

Πολλάκι δ' ἐξ ὀλίγης ὀδύνης μέγα γίγνεται ἄλγος,
Κοῦκ ἂν τίς λύσαιτ' ἥπια φάρμακα δοῦς.
Τὸν δὲ κακαῖς νόσοισι κυκώμενον ἀργαλείαις τε
ἈΨάμενος χειροῖν, ἄψα τίθησ' ὑγιῆ.

SOLON.

Sæpe dolor tenuis morbos produxit acerbos,
Tollere quos nullis sit medicaminibus :
Sæpe diu sævo jactatum corporis æstu
Contactu sanum reddidit una manus.

GROTIUS.

Notes

REPORT

OF THE EXPERIMENTS

ON ANIMAL MAGNETISM,

MADE BY

A COMMITTEE OF THE MEDICAL SECTION OF THE
FRENCH ROYAL ACADEMY OF SCIENCES:

READ AT THE MEETINGS OF THE 21st AND 28th OF JUNE, 1831,

TRANSLATED, AND NOW FOR THE FIRST TIME PUBLISHED;

WITH AN

HISTORICAL AND EXPLANATORY INTRODUCTION,
AND AN APPENDIX.

By J. C. COLQUHOUN, Esq.

Ingenii commenta delet dies; naturæ judicia confirmat.—CICERO.

Non fingendum, non excogitandum, sed inveniendum et observandum quid
natura faciat aut ferat.—BACON.

EDINBURGH:

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RE

P R E F A C E.

IT is not without considerable hesitation and great diffidence that I venture to submit the following pages to public notice.

The subject is, in a great measure, foreign to my usual avocations, and was originally taken up merely as a matter of curiosity, although it afterwards swelled, in my estimation, into no small importance. Conscious, however, as I necessarily must be, of my own great deficiency in the requisite knowledge of those sciences which are most calculated to elucidate the particular object of my present researches, I have long felt an anxious desire that some individual, better qualified by his

EATON
JULY 1859

professional pursuits, and in every other respect more competent, had been induced to undertake the task which has now devolved on me. But seeing no immediate prospect of the fulfilment of this hope, and having been frequently applied to, both by professional gentlemen and others, for information, I have, at length, felt myself almost compelled to exhibit a concise view of the progress which has hitherto been made towards the elucidation of this obscure but most interesting subject; for the reader will soon perceive, that this could not have been satisfactorily accomplished in mere casual and interrupted conversation. Indeed, it is almost impossible for any one to comprehend a great many particulars, which it is yet necessary not to overlook, without having either himself carefully made experiments, or witnessed,—at least attentively studied,—those made by others.

Fortunately, the kindness of a most respected friend, whose active and enlightened mind is constantly alive to the interests of literature and science, has recently supplied me with an admirable opportunity of introducing the subject

to the notice of the British public, by communicating to me the late Report of the Magnetic Experiments made by a Committee of the Medical Section of the Royal Academy of France. I felt that I had now nothing more to do, than to lay this important document before my countrymen, accompanied by such an historical and explanatory introduction, as might enable those, who had not hitherto paid any attention to the subject, to comprehend its details.*

This subject ought to be peculiarly interesting to the medical profession, as well as to the philosopher in general. If the vast variety of facts, which have been gradually accumulating during the last half century, can be considered as satisfactorily substantiated, the force of the evidence in favour of *Animal Magnetism*,—or by whatever other name we may choose to distinguish that peculiar species of sympathetic influence which has long been so

* This Report, so far as I am aware, has not been published in France. A determinate number of copies, however, were lithographed for the use of the members of the Academy; and from one of these the translation has been made.

called,—becomes absolutely irresistible. And if these facts be true, and not entirely supposititious and delusive, it cannot be denied that they are calculated to open up many new and most important views in medical and physiological science,—indeed, in the whole philosophy of the human mind.

Ever since the time of that singular compound of genius and folly, Paracelsus, physicians in general, seem to have been in the habit of relying too exclusively upon the efficacy of the chemical remedies, to the almost entire neglect of many simple, and natural, though equally efficacious sanative processes, especially those powerful psychical influences, which appear to have been known and employed in ancient times, and which are developed, with such prodigious effect, in the magnetic treatment. Thus, for example, in cases of epilepsy and other spasmodic diseases, the regular practitioner would perhaps prescribe the internal administration of lunar caustic, ammoniate of copper, or some other dangerous drug; whereas, the magnetic doc-

tor would cure the patient as speedily, as effectually, and probably more safely, by means of a few simple, and apparently insignificant manipulations. This is a circumstance which surely deserves the serious attention of the profession; the more especially, as, should it still continue to be neglected by the regular physician, the treatment runs the risk of being unskilfully practised, and probably abused, by the empiric.*

This country has produced many eminent physicians, distinguished for their learning, their talents, and their liberality. Of late, however, our medical men seem liable to the reproach of having almost entirely neglected the most important labours of their professional brethren upon the continent. The interesting and instructive works of Sprengel, Reil, Treviranus, Gmelin, Wienholt, Autenrieth, and many others, are known only to a

* This truth was fully exemplified during the earlier practice of *animal magnetism* in France.

“Eadem namque subjecti subtilitas et varietas, quæ magnam medendi facultatem præbet, sic etiam magnam aberrandi facilitatem.”—BACON.

few; and when any mention happens to be made of the subject of *animal magnetism*, it is at best received with an ignorant ridicule, or with a supercilious reference to the superseded report of the French commissioners in 1784; as if nothing had been done, since that period, towards a more profound experimental investigation and improvement of the magnetic treatment.

But it is evident that our physicians cannot long remain ignorant of these matters, without falling greatly behind the age in respect to professional acquirements. To them, therefore, I would respectfully, but earnestly recommend a scientific and impartial inquiry into this important subject. They are unquestionably the most competent to the investigation, the most interested in its result, and the best qualified to render the discovery—provided they shall be ultimately satisfied that it really is a discovery—most conducive to the interests of science, and to the public welfare. At all events, they ought no longer to betray utter ignorance upon a subject which has long been

handled in almost every physiological textbook upon the continent.*

Within the limits which I had prescribed to myself in this publication, it was found quite impossible fully to elucidate all the details of

* The great imperfection of our physiological systems has been adverted to, and loudly complained of, by every sensible and candid writer on the subject. A great proportion of the excellent work on *Life and Organization*, by that very eminent anatomist and physiologist, the late Dr John Barclay of Edinburgh, is occupied with an exposition and refutation of the fallacious theories of his predecessors. Mr How, the author of a translation of Rudolphi's *Elements of Physiology*, very justly observes in his preface, that "the almost insuperable difficulties, which have ever attended the compilation of an elementary work on physiology, are increasing almost daily. There are few authors who are not engaged in some favourite hypothesis, and thus the facts which come under their observation are seen through a false and deceitful medium." The testimony of Mr Lawrence, in his *Lectures on Physiology*, (Lect. III.) is to the same effect. "In this," says he, "as in most other subjects, the quantity of solid instruction is an inconsiderable fraction of the accumulated mass; a few grains of wheat are buried amid heaps of chaff. For a few well-observed facts, rational deductions, and cautious generalizations, we have whole clouds of systems and doctrines, speculations, and fancies, built merely upon the workings of imagination, and the labours of the closet."

A great part of the evil probably arises from that which Bacon so decidedly reprobates—the premature formation of theories and systems, which are found inadequate to explain all the phenomena that occur; so that when new facts are observed, they are immediately rejected without due inquiry, not because they can be demonstrated to be false, but because they are inconsistent with our preconceived notions.

this interesting subject. This would have required, at the least, a large volume. All that I proposed to myself, therefore, at this time, was merely to give such an introductory notice of this discovery, as might prepare the reader, in some degree, for a more serious study of its nature and principles, and of the evidence by which its reality is supported. Should the present trivial publication attract any remarkable share of attention, additional information can easily be communicated hereafter.

EDINBURGH,
15th April, 1833.

REPORT

OF

MAGNETIC EXPERIMENTS, &c.

INTRODUCTION.

Nihil compositum miraculi causa, verum audita scriptaque senioribus tradam.—TACITUS, *An.* xi. 27.

WHEN a series of experiments has been instituted and successfully conducted, with the view of investigating facts which are of rare occurrence, and not obvious to common observation, it is often exceedingly difficult to impress ordinary minds with a suitable conviction of the truth of the result, however accurately it may have been deduced. This difficulty, too, is greatly increased, when the phenomena evolved are of a nature to excite our wonder, rather than to satisfy our reason, and seem to baffle every effort to bring them under any ascertained general laws, or to subject them to the rules of any previous

philosophical theory. There is always, indeed, a sufficient fund of credulity in the world, accompanied with a disposition to believe every thing that is new, and marvellous, and incomprehensible. But it is not among the ignorant and the credulous that the true philosopher looks for the rational approbation of his labours, or the accurate appreciation of the truth and value of his discoveries. Even men of scientific and otherwise unprejudiced minds,—whose opinions alone can confer credit upon the efforts of the philosopher,—are naturally slow in yielding their assent to the truth of any series of singular phenomena, which do not fall within the sphere of their own investigations, and of the conditions of which they are yet necessarily ignorant. Nor is this caution prejudicial in the end to the interests of science, unless when it is allowed to degenerate into downright obstinacy, or becomes contaminated by the sectarian spirit of party.

In all cases where a class of extraordinary facts is presented to us upon the evidence of others, which we ourselves have hitherto had no opportunity of examining, the rational means of arriving at a just conclusion respecting them appear to be,

1. To consider the nature of the subject, the number of the observations and experiments which have been made, and the analogy of the phenomena which have been observed in similar circumstances ;
2. To satisfy ourselves with respect to the general character, intellectual fitness, and consequent credibility of the observers ;
3. To scrutinize the circumstances under which

the various experiments were made, with a view to detect any possible sources of error ;

4. To be assured of the precision and unambiguity of the facts themselves, and of the rational impossibility of referring them to more than a single cause ; and,

5. If possible, to repeat, for our own satisfaction, or cause to be repeated in our presence by others, the experiments by which the phenomena have been elicited, and that in the same circumstances, and under the same conditions.

By judiciously following these rules, every intelligent inquirer may succeed in obtaining complete conviction.

In proceeding to execute the task I have undertaken in the present publication, I am quite aware that I may expose myself to the charge of drawing largely upon the credulity of my countrymen. In my own defence and justification, however, I may be permitted to declare, that I shall bring forward no facts, as such, unless they be sufficiently attested by men of unimpeachable veracity ; men abundantly qualified by their scientific attainments, perspicacity, and cautious spirit of research, for investigating the reality of the facts which they profess to have witnessed, and who, besides, could have no conceivable interest in the propagation of falsehood. I may add, that I have myself produced, and consequently witnessed, several of the phenomena described in the following pages, and that under circumstances in which no deception was possible. My object, however, is not so much to force conviction upon the

minds of the careless or the blindly incredulous, as to solicit the attention of the inquisitive to a subject of rational and most interesting inquiry ; and, if possible, to excite a corresponding spirit of investigation among the friends of truth and science.

The reader is requested to observe, that no subject of questionable theory is now to be propounded to him. Our business, at present, is with mere matters of fact ; and these matters of fact he will admit or reject either on the incontrovertible evidence of other observers here to be adduced, or on the testimony of his own experience. All that is required of him is, that he shall bring to the investigation of the subjects brought under his notice, that candour of mind, and that perfect freedom from prejudice, which we ought to preserve in all our researches after truth. Indeed, I would strongly recommend to all who approach the consideration of this subject, to abstain from any attempt to explain the facts presented to their notice upon the principles of any preconceived theory, or of any theory whatever. It is the facts, and the facts alone, which ought to engage our attention in the first instance ; and these, as has been already observed, we are bound to admit or reject, upon such evidence as we conceive to be satisfactory in the circumstances of the case.

Moreover, it may be proper to warn the reader against the absolute and hasty rejection of any fact, without due investigation, merely because it may appear to him to be extraordinary, unaccountable, or improbable ; or because the means employed seem in-

adequate to produce the alleged effects. There are many facts in science which we are compelled by evidence to admit, although we are incapable of discovering the principle which is active in their production. What do we know, for example, of the real cause of the phenomena of mineral magnetism, of electricity and galvanism ; of the susceptibility of disease in the animal organization ; of infection ; of the salutary operation of many medicinal drugs, &c.? If no facts, indeed, were to be admitted in science, but such as could be immediately traced to a certain and satisfactory principle, our knowledge would be confined within exceedingly narrow bounds.

. The following remarks of the most illustrious disciple of Newton, are peculiarly applicable upon the present occasion. The celebrated M. De la Place, in his *Essai sur les Probabilités*, observes, that “ of all the instruments which we can employ, in order to enable us to discover the imperceptible agents of nature, the nerves are the most sensible, especially when their sensibility is exalted by particular causes. It is by means of them that we have discovered the slight electricity, which is developed by the contact of two heterogeneous metals. The singular phenomena which result from the extreme sensibility of the nerves in some individuals, have given birth to various opinions relative to the existence of a new agent, which has been denominated *Animal Magnetism*, to the action of the common magnetism, to the influence of the sun and moon in some nervous affections, and, lastly, to the impressions which may be experienced

from the proximity of the metals, or of a running water. It is natural to suppose that the action of these causes is very feeble, and that it may be easily disturbed by accidental circumstances; but because, in some cases, it has not been manifested at all, we are not entitled to conclude that it has no existence. We are so far from being acquainted with all the agents of nature, and their different modes of action, that it would be quite unphilosophical to deny the existence of the phenomena, merely because they are inexplicable in the present state of our knowledge. It becomes us, however, to examine them with an attention the more scrupulous, in proportion as we find it more difficult to admit them; and it is here that the calculation of probabilities becomes indispensable, in order to determine to what degree we ought to multiply our observations and experiments, with a view to obtain, in favour of the agents which they seem to indicate, a probability superior to the reasons we may have for rejecting their existence."

"The essential point," says Nicole,* after Aristotle, "when any question arises respecting facts that are extraordinary and difficult to conceive, is not to demonstrate how they exist, but to prove that they do exist."—"We must not decide," says Father Lebrun, "that a thing is impossible, because of the common belief that it cannot exist; for the opinion of man cannot set limits to the operations of nature, or to the power of the Almighty."†

* Nicole, *Oeuvres*, Vol. vii. let. 45, p. 238.

† *Hist. Critiq. des Superst.* B. i. ch. 7.

There is no doubt that, when phenomena of an extraordinary character are presented to us, to which we can perceive nothing analogous in our previous knowledge, and which we cannot explain upon any known principle, it is natural that we should require much stronger evidence to convince us of their reality, than in the case of facts of more ordinary occurrence and of easier explanation. Here, indeed, it is the duty of the philosopher to act with great caution, and to suspend his belief, until he has obtained evidence of a character and weight sufficient to satisfy his judgment, and to remove every reasonable doubt. But when such evidence has once been obtained, we can no longer withhold our assent, without totally abandoning the use of our reason, and surrendering ourselves to an irrational scepticism.

The effects which are alleged to have been produced by the influence of what is called **ANIMAL MAGNETISM**, appear to have excited little sensation in this country, excepting as an occasional subject of ridicule. In persons who have made no serious inquiry into the subject, the very extraordinary, and apparently mysterious and unaccountable character of the facts, might almost justify the derision with which they appear disposed to treat them. But he who enters into an investigation of these facts will soon perceive that they merit more serious attention. During the last half century, numberless experiments have been made upon the continent, especially in

France and Germany, and a vast variety of cases of the most singular character witnessed and recorded, which, if we consider them, as they seem entitled to be considered, as well authenticated, will be at once admitted to be of an highly important nature, whether we regard them merely in a medical point of view, or look upon them as a most interesting and valuable accession to our physiological and psychological knowledge. These experiments, too, were conducted, not by ignorant empirics, but chiefly, as will be seen in the sequel, although not limited to them, by professional gentlemen of learning, talents, and eminence, whose character holds out sufficient security against deception, even supposing that, in the particular circumstances, deception had been practicable, or had been attempted.

For the benefit of those who are either entirely ignorant of the subject, or have not hitherto bestowed sufficient attention upon it, it may be proper to premise a few historical details, in order to enable them to follow the experiments and comprehend the observations contained in the Report of the Committee of the Medical Section of the French Academy, which is to be submitted to them in the sequel.

There are various simple operations in almost constant practice among mankind, and performed, as it were, instinctively, which, from their very frequency, and apparent insignificance, engage scarcely any part of our attention, and, consequently give rise to no reflection. We find, indeed, a number of floating opinions relative to the nature and the efficacy of some

of these seemingly trifling operations, which have been transmitted from age to age, until they have been permitted to settle down and mingle with the elements of popular belief; but men of education and science have generally agreed to regard all such practices with indifference, and to reject all such opinions with contempt, as the offspring of mere ignorance and prejudice. It is quite possible, however, that these opinions and practices may be the rude reliques of some branches of knowledge, cultivated in remote periods, which have been almost entirely swept away and nearly obliterated from the records of human acquirement, leaving but a few faint traces of their previous existence behind, in popular superstition and the deeply-rooted prejudices of the vulgar.

In all ages, a certain medicinal virtue has been ascribed to the touch of the human hand, to the placing of it upon a sick person, or using it as a topical remedy, by rubbing with it any part of the body which may happen to have been injured. This fact is familiar to all of us from our infancy, although little attention appears to have been hitherto paid to the operation, and scarcely any attempt made to assign a cause for the soothing influence.

Natural instinct prompts a patient to apply his hand to any part of his body in which he feels pain. If he should happen to have received a blow, or any local bodily injury, the hand instinctively moves towards the suffering part, and probably rubs it gently. In the same manner, in the case of a headach, a cholic, &c. we naturally seek relief from the applica-

tion of the hand to the region where the pain is felt. In similar complaints, too, we frequently experience relief from the same operation performed by another with the view of alleviating the painful sensation. This process is well known and appreciated in the nursery, where it is often resorted to by attendants upon children. When a child has been injured, or is otherwise suffering bodily pain, it usually runs to its mother or its nurse, who places it on her knee, presses it to her breast, applies her hand to the part affected, rubs it gently, and, in many cases, soothes the painful symptoms, and sets the child asleep.

This process, indeed, appears to be sometimes adopted, not merely with the view of alleviating any particular painful sensation, but as a general corroborant and preservative of the health. In some parts of Bavaria, we are informed that the peasants regularly rub their children from head to foot, before putting them to bed; and they are of opinion that this practice is attended with salutary consequences. The mode of taking the bath among the oriental nations, accompanied with friction, and pressing the different parts of the body, produces a refreshing, invigorating, and highly agreeable feeling, occasions a slight perspiration and gentle slumber, and cures, or at least alleviates, many diseases. In investigating the customs of different countries, we sometimes stumble upon practices still more analogous to the magnetic processes. The author of the *Philosophie Corpusculaire* informs us, that a family exists in the mountains of Dauphiné, who have been in the habit of magnetizing,

from father to son, for centuries. Their treatment, he adds, consists in conducting the great toe along the principal ramifications of the nerves. Kieser * mentions that a similar mode of treatment (called *Treten*) has long prevailed in many parts of Germany, for the cure of rheumatic and other complaints. We have probably all heard of the virtue ascribed to the great toe of King Pyrrhus.

Long before the discovery of what is now called *Animal Magnetism*, indeed, many eminent physicians appear to have been perfectly well acquainted with the efficacy of touching and rubbing, as a means of curing diseases. Nay, if we may credit the authority of the anonymous author of the *Denarium Medicum*, there were many ancient physicians who cured diseases without making use of any material remedies, and, as it would appear, in a manner purely magnetic. "Fuerunt," says he, "ante Hippocratem multi viri docti, qui nulla prorsus medicina corporea usi sunt, sed sola spiritus et animæ facultate."

Michael Medina, in his treatise *De recta in Deum fide*, cap. 7. (Venice, 1564,) tells us that he knew a boy at Salamanca who was believed to possess the gift of communicating health, and who cured many persons of the most serious diseases merely by touching them with his hand. Thiers, in his *Traité des Superstitions*, (B. vi. ch. 4,) mentions several monks who were in the practice of curing diseases by the touch. Pujol, in his work on *Trismus*, relates a curious circumstance which occurred during the treat-

* System des Tellurismus, &c. Vol. i. p. 381. § 127.

ment of a patient who was afflicted with the disease called *Tic douloureux*. "Every paroxysm," says he, "terminated by the flowing of some tears from the eyes, and of some saliva from the mouth ; but the patient was obliged to beware of drying her eyes and chin, because the slightest touch increased the acuteness and duration of the pain. In one of these attempts, she made the discovery, that when she slowly and cautiously approached the points of her fingers to the suffering part, the fit was much shortened. She was obliged, however, merely to reach the skin with the edge of her nails, to touch it as lightly and as rapidly as possible, and then to withdraw them as fast as she could." In consequence of this superficial contact, she experienced a painful but merely momentary itching ; upon which there immediately followed a sensation which she compared to the noise made by the wheels of a clock in striking the hour, and then the fit terminated. *

Individuals have at various times appeared in this country, who have acquired considerable reputation for their skill in reducing obstinate swellings, and curing other diseases, principally of the joints, by means of friction and pressure ; and these methods have also been frequently adopted in the cure of rheumatic complaints. But in such cases, the beneficial

* Pujol regarded Animal Magnetism as a chimera, and considered the effects of this manipulation as merely electrical. Wienholt, however, himself a physician, and one of the most sensible writers upon this subject, is disposed to look upon the matter in a different light, and recommends that the magnetic treatment should be tried in similar cases.

effects, it is believed, have generally been ascribed to the mere friction, and to the increased local excitement and activity thereby produced in the affected parts.

A peculiar and supernatural efficacy has been sometimes ascribed to the touch of particular individuals. Thus in England and France, it was an old belief, that the monarchs of these kingdoms possessed the power of curing the scrofula by means of the touch. This power is said to have been first ascribed to Edward the Confessor, in England, and to Philip I. in France. The following was the formula adopted by the Kings of France, in manipulating upon such occasions: *Le Roi te touche, Dieu te guerisse*. The same power is said to have been previously exercised by the Scandinavian Princes, and particularly by St Olaf, who is supposed to have reigned from 1020 to 1035; so that this traditional efficacy of the royal touch appears to have originated in the north of Europe.*

These circumstances, relative to the popular belief of the sanative efficacy of the human touch, are certainly curious. Some of the writers upon *animal magnetism*, indeed, do not admit that there is much, if any analogy between this mode of cure and the magnetic processes. It would not be proper, however, to have omitted all notice of the practices and the belief alluded to, the more especially as, notwithstanding all the facts which have been brought forward, and the theories which have been propounded upon the subject, we are still, confessedly, very ignorant of the true

* See Snorro Sturluson's History of the Scandinavian Kings.

causes which operate in producing the phenomena of *animal magnetism* ; and it has never yet been ascertained in how far these phenomena may depend upon the physical means employed, or upon the psychical influences which are exerted or developed in the magnetic treatment. The general prevalence of the popular belief respecting the existence of the influence in question, appeared to be a matter of too much consequence to be passed over entirely without notice.

The writers upon the subject of *animal magnetism* have been induced to ascribe a great deal of influence to the human eye ; and in this opinion they appear to be supported by a very ancient and generally prevalent popular belief, which, in many instances, no doubt, may have degenerated into superstition. This belief, however, appears to have existed from the earliest times. Pliny informs us, in his *Natural History*, that a particular colour of the eye, and a double pupil (probably meaning a variously coloured or spotted *iris*,) were believed to indicate that the persons having this colour or conformation of the eye were peculiarly endowed with this species of the magnetic virtue. *

Of all the corporeal organs, indeed, there is none

* "Esse, adjicit Isigonus, in Triballis et Illyriis, qui visu quoque effascinent, interimantque quos diutius intueantur, iratis præcipue oculis : quod eorum malum præcipue sentire puberes. Notabilius esse, quod pupillas binas in singulis oculis habeant. Hujus generis et feminas in Scythia, quæ vocantur Bithyæ, prodit Appollonides : Philarchus, et in Ponto Thibiorum genus, multosque alios ejusdem naturæ ; quorum notas tradit in altero oculo geminam pupillam, in altero equi effigiem." And more to the same purport.—Plinii, Nat. Hist. l. vii. c. 2.

which can be considered so much in the light of an immediate and faithful interpreter of the internal thoughts, feelings, and emotions, as the eye. It is, as it were, at once the telescope and the mirror of the soul. Love, hate, fear, jealousy, courage, innocence, and guilt, are revealed by that powerful and delicate organ; every species of passion, in short, is immediately pourtrayed in it; and there is probably no feature in the human countenance from which we are so much disposed to draw our inferences, and to form our opinions, respecting individual characters. “Nec enim,” says Wierius, “ullum reperias in humani corporis fabrica organum, quod tanta spirituum copia scateat, et ex quo eorum fulgor usque adeo emicet, ut de oculi pupilla certum est.” *

The force and fascination of the eye, indeed, have long been proverbial, and the common belief of the people has ascribed to them many of those phenomena which are included under the description of magic and witchcraft. The baneful effects of the *evil eye* are recorded in the vulgar traditions of all ages and nations. Hence, probably, the derivation of the Latin word *invidia*; and Virgil clearly alludes to the common superstition in his 30th Eclogue, v. 118:

Nescio quis teneros oculus mihi fascinat agnos.

According to the accounts of recent travellers, the Indians are to this day convinced, that many diseases are generated merely by an evil look. In Captain Lyon's Travels in Northern Africa, it is observed,

* De præstigiis dæmonum, lib. ii. c. 49.

that among the Arabs, the *evil eye* is, of all mischiefs, the most dreaded ; and for a stranger to express particular admiration of a child, a horse, or any other valuable, is to bring on it, or its possessor, misfortune, unless averted by passing over the object *a finger wetted with saliva*.

It has been asserted that the human eye has a powerful influence in subduing the natural courage and ferocity of wild animals, in so much that bulls, tigers, &c. it is said, have been known to retire in dismay before the firm and fixed look of man. Some singular and almost incredible instances of this influence will be found in Van Helmont's *Treatise on the Plague*, and in other works. *

* See, in particular, " *Secrets et Remedes eprouvés, dont les preparations ont été faites au Louvre, de l'ordre du Roi, par M. L'Abbé Rousseau,*" &c. 2d edit. Paris, 1708.

I remember having read in a newspaper, some years ago, an account of the escape of a tiger from confinement, which caused great terror and confusion in the streets of London. A gentleman happening to come suddenly out of a house, without any knowledge or suspicion of his danger, found the animal couched within a few yards of him. Fortunately, this gentleman had spent some part of his life in the East Indies, and was acquainted with the nature of these ferocious animals. Instead of attempting to make his escape, he stood perfectly still, and fixed his eyes steadily upon the tiger, who, in the course of a few seconds, made a bound to the opposite side of the street, and soon left the gentleman in perfect security.

I need make no apology for extracting the following very curious observations from a popular publication entitled *Time's Telescope*, for 1832.

RECIPROCAL EFFECTS OF BETRAYING FEAR.

"It is well known that with regard to most animals, the betrayal of fear in one often excites another to mischievous attacks, or, if these have been commenced, to increased boldness. That this does not hold, as is usually supposed, in the case of bees, appears from a cir-

The breath and the saliva are both alleged to possess considerable efficacy in the cure or alleviation of diseases. The remedial efficacy of the breath, indeed, appears to have been maintained in ancient times; for we find that Pliny recommends breathing upon the forehead as a means of cure.* Peculiar virtue has, in all times, been ascribed to the breath of young and healthy persons. On the other hand, the breath of some serpents is said to communicate a deadly poison.

When a child complains, the mother or the nurse frequently says that she will blow away the pain; and

cumstance which occurred to M. De Hofer of Baden. Being a great admirer of bees, they appeared to have acquired a sense of friendship for him, by virtue of which he could at any time approach them with impunity, and even search for a queen, and taking hold of her gently, place her upon his hand. This was, as usual, ascribed to his want of fear; but having had the misfortune to be attacked by a violent fever, he soon found, after his recovery, that the bees considered him as a different person, and instead of being received by them as an old friend, he was treated as a trespasser; nor was he ever able, after this period, to perform any operation upon them, or approach within their precincts, without exciting their anger. It would thence appear that it was not so much his want of fear and confidence in their want of enmity, as some peculiar effluvia of his body (changed by the fever) which gave rise to the circumstance.

“That the non-betrayal of fear, however, has a powerful influence upon quadrupeds, as well as upon man himself, there can be no doubt. We are acquainted with a gentleman, who affirms, that he is not afraid to face any animal, not excepting a lion, a tiger, or even a mad dog, and when in India, he gave actual proof of his courage, by killing, with his own hand, more tigers than one. His secret is to fix his eye firmly and undauntedly on the animal, a method which he maintains will cause the fiercest to quail. By the same means he succeeded in subduing, without other assistance, a furious maniac, who had broke loose from confinement in a mad-house.

* Hist. Nat. l. xxviii. c. 6.

it is quite usual among the common people, in some countries, to treat the disease called St Anthony's fire magnetically, by breathing upon the body. Borelli mentions that there exists a sect of physicians in India, who cure all sorts of diseases merely by the breath.

The quality of the saliva, in men and other animals, appears to depend much, not only upon the bodily health, but also upon the state and disposition of the mind. The natural office of this secretion is to prepare the food for digestion. Most of us have experienced the alteration produced upon this secreted fluid by corporeal disease ; the passions seem to exercise a strong influence over it ; and it is sufficiently well known that madness, in men and other animals, instantly converts it into poison.

The saliva is said to have a peculiar efficacy in the case of swellings. It was employed as a remedy by the *Ensalma*dores in Spain ; who, according to Delrio, cured diseases by means of the saliva and the breath.*

It is scarcely necessary to repeat, that the alleged efficacy of these simple natural remedies, has been brought under notice, merely in deference to the very general popular belief. Some of the professors of animal magnetism seem inclined to admit this efficacy, in certain cases, and in a certain degree : others deny it altogether, and ascribe the phenomena produced solely to those psychical influences, which are now to be considered.

Cures are said to have been sometimes effectuated

* Delrio, *Disquisit. Magic.* Mogunt, 1606. Tom. i. p. 66.

psychically, and, as it were, magically, without employing any visible medium, or tangible remedy, by the mere influence of the will and determination of the individual over the corporeal organs. The celebrated German metaphysician, Kant, wrote a treatise, addressed to Dr Hufeland, upon the power of mental resolution in overcoming pain arising from some derangement of the animal economy ; and he observed that this power was most efficaciously exerted in the case of cramps and spasmodic affections. This observation has been confirmed by the experience of the animal magnetisers, who have occasionally witnessed cases of a similar description, and have themselves performed cures by a strong effort of the will and resolution, without the employment of any manipulations, or, indeed, of any physical media whatever. Passavant mentions that he knew a lady who cured herself of spasms in this manner. Her husband, to whom she was tenderly attached, always treated her with coldness and indifference whenever she was seized with any affection of this kind ; and this circumstance induced her to exert a powerful effort of resolution, of which she was otherwise incapable, and in consequence of which she succeeded in effecting a complete cure.* Brandis, Principal Physician to the King of Denmark, relates several cases of a similar nature ; in particular, one of a lady whom he cured of violent spasms, and another of a young man whom he cured of St Vitus's dance, by resolutely forbidding him to

* Untersuchungen über den Lebensmagnetismus und das Hellsehen, von Dr J. C. Passavant. Frankf. a M. 1821.

yield to the attacks.* The treatment resorted to by Boerhaave, in the case of the convulsive children in the Orphan-House at Haarlem, appears to have been of the same kind.

Indeed, there is a variety of instances upon record of the most marvellous and incredible influence of volition over the bodily organization, even in the case of such operations as cannot be conceived to depend, in any degree, upon the will of the individual. Thus, in Franklin's *Journey to the Polar Sea*, (p. 157), a strange story is told of a man, who, after earnest prayer, became provided with milk, and actually suckled a child.

Bernier, in his *Ceremonies et coutumes Religieuses*, (Tom. vi. p. 188), mentions that voluntary somnambulism is frequent among the Indian Bramins and Fakirs, and that even the means of producing it are taught. In Avicenna's treatise *De Animalibus*, a case is reported of a man who possessed the power of paralysing his limbs at pleasure, by an effort of volition. Cardanus relates of himself, that he could voluntarily place himself in a state of insensibility.† St Austin, in his work *De Civitate Dei*, has recorded two cases of a similar description; the one of a man who could

* Brandis, Ueber psychische Heilmittel und Magnetismus. Copenhagen, 1818.

† "Quatuor mihi indita sunt a natura, quæ nunquam aperire volui, et omnia (meo judicio) admiratione digna. Quorum primum hoc est, quod quoties volo, extra sensum quasi in ectasim transeo," &c.—De rerum varietate, lib. viii. c. 43.—Something similar is related of that singular character Emanuel Swedenborg; and also, it is believed, of Jacob Behmen.

perspire when he wished it; and the other of a priest, Restitutus by name, who, whenever he pleased, could throw himself into a state of complete insensibility, and lie like a dead man.*

One of the most extraordinary, the most circumstantial, and the most authentic instances which has been recorded of the astonishing power of volition over the bodily organization, is that related by the celebrated Dr Cheyne, in one of his medical treatises,† and which appears to be established by the most irrefragable evidence. It is the case of a Colonel Townsend, who, as in the instance mentioned by St Austin, could die, to all appearance, at any time that he chose, and having lain for a considerable period in that state, could resuscitate himself by a voluntary struggle. “He could die,” says Dr Cheyne, “or expire when he pleased, and yet by an effort, or somehow, he could come to life again. He insisted so much upon our seeing the trial made, that we were at last forced to comply. We all three felt his pulse first; it was distinct, though small and thready, and his heart had

* “Illud multo est incredibilius, quod plerique fratres memoria recentissima experti sunt. Presbyter fuit quidam, nomine Restitutus, in parœcia Calamensis ecclesiæ, quando ei placebat, rogabatur aut ut hoc faceret ab eis qui rem mirabilem coram scire cupiebant, ad imitatas quasi lamentantis cujuslibet voces, ita se auferebat a sensibus, et jacebat simillimus mortuo; ut non solum vellicantes atque pungentes minime sentiret, sed aliquando etiam igne urereter admoto, sine ullo doloris sensu, nisi post modum a vulnere; non autem obnitendo, sed non sentiendo non movere corpus, eo probatur, quod tanquam in defuncto nullus inveniebatur anhelitus; hominum tamen voces, si clarius loquerentur, tanquam de longinquo se audisse postea referebat.”

† Cheyne, *English Malady*, &c.

its usual beating. He composed himself on his back, and lay in a still posture for sometime ; while I held his right hand, Dr Baynard laid his hand on his heart, and Mr Skrine held a clean looking-glass to his mouth. I found his pulse sink gradually, till at last I could not feel any by the most exact and nice touch. Dr Baynard could not feel the least motion in his heart, nor Mr Skrine perceive the least soil of breath on the bright mirror he held to his mouth. Then each of us, by turns, examined his arm, heart and breath ; but could not by the nicest scrutiny discover the least symptom of life in him. We reasoned a long time about this odd appearance as well as we could, and finding he still continued in that condition, we began to conclude that he had indeed carried the experiment too far ; and at last we were satisfied that he was actually dead, and were just ready to leave him. This continued about half an hour. By nine o'clock in the morning, in autumn, as we were going away, we observed some motion about the body, and upon examination found his pulse and the motion of his heart gradually returning ; he began to breathe gently, and speak softly. We were all astonished to the last degree at this unexpected change, and after some further conversation with him, and among ourselves, went away fully satisfied as to all the particulars of this fact, but confounded and puzzled, and not able to form any rational scheme that might account for it."

In the preceding instances, we see the astonishing power which some individuals appear to possess over their own bodily organization. But there is a still

more incredible power noticed by many authors, which enables an individual, by an energetic effort of volition, to produce very extraordinary effects upon the corporeal organism of others. The existence of such a power was maintained by a pretty numerous sect of physicians and philosophers, during the sixteenth and seventeenth centuries. Of these, I may mention as the most eminent, Pomponatius,* Rodolphus Goclenius,† Athanasius Kircher,‡ Van Helmont,§ Sir Kenelm Digby,|| William Maxwell,¶ J. G. Burgraave,** Sebastian Wirdig,†† Joannes Bohnius,‡‡ &c. All of these writers, and many others, assumed

* Petrus Pomponatius, *De Incantationibus*. Basil, 1567.

† Rod. Goclenii, *Tract. de Magnet. vuln. curat.* Marburgi, 1608, et Francof. 1613.

‡ Athan. Kircher, *Magnes, sive de Arte Magnetica*. Coloniae, 1643, et Romae, 1654. *Magneticum Naturæ Regnum*, &c. Amst. 1667.

§ Van Helmont, *De Magnet. Vuln. — curatione*. Paris, 1621. See also the other works of this author.

|| K. Digby, *Of the Cure of Wounds by the power of Sympathy*. Lond. 1660.

¶ Gul. Maxwell, *Medicinæ Magneticæ libri tres*, &c. Frankf. 1679.

** J. G. Burgraave, *Biolychnium, seu lucerna vitæ, cui accessit cura morborum magnetica*, 1629. This work I have not seen; but I find it referred to by Kluge, under a title somewhat different.

†† Sebastian Wirdig, *Nova Medicina Spirituum*. Hamb. 1673. This also is a work which I have not been able to procure; but I find the following remarkable quotation from it on the title-page of a treatise, entitled, *Mesmer Justifié*. "Totus mundus constat et positus est in magnetismo; omnes sublunarium vicissitudines fiunt per magnetismum; vita conservatur magnetismo; interitus omnium rerum fiunt per magnetismum." P. 178.

‡‡ Bohnius, *De Spirituum Animalium Medela*. Hamb. 1688.

To the list of authors given in the text, may be added:—Jul. Cæs. Vaninius, *De Admir. Naturæ arcan.*; C. Agrippa ab Nettesheym, *De Occulta Philosophia*; Christopher Irving; N. Papin; Fludd, &c. &c.

the existence of an universal magnetic power, by which they attempted to explain the dependence and reciprocal action of bodies, in general, upon each other, and, in particular, the phenomena of the vital organization. They also broadly and distinctly maintained the proposition, that the will or imagination of man, when energetically called into action, is capable of producing a perceptible effect upon the organism of other living beings, even at a considerable distance.

This proposition has been, perhaps, most clearly enunciated by Pomponatius and Van Helmont ; and considering them as the representatives of the whole of this class of writers, I deem it sufficient to give an abstract of the opinions which they entertained upon the subject we are now investigating.

Pomponatius* assumes it as a fact generally acknowledged, that there are men endowed with the faculty of curing certain diseases, by means of an effluence, or emanation, which the force of their imagination directs towards the patient. "When those," says he, "who are endowed with this faculty, operate by employing the force of the imagination and the will; this force affects their blood and their spirits, which produce the intended effects, by means of an evaporation thrown outwards."†

* Petrus Pomponatius was born at Mantua in 1462, and died in 1525. He was professor of philosophy at Padua.

† "Possible est apud me, quod homo habeat talem dispositionem qualem discimus. Sic contingit, tales homines qui habeant hujusmodi vires in potentiâ, et per vim imaginativam et desiderativam cum actu operantur, talis virtus exit ad actum, et afficit sanguinem et spiritum, qui per evaporationem petunt ad extra, et producunt tales effectus." Cap. iv. p. 44.

He afterwards observes, that it is by no means inconceivable that health may be communicated to a sick person by this force of the imagination and the will, so directed ; and he compares this susceptibility of health to the opposite susceptibility of the infection of disease. *

In another passage, our author enumerates the conditions of the exercise of this faculty, in nearly the same terms as are employed by the modern magne-

* “Incredibile non est, etiam sanitatem posse produci ad extra ab anima taliter imaginante et desiderante de ægritudine.”—P. 51.

“Quemadmodum aliquis potest infici et ægritudinem suscipere ab aliquo alio ex evaporatione, sic et aliquis secundum istum modum potest suscipere sanitatem.”—P. 88.

Vaninius, in his work above referred to, has a passage to the same effect: “Vehementem imaginationem, cui spiritus et sanguis obediunt, rem mente conceptam realiter efficere, non solum intra, sed et extra. Ergo præpotentem animæ de valetudine cogitationem posse ægroto sanitatis aliquid impertiri.”—L. iv. Dial. 5.

There is also a curious passage in Maxwell upon this subject, which I take the liberty of subjoining: “Imaginationem extra corpus operari clarum esse puto.—Et quid quæso aliud est imaginatio quam, ut ita dicam, animæ manus, per quas illa sine corporis auxilio operatur.”—Med. Magnet. l. i. cap. 2.

Here, too, I cannot avoid quoting a remarkable passage from Cornelius Agrippa ab Nettesheym, in which he asserts that it is possible for a man to communicate his thoughts to another, even at a great distance, and appeals to his own experience, as well as to that of others, for the truth of the fact.

“Possibile est naturaliter, et procul omni superstitione, nullo alio spiritu mediante, hominem homini ad quamcunque, longissimam etiam vel incognitam, distantiam et mansionem, brevissimo tempore posse nuntiare mentis suæ conceptum: etsi tempus in quo istud fit non possit præcise mensurari, tamen intra viginti quatuor horas id fieri omnino necesse est: et ego id facere novi, et sæpius feci. Novit idem etiam fecitque quondam Abbas Trithemius.”—De Occulta Philosophia, lib. iii.

tisers, and he adds, that the confidence of the patient contributes to the efficacy of the remedy.

It is necessary, says he, that he who exercises this sort of enchantment should have great faith, a strong imagination, and a firm desire to cure the sickness. But these dispositions are not to be found equally in all men.*

It must not be concealed, however, that Pomponatius ascribes a much more extensive power to the magnetic virtue than any other author whom I have yet met with, and he even goes so far as to say, that in certain circumstances it may render the very elements, and matter itself, subject to the commands of man.†

There is no author of that age who appears to have so fully anticipated the discovery of *animal magnetism* as Van Helmont;‡ indeed, in perusing

* “Oportet præcantatorem esse credulum, et magnam fidem adhibere, et habere vehementem imaginationem et fixum desiderium, et circa unamquamque ægritudinem. Modo patet non omnes homines esse æqualiter dispositos.”—P. 73.

† “Cum hominis animæ voluntas et maxime imaginativa fuerint vehementes, elementa, venti et reliqua materialia sunt nata obedire eis.” P. 237.

‡ John Baptist van Helmont was born at Brussels in the year 1577, and died in 1644. He was educated for the profession of a physician, but spent the greater part of his life in chemical researches. He discovered the laudanum of Paracelsus, the spirit of hartshorn, and the volatile salts; and to him we owe the first knowledge of the elastic æriform fluids, to which he gave the name of *Gas*, which they still retain. The science of medicine is also under considerable obligations to Van Helmont. But some of his most singular and original opinions are those which relate to our subject. His works were collected some time after his death, and beautifully printed by Elzevir.

some parts of his works, we might almost conceive that we were reading the work of some disciple of Mesmer. His treatise *On the Magnetic Cure of Wounds*, is, in this respect, particularly remarkable. It was intended as an answer to two authors who had written upon the same subject—Goclenius, a physical philosopher then in great repute, and Father Robert, a Jesuit. The first had maintained the reality of the cures effected by the magnetic means, and ascribed them to natural causes. The latter did not deny these cures, but condemned them as proceeding from the devil.

Van Helmont shows that Goclenius had feebly defended the cause of truth; and he proves, in opposition to Father Robert, that there is nothing criminal or diabolical in the magnetic treatment, but that all the phenomena depend upon natural causes. “Magnetism,” says he, “is an universal agent; there is nothing new in it but the name; and it is a paradox only to those who are disposed to ridicule every thing, and who ascribe to the influence of Satan all those phenomena which they cannot explain.”* He defines magnetism to be “that occult influence which bodies exert over each other at a distance, whether by attraction or by impulsion.”† The medium or vehicle of this influence he designates by the name of the *Mag-*

* “Magnetismus, quia passim viget, præter nomen, nil novi continet; nec paradoxus nisi iis qui cuncta derident, et in Sataniæ dominum ablegant quæcunque non intelligent.”

† “Sic vocitamus eam occultam coaptationem qua absens in absens per influxum agit, sive trahendo vel impellendo fiat.”—§ 69.

nale Magnum, which he seems to consider as an universal fluid pervading all nature. It is not, he continues, a corporeal substance, capable of being condensed, measured, or weighed; but an ethereal, pure, vital spirit, or essence, which penetrates all bodies, and acts upon the mass of the universe. With regard to the human frame, he conceives that the seat of this magnetic influence is in the blood, and that it is called forth and directed by volition. Van Helmont occasionally gives to this influence the epithets of ecstatic and magical, using the latter word in its more favourable signification.*

In the same treatise, Van Helmont proceeds to say, that he had hitherto delayed the communication of a great mystery, viz. that there resides in man a peculiar energy, which enables him, by the mere force of his will and imagination, to act at a distance, and to impress a virtue, to exercise an influence, upon a very

* “ Igitur in sanguine est quædam potestas exstatica, quæ si aliquando ardenti desiderio excitata fuerit, etiam ad absens aliquod objectum, exterioris hominis spiritum deducendo sit: ea autem potestas in exteriori homine latet, velut in potentia; nec ducitur ad actum, nisi excitetur accensa imaginatione, ferventi desiderio, aut arte aliqua pari.”—§ 76.

“ Eadem vero anima, magicâ virtute non nihil expergefata, extra suum ergastulum, in aliud distans objectum solo nutu agere posse, per media deportato: in eo nempe sitam esse totam basim magiæ naturalis, nullatenus autem in ceremoniis variisque superstitionibus.”—§ 122.

“ Postremo est virtus magica a corpore quasi abstracta, quæ fit excitemento interioris potestatis animæ, unde fiunt potentissimæ procreationes et validissimi effectus, et per phantasiam suam agit, et quo spiritualior eo potentior.”—§. 157.

distant object.* This power, he admits, is incomprehensible; but there are other powers and agents in nature which we are equally incapable of comprehending, such as the power of human volition over the corporeal organs. The union of the soul and the body, too, and their reciprocal influence upon each other, depend upon causes which we are unable to discover.

Our author also asserts, that we can impress upon another body the virtue with which we ourselves are endowed; that we can thus communicate to it certain properties, and make use of it as an intermediate agent for producing salutary effects. He maintains, for example, that several vegetable remedies derive a peculiar efficacy from the imagination of the individual who gathers or prepares them; and this is quite consistent with the alleged experience of many of the modern professors of animal magnetism. But one of the most remarkable passages in this treatise, is that in which the author explains the conditions necessary to the success of the magnetic treatment. "We have already observed," says he, "that all magical power lies dormant in man, and that it requires to be excited. This is invariably the case, if the subject upon whom we wish to operate is not in the most favourable disposition; if his internal imagination

* "*Ingens mysterium propalare hactenus distuli; ostendere videlicet in homine sitam esse energiam quâ solu nutu et phantasia sua queat agere in distans, et imprimere virtutem, aliquam influentiam, deinceps per se perseverantem et agentem in objectum longissime absens.*"
§. 158.

does not abandon itself entirely to the impression which we wish to produce upon him ; or if he, towards whom the action is directed, possesses more energy than he who operates. But when the patient is well disposed, or weak, he readily yields to the magnetic influence of him who operates upon him through the medium of his imagination. In order to operate powerfully, it is necessary to employ some medium ; but this medium is nothing unless accompanied by the internal action." * All this, as we shall afterwards see, is quite coincident with the modern doctrine of *animal magnetism* introduced by Mesmer.

There is nothing more striking, and probably to most persons more incomprehensible, in the works of Van Helmont, and, indeed, of most of the early writers on the subject of magnetism, than the vast and mysterious influence which they ascribe to the power of energetic and concentrated volition—an opinion which could hardly be founded but upon experience of the fact. In this respect, too, there appears to be a remarkable coincidence between their opinions and the doctrines and practice of the modern magnetic school of Barbarin, which the reader will find explained in the sequel.

The will, according to Van Helmont, is the first of powers. It was by the will of the Almighty that the

* "Diximus omnem fortassis magicam vim dormire et excitatione opus habere ; quod perpetuo verum est, si objectum in quod agendum est non sit proxime dispositum, si ejus interna fantasia non prorsus annuat agentis impressioni, vel etiam si robore patiens sit par vel superior agenti ; at contra," &c. §. 172.

universe was created ; it was by volition that motion was originally impressed upon all objects ; it is the will existing in man, which is the principle of all his actions. Volition belongs to all spiritual beings ; it is the more active and powerful in them, in proportion as they are disengaged from matter ; and the energy with which it operates without the assistance of organs, is the essential characteristic of pure spirits. These positions are laid down by our author in his treatise, entitled *Actio Regiminis* ; where he repeats in somewhat different words, the opinions which he had so often expressed in the work to which we have already so fully referred.*

It seems unnecessary to take any notice of the theory upon which, in another treatise, Van Helmont endeavours to account for the phenomena to which he refers. It may be observed, however, that he there lays down more clearly a principle which is implied in some of his preceding propositions, viz. that those who exert this magnetic influence, operate more or less powerfully according to the energy of the will ; and their operation may be impeded by the resistance of that which is operated upon. A magician † will operate much more certainly upon weak than upon robust beings ; because the power of operating by

* “ Est ergo tertia actio spiritibus incorporeis propria, qui non requirunt ad agendum radicem directam nec aspectum objecti, nec ejus propinquitatem, dispositionem aut colligationem, sed agunt solu nutu potestativo, longe vi influentiali efficaciore.” *Act. Regimin.* § 39.

† This word might here be very properly translated *Magnetiser*.

volition has its limits, and he who possesses energy of mind, can easily resist it.*

It would be premature, perhaps, at present, to give any account of the observations and experiments of Van Helmont, on the subject of the ecstatic, or magnetic crisis. In the meantime, I may observe, that it appears quite evident from the whole works of this author, that he was not only perfectly well acquainted with the magnetic influence, but that he made use of it professionally, and placed great confidence in its effects. He himself, indeed, informs us, that when the plague was raging in the town of Brussels, he thought it his duty to seize the opportunity of instructing himself, and of being useful to others. He accordingly offered his services to attend the sick ; neither the fatigue nor the fear of infection could abate his zeal, or extinguish his charity. “ Perceiving,” says he, “ that most of the physicians deserted the sick, I devoted myself to their service, and God preserved me from the contagion. All, when they saw me, seemed to be refreshed with hope and joy ; whilst I, supported by faith and confidence, persuaded myself that God would be pleased to confer upon me the science of an adept.†”

These observations and opinions of Van Helmont, and other writers of his age, are exceedingly curious, and certainly deserved a careful experimental investigation. But the style in which most of these treatises were written, was so shrouded in mystery ; the vague

* See Van Helmont's Treatise, *De Injectis Materialibus*.

† *Promissa auctoris*, col. 3, § 7.

and unsatisfactory theories, in which their authors delighted to indulge, tended so much to obscure the few facts which they really developed; and the opinions which they announced were so much at variance with the common philosophical systems, as well as with the ordinary experience of life, that no attempts appear to have been subsequently made to ascertain the truth or falsehood of their principles by a fair appeal to the decisive test of scientific experiment. On the contrary, the magnetic authors gradually came to be generally regarded as idle visionaries or contemptible empirics; they were placed in the same class with the astrologers and alchemists; their works were consigned to neglect and oblivion, or, at most, only occasionally consulted by the curious, and referred to as striking instances of the hallucinations of the human intellect. Thus were the mystical volumes of these magnetic philosophers allowed to repose, for a long period, amidst the learned dust of our libraries, until, in recent times, when the subjects of which they treated again began to attract a considerable share of the public attention, they were sought after with avidity, drawn forth from their obscurity, carefully studied, and appealed to by the professors of *animal magnetism* in support of their principles and practice.

Did we feel ourselves justified in adopting some such theory as that involved in the opinions of those authors whose writings we have just been considering, there is no doubt that we should be enabled to give an apparently satisfactory explanation

of many alleged facts which appear otherwise inexplicable ; and of which, therefore, it has been usual hitherto, to deny the reality altogether, and to ascribe them entirely to imagination or delusion. In all ages and countries, indeed, phenomena similar to those which are alleged to be produced by *animal magnetism* have been occasionally observed. The ancient writers are full of allusions which, when carefully examined, leave no room to doubt that some knowledge of these powers and processes obtained in very early times. How are we otherwise to explain, in anything like a satisfactory manner, the ancient oracles, the prophetic dreams, and the cures produced by the touch of the priests in the Temples of Health, which popular belief ascribed to the immediate influence of some beneficent deity ? At a subsequent period, indeed, these singular effects were attributed to the impositions of the priesthood, aided by the ignorance and credulity of the people. But since the discoveries which have been made during the practice of *animal magnetism*, it has appeared exceedingly probable to many learned inquirers, that these phenomena were not the offspring of fraud and deception, but depended upon a knowledge of certain principles, which was afterwards obscured or lost amidst the decline of those institutions by which it had been cherished.*

Yet this knowledge does not appear to have been totally lost. There occur in the works of the Greek and Roman authors occasional expressions, which cannot well be explained unless upon the supposition,

* See Sprengel's *Gesch. d. Medicin.*

that some memory, at least, of these very ancient practices had been preserved by tradition.

In the following verses of Solon, we have the earliest and perhaps the directest testimonies to the practice of manipulation as a sanative process to be found in antiquity. It is surprising that they should have hitherto escaped the notice of all the writers upon *animal magnetism*, many of whom have exercised great diligence in collecting the allusions to this process which occur among the ancients.

Πολλάκι δ' ἐξ ὀλίγης ὀδύνης μέγα γίγνεται ἄλγος,
 Κούκ' ἂν τις λύσσαιτ' ἥπια φάρμακα δούς.
 Τὸν δὲ κακαῖς νούσοισι κυκώμενον ἀργαλείαις τε
 ἈΨάμενος χειρῶν, αἰψα τιθεσ' ὑγιῇ.

SOLON, *apud Stobæum*.*

The following remarkable expressions occur in the *Amphitruo* of Plautus: "Quid, si ego illum tractim tangam, ut dormiat." These expressions are evidently used euphemistically in a humorous sense, for "What if I knock him down;" but we can hardly fail to perceive that there is here an obvious allusion to some method of setting persons asleep by a particular process of manipulation; and, accordingly, they are so explained in a note upon this passage in Taubmann's edition of Plautus.†

* Stanley, in his *History of Philosophy*, (1666) has given us a very competent translation of these verses:

"The smallest hurts sometimes increase and rage
 "More than all art of physic can assuage;
 "Sometimes the fury of the worst disease
 "The hand, by gentle stroking, will appease."

† The words of Taubmann are these: "Tractim tangam, ut dormiat. Perbelle videtur ludere, tralatione a nutriculis ductâ, quæ pusiones

In the following verses of Martial, the process in question is not merely alluded to, but pretty fully described. They occur in B. iii. Ep. 82, and appear to refer to some refinement of luxury.

Percurrit agili corpus arte tractatrix,
Manumque doctam spargit omnibus membris.*

Sprengel, in his learned *History of Medicine*, informs us that, in chronic affections, Asclepiades of Bithynia, who acquired so much reputation as a physician at Rome, recommended frictions, to be continued until the patient fell asleep, which sleep he considered as very salutary. Tacitus and Suetonius have preserved an account of two remarkable magnetic cures, which were performed by the emperor Vespasian, at Alexandria.†

Among the ancient oriental nations, the cure of diseases by the application of the hands appears to have been well known. The Chaldean priests are said to have practised this mode of treatment; as also the Indian Bramins, and the Parsi. According to the accounts of the Jesuit Missionaries for the year 1763, the practice of curing diseases by the imposition of the hands, has prevailed in China for many ages.

palma leniuscule demulcent ut dormiant."—Taubmann's Commentary on Plautus was published in 1612.

* There is also a passage in Seneca's Epistles, in which this process seems to be alluded to, although the meaning, perhaps, may be thought ambiguous. "Quidni ego feliciorum putem Mucium, qui sic tractavit ignem, quasi illam manum tractatori prætisset." Ep. 66.—The Latin words—*Tractator* and *Tractatrix*—seem to imply the knowledge and practice of some art of this kind among the Romans.

† Tacit. Hist. iv. 81. Suet. in Vespas. vii. §§. 5, 6.

If we admit, to any extent, the efficacy of these manipulations, and give any degree of credit to what has been alleged in regard to the influence of human volition, we shall have the ready means at hand of explaining, in a pretty satisfactory manner, many of those extraordinary cases which have served as a foundation for the popular belief in witchcraft, sorcery, possession, &c.—a belief which has led to many absurdities in speculation, and occasioned many enormities in practice. Some learned persons, indeed, have expressed an utter scepticism with respect to the foundation of the belief in question, considering it as entirely delusive; whilst others have attempted to account for such of the phenomena as they conceived to be undeniable, upon principles which are altogether inadequate and unsatisfactory. If, however, upon a more minute investigation into the powers and processes of nature, and a more thorough examination of the physiological and psychological principles upon which they depend, it should appear that the phenomena which have occasioned so much doubt and discussion may be justly ascribed, partly, to sympathetic susceptibility, to certain reciprocal influences of organic and inorganic bodies upon each other; partly, to a certain disposition of the nervous system, and probably, in some instances, to a diseased state of the animal organism,—would not this tend to dissipate, in a great measure, the clouds which have hitherto enveloped this mysterious subject, and assist us in evolving principles, which, by controlling alike the rash incredulity of scepticism and the irrational errors

of superstition, could not fail to prove highly interesting and advantageous to the philosophy of man.

Some curious facts respecting the great confidence which the North American Indians place in the professors of the magical arts will be found in Hearne's Journey. Such is the influence of these professors, that they appear to be capable of curing the most serious complaints without resorting to any physical means, and that the fear of having incurred their malignity plunges individuals into diseases which often terminate fatally. One of these Indians, Matonabbi by name, conceiving that Hearne was in possession of supernatural powers, requested him to kill, by magic, a man, against whom he entertained a deadly hatred. To oblige him, Hearne, without dreading any bad consequences, drew some figures upon a piece of paper, and gave it to Matonabbi, advising him to make it as public as possible. Matonabbi's enemy, who enjoyed perfectly good health, scarcely heard of the paper, when he became melancholy, refused food, and died in the course of a few days.

Here we have a very simple case, in which we can have no difficulty in ascribing the whole effect produced, primarily, if not solely, to the influence of the imagination. To this power, indeed, as we shall see in the sequel, many learned persons were, at one time, disposed to attribute all the phenomena of *animal magnetism*. But there is a vast number of cases which do not admit of being satisfactorily explained upon this hypothesis.

The following case, in some of its features, bears a

striking analogy to the magnetic. It is quoted from the newspaper report of a trial which took place at the Taunton assizes, on the 4th of April 1823, before Mr Justice Burrough.

Elizabeth Bryant, aged 50, with her two daughters, Elizabeth, aged 22, and Jane, aged 15, were charged with maliciously assaulting an old woman, Ann Burgess, a reputed witch, under the following circumstances.—It appears that Elizabeth Bryant, the younger, had been afflicted with fits, which were supposed to have been occasioned by the influence of some malignant spirit ; and a noted sorcerer in the neighbourhood was resorted to by the mother for advice. The conjuror, in order to break the charm, gave an amulet to secure the wearer against witchcraft, and prescribed some medicines to be taken internally, and also a paper of herbs to be burned with certain ceremonies and incantations. But this was not all ; for the prisoners were actually possessed with the horrible notion, that, in order to dissipate the charm effectually, it was necessary to draw blood from the witch. Accordingly, having fixed upon the prosecutrix as the individual by whom the young woman was bewitched, they took an opportunity of making an assault upon her, and of drawing blood from her arm by lacerating it dreadfully with a large nail. The parties were convicted, and had sentence of imprisonment.

This trial is curious, as affording an instance of the rude belief in witchcraft, still prevalent in some remote parts of the country. But there are some farther

circumstances mentioned in the newspaper report of the case, which are more to our purpose.

The fits, with which the young woman was afflicted, are not very circumstantially described. It is said, that, "when worked upon, she would dance and sing, just as if she was dancing and singing to a fiddle, in a way that there was no stopping her before she dropped down, when the fiend left her. Whilst the fit was upon her, she would look *wished* (wild or frightened,) and point at something, crying: *There she stands! there she stands!*" One of the witnesses said that she felt for the girl very much, and that her state was "very pitiable." It likewise appeared that she had been subject to these fits for twelve months.

But the conclusion of the report is most remarkable. It is said, that, "as the preparations were taken by the ignorant creatures, it could not be ascertained what they were," whether medicinal, or mere rubbish, *as is most probable*. But we are positively assured, that *after the rites were all performed*, such was the effect upon the imagination of the girl, who fancied herself possessed, that *she has not had a fit since*.

Had it not been for the brutal assault upon the old woman, this case would have been a very innocent one, and would merely have added another instance to the many already on record, of the efficacy of the psychical, or, as some would call them, the *magnetic* remedies.

Upon the subject of these magnetic remedies, I must beg permission to make a quotation from a work by an eminent foreign physician, whose talents and ex-

perience entitle his observations to be treated with great attention and respect.

“It is a proof,” says Dr Ziermann,* “of partial and narrow views, which forms a great and a just reproach to medical science, in our days, that its professors should conceive that all diseases must be cured merely by medicines. This certainly betrays as great a deficiency of science and experience, as is objected to those who rely solely upon the efficacy of the magnetic manipulations. That there are great masters in medicine,—in the art of curing diseases by the administration of drugs,—is no proof to the contrary; for they would have been much greater masters of their art, and much more successful physicians, had they not themselves limited their means. They would have restored to health many of those patients whom they now dismiss as incurable; and they would cure many patients more rapidly, and more effectually, than they now do. Every means that can be used as a remedy, without greater disadvantages than the disease itself, is a sanative and an auxiliary, and, as such, ought to be employed by the physician. He ought not to be

* Stieglitz's Ideen über den thierischen Magnetismus. Beleuchtet von Dr J. C. L. Ziermann. Hannover, 1820.

Dr Ziermann, I believe, was for many years in the military service of Great Britain. The above work was written in answer to a publication, upon the same subject, by Dr John Stieglitz, physician to the king at Hanover, which appeared there in 1814. In his work, Dr Stieglitz had admitted the greater part of the phenomena of *animal magnetism*, and did not even pretend to deny the efficacy of the treatment as a remedy in diseases; but his book, upon the whole, was written in a hostile spirit, and it was evident that he viewed the magnetic treatment with considerable jealousy.

ignorant of the psychical remedies, which are intimately interwoven with the doctrine of magnetism. By psychical remedies, I understand not merely the art of curing mental diseases by means of tangible and ponderable drugs, ————— but the art of operating upon the spiritual powers and capacities of man, upon the heart and understanding, the temper, character, modes of thinking and prejudices,—which may be done in a variety of ways, by words, gestures, signs, and actions, according to the mental disposition and constitution of the individual ; so as to affect the invisible vital functions, or the basis of the phenomenal life, and thus produce salutary changes in the diseased organization. How this is effectuated, indeed, we know not ; but that it is effectuated is certain, for we have experienced it.

“ The physician, therefore, must not be a mere dealer in medicines ; he must understand how to operate in a salutary manner upon his patients without drugs, or by employing them only in part ; and if he does not know, or neglects to do this, he does not possess, or does not exercise his art in its whole extent ; and were he even the greatest master of medicine in the world, still he is not the more perfect physician which he might be. ——— All really great physicians have acknowledged this truth, and applied it in practice. Along with the use of drugs, they have employed the psychical remedies, in the sense in which I have used the expressions. Hence, too, we can explain, how physicians possessed of moderate medical attainments, but endowed with much intuitive or acquired know-

ledge of human nature, and, on the other hand, men of great medical skill, have, with very insignificant medicines, been fortunate in operating cures throughout their whole lives. In vain, perhaps, would Boerhaave have exhausted the whole magazine of antispasmodic drugs, even to alleviate the convulsions with which the children in the Haarlem Orphan-house were seized. A few words from his lips were sufficient to produce a perfect cure upon the spot."

About the middle of the seventeenth century, there appeared in London, a certain gardener of the name of Levret, an Irish gentleman, Valentine Greatrakes, and the notorious Dr Streper, who cured, or pretended to cure, various diseases by stroking with the hand. Their proceedings excited considerable sensation at the time; but no attempt seems to have been made to investigate the subject physiologically; on the contrary, their treatment soon came to be regarded as a piece of quackery, or as the consequence of a peculiar virtue specially conferred by nature upon these individuals.*

* The learned Pechlinus, in his work entitled, *Observationum Physico-Medicarum libri tres*, Hamb. 1691, has preserved a pretty full account of Greatrakes; and there is also extant a treatise, said to have been written and published by that singular individual himself, entitled, *Brief Account of Mr Valentine Greatrakes*, Lond. 1666. The efficacy of the treatment adopted by Greatrakes is attested by the most respectable witnesses; amongst others, by the celebrated experimental philosopher, and truly pious Christian, Mr Boyle; who also bear ample testimony to the simplicity and excellence of his moral character, and his reverence for the principles of religion. The philosopher Cudworth was among his patients.

The method of Greatrakes consisted in applying his hand to the diseased parts, and in rubbing gently downwards. This is very like the most common and most simple process adopted by the present magnetisers; and it is remarkable that the effects produced by his treatment appear to have been precisely similar to some of the ordinary phenomena of *animal magnetism*; viz. increased excitement, different kinds of excretions, such as perspiration, alvine evacuations, vomiting, &c. No mention, however, is made of sleep or somnambulism in the accounts given of the cures performed by Greatrakes; whether it be that he did not produce these phenomena, or that he did not particularly observe them. It is remarked, indeed, by Deleuze, and by other writers upon *animal magnetism*, that somnambulism rarely appears when it is not sought to be excited, and that it may take place without being observed, as actually occurred to some of the first disciples of Mesmer.*

* A number of other instances might be produced of persons who, without any knowledge of magnetism, have cured diseases by the touch, believing themselves to be specially endowed with this virtue. Deleuze, on the authority of credible persons, mentions a shoemaker of Auxerre, of the name of Dal, who operated efficaciously in this manner, upon persons affected with the toothach, sprains, &c. He would accept of no remuneration; and he even alleged, that, if he once took payment, he should no longer operate with success.

In the German Archives of Animal Magnetism, (Vol. i. No. 3.) there is an extract of a letter from Silesia, dated 22d July 1817, giving an account of a magical or magnetic doctor, of the name of Richter, who had cured many sick and infirm persons merely by manipulation. He was visited, it is said, by multitudes, from ministers of state and counts down to the lowest beggars; and he cured them all indiscriminately and gratuitously. He refused every kind of recompense; and when

A still more extraordinary character appeared, long afterwards, in the person of the German exorcist, John Joseph Gassner. Gassner was born, in 1727, at Bratz, near Pludenz, in Suabia, and became Catholic minister at Clösterle, in the bishopric of Chur. He took up a notion that most diseases arose from demoniacal possession, and could be cured by exorcism. He commenced by curing some of his parishioners in this way, and excited considerable sensation. He went first to reside with the Bishop of Constance, and afterwards, in 1774, with the Archbishop of Ratisbon at Elwangen, where he performed a number of astonishing cures, especially among patients affected with spasmodic and epileptic complaints. A public officer took regular and copious minutes of his procedure, which were attested by a number of persons of the first respectability. The phenomena which occurred were of the most extraordinary nature; the facts never were denied, nor attempted to be refuted; although, at a subsequent period, persons who had not witnessed the treatment, and could not explain the phenomena, found it most convenient, as usual, to throw discredit upon the whole procedure, and ascribe it wholly to quackery and imposture.

any thing was given, it was immediately handed over to the poor. The government had investigated his conduct and procedure, and granted him protection. He is afterwards described as a man of good substance, an innkeeper at Royn, near Leignitz, of a vigorous and healthy constitution, and the best reputation. Some account of this man will be found in the second volume of Kausch, "*Memorabilien der Heilkunde*."

It was not until towards the end of the eighteenth century, that this most interesting subject was revived, and that, after an ample series of experimental investigations, the remarkable efficacy of this mode of treatment was fully developed, and firmly established by induction. For this discovery,—if such we may be permitted to call it,—the world is indebted to a man, whose character and motives have been painted in such opposite colours, and whose merits have been so variously appreciated, that, were we to draw our inferences merely from a perusal of the writings of his partizans and his opponents, without any serious examination of those labours upon which his reputation must ultimately rest, we should find it difficult to determine, even at the present day, whether we ought to consider him as one of the greatest benefactors to science, and to the human race in general, or as one of the most impudent and most successful scientific impostors who have ever attempted to practise upon the credulity of mankind.

Frederick Anthony Mesmer, a native of Switzerland, was born upon the 23d of May 1734. In his youth, he came to Vienna, in very needy circumstances, for the purpose of studying physic; and after having attended the lectures of Van Swieten and De Haen for several years, and taken his degree of Doctor of Medicine, he settled in that capital as a practising physician, and placed himself in a situation of independence by an advantageous marriage. From

his youth upwards, he evinced a strong bias towards the uncommon and the marvellous ; and his favourite employment was to search after the almost forgotten works of the old mystical writers, particularly those who treated of astrology, which he studied with great attention and earnestness. The consequence of this was, that, upon the occasion of his promotion, in the year 1766, he wrote and publicly defended a dissertation *On the Influence of the Planets upon the Human Body*. This treatise drew down upon him the universal ridicule of his professional brethren, who regarded him, from that period, as a strange visionary ; and it is probable that this first display of his early bias injured his character as a physician during the whole of his subsequent career. But the only effect of this treatment upon Mesmer himself, was to render him still more ardent and enthusiastic in the prosecution of his favourite studies.

His theory of the influence of the stars upon the human body is founded upon the assumed existence of a certain subtile element, or essence, pervading all nature, (the ether of Newton ;) and this element he, at first, thought to have discovered in electricity, until, by repeated experiments, he became convinced of the insufficiency of that principle to explain the phenomena.

After a variety of fruitless efforts, he, at length, in the month of November 1773, resorted to the magnet, to which his attention had been particularly called by the Jesuit, Maximilian Hell,* professor of as-

* Hell was born at Chemnitz in Hungary, in the year 1720, and

tronomy at Vienna ; for which reason, the latter subsequently claimed for himself the merit of the discovery of the magnetic remedy. Mesmer was the more readily induced to believe that he should be enabled to attain his end by means of the magnet, as many previous writers had not only proved its efficacy upon the human body, but had ascribed to it an extensive influence over universal nature.

He now proceeded to apply artificial magnets

entered, at an early age, into the order of Jesuits. From his youth he devoted himself to the study of astronomy and experimental philosophy ; in 1745—46, he assisted Father J. Francois, who had the charge of the Jesuit's Observatory at Vienna, in his observations, and took an active part in promoting the establishment of a cabinet for experimental physics in that city. Having taught the mathematics, for some years, at Clausenburg in Transilvania, he was recalled to Vienna to fill the situations of astronomer and keeper of the observatory. From 1757 to 1786, he published yearly Ephemerides, which form a very interesting collection for the astronomer. Count Bachoff, the Danish ambassador at Vienna, urged him to undertake the task of observing the transit of Venus in Lapland ; and, for this purpose, Hell set out in the month of April 1768. After having accomplished his purpose, he returned to Vienna in August 1770. Of his subsequent connection with Mesmer some notice has been taken in the text. Hell died at Vienna on the 14th of April 1792, after having contributed greatly to the advancement of astronomical science. His works, besides the Ephemerides above-mentioned, are numerous. Among these are, *Tabulæ solares N. L. de la Caille, cum suppl. reliquar. tabular.* 1763. *Tabulæ lunares Tob. Mayer, cum suppl. D. Cassini, de Lalande, et suis,* 1763. *De transitu Veneris ante discum solis die 3tio Jun. 1769, Wardachusii in Finnmarchia observato,* 1770. *De paralaxi solis ex observatione transitus Veneris anni 1769, 1773, &c.*

It does not appear that Hell can claim much of the merit due to the discovery of *animal magnetism*. He may have originally suggested the use of the mineral magnet, to which he always ascribed the remedial efficacy ; whereas, the experiments of Mesmer, as will be seen, ultimately led to a very different result.

which his friend Hell prepared for him in various forms) to diseased parts of the human body ; he afterwards brought the affected parts into permanent connection, or affinity, with his magnets, and had, at length, the pleasure of witnessing the most satisfactory effects. These results of his experience he published to the world in a *Letter to a Foreign Physician on the Magnetic Remedy*. Upon this occasion, however, he got involved in a controversy with his friend Hell ; but after some explanations, the parties became again reconciled to each other.

As several respectable individuals had been relieved from the most obstinate complaints by this treatment, some of whom had been induced to communicate their cures to the public through the medium of the press, and as other physicians besides Mesmer, now resorted to the same practice, and experienced the same satisfactory results ; the new remedy could not fail to attract considerable attention, although there were some who could perceive no particular advantage in it, while others totally denied its efficacy.

The magnetic remedy, indeed, was not sanctioned or patronised by the physicians of Vienna ; and Mesmer experienced so much calumny and persecution, on account of the novelty and singularity of his practice, that he resolved to withdraw himself from that capital. Accordingly, in the years 1775 and 1776, he made travels of discovery into Bavaria and Switzerland, and performed several remarkable cures, as well in private circles, as in the public hospitals at

Bern and Zurich. Upon this occasion too, he paid a visit to the famous exorcist, Gassner, at Ratisbon.

Upon his return to Vienna, in order to be enabled to continue his practice with more secrecy, and less interruption, he established an hospital in his own house, where he received destitute sick persons, whom he subjected to the magnetic treatment.

Hitherto, Mesmer had always made use of the magnetic rods in operating upon his patients, and he believed that the remedial efficacy of his treatment was the consequence of a certain virtue inherent in the mineral magnet. In the course of his experiments, however, he was now led to form a very different conclusion.

He observed that, in the case of nervous patients, in particular, he was enabled to produce a variety of phenomena of a very peculiar nature, which were not reconcileable with the usual effects of the magnet. This induced him to suppose that his magnetic rods, perhaps, did not operate merely by attraction, but that they, at the same time, served as the conductors of a fluid issuing from his own body. This conjecture seemed to him to be converted into a certainty, when he became satisfied, by repeated experiments, that he could produce the very same effects, without using the magnet, by merely passing his hands from the head of the patient towards the lower extremities, or even by making these motions at some distance from the patient; and that he could also communicate to inanimate objects, by merely rubbing them with his hand, the power of producing similar effects upon

such nervous patients as came into contact with them. *

Partly swayed by the fact ascertained by previous experiments, that, in like manner, by repeated friction in certain directions, a magnetic attraction could be excited in iron, without the application of any magnet; and partly seduced, also, by the supposed fact, that in the process above mentioned, the animal body exhibited a certain polarity and inclination; Mesmer now jumped, at once, to the conclusion, that there exists in the animal frame an original and peculiar species of magnetism, which is capable of being set in activity without the aid of the artificial magnet. He now extended this magnetic power over all nature; formed theories upon this assumed fact; and, in so far as this alleged influence was exhibited in the animal body, he gave it the name of *animal*, to distinguish it from the *mineral* magnetism. †

* The disciples of Mesmer, therefore, could be at no loss, upon their own principles, to account for the efficacy of *Perkins's Metallic Tractors*, which, at one time, made so much noise in this country. They were, in fact, nothing else than a modification of *animal magnetism*; and being themselves merely conductors, it was of no essential consequence whether they were made of metal, or (as Dr Haygarth's) of any other substance. Yet, if we may give credit to some of the more recent writers upon *animal magnetism*, there is a peculiar virtue in certain metals, capable of affecting the human frame in different ways. But into this subject we have no occasion to enter at present.

† It has been thought proper to point out, thus particularly, the original mistake of Mesmer, because it is quite certain that a great deal of the argument, and almost the whole of the wit and ridicule, by which the magnetic treatment has been assailed, have been suggested by the name; and many persons, otherwise ignorant of the subject, still expect, like the first French Commissioners, to see the magnetic

It is highly probable, if not absolutely certain, that the discovery of that organic susceptibility which gave rise to the magnetic treatment, did not originate entirely with Mesmer himself, but was suggested to him by the perusal of the works of certain mystical writers of the sixteenth and seventeenth centuries, to which reference has already been made. But, Mesmer has the unquestionable merit of having been the first, in recent times, who availed himself of the hints of these earlier writers, and who, by patient and indefatigable investigation and experiment, established, as demonstrated fact, that which, so far as we know, had previously been mere theory and conjecture.

From the period of this curious discovery, however, its author daily assumed a more mysterious demeanour, veiled his experiments and observations in a sort of sacred obscurity, and talked no more of mineral, but of *animal magnetism*. He no longer made use of the magnetic rods, but considered his own body as the depository of this magnetic virtue, which he was not merely capable of communicating, at pleasure, by immediate manipulation, but could convey to a distance by means of his volition, and thus eradicate the most complicated diseases, without explaining, in an intelligible and satisfactory manner, the method in which he performed his cures.

No person was able to penetrate this mysterious obscurity; but it was still commonly believed that

fluid sensibly exhibited. The name of *animal magnetism* is now admitted to be improper, but it would not be easy to substitute one more appropriate.

Mesmer continued to operate by means of magnetic rods concealed about his person. Meanwhile, some learned individuals endeavoured to throw discredit on his treatment; and others, who had once been attached to him, afterwards publicly and explicitly proclaimed their scepticism. Mesmer, in short, was pretty generally held to be an impostor, at least, a self-deceiving enthusiast. In order to obviate these suspicions, he sent circular letters to the most celebrated learned societies in Europe, in which he attempted to explain his principles, and gave an account of his magnetic cures. Of these learned bodies, the Royal Academy of Berlin alone condescended to return an answer, in which some doubts were expressed, and some queries put to the author, to which, however, he did not think proper to make any reply; and by this conduct, he strengthened the unfavourable opinion which had been entertained against him.

The ill repute in which he now stood in the eyes of his professional brethren and the scientific public in general, combined with the diminution of his fortune, induced Mesmer to leave Vienna, in the year 1777, and to look about for some new theatre for the exercise of his magnetic art. Some time elapsed before the public received any certain intelligence respecting him; but at length, in the month of February, 1778, he made his appearance at Paris; where, however, he, at first, found the learned but little disposed to patronise his discovery. He was, however, fortunate enough to make a convert of Dr D'Eslon, who became a zealous partizan of the mag-

netic doctrine, and encouraged Mesmer to publish, in the following year, a short treatise,* which, besides an apology for his conduct in Vienna, contained a concentrated view of his system in twenty-seven propositions. The following is the substance of this system.

There exists a reciprocal influence between the heavenly bodies, the earth, and animated beings. The medium of this influence is a very subtile fluid, pervading the whole universe, which, from its nature, is capable of receiving, propagating, and communicating every impulse of motion. This reciprocal action is subject to certain mechanical laws, which have not yet been discovered. From this action there result alternative effects, which may be considered as a *flux* and *re-flux*. This flux and re-flux may be more or less general, more or less particular, more or less compounded, according to the nature of the causes which determine them. It is by this operation (the most universal of those which nature exhibits to us) that the relations of activity are maintained between the heavenly bodies, the earth, and its constituent parts. The properties of matter, and of organized bodies, depend upon this operation. The animal body experiences the alternative effects of this agent; which, by insinuating itself into the substance of the nerves, affects them immediately. The human body exhibits properties analogous to those of the magnet, such as *polarity* and *inclination*. The property of the animal body, which renders it susceptible of this influence,

* Memoire sur la decouverte du Magnetisme animal. Paris, 1779.

occasioned its denomination of *animal magnetism*. The action and the virtue of *animal magnetism* are capable of being communicated to other animated and inanimate bodies. The one and the other, however, are susceptible of them in different degrees. This action and this virtue can be increased and propagated by these bodies. We observe from experience the flowing of a certain subtile matter, which penetrates all bodies, without perceptibly losing any of its activity ; and it operates at a considerable distance, without the aid of any intermediate object. Like light, it is reflected by mirrors ; and it is invigorated, diffused, and communicated by sound. This virtue is capable of being accumulated, concentrated, and transported. There are animated bodies, although very rare, which possess a property so opposite to magnetism that their mere presence prevents all its effects in other bodies. This opposite power also penetrates all bodies, and is likewise capable of being concentrated and diffused : It is, therefore, not merely a negative, but a really positive power. The mineral magnet, whether natural or artificial, is likewise equally susceptible with other bodies of *animal magnetism*, and even of the opposite virtue, without suffering, in either case, any alteration of its agency in respect to iron ; which proves that the principle of *animal magnetism* is essentially different from that of the mineral. This system will furnish new illustrations of the nature of fire and of light ; as also of the theory of attraction, of flux and re-flux, of the magnet and of electricity. It will inform us, that the magnet and artificial elec-

tricity only have, with respect to diseases, properties in common with several other agents which nature presents to us ; and that, if the former have produced some salutary effects, these effects are to be ascribed to *animal magnetism*. By means of *animal magnetism*, nervous diseases may be cured immediately, and other complaints mediately : It explains to us the operation of the remedies, and promotes the salutary crises. With the knowledge of its principles, the physician can discover with certainty, the origin, the nature, and the progress of diseases, even the most complicated ; he can arrest their progress, and ultimately cure them, without ever exposing the patient to dangerous or troublesome consequences. Lastly, this doctrine will enable the physician to judge accurately with respect to the degree of health possessed by all individuals, and to preserve them from those diseases to which they may be exposed. Thus, the science of medicine may attain its highest degree of perfection.*

This novel and obscure theory found no favourable reception among the men of science in France ; on the contrary, it was not undeservedly treated, as the dream of a visionary, with coldness or contempt.

The Medical Faculty of Paris, however, could not be expected to continue altogether indifferent to the

* Since the great light which has been thrown upon this subject by the extended practice of *animal magnetism*, these early mystical theories of Mesmer and his partisans have become rather curious than really interesting or instructive. In a work like the present, however, some notice of them could not, with propriety, have been omitted. But let no one imagine that he has demolished *animal magnetism*, as a *fact*, when he has merely demonstrated the improbability of these hypotheses to explain its *cause*.

subject, especially as one of its members, Dr D'Eslon, was not only a zealous partisan of Mesmer, but had actually published a work upon *Animal Magnetism*. The measures at length resorted to, for the purpose of vindicating the honour of the body, were not, assuredly, very creditable to the state of science towards the conclusion of "the philosophical century." Instead of investigating the matter, with a view to ascertain the truth or falsehood of the obnoxious doctrine, they proceeded at once to deprive the magnetic Doctor of his voice in the Faculty for a whole year, and threatened farther, that, if he did not recant his principles at the expiration of that period, his name should be erased from the list of members; in short, that he should be excommunicated. A schism in the church, some centuries ago, could not have been contemplated at Rome with greater horror and alarm than were exhibited by these disciples of Æsculapius on the disclosure of the magnetic heresy.*

* Learned bodies seldom obtain much credit from posterity for their attempts to interfere with the progress of scientific discovery. In the year 169, the celebrated Galen came to Rome, where he became eminent for his successful practice; but the ignorance of the times drove him thence by an accusation of practising the magical arts. In the 17th century, Galileo was persecuted by the Roman Consistory, for maintaining the true theory of the planetary motions. In the year 1566, the Faculty of Medicine at Paris issued a decree prohibiting the use of antimony, and this decree was confirmed by the Parliament. Paumier of Caen, a great chemist and celebrated physician at Paris, having disregarded the decree of the Faculty, thus sanctioned by the Parliament, was degraded in 1609. The Quinquina, or Peruvian bark, was imported into Europe by the Spaniards in 1640. Nine or ten years afterwards, the Jesuits distributed a great quantity of it at Rome, curing intermittent fevers with it as if by enchantment.

But, although deprived of scientific and professional patronage, the practice of *animal magnetism* began to make considerable progress among the public; and this progress was greatly accelerated in consequence of the successful magnetic treatment of some patients from among the more respectable classes of society, who published accounts of their cures, and being astonished at the result of the means employed, took occasion to bestow the most extravagant panegyrics upon Mesmer and his remedial art. Among these was the celebrated Court de Gebelin, the learned author of the *Monde Primitif*, who, from a very dangerous state, had been restored to health by magnetism; and who, in a letter to his subscribers, not only related the particulars of his own case, as a proof of the superior efficacy of Mesmer's treatment, but extolled the magnetic *panacea* as the most wonderful discovery that had been made by human wisdom and ingenuity since the creation of the world.

The very mystery in which Mesmer enveloped his treatment, tended to excite curiosity, while it withdrew attention from the active principle, and thus caused him to be regarded as an extraordinary man, full of the ancient Egyptian wisdom, and conversant with all the secret influences of nature. This, while it extended his reputation, seemed to flatter the mys-

The physicians, however, declared war against this efficacious remedy, and the ecclesiastics prohibited sick persons from using it, alleging that it possessed no virtue but what it derived from a compact made by the Indians with the devil. In 1784, the Medical Faculty at Paris prohibited the practice of *animal magnetism* by any of its members under the penalty of being deprived of their privilege.

tical disposition of the man. His house became crowded with patients of all ranks, and from every quarter ; and such was the extent and success of his practice, that, in the course of a short time, he is said to have amassed a large fortune.

Although Mesmer had the undoubted merit of being the first who experimentally discovered the effects of the magnetic process upon the animal constitution, and who employed that process systematically for the cure of diseases, it cannot be denied that he affected a great deal of idle and almost ludicrous formality in his mode of conducting the treatment. We have now no means of ascertaining whether all this was done merely for the purpose of *mystification*, or whether he himself actually believed it to be essential to the success of his practice. There can be no doubt, however, that this affectation of mystery was highly unfavourable to the scientific investigation of the subject, besides injuring his own character in the eyes of many learned and sensible persons, who, looking only at the accessories, were disposed to regard him merely as a quack ; whereas, we have every reason to believe that he was himself sincerely impressed with a conviction of the reality, and the great scientific importance of the discovery which he had made.

He operated not only by the actual touch of his hands, or by means of an iron rod extended to some distance from his body ; but, by means of cords, he placed his patients in connection with magnetised trees, or conducted the invisible magnetic fluid out of

covered vessels (*baquets*) to the patients, who sat round in a circle ; and, by this treatment, he was enabled to throw them into very peculiar states, which could not be properly called either sleeping or waking, but presented some of the phenomena of both. It sometimes happened, however, that none of all these arrangements was found necessary ; for a single look from Mesmer was frequently sufficient to produce the same effects. This circumstance will be better understood when we come to consider the improvements which were made upon the processes of *animal magnetism* subsequently to the retirement of its discoverer.

In order, it is supposed, to increase the efficacy of his treatment, the chamber in which he performed his operations and cures was darkened to a sort of twilight ; a number of mirrors were placed around it ; and a profound and mysterious silence prevailed, interrupted only occasionally by the tones of the *harmonica*, an instrument upon which Mesmer himself performed with great skill, or by those of a harpsichord.

All this whimsical apparatus and mystery, however essential it may have appeared to Mesmer himself, had too much the semblance of quackery, and was certainly calculated to operate unfavourably to the reputation of his treatment in the minds of sober and scientific men ; who, upon a superficial view, and judging merely from what was submitted to their senses, must have been inclined to attribute any effects which they witnessed to the influence of the

surrounding scene upon the imagination and the nervous system, rather than to that secret magnetic virtue to which the operator ascribed them, but which could not be palpably exhibited. It is said that Mesmer in his latter days approved and adopted the more simple and less ostentatious, yet equally efficacious processes, which were subsequently introduced by his successors in the magnetic art. The Mesmerian system, however, with the use of the *baquet*, was for a long time retained, and, if not now, was, at least till lately, practised by some of his disciples.

Mesmer was not only deprived of the countenance and protection of the medical profession ; he was ridiculed by the wits of Paris, and attacked and calumniated by the public journals, into which, we are told, the censors allowed no article to be admitted which emanated from any of his partizans. At length he found it necessary to vindicate himself, and to expose to the world the unfair proceedings of his enemies.*

It cannot be denied, however, that Mesmer drew down upon himself a great deal of this obloquy and persecution by the obscurity of some of his propositions, the mystery attending his practice, and by the coldness and contempt with which he affected to treat the professors, as well as the profession of the medical art. He boldly set out with the extraordinary and novel principle : *There is but one health, one dis-*

* " *Precis historique des faits relatifs au magnetisme animal*," &c. 1781; a work which deserves to be carefully perused by all those who are desirous of obtaining a knowledge of the early history of the magnetic doctrines and practice.

ease, and one remedy, and arrogated to himself the discovery of the grand *panacea*.

To add to the disagreeableness of his situation, a misunderstanding arose between him and his intimate friend and zealous partizan, D'Eslon, who had set up a separate and independent magnetic establishment, a step which occasioned a serious breach between the disciple and his master. The consequence of all these unpleasant circumstances was, that Mesmer quitted Paris, and went to reside, for a time, at Spaa; at length he was induced, by the solicitations of his friends, to return to the French metropolis, for the purpose of delivering a course of lectures on his magnetic remedy.

Mesmer now had recourse to a proceeding which has exposed him to a good deal of animadversion. He had previously refused an offer made to him by the French government of 20,000 livres, for the communication of his secret, upon the pretext that it might give occasion to dangerous abuses; whereas, upon his return to Paris, he agreed to sell this secret, which he would not entrust to the prudence of the magistracy, to every private individual who was willing to pay him one hundred Louis-d'or in return. With this view he established a secret society under the name of "The *Harmony*," where he initiated those, who paid him the above price, into his mystery, under the most sacred promises of secrecy; and by this means he is said to have realised a fortune of 150,000 crowns.* This society consisted principal-

* M. Deleuze vindicates Mesmer, upon not unreasonable grounds,

ly of wealthy persons who had not been educated for the medical profession ; it reckoned only four physicians among its numbers.

In consequence of this step, *animal magnetism* lost a great deal of that impenetrable mystery in which it had been hitherto enveloped, and which had, at least, secured it from abuse. The secret was not kept : The art was empirically practised by persons who had obtained merely a superficial knowledge of its principles ; and it was frequently exposed to the most ridiculous misapplications ; circumstances which could not fail to bring the whole treatment into discredit.

In the meantime, however, some of Mesmer's pu-

from the censures to which he exposed himself by this proceeding. It must be recollected, that he had purchased the right of exercising the medical profession, and he was, therefore, entitled to make others pay for the instruction he communicated to them. But farther, he had spent a great deal of time and labour on a discovery, which he himself believed to be of vast importance to science and to humanity ; and he was rewarded for his exertions by the persecution of the whole faculty. He had, therefore, a right to sell the secret of his method to those who were willing to purchase it. But it is known to be a fact, that he instructed several individuals gratuitously ; and there is an anecdote respecting him, related by Deleuze, which proves his liberality, and does great credit to the delicacy and disinterestedness of his character. M. Nicolas, a physician of Grenoble, was one of those who came to be enrolled among his pupils. Having paid down the sum required, he confessed that the sacrifice embarrassed him a good deal. " I thank you, sir," said Mesmer, " for your zeal and your confidence ; but my dear brother, don't let this make you uneasy. Here are an hundred Louis ; carry them to the box, that it may be believed you have paid as well as the rest ; and let this remain a secret between ourselves." This anecdote was communicated to Deleuze by M. Nicolas himself. Moreover, it is very doubtful whether Mesmer ever realised such large sums, as he is alleged by some to have acquired.

pils made a more prudent and cautious use of *animal magnetism*. They established *harmonic societies* in the different provinces and towns of France, and united themselves under the general superintendence of Mesmer. In these institutions, the destitute sick were magnetised *gratis* in the presence of physicians; the discoveries made in the progress of their practice were communicated to each other; and the most interesting cases were made public through the medium of the press.

It is rather singular, that the Medical Society of Paris paid so little attention to this pretended discovery; and that they permitted *animal magnetism* to be practised for so long a period, without any investigation, interruption, or hinderance upon their part.

In the year 1778, indeed, at the solicitation of a friend of Mesmer's, they appointed a committee to enquire into this subject, consisting of the physicians, Daubenton, Desperrieres, Mauduyt, Andry, Tessier, and Vicq-d'Azyr; but Mesmer, although he had no objection to receive them, or any other individuals, as witnesses of his treatment, would not agree to the proposed investigation, on the ground that it might give him the appearance of a common mystical empiric. On the other hand, he proposed to the Medical Faculty, as a test of the superior efficacy of his practice, that twenty-four patients should be selected from the hospitals, one-half of whom were to be treated according to the usual principles of medicine,

and the other half should be magnetised by himself. * This proposal, however, was not accepted by the Faculty, who contented themselves with commissioning two of their members, MM. Andry and Thouret, to investigate the medicinal effects of the mineral magnet, a task which these gentlemen performed in a very satisfactory manner. †

* The same proposal, it is said, has been repeatedly made by the Marquis de Puysegur, but it has never been accepted. The circumstance is remarkable, as it demonstrates, at least, the great confidence which the magnetisers repose in the efficacy of their peculiar mode of treatment.

† See "Observations et Recherches sur l'usage de l'aimant en Médecine, ou Mémoires sur le Magnétisme Médicinal;" in the "Histoire de la Société Royale de Médecine," for the year 1779. Paris, 1782.

The medicinal efficacy of the mineral magnet seems to have been observed in ancient times, and its application, in certain diseases, was recommended by Galen and Dioscorides. Borelli takes notice of its application in the tooth-ach and ear-ach: "Quidam sunt, qui dentiscalpia, auriscalpiæque habent, quæ tactu solo dolores dentium, aurium et oculorum tollant." Klarich of Göttingen occupied himself, about the year 1765, with experiments on the medicinal efficacy of magnetism. (See the *Hannoverian Magazine* for 1765, and the *Göttingen Literary Advertiser* for 1765, 1766.) The reader will also find this subject amply discussed in the following works:

"Ludwig, Dissert. de Magnetismo in corpore humano." Leips. 1772.

"J. C. Unzer, Beschreibung der mit dem Künstlichen Magnet angestellten Versuche." Altona, 1775.

"J. F. Bolten, Nachricht von einem mit dem Künstlichen Magnet gemachten Versuch in einer Nervenkrankheit." Hamb. 1775.

"J. A. Heinsius, Beyträge zu meinen Versuchen welche mit künstlichen Magneten in verschiedenen Krankheiten angestellt worden." Leips. 1776.

"Sammlung der neuesten gedruckten und geschriebenen Nachrichten von Magnetcuren." Leips. 1778.

"Historia trismitonici quadraginta fere septimanarum a Philiatro de Woher curati. Freiburg, 1778."

At length, when animal magnetism prevailed to such an extent in France, as to give occasion to many abuses of that practice in the hands of the ignorant and unskilful, a royal mandate was issued, upon the 12th of March 1784, to the medical faculty, requiring them to appoint commissioners to investigate the matter. Two commissions were, in consequence appointed; the one consisting of members of the Academy of Sciences,—Franklin, Le Roi, Bailly, De Bori, and Lavoisier, and of the medical faculty,—Bovie, and after his death, Majault, Sallin, D'Arcet and Guillotin; the other composed of members of the society of physicians,—Poissonnier, Desperrieres, Caille, Mauduyt, Andry and Jussieu.

The result of the investigation by these commissioners is well known. They published reports altogether unfavourable to the pretensions of *animal magnetism*; and these reports seem to have satisfied most of the scientific men at that period, and have been appealed to ever since, more especially in this country, as having set the question, respecting the merits of the magnetic treatment, completely at rest.*

“E. G. Baldinger, *Programma, Succincta narratio historica, de Magnetis viribus ad morbos sanandos*, 1778.” (In *Opusc. Medic. Gottingæ.*)

“De Harsu, *Recueil des effets salutaires de l'aimant dans les maladies.*” Geneve, 1782.

* See “*Rapport des Commissaires de la Société Royale de Médecine, nommés par le Roi, pour faire l'examen du magnetisme animal*; Paris, 1784.—*Rapport des Commissaires chargés par le Roi de l'examen du magnetisme animal* (by M. Bailly); Paris, 1784.—*Exposé des expériences qui ont été faites sur le magnetisme animal. Lu à l'Académie des Sciences par M. Bailly.* Paris, 1784.—*Report of Benjamin Franklin and other Commissioners, charged by the King of France with the examination of the animal magnetism, as now practised at*

The whole of this investigation, however, is alleged by the professors of *animal magnetism* to have

Paris; translated from the French, with an historical introduction. Lond. 1785."

The following extract from the Report of the Commissioners will sufficiently show the object they appear to have had in view, and the method in which the investigation was conducted.

"1. Le fluide, que les Commissaires nomment fluide magnetique animal, n'existe pas, car il echappe à tous les sens.

"2. Ce fluide echappant à tous les sens, son existence ne peut etre demontré que par les effets curatifs dans le traitement des maladies, ou par les effets momentanés sur l'economie animale.—Il faut exclure de ces deux preuves le traitement des maladies, parcequ'il ne peut fournir que des resultats toujours incertains et souvent trompeurs.

"3. Les veritables preuves, les preuves purement physiques de l'existence de ce fluide, sont les effets momentanés sur le corps animal.

"Pour s'assurer de ces effets, les commissaires ont fait des epreuves, 1. Sur eux-memes; 2. sur sept malades; 3. sur quatre personnes; 4. sur une societé assemblée chez M. Franklin; 5. sur des malades assemblés chez M. Jumelin; 6. avec un arbre magnetisé; 7. enfin sur differens sujets."

"4. De ces experiences, les Commissaires ont conclu, que l'imagination fait tout, que le Magnetisme est nul. Imagination, imitation, atouchement, telles sont les vrais causes des effets attribué au Magnetisme Animal."

"5. Les procedés du Magnetisme etant dangereux, il suit que tout traitement public où les moyens du Magnetisme seront employés, ne peut avoir à la longue que des effets funestes."

Such is the substance of this celebrated Report. It seems quite clear that these Commissioners were exceedingly ignorant of the subject which they were charged to investigate; and their Report was addressed to a public even more ignorant than themselves. It would appear, however, that their principal object was to satisfy themselves of the existence or non-existence of the alleged *magnetic fluid*, which fluid was never any thing more than a mere hypothesis in the magnetic theories,—a gratuitous assumption of Mesmer's, in order to enable him to account for the phenomena; and these phenomena could be, in no degree, affected by the rejection of the supposed agent. The facts connected with the magnetic treatment would still have stood upon the same footing as they did previous to the investigation.

The Commissioners, indeed, do not pretend to deny that some ef-

been conducted in a very superficial and unsatisfactory manner. Franklin is said to have been indisposed at the time, and to have paid little attention to the proceedings. Of the whole commissioners, the learned and intelligent Jussieu, it is stated, took the greatest interest in the investigation, and bestowed the greatest attention upon the phenomena exhibited; and it is a circumstance rather remarkable, that this eminent physician not only refused to subscribe the general report drawn up by the other commissioners, but published a special report of his own, in which he presented an entirely different view of the matter, and pronounced an opinion highly favourable to the pretensions of Mesmer and his disciples. *

It is well known, that the commissioners, in gene-

facts were produced in the course of their experiments, which, indeed, is wonderful enough, considering the circumstances in which they were made. But these effects they ascribed to imagination, imitation, and *attouchement*,—that is to say, they attempted to refute one theory by setting up another of their own; and whether they were right or wrong is a matter, comparatively, of little consequence. It is the facts, and not the opinions of theorists, which are of chief importance here, as in all other scientific questions. The reader, however, will find some observations in the sequel, which will probably convince him, that, in our present more advanced state of knowledge upon this subject, the theory of imagination, imitation, and *attouchement* is utterly untenable, if not wholly absurd.

The dangers attending the empirical and unskilful application of animal magnetism are allowed upon all hands,—by the partisans as well as by the opponents of the system; but this observation cannot apply to the treatment when carefully conducted under scientific and medical superintendence and control; and, at any rate, it has nothing to do with the truth of the facts.

* “Rapport de l'un des Commissaires (A. L. Jussieu,) chargés par le Roi de l'examen du Magnetisme Animal. Paris, 1784.”

ral, although men of undoubted learning and talents, proceeded to the investigation of *animal magnetism* with minds strongly prepossessed against the subject of enquiry. It is certain, too, that they did not possess a sufficiently intimate knowledge of that subject, to enable them to conduct their researches with the requisite skill and judgment. They did not, however, pretend to deny altogether the effects produced by the magnetic treatment, imperfectly as it would appear to have been applied ; and this is a circumstance of considerable importance. But, as the fluid which Mesmer and his friends alleged to be active in the process could not be physically exhibited, they conceived themselves justified in denying its existence,—probably upon the principle, that *de non apparentibus, et non existentibus, eadem est ratio*,—and in ascribing the phenomena, which they did observe, to *sensitive excitement, imagination* and *imitation*. The commissioners then, admitted that certain effects were produced by the magnetic processes which they attempted ; and they even put forth a theory to account for the phenomena. But this theory must just take its place at the side of all the others which have been formed upon the same subject ; and it must be ultimately received or rejected, according as it shall be found to be confirmed or refuted by experience.

At the period, indeed, when these commissioners instituted their investigation, the principles of *animal magnetism* were but imperfectly known. They seem to have been ignorant of the conditions of the treat-

ment. They were not informed of the great influence of volition in determining and regulating the magnetic process; and that the external means employed, although frequently useful, are not absolutely essential, but merely instrumental and accessory, and may sometimes be altogether dispensed with. They do not appear to have been aware, that we cannot always be assured of the magnetic influence by effects instantaneously produced. In short, they ought previously to have studied the subject more profoundly; to have multiplied their experiments, and taken full time to consider the phenomena; instead of pronouncing an inconsiderate and hasty decision, upon a very superficial and imperfect examination.

The experiments, too, were conducted, not under the superintendence of Mesmer himself, but of his pupil D'Eslon; who afterwards protested against the reports of the commissioners,* as did several other professors of *animal magnetism*; among whom M. Bonnefoy distinguished himself by an ingenious analysis of these reports,† in which he showed that the commissioners had been guilty of a number of errors and contradictions.

A variety of other publications appeared about this period for and against the practice of *animal magnetism*; and, at length, Macquart and Briéude endeavour-

* "Observations sur les deux Rapports de MM. les Commissaires nommés par sa Majesté pour l'examen du Magnetisme Animal, par M. D'Eslon. 1784."

† "Analyse raisonnée des Rapports des Commissaires chargés par le Roi de l'examen du Magnetisme Animal, par J. B. Bonnefoy. 1784."

ed to give a final blow to magnetic science in the article *Imagination*, in the *Encyclopedie Methodique de Medecine*.

The facts, however, which the new system of treatment almost daily disclosed, were much too strong and too firmly established to be overthrown by the united force of learning, ingenuity, ridicule, and invective. Accordingly, the subject of *animal magnetism* continued to occasion much controversy in France, until, upon the breaking out of the revolution, other interests than those of science almost entirely absorbed the public attention. It was still practised, however, as a remedial art, in some of the provinces of that kingdom ; where schools were formed and societies established for its cultivation and improvement.

In the year 1787, Lavater,* the celebrated physiognomist, imparted the system of *animal magnetism* as improved by Puysegur,† to the physicians, Bicker,

* It would appear that Lavater had been originally a disbeliever in regard to the magnetic doctrines, until he had an opportunity of satisfying himself by experiments. The mystical views, then combined with the practice of the system, were well calculated to make a profound impression upon a mind so enthusiastic as his. Some curious letters, upon this subject, addressed by him to his friend Spalding, have been preserved in the 8th volume of Eschenmayer's "Archiv für den thierischen Magnetismus."

† Next to Mesmer, the original discoverer, *animal magnetism*, perhaps, lies under the greatest obligations to the Marquis de Puysegur, especially for the very interesting observations which he made and published upon the phenomena of the natural and of the magnetic somnambulism. His principal works upon this subject are : "Mémoires pour servir à l'histoire et à l'établissement du magnétisme animal." 3d edit. Paris, 1820. "Du magnétisme animal, considéré dans ses rapports avec diverses branches de la Physique générale," 2d edit.

Olbers, and Wienholt* in Bremen; and, about the same time, Boeckmann and Gmelin received it directly from Strasburg. It was owing chiefly to the zeal, ability, and industry of these learned and most respectable physicians, that the magnetic treatment was revived in Germany, where it has continued to flourish ever since, under the direct countenance and protection of some of the local governments. Besides a great variety of learned works† upon this subject, which have appeared without intermission, there are several journals, both in France and in Germany, which are devoted entirely to the theory and the phenomena of *animal magnetism*; and in which the cases falling under that system of treatment are regularly re-

Paris, 1809. “Recherches, experiences, et observations physiologiques sur l’homme dans l’état de Somnambulisme naturel, et dans le Somnambulisme provoqué par l’acte magnétique.” Paris, 1811.

* Wienholt, for a considerable period, would not listen to any argument in favour of the magnetic treatment. At length, however, he was induced to make some experiments upon his patients, the success of which made him a complete and a sincere convert. He is the author of several valuable works upon the subject. The most useful, perhaps, is that entitled: “Heilkraft des thierischen Magnetismus nach eigenen Beobachtungen.”—Lemgo, 1802—5; 4 vols. 8vo.

Wienholt is, undoubtedly, one of the most sober and sensible writers on *animal magnetism*. His experiments were made with great caution, and all his observations breathe the spirit of perfect honesty, candour, and conscientiousness. His preface to the work above mentioned is of considerable importance to the early history of the progress of the magnetic treatment.

† The latest, and most comprehensive, *systematic* work in Germany on the subject of *animal magnetism*, so far as I am aware, is Professor Kieser’s “System des Tellurismus, oder thierischen Magnetismus.”—Leips. 1822. 2 vols. large 8vo.

corded, in the same manner as other important facts which are observed in medical practice.*

Meanwhile Mesmer seems to have withdrawn in disgust from that theatre upon which he had hitherto acted so conspicuous a part. He retired to his native country, Switzerland, where he continued the practice of the magnetic treatment privately, for the benefit of the poor, until the period of his death, which took place upon the 5th of March, 1815, at Meersburg, on the Lake of Constance, at the advanced age of eighty-one years. As a proof of his sincere belief in the efficacy of the remedy which he himself had discovered, it may be remarked, that he not only continued the practice of *animal magnetism* among the poor in his neighbourhood, during his retirement, but that he submitted to the magnetic treatment in his last illness, and experienced from it great relief.

During the active period of his career, Mesmer was exposed to a great deal of odium, and his character was frequently assailed by the most opprobrious aspersions. He was constitutionally disposed to mysticism; he paraded his discovery in all the trappings of quackery; and his natural vanity led him constantly not only to magnify his own merit, but to

* Among the most distinguished of these journals may be reckoned the "Bibliothèque du Magnétisme Animal," published at Paris since the year 1817, instead of the "Annales du Magnétisme Animal," which it replaced; the "Archiv für den thierischen Magnetismus," edited by the Professors Eschenmayer of Tübingen, Kieser of Jena, Nasse of Halle, and Nees von Esenbeck of Bonn, and published at Leipsic; and the "Jahrbücher für den Lebens Magnetismus," edited by Professor Wolfart of Berlin, and published also at Leipsic. All of these are, we believe, still in progress. They afford a vast repertory of facts.

treat his opponents—nay, even his professional brethren in general—with a presumptuous contempt, which they could not fail to resent. Yet he appears to have been perfectly sincere in the doctrines which he professed, and honest in the detail of that experience upon which his theory was founded. In testimony of his liberality, it is worthy of notice, that, although during the course of his busy life, he had ample opportunities of acquiring great wealth, and was reported by his adversaries to be of an avaricious disposition, his whole fortune, at the time of his death, was found not to exceed 10,000 francs. His loss was much lamented, especially by the poor in his neighbourhood, who had regarded him, for a long period, as their father and their physician.*

After the retirement of Mesmer, the professors of *animal magnetism* in France became divided into three different schools, varying considerably from each other in their several modes of treatment.

The original school of Mesmer, whose chief seat

* In an historical sketch of animal magnetism by M. de Lausanne, published in the *Annales du Magnetisme Animal*, it is said that Mesmer refused the offer of a yearly pension of 30,000 *livres*, made to him by the king of France through the minister Maurepas, because his own pecuniary interest was a secondary object with him, and he wished first to have his discovery formally recognized and sanctioned by authority. His answer was: "Les offres qui me sont faites me semblent pecher, en ce qu'elles presentent mon interet pecuniaire, et non l'importance de ma decouverte, comme objet principal. La question doit etre absolument envisagée en sens contraire; car sans ma decouverte, ma personne n'est rien." It is also said to have been in consequence of D'Eslon's breach of confidence that Mesmer was induced to sell his secret.

was at Paris, operated, principally, by physical means; by touching, rubbing and pressure with the hand, or by the employment of metal conductors. Its disciples made use of magnetical vessels (*baquets*)* and trees, and magnetised baths; they recommended the drinking of magnetised water, and the carrying of magnetised plates of glass upon the stomach; and, in general, their treatment was calculated to produce strong crises and reactions in their patients. They regarded the convulsions which ensued as a remedial process of nature; and, accordingly, they endeavoured to bring them on by artificial means, and called them *crises*. As the first and great object, therefore, in every magnetic treatment, was to produce such crises, certain rooms, called *chambres de crise*, were fitted up; apartments of which the walls and floors were covered with mattresses and cushions, to prevent the convulsive patients from injuring themselves in the access of their crises. Mesmer's idea, that light and sound are peculiarly favourable to the magnetic process, has been already noticed.

A second school was established at Lyons and Ostend, under the direction of the Chevalier Barbarin, who adopted a method of treatment totally different from the preceding.

The school of Barbarin operated purely psychically, admitting no other agents in the magnetic process,

* The *baquet* was a kind of covered tub, filled with water, iron, glass, &c. which was supposed to contain the magnetic influence; and cords were attached to this vessel, for the purpose of conducting the magnetic virtue to the patients under treatment.

than *faith* and *volition*. For this reason, its disciples were distinguished by the name of *Spiritualists*. They practised no particular manipulations; any physical operations which they admitted being considered as merely accessory, and by no means essential. They endeavoured, therefore, to produce all the effects of *animal magnetism* in their patients, by firm determination, and the energy of the operator's volition, even at considerable distances. Their motto was: *Veillez le bien—allez et guerissez!*

The third school was established, under the direction of the Marquis de Puysegur, at Strasburg, with the name of the *Société harmonique des amis réunis*. It was distinguished not only by the excellent adaptation of its constitution, but, principally, by combining, in a happy manner, the physical and psychical treatment, and thus steering a middle course between the schools of Mesmer and Barbarin. The *chambres de crise*—or, *chambres d'enfer*, as Puysegur called them,—were entirely banished from this institution; and the magnetic treatment was conducted in a manner the best calculated to insure the repose and comfort of the patients.* The manipulations, when em-

* Kluge gives great credit to Puysegur for abolishing the *chambres de crise*. Other professors of *animal magnetism*, however, and among these Van Ghert and Ziermann, look upon the matter in a quite different light, and, with Mesmer, consider the crises, when properly regulated, as highly salutary. Upon this subject, Ziermann makes the following observations: "Nature cures many diseases only by means crises, that is, in the meaning in which the word is here used, by violent efforts. In general, it is only the physician who is capable of distinguishing this crisis from the disease itself. His important busi-

ployed, were extremely gentle; and the hands, instead of being brought into contact with the patient, were frequently kept at some distance from him. In consequence of this mode of treatment, there ensued crises of quite a different kind from those which were known to Mesmer; the most agreeable feelings were experienced; the intellectual faculties appeared to be increased and exalted, and in the higher stages, the patient exhibited a very delicate knowledge of his own bodily state, as well as of the internal condition of such other patients as were placed in magnetic connection (*en rapport*) with him.

This improved treatment, introduced by Puysegur,

ness is to manage, to moderate, to increase it, according to the nature and necessity of the case. Puysegur, Deleuze, and the other respectable French magnetisers are not physicians—they dread that tumult which they are incapable of governing—that activity which they cannot direct and regulate. They are right, and act prudently, in not attempting to develop powers which they cannot control. The physician, however, is in a quite different situation. He knows what diseases are cured by nature through similar efforts; he moderates or avoids them altogether, when it is desirable to do so; but in cases where a contrary procedure is necessary, he excites them with courage and caution. But it is a peculiarity of the magnetic treatment that it promotes the crises, develops them earlier and in a more lively manner, and thus brings the disease sooner to a termination. These are advantages which it possesses in a degree beyond all other means. He who represents these artificial crises, in general, as injurious, and on this account reprobates and rejects them, is ignorant of the very essence and advantages of magnetism; and instead of rendering it more practically useful, he, by the dissemination of such representations, diminishes the benefits which its application is peculiarly calculated to afford.” Hippocrates has a somewhat similar idea. “*Ars medica ab eo quod molestum est liberat, et id, ex quo quis ægrotat, auferendo, sanitatem reddit. Idem et natura per se facere novit.*”

was subsequently adopted, in a great measure, by all the best magnetisers, and even, it has been said, by Mesmer himself. It is to the same intelligent magnetiser, too, that we are indebted for the discovery of the magnetic Somnambulism and of its singular phenomena.

I am not aware that any particular school of *animal magnetism* predominates in Germany. In that country, however, the treatment is almost universally employed and recommended by the most intelligent physicians; much attention is bestowed upon the magnetic phenomena, and great ingenuity is displayed in the formation of theories to account for the results.

For the benefit of those who may not hitherto have had an opportunity of studying this subject, or of obtaining any correct information respecting it, it may be proper to make a few observations upon the magnetic susceptibility,—the peculiar mode of treatment,—and the effects produced upon the organization of the patient.

Every individual does not possess the capability of operating magnetically upon others; and even he who does possess the power, in some degree, will not always operate beneficially. Certain properties, partly physical, and partly psychical, are requisite in the practical magnetiser; and the fortunate combination of these properties may, in most cases, be considered as a gift of nature. There is a similar inequality in the susceptibility of patients,—some being not at all, others very slightly, and others, again, very easily and powerfully affected by the magnetic treatment. In

general, strong and healthy persons exhibit little susceptibility ; while weak and diseased persons are strongly affected in various ways. *

With regard to physical constitution, experience seems to have demonstrated that the magnetiser ought to possess a preponderance of energy over his patient. A few instances, indeed, have been observed, in which weak persons have magnetised with effect. But such exceptions are said to be extremely rare ; and Wienholt attempts to account for them upon the principle, that, in such subjects, the vital energy has a greater tendency to the surface, and, therefore, a more diffusive efficacy.

The magnetiser ought to possess, not merely a strong constitution, but also a sound state of bodily health. A magnetiser affected with sickness will not only operate imperfectly, but, besides, runs the risk of communicating his diseased feelings to the patient, and of thus increasing those sufferings which it is his purpose to alleviate. The age of the magnetiser, too, is a matter of considerable importance. The proper age is that in which the corporeal and mental constitution have attained their utmost developement ; and the doctrinal writers have, therefore, fixed it within the period between the twenty-fifth and fiftieth years.

* To these circumstances, perhaps, we may ascribe the confirmed scepticism of certain persons, who have made trivial attempts to bring the magnetic doctrines to the test of experiment. They do not reflect that the magnetic action depends upon certain conditions, and that, if these conditions are not fulfilled, it is in vain to expect any satisfactory result.

To these physical qualifications must be added the psychical, consisting of a sound and energetic mind, a lively faith, and a determined, despotic volition.

It has been observed, that different persons are variously susceptible of the magnetic influence. This will be best explained when we come to speak of the effects produced by the treatment.

The magnetic treatment is either simple or compound. In the former case, the magnetiser operates solely by himself ; in the latter, he makes use of certain external *media*. The simple magnetic treatment is usually administered with the hand, and is thence called *manipulation*. But the magnetiser can also operate without employing the hand—by breathing, or by fixing the eyes or the thoughts steadily and intensely upon the patient. When the magnetic connection has been previously established, a single fixed look of the magnetiser, accompanied with energetic volition, has frequently been found sufficient to throw the patient into the state of magnetic sleep, or somnambulism.

The magnetic treatment by manipulation comprehends several modes of touching and stroking with the hand, which could not be described here particularly without leading us into prolixity. The usual method is to stroke repeatedly, with the palms of the hands and the fingers, in one direction downwards, from the head to the feet ; and, in returning, to throw the hands round in a semicircle, turning the palms outwards, in order not to disturb the effects of the direct stroke. To magnetise in the contrary direc-

tion—that is, from the feet upwards towards the head—not only counteracts the effects of the former method, but frequently operates of itself, prejudicially, especially in the case of irritable subjects. If we attempt to operate with the back of the hand, no effect whatever will probably be produced upon the patient.

If, in the course of this process, the hands or fingers of the operator are made actually to touch the body of the patient, it is called manipulation *with contact*; if, on the contrary, the operation is conducted at some distance, it is called manipulation *in distans*. The manipulation with contact is of two kinds: It is accompanied either with considerable pressure, or with light touching—manipulation with *strong* or with *light* contact. The manipulation with strong contact is certainly the most ancient and the most universally prevalent mode of operating; and traces of it are to be found in almost all ages and countries. In manipulating with light contact, the hand, indeed, is conducted very lightly along the body of the patient; but the magnetiser must perform this operation with the utmost energy, and always have the desire of applying strong pressure to the body of the patient.

The manipulation *in distans* is applied at a distance of generally from two to six inches from the patient's body; in the case of very susceptible persons, it is performed at a still greater distance. The effects of this mode of manipulating are less intense than those produced by actual contact, and, besides, it requires a greater energy of volition on the part of the

magnetiser. It is, however, frequently employed in magnetising very irritable patients, who cannot endure any stronger method. *

It would be tedious to enumerate and describe all the various kinds of manipulation, of which the reader will receive ample information by consulting the elementary works upon this subject. All these, however, may be combined in the magnetic treatment, according to circumstances. Much, of course, must depend upon the skill and judgment of the magnetiser, who will vary his modes of operating according to the effects produced, and the degree of sensibility exhibited by the patient.

I must not, however, pass unnoticed the method of administering *animal magnetism* adopted and recommended by Professor Kluge, in whose work the whole process is described with great minuteness. †

Before commencing the magnetic manipulations, it is necessary that both the magnetiser and the patient should be conveniently placed ; in order that the former may be enabled freely to perform his operations, and the latter prepared for the expected crisis of sleep. A semi-recumbent posture of the patient is, upon the whole, the most convenient, the body being, at the same time,

* Wienholt, however, observed several cases, in which the patients could not endure the manipulation *in distans*. (See Heilkraft, &c. Vol. i. p. 292, *et seq.* Vol. ii. p. 349, and Vol. iii. pp. 118, 199.) Kluge observed the same thing in one of his patients, but could not discover the reason of it. (Kluge, p. 337, note c.)

† See C. A. F. Kluge, Versuch einer Darstellung des Animalischen Magnetismus, &c. Berlin, 1815.

so far bent, that the operator can reach, without difficulty, from the crown of the head to the toes. Should the patient be unable to leave his bed, we must endeavour to place him in a proper bended position by means of pillows. It is not necessary that the patient should be completely undressed, only no silk covering should be allowed to intervene.

The best situation, perhaps, in which a magnetic patient can be placed, is in an easy arm-chair, with his hands resting on the arms, his feet upon a foot-stool, and his knees bent somewhat forward. The magnetiser then places himself, upon a common chair, opposite to the patient, and so near as to be able to enclose his knees within his own, but without designedly touching them.

When the magnetiser has thus placed the patient and himself in the most convenient attitude, he proceeds to the manipulations, which are distinguished into the *preparatory* and the *effective*. The preparatory manipulations were formerly called *placing in connection or affinity* (*mettre en rapport, en harmonie*); meaning that they were employed for the purpose of establishing such a sympathy between the magnetiser and the patient, as should render the subsequent operations more certain and effectual.

Some magnetisers, and among others Wienholt, proceeded at once to the effective treatment, without any preparation. Kluge, however, strongly recommends a contrary method, and, apparently, with good reason; because, otherwise, especially in the case of very irritable patients, the preparatory manipulations

enable them to endure the more effective operations, which, without such preparations, might be very painful.

The preparatory manipulations are performed in the following manner. The operator lays hold of the shoulders of the patient with both his hands, in such a manner that the balls of his thumbs are placed in the arm-pits, and the other fingers rest upon the shoulders. In this position he continues for a few seconds, excites in himself the intention of pressing the shoulders together, and then laying hold of the upper part of the arms, glides down to the elbows, tarries there a little, and then proceeds down to the hands, where he applies the points of his thumbs to those of the patient, and allows the remaining fingers to rest upon the back of the patient's hands. He then returns, by means of the dorsal manipulation (*i. e.* the hands being thrown round in a semicircle, in the manner already described) to the shoulders, and repeats the same operation two or three times; after which he commences the effective manipulations, of which a general description has already been given.

No person ought to attempt the magnetic treatment without having previously prepared himself by a careful study of the best works which have been written on the subject by practical authors, such as those of Tardy de Montravel, Gmelin, Heineken, Wienholt, Deleuze, Kluge, &c. in order that he may thoroughly understand the proper methods, and profit by their experience, when analogous cases occur in his own practice.

The effects produced by *animal magnetism* upon the organism of the patient are truly wonderful, and can scarcely be expected to obtain belief, excepting from those who have actually experienced or witnessed them. These effects are very various, and may be divided into two classes. The first consists of those general effects which are produced upon the entire bodily frame, and which are not merely periodical, but continue throughout the whole treatment. The second comprehends those which affect only some particular functions of the organization, and which are not constantly manifested, but only at certain times, and especially during the magnetic manipulations. These last may be reckoned among the particular effects of animal magnetism.

The general effects of *animal magnetism*, which may be regarded as permanent states of the organization, and which almost always manifest themselves, in a greater or less degree, in all subjects whose diseases are of such a nature as to admit of the application of this mode of treatment, and which, therefore, seem to originate from the sympathy of the whole body, are, chiefly, the following :

1. A general excitement and strengthening of the vital functions, without any considerable *stimulus*, in the nervous, muscular, vascular and digestive organs. Persons who could not be strengthened by corroborant medicines of any kind, have been restored to health, from a state of the greatest debility, in a short time, by means of the magnetic treatment. The application of this remedy quickens the pulse, produces

an increased degree of warmth, greater sensitive power, and mental cheerfulness. The appetite and the digestion are increased; the bowels, which had previously been kept open by artificial means, now become regular; and the patient acquires a liking for such kinds of food as are good for him, and an aversion from such as are injurious. *Animal magnetism* also promotes all the other secretions. In those complaints which are peculiar to females, it is said to be the most powerful and effectual remedy hitherto discovered. It seems to operate principally upon the great concatenation of sympathetic nerves (the *plexus solaris*) situated in the abdomen, and, by means of their various combinations, to communicate its influence to the rest of the system.

2. It affords a gentle *stimulus*, pervading, generally, the whole surface of the body, by which all disturbed harmony and diseased local action are removed, and the *equilibrium* again restored. In this way, *animal magnetism* soothes the most violent action of the nervous system, the tumult of the muscles, and the over-exertion of the vital functions in the whole economy.

3. It draws off the increased vital action from the diseased parts, and conducts it to others. By this means, a twofold advantage is attained. In the first place, the excited action is carried away from the internal and more noble organs, to such whose violent action is attended with less injury to the system; and, in the second place, the salutary vital action is strengthened and increased in particular debi-

litated organs. The consequences of the magnetic treatment, therefore, are—*soothing* and *strengthening*. In most instances, the agitation produced by the diseased organization is gradually allayed, until, at length, a perfect recovery is effected; because,

4. Animal Magnetism occasions a diminution and total removal of the existing cause of the diseased action of the nervous system.

The particular effects of animal magnetism, which are not the necessary consequences of its application, but which only occasionally manifest themselves, periodically, in a greater or less degree, in individual cases, are exceedingly various, and seem to depend, in a great measure, upon the peculiar physical and moral constitution, not only of the patient, but of the operating magnetiser.

It sometimes happens that no perceptible effect is produced upon the patient, during the magnetic treatment, of which the efficacy only appears in the gradual restoration to health. Dr Passavant mentions a case of this description which occurred under his own eye, where a girl was cured of St Vitus's dance, without exhibiting any of the ordinary phenomena of the magnetic treatment.* In most instances, however, the magnetic patient experiences a variety of symptoms of a nature more or less remarkable. So various, indeed, and so peculiar are these effects of the magnetic process, that it appears quite impossible to ar-

* "Untersuchungen über den Lebensmagnetismus und das Hellsehen; von Dr J. C. Passavant."—Frankf. on the Main, 1821, p. 73.

range or classify them under any general heads. Such a classification, it is true, has been attempted at different times, by Gmelin, Heineken, Wienholt, Hufeland, and others; and Kluge, availing himself of the labours of his predecessors, has distinguished the phenomena produced by the magnetic treatment into six classes; but he admits, at the same time, that this classification is still a mere essay, and necessarily imperfect.

This classification, of which I shall immediately give an abstract, follows the order of the different degrees through which the patient has been observed to pass during the magnetic treatment.

The *first* degree presents no remarkable phenomena. The intellect and the senses still retain their usual powers and susceptibilities. For this reason, this first degree has been denominated the degree of *waking*.

In the *second* degree, most of the senses still remain in a state of activity. That of vision only is impaired; the eye withdrawing itself gradually from the power of the will. This second degree, in which the sensibility is partially disturbed, is by some magnetisers called the *half-sleep*, or the *imperfect crisis*.

In the *third* degree, the whole of the organs, through the medium of which our correspondence with the external world is carried on (the senses) refuse to perform their respective functions, and the patient is placed in that unconscious state of existence, which is called the *magnetic sleep*.

In the *fourth* degree, the patient awakes, as it were,

within himself, and his consciousness returns. He is in a state which can neither be properly called sleeping nor waking, but which appears to be something between the two. When in this state, he is again placed in a very peculiar connection with the external world. This fourth degree has been distinguished in the writings of the animal magnetisers, by the name of the *perfect crisis*, or *simple somnambulism*.

In the *fifth* degree, the patient is placed in what is called the state of *self-intuition*. When in this situation he is said to obtain a clear knowledge of his own internal mental and bodily state, is enabled to calculate, with accuracy, the phenomena of disease which will naturally and inevitably occur, and to determine what are their most appropriate and effectual remedies. He is also said to possess the same power of internal inspection with regard to other persons who have been placed in magnetic connection with him. From this fifth degree all the subsequent magnetic states are comprehended under the denomination of *lucidity*, or *lucid vision*, (Fr. *Clairvoyance*; Germ. *Hellsehen*.)

In the *sixth* degree, the *lucid vision*, which the patient possessed in the former degree, extends to all objects, near and at a distance, in space and time; hence it has been called the degree of *universal lucidity*.

No patient, it is said, can reach the higher degrees of magnetism, without having previously passed through the lower. Individuals, it is true, are sometimes placed in the higher degrees at the very first

magnetic treatment; but they are supposed to have previously passed through the intermediate states in so rapid a manner, as rendered it difficult, or impossible, to distinguish the transitions. External, as well as internal influences, not yet sufficiently ascertained, dispose a patient, more or less, at particular times, to attain a certain degree; and hence, the magnetic sleep is never permanently the same, but always variable.

I have thus attempted to point out, as concisely as possible, the most remarkable characteristic symptoms exhibited in the six progressive states produced by the magnetic treatment. It is thought unnecessary, at present, to enlarge upon the very curious facts alluded to in describing the fourth, fifth, and sixth degrees; the more especially as the reader will find some of the most important of them exemplified in the following Report of the French physicians.

It may be proper, however, to make a few observations upon the theory put forth by the first French commissioners, in order to account for the phenomena of *animal magnetism*, and which appears to have been framed with such plausibility, as to have satisfied those scientific men who were ignorant of the process, and in a great degree checked for a season all serious experimental investigation of the subject.

This theory ascribed the whole of the magnetic phenomena to *imagination*, *imitation*, and *attouche-ment*.

The last element of this theory is at once overthrown by the single decisive fact, that all the mag-

netic phenomena are frequently produced without touching the patient at all.

The influence of the imagination and of the imitative principle seem, at first sight, much more capable of affording an adequate explanation of the facts; but the activity of these principles in the magnetic process is rejected as absurd by every practical magnetiser, as well as by every intelligent opponent of the system; and, besides, many of the phenomena are of such a nature, that they cannot be rationally accounted for upon any such theory. Even Dr Stieglitz, an opponent, whose work appeared in 1814, ridicules the idea of tracing the magnetic phenomena to any such sources. "A great multitude of facts," says the Doctor, which, allowing for some little variation in the more minute shades, still coincide in the most essential points, force complete conviction upon us. The number of credible observers who attest them, and whose representations bear the stamp of truth, has increased so much, within the last twenty or thirty years, in many parts of France, Germany, and Switzerland, as to overthrow all scepticism on the subject."—P. 17. "Have those seized the right point of view, who ascribe all these phenomena to the influence of a diseased imagination, or to the excitement of sexual passion? The partizans of *animal magnetism* have a right to complain, when their antagonists attempt to annihilate many volumes of observations with these turns and tirades, eternally repeated, although long since refuted. Indeed, this is merely to seek an outlet for escape; to withdraw,

in the most convenient manner, from the investigation of truth ; to prevent our listless repose from being disturbed, by adopting shallow hypotheses, which are here totally inapplicable ; and to parry off attacks upon preconceived opinions, which we are neither willing to abandon, nor seriously to defend." *

"Imagination and sensual excitement," says the celebrated Dr Hufeland, "are not the causes of these phenomena ; for we have decisive facts to prove, that the effects have appeared without the slightest co-operation of the imagination, and that persons of the same sex have produced them upon each other." To the same effect, the learned Sprengel remarks, that "the imagination of the patient is never observed to be increased previous to the manifestation of the phenomena, and that the effects are not different in

* "In the times of ignorance, superstition laid hold of all phenomena, and without searching for their real causes, everything was ascribed to the immediate agency of Divine power, or to the intervention of the devil. At present, the imagination plays nearly the same part ; and in physiology it is considered as the cause of all that appears to be otherwise inexplicable. The best established facts are, at first, declared to be gross errors, and when, at length, they have become incontestable, they are attributed to the imagination ; but no one is capable of explaining in what mannner this spiritual faculty produces the physical results."

"Science, however, teaches us nothing when it endows the imagination with supernatural power, and the truth is that, in doing so, it merely changes the name of something that is unknown. Ignorance concealed under another word is still ignorance, and the accumulation of phenomena adds little to our knowledge, so long as none of them is explained."

"Imaginary hypotheses can never hold the place of truth, nor dispense with the necessity of investigation."—Chardel, *Essai de Psychol. Physiol.* Paris, 1831.

those persons who have entertained the greatest doubts regarding the efficacy of the treatment, and in those who never heard a word about it. Hence I hold it to be clear that the imagination has nothing to do in the production of these phenomena; and this is confirmed by Gmelin, who relates that magnetic patients have frequently witnessed convulsions in others without being themselves affected in a similar manner.” *

Sprenzel also mentions another decisive fact in regard to the alleged influence of the imagination in the magnetic process,—a fact well known to all practical magnetisers. It is simply this, that if we attempt to manipulate in contrary directions, the usual effects will not be produced, whereas, others of a totally different nature will be manifested. †

* “*Ea autem methodus quosnam effectus producat, dictu est mirabile. Plerique jucundas habent sensationes blandi caloris aut etiam auræ quasi descendentis per nervos. Neque unquam imaginatio ante accessum eum augetur: neque aliter se habent ii effectus in hominibus, qui vel maxime de efficacia earum tractationum dubitaverant, neque alios videbis in iis, qui nunquam de ea re quidquam audiverunt. Unde imaginationem profecto nihil posse, ut ea phænomena nascantur, exploratum habeo: quod confirmatum ad Eberhardo Gmelino lego, qui magnetismo eo imbutos refert sæpe convulsivos aliorum adfectus conspexisse sine ulla noxa.*”—Sprenzel, *Instit. Medicinæ*, Tom. ii. p. 300, §. 396.

† “*Maxime autem veritatem ejus methodi et observatorum candorem probat constantissimus contrariorum tractuum effectus. Quodsi enim vel frictionem vel etiam imaginationem accusaveris, neutra agere in contrariis contrariorum tractuum effectibus potest. Pallor enim subitaneus, et frigus, et nervorum distentio, nunquam a frictione simili, contrariis duntaxat tractibus suscepta, oriri possunt.*”—*Ibid.* p. 305, §. 398.

Amongst the numerous doctrinal writers and practical magnetisers, the only one whom I have found, in recent times, adhering to the

A great deal has been occasionally said with regard to the dangers that may arise from the practice of animal magnetism ; but these dangers are only to be apprehended from the ignorant and unskilful application of the treatment. In the hands of the intelligent physician, who knows how to employ it, it is a safe and most effectual remedy in many diseases. Upon this subject, Dr Ziermann observes, that, "if in the earlier magnetic associations, the storm, once excited, was allowed to rage, in the nervous system, in uncontrolled convulsions,—if the salutary activity of nature was cherished into a destructive organic tumult ; it was, indeed, very meritorious to put a stop to these extravagances and abuses, and to warn the public against them. Here, however, the blame is not imputable to magnetism, but to the ignorance or imprudence

theory of imagination, and of imagination alone, is M. Bertrand, who published a work upon animal magnetism in 1826. But so far as I can perceive, M. B. seems to know nothing of the magnetic treatment as a sanative process ; he appears to conceive that it consists altogether in producing somnambulism. "*Quant a moi,*" says he, "*je crois aux phenomenes du somnambulisme, et j'écris ce livre pour prouver que le magnetisme est une pure chimere.*" It is rather difficult to comprehend what M. B. really means, but, so far as his opinions can be guessed at, they are directly at variance with those of every other individual who is acquainted with the subject.

I may be permitted to observe, that the opinions of Dr Sprengel, upon this question, are the more valuable, not only on account of his great learning and high reputation, but in consequence of the circumstance, that he was originally an opponent of animal magnetism, against which he wrote a small work, but subsequently became a convert to the doctrine ; which, indeed, with few exceptions, is now universally admitted by all the most eminent physicians and physiologists of the continent. In Germany we know only of a single disbeliever of the facts of magnetism among several opposers of the practice. That disbeliever is Rudolphi. And what are his arguments ?

of those, who, without medical knowledge, or without a sufficient acquaintance with the new method, attempted the cure of diseases by its means ; and a great part of the abuses and mischiefs of all kinds, which must necessarily have arisen from this cause, as well as from the illusions under which enthusiasts, and others entertaining false and exaggerated views, plied this occupation,—is to be ascribed to those, who, although best qualified by their attainments to direct this important business, stood altogether aloof. As soon as the intelligent physician avails himself of this method of cure, as soon as it is wrested from the hands of the unprofessional, then there is as little danger to be apprehended from it, as from the poisons and surgical instruments which we are in the daily practice of employing.”

An opinion in some respects similar to that of Dr Ziermann, upon the subject of *animal magnetism*, was expressed by the late Mr Dugald Stewart, in one of the last of those valuable works with which he enriched the philosophical literature of his country. The ingenious professor appears to have been well aware of the irresistible weight of the evidence, which had been adduced in favour of the facts ; but had he been better acquainted with the magnetic treatment and the nature of the phenomena, his candid mind would certainly have led him to reject that exploded theory, upon which, along with the first French commissioners, he attempted to account for the facts.

“ Among all the phenomena, however,” says Mr Stewart, “ to which the subject of imitation has led our

attention, none are, perhaps, so wonderful as those which have been recently brought to light, in consequence of the philosophical inquiries occasioned by the medical pretensions of Mesmer and his associates. That these pretensions involved much of ignorance, or of imposture, or of both, in their authors, has, I think, been fully demonstrated in the very able report of the French academicians ; but does it follow from this, that the *facts* witnessed and authenticated by these academicians should share in the disgrace incurred by the empirics who disguised or misrepresented them ? For my own part, it appears to me, that the general conclusions established by Mesmer's practice, with respect to the physical effects of the principle of imitation and of the faculty of imagination, (more particularly in cases where they co-operate together,) are incomparably more curious, than if he had actually demonstrated the existence of his boasted fluid : Nor can I see any good reason why a physician, who admits the efficacy of the *moral* agents employed by Mesmer, should, in the exercise of his profession, scruple to copy whatever processes are necessary for subjecting them to his command, any more than he would hesitate about employing a new *physical* agent, such as electricity or galvanism. The arguments to the contrary, alleged by the commissioners, only show that the influence of imagination and of imitation is susceptible of a great abuse in ignorant or in wicked hands ;—and may not the same thing be said of all the most valuable remedies we possess ? Nay, are not the mischievous consequences which have actually

been occasioned by the pretenders to *animal magnetism*, the strongest of all encouragements to attempt such an examination of the principles upon which the effects really depend, as may give to scientific practitioners the management of agents so peculiarly efficacious and overbearing? Is not this mode of reasoning perfectly analogous to that upon which medical inquirers are accustomed to proceed, when they discover any new substance possessed of *poisonous* qualities? Is not this considered as a strong presumption, at least, that it is capable of being converted into a vigorous remedy, if its appropriate and specific disorder could only be traced; and has it not often happened, that the prosecution of this idea has multiplied the resources of the healing art?" *

Natural somnambulism is a very curious phenomenon, and of rare occurrence; but a good many instances of it have been observed and described, while its more remarkable manifestations have been attempted to be explained upon various ingenious but unsatisfactory hypotheses. Somnambulists, or sleep-walkers, are persons, who apparently, in a state of profound sleep, rise from their beds at night, traverse the most inaccessible places without awaking, and successfully perform the most minute and delicate operations, whether intellectual or mechanical; and all this in the dark, with their eyes closed, as in the ordinary state of sleep. It has been observed, also, that individuals, while in this state, occasionally manifest a superior knowledge of subjects and of languages, which they

* Elements of the Philosophy of the Human Mind, vol. iii. 4to, Lond. 1827, pp. 221-222.

had not previously studied so as to remember, or with which they had been but imperfectly acquainted. It is likewise a striking peculiarity of this state of existence, that, after awaking, the individual, who had thus insensibly performed all these operations, retains no recollection of any thing that passed while he was under the influence of somnambulism.

It is worthy of notice, too, that the acts of the somnambulist are almost always performed with a degree of freedom, boldness, and precision, superior to what he manifests when awake; and that he generally succeeds in every thing he attempts. There is no instance, so far as I am aware, of a somnambulist awaking spontaneously in the midst of any operation which he has once undertaken; nor of his perishing amidst the dangers which he frequently encounters. There are, it is true, many instances of somnambulists who have perished in consequence of having been suddenly awakened by the imprudent alarm of the witnesses of those perils to which they were apparently exposed; but the general experience of all times seems to lead to the conclusion, that the somnambulist is guided by other senses or instincts; in short, that he is protected from injury by other means and guarantees of security, than those by which his conduct is regulated in his ordinary waking state. So long as he is left undisturbed in his proceedings, he acts fearlessly, and is safe; a sudden awakening alone, by restoring him to his natural state, causes him to perish.

Now, it is one of the many benefits conferred upon physiological science by the magnetic treatment, that

it has not only demonstrated the possibility of producing this singular state of the human organization artificially, but likewise afforded the means of more minutely investigating its various and most interesting phenomena. Many of the professors of *animal magnetism*, indeed, seem to be of opinion, that the magnetic treatment is not the primary and efficient, but only the secondary and occasional cause of somnambulism; that is to say, that it merely tends to develope that crisis in such constitutions as are pre-disposed to it. It is certain, however, that it has been so produced in a great variety of instances; and thus given rise to many speculations, both with regard to the agency of the magnetic principle in general, and to the nature and phenomena of that extraordinary state of existence which has just been described.

Ignorant, as I must acknowledge myself to be, of the medical sciences, it would be highly presumptuous in me to attempt to propound any theory upon a subject so very obscure as this. The few observations which follow, therefore, I should wish to be considered merely in the light of hints to those who may hereafter be led to the investigation of the subject, with more knowledge, experience, and ability.

Although it has long been customary to ascribe the operations of sense, as well as of intellect, to the cerebral organs, yet I believe it has never been altogether denied that these operations may be influenced, in a considerable degree, by the peculiar state of other parts of the organism, and, especially, of the nervous system in general.

The late profound and interesting researches of those eminent physiologists, Reil, Autenrieth, and Humboldt, have gone far not only to demonstrate the existence of a nervous circulation, but even to render probable the external expansion of this circulating fluid,—an expansion which takes place with such energy as to form an atmosphere, or sphere of activity, similar to that of electrical bodies. Admitting, then, the existence of this nervous fluid, and of its sensible atmosphere, it does not seem to be a very violent or unphilosophical hypothesis to presume, that it is capable of being directed outwards, by the volition of one individual, with such energy as to produce a certain effect upon the organization of another. This hypothesis, too, appears to be supported by the fact, that the persons possessing the greatest nervous energy operate, in general, most effectually in the magnetic treatment, and that weak and diseased persons,—especially those labouring under disorders of the nervous system,—are most susceptible of the magnetic influence.

Almost all the practitioners of *animal magnetism*, indeed, seem to agree in this, that the magnetic treatment operates principally, if not altogether, upon the nervous system, and, particularly, upon those nerves which are situated in the abdominal region. In this region, we find the great ganglion, or concatenation of sympathetic nerves, called the *plexus solaris*, which appears to be the centre of the ganglionic system,—a system of nervous influence opposed, as is well known, to that of the brain. So important in

the human economy has the region of this great ganglion been considered, that some of the older philosophers conceived it to be the seat of the sentient soul. In a diseased state of the organism, this ganglion appears to stand in very peculiar relations towards the cerebral system; and it has sometimes been, not unreasonably, denominated the *cerebrum abdominale*.

Now, it is a singular fact, that, in many cases of catalepsy and somnambulism, the usual organs of the senses have been found to be entirely dormant, and the seat of sensibility apparently transferred to the region of this ganglion, or *cerebrum abdominale*.* Does not this fact suggest some distinction, not hitherto sufficiently investigated, between the *intellect* and the *sensibility*,—between the *cerebral* and the *ganglionic* systems?

There seems little reason to doubt, that this important ganglion was designated by Paracelsus and Van Helmont in what they have said respecting the existence and functions of the *archeus*, which they considered as a sort of demon, presiding over the stomach, acting constantly by means of the vital spirits, performing the most important offices in the animal economy, producing all the organic changes which take place in the corporeal frame, curing diseases, &c. Van Helmont even held that, by virtue of the *archeus*, man was approximated to the realm of spirits; meaning, I presume, that in cases of ecstasy,

* This fact was long ago demonstrated by the experiments of Dr Petetin at Lyons, and has since been abundantly confirmed.—See *Appendix*.

catalepsy and somnambulism, the excited sensibility of the *archeus*, (or *plexus solaris*?) predominates over the cerebral energy, supplies its functions with increased activity, and seems to transport us into another world. Taking into view the whole of the facts connected with this subject, the ideas of Paracelsus and Van Helmont, when divested of their mysticism, may be found not quite so extravagant and chimerical as has been hitherto supposed.

In consequence of his ingenious and minute investigations into the nervous system, Reil conceived himself entitled to assume two poles of nervous sensibility in the human organism, the one, the *pneumatic pole*, being situated in the brain, the other, the *somatic pole*, in the ganglionic system. The late ingenious Dr Spurzheim, without any reference to the subject we are now investigating, has made the following judicious remark : " Sometimes it would appear as if the vital power were concentrated in one system, to the detriment of all the others. The muscular or athletic constitution is often possessed of very little nervous sensibility ; and, on the other hand, great activity of the brain seems frequently to check muscular developement." * This observation is quite consistent with the opinions of Reil. If we admit the relationship, or perhaps rather the antagonism, already pointed out, between the intellect and the sensibility, between the cerebral and the nervous or gang-

* Phrenology, in connexion with the study of Physiognomy, p. 15.

lionic systems, and could we conceive it possible, either by means of the manipulations, &c. employed in the magnetic treatment, or otherwise, to withdraw a considerable portion of the nervous or vital energy from the cerebral region, and concentrate it at the *epigastrium* in the *plexus solaris*, should we not thus be enabled to account, in some degree, for the extraordinary phenomena of *animal magnetism*, occasioned by the exalted sensibility of the ganglionic system? And might not the same phenomena be manifested in certain diseased or disturbed states of the organism, such as catalepsy and somnambulism, in consequence, perhaps, of some unequal and irregular distribution of the nervous energy?

I repeat that I have not presumed to offer the foregoing observations with the hope of their affording a satisfactory theory to account for the phenomena in question, but merely as queries thrown out to those persons, who, with superior qualifications for the task, may feel inclined to prosecute the inquiry. Much, indeed, still remains to be done in the investigation of this dark and difficult subject; but a patient and judicious perseverance in the paths of experimental research may, ultimately, lead to a successful solution of some, at least, of the many difficulties with which it is now beset. The evolution of some single, and perhaps simple principle may, at length, disperse the darkness which now envelopes this most interesting physiological question; and posterity may even wonder that we should have been impeded, by apparently in-

surmountable obstacles, in an investigation, in which every thing is to them smooth and easy.*

To conclude:—In the higher degrees of *animal magnetism*, we may find a complete practical refutation of all the material theories of the human mind, an impressive proof of the independence of the soul, and the strongest grounds for presuming its immortality; since it has been demonstrated beyond the possibility of rational doubt, that, in its manifestations, it is not confined to any one particular portion of the corporeal organism, and that it is capable of exercising its functions without the use of any of those material organs, by means of which it usually maintains a correspondence with the external world.†

The reader will be pleased to remember, that the following Report contains only a small fragment of the evidence in favour of *animal magnetism*; but,

* “ Veniet tempus, quo ipsa quæ nunc latent, dies extrahet, et longioris ævi diligentia. Ad inquisitionem tantorum ætas non una sufficit. Veniet tempus, quo posteri nostri tam aperta nos nescivisse mirabuntur.”—Seneca.

† “ In eo tamen Wienholt adsentior, et his phenominis ali immortalitatis spem ac augeri; cum nullum supersit dubium, posse nos sentire ac percipere sine ullo organorum externorum commercio.”—Sprengel, Inst. Med. p. 311, §. 401.

Dr Georget, a young and most promising physician, published a work of great merit, in 1821, under the title of “ *Physiologie du Systeme Nerveux*,” in which he broadly professed the principles of materialism; but afterwards, on becoming acquainted with the phenomena of the magnetic somnambulism, he found reason to change his opinions; and in his last will and testament, dated 1st March 1826, he earnestly requested that the utmost publicity should be given to his recantation.

Dr Georget is said to have been engaged in a work upon this subject at the time of his death, in 1828.

emanating, as it does, from a public scientific body of the highest respectability, and among whom no prejudice in favour of the subject could be presumed to exist, it was conceived that it must carry with it a far greater weight of authority than the result of any private investigation. It may be considered, too, as an ingenuous recantation of its former errors, and as an appropriate palinode for the hasty opinions expressed in the report of its previous premature and most imperfect inquiry. It is calculated, therefore, to elevate the character and reputation of the present members of the academy, and to repair the injury and injustice which were committed by their predecessors.

REPORT

ON THE

MAGNETIC EXPERIMENTS,

**MADE BY A COMMITTEE OF THE ROYAL ACADEMY
OF MEDICINE.**

REPORT

ON

ANIMAL MAGNETISM.

GENTLEMEN,

MORE than five years have elapsed since a young physician, M. Foissac, whose zeal and talent for observation we have had frequent opportunities of remarking, thought it his duty to draw the attention of the medical section to the phenomena of *animal magnetism*. With regard to the Report made by the Royal Society of Medicine in 1784, he recalled to our recollection, that, amongst the commissioners charged with conducting the experiments, there was one conscientious and enlightened man, who had published a Report in contradiction to that of his colleagues ; that since the period in question, magnetism had been the object of new experiments and of new investigations ; and, with the consent of the section, he proposed to submit to their examination a somnambulist who appeared to him to be capable of throwing light upon a question, which several of the most intelligent

men in France and Germany considered as far from being resolved, although, in 1784, the Academy of Sciences and the Royal Society of Medicine had pronounced an unfavourable judgment.

A committee, composed of MM. Adelon, Burdin the elder, Marc, Pariset, and myself, (M. Husson,) were appointed by you to report upon the proposition of M. Foissac.

The Report, which was presented to the Section of Medicine at its meeting of the 13th December 1825, concluded that magnetism ought to be subjected to a new investigation. This conclusion gave rise to an animated discussion, which was prolonged during three meetings—the 10th and 24th of January, and the 14th of February, 1826. At this last meeting, the committee replied to all the objections which had been made to their Report; and at the same meeting, after mature deliberation, after adopting the mode hitherto unusual in matters of science, of an individual scrutiny, the Section decided that a special committee should be appointed, in order to investigate anew the phenomena of animal magnetism.

This new committee, consisting of MM. Bourdois, Double, Itard, Gueneau de Hussy, Guersent, Fouquier, Laennec, Leroux, Magendie, Marc, and Thillaye, was appointed at the meeting of the 28th of February 1826. Some time afterwards, M. Laennec, having been obliged to leave Paris on account of his health, I was named to replace him; and the committee, thus constituted, proceeded to discharge the duty with which it had been entrusted.

Their first care, previous to the retirement of M. Laennec, was to examine the somnambulist who had been offered to them by M. Foissac.

Various experiments were made upon her within the premises of the Academy; but we must confess that our inexperience, our impatience, our distrust, perhaps too strongly manifested, permitted us only to observe certain physiological phenomena sufficiently curious, which we shall communicate to you in the sequel of our Report, but in which we did not recognize any peculiar phenomena of somnambulism. This somnambulist, fatigued, no doubt, with our importunities, ceased, at this time, to be placed at our disposal; and we were obliged to search the hospitals for the means of prosecuting our experiments.

M. Pariset, physician to the *Salpetriere*, was more capable, than any other, of assisting us in our search. He set about the task with an ardour, which, unfortunately, led to no result. The committee, who founded a great part of their hopes upon the resources which this hospital might be capable of furnishing, whether in regard to the individuals who might be subjected to experiment, or to the presence of M. Magendie, who had requested to accompany them as one of the committee; the committee, we say, seeing itself deprived of those means of instruction which it had expected to find, had recourse to the zeal of each of its individual members.

M. Guersent promised us his assistance in the hospital *des Enfants*, M. Fouquier in the hospital *de la Charité*, MM. Gueneau and the Reporter in the *Hotel-*

Dieu, M. Itard in the Institution for the Deaf and Dumb; and thenceforward, each prepared to make experiments, which were subsequently to be witnessed by the other members of the committee. Other and more powerful obstacles soon arrested our labours; the causes from which these obstacles proceeded are unknown to us; but, in virtue of a decree of the general council of the hospitals, of date the 19th of October 1825, which prohibited the use of every new remedy which had not previously been approved of by a committee appointed by the council, the magnetic experiments could not be continued at the hospital *de la Charité*.

Reduced to their own resources, to those which the particular relations of each of its individual members might present, the committee made an appeal to all the physicians who were known to make animal magnetism the object of their researches. We requested them to allow us to witness their experiments, to accompany them during their progress, and to confirm the results. We are bound to declare that we have been most effectually assisted in our investigations by several of our brethren, and especially by the gentleman who first suggested the enquiry, M. Foissac. We do not hesitate to declare that it is to his constant and persevering intervention, and to the active zeal of M. Dupotët, that we are indebted for the greater part of the materials embodied in the Report which we now present to you. Nevertheless, gentlemen, do not believe that your committee, in any circumstance, intrusted to others than its own members the task of

directing the experiments which we witnessed, that any others than the Reporter held the pen, at any instant, for the purpose of compiling the minutes of procedure, and of commemorating the succession of the phenomena which presented themselves, and exactly as they presented themselves. The committee proceeded to fulfil their duties with the most scrupulous exactness ; and if we render justice to those who assisted us with their kind co-operation, we must, at the same time, destroy even the slightest suspicion which might arise in your minds with regard to the share, greater or less, which others than ourselves may be supposed to have had in the investigation of this question. Your committee always suggested the different modes of experimenting, traced the plan of inquiry, directed the course to be perused, followed and described its progress. Finally, in availing ourselves of the services of auxiliaries more or less zealous and enlightened, we have always been present, and always impressed our own direction upon every thing that has been done.

Thus you will see that we admit no experiment made without the presence of the committee, even by members of the academy. Whatever confidence the spirit of confraternity, and the reciprocal esteem with which we are all animated, ought to establish amongst us, we felt that in the investigation of a question of which the solution is so delicate, we should trust none but ourselves, and that you could trust only to our guarantee. From this rigorous exclusion, however, we have thought proper to except a very curious phe-

nomenon observed by M. Cloquet, which we have admitted, because it was already, in a manner, the property of the academy, the section of surgery having been occupied in its investigation at two of its meetings.

This reserve, gentlemen, which the committee imposed upon itself, in regard to the use of various facts relative to the question which we studied with so much care and impartiality, would give us the right to demand a return of confidence, if any persons who had not witnessed our experiments should be inclined to raise discussions in regard to their authenticity. For the same reason that we only demand your confidence in respect of what we ourselves have seen and done, we cannot admit that those who, at the same time as ourselves and along with us, had neither seen nor done, can attack or call in question that which we allege to have observed. And, moreover, as we always entertained the greatest distrust of the announcements which were made to us of wonders to come, and as this feeling constantly predominated during all our researches, we think we have some right to require that, although you may suspend your belief, you will, at least, raise no doubt in regard to the moral and physical dispositions with which we always proceeded to the observation of the various phenomena of which we were witnesses.

Thus, gentlemen, this Report, which we are far from presenting to you with the view of fixing your opinion upon the question of magnetism, cannot and ought not to be considered in any other light, than as

the combination and classification of the facts which we have hitherto observed : We offer it to you as a proof that we have endeavoured to justify your confidence ; and while we regret that it is not founded upon a greater number of experiments, we trust that you will receive it with indulgence, and that you will hear it read with some interest. At the same time, we think ourselves bound to make you aware, that what we have seen in the course of our experiments bears no sort of resemblance to what the report of 1784 relates with regard to the magnetisers of that period. We neither admit nor reject the existence of a fluid, because we have not verified the fact ; we do not speak of the *baquet*,—of the *baguette*,—of the chain established by the medium of a communication of the hands of all the magnetised patients,—of the application of means prolonged, sometimes during several hours, to the hypochondriac region and the stomach,—of the vocal and instrumental music which accompanied the magnetic operations,—nor of the assemblage of a great number of people together, who were magnetised in the presence of a crowd of witnesses ; because all our experiments were made in the most complete stillness, in the most absolute silence, without any accessory means, never by immediate contact, and always upon a single person at a time.

We do not speak of that which, in the time of Mesmer, was so improperly called the *crisis*, and which consisted of convulsions, of laughter, sometimes irrepressible, of immoderate weeping, or of pier-

cing cries, because we have never met with these different phenomena.

In all these respects, we do not hesitate to declare, that there exists a very great difference between the facts observed and decided upon in 1784, and those which we have collected in the work which we have the honour to present to you ; that this difference establishes a most glaring line of demarcation between the one and the other ; and that, if reason has done justice in regard to a great proportion of the former, the spirit of observation and research should endeavour to multiply and appreciate the latter.

It is with magnetism, gentlemen, as with many of the other operations of nature, that is to say, a certain combination of conditions is required in order to the production of such and such effects. This is an incontrovertible principle, which, if it required any proof, might be confirmed by that which takes place in divers physical phenomena. Thus, without a certain dryness of the atmosphere, electricity would be but feebly developed—without heat, we should never obtain that combination of lead with tin, which constitutes the common solder of the plumbers—without the light of the sun, we should not witness the spontaneous combustion of a mixture of equal parts of chlorine and hydrogen, &c. &c. Whether these conditions be external or physical, as in those cases to which we have just referred ; whether they be internal or moral, such as the magnetisers allege to be in-

dispensable to the developement of the magnetic phenomena—it is enough that they exist, and that they should be *exacted* by them, to make it incumbent upon your Committee to endeavour to unite them, and to make it their duty to submit to them. It was, however, neither our duty nor our inclination to divest ourselves of that indefatigable curiosity, which induced us, at the same time, to vary our experiments, and, if we could, to set at fault the practices and the promises of the magnetisers. For this double reason, we conceived ourselves bound to disburthen ourselves of the obligation they would impose of having a strong faith, of being animated solely by benevolent motives. We sought only to be inquisitive, mistrustful and exact observers.

Neither did we think it our duty to endeavour to explain these conditions. This would have been a question of pure controversy, for the solution of which we had no better means than in attempting to explain the conditions of other physiological phenomena, such as those that regulate the action of different medicines. These are questions of the same kind, upon which science has yet pronounced no judgment.

In all the experiments which we made, we invariably observed the most rigorous silence, because we conceived that, in the developement of phenomena so delicate, the attention of the magnetiser and of the magnetised ought not to be distracted by any thing foreign. Besides, we did not wish to incur the reproach of having injured the success of the experiment by conversation or by other distracting causes ;

and we always took care that the expression of our countenances should neither operate as a constraint upon the magnetiser, nor inspire doubt into the mind of the person magnetised. Our position—we are anxious to repeat it—was constantly that of inquisitive and impartial observers. These different conditions, several of which had been recommended in the works of the respectable M. Deleuze, having been well established, we proceed to state what we observed.

The person to be magnetised was placed in a sitting posture, either in a convenient elbow-chair, or on a couch—sometimes even in a common chair.

The magnetiser, seated on a chair a little more elevated, opposite, and at the distance of about a foot from the patient, seemed to collect himself for some moments, during which he took the thumbs of the patient between his two fingers, so that the interior parts of the thumbs were in contact with each other. He fixed his eyes upon the patient, and remained in this position until he felt that an equal degree of heat was established between the thumbs of the magnetiser and the magnetised. He then withdrew his hands, turning them outward, placed them on the shoulders, where he allowed them to remain about a minute, and conducted them slowly, by a sort of very slight friction, along the arms to the extremity of the fingers. This operation he performed five or six times, which the magnetisers call a *pass*; he then placed his hands above the head, held them there a moment, drew them downwards in front of the face at the distance of one or two inches to the *epigastrium* (pit of the

stomach), resting his fingers upon this part of the body ; and he descended slowly along the body to the feet. These *passes* were repeated during the greater part of the sitting ; and when he wished to terminate it, he prolonged them beyond the extremity of the hands and feet, shaking his fingers each time. Finally, he made transverse *passes* before the face and the breast at the distance of from three to four inches, presenting his two hands approximated to each other, and separating them abruptly.

At other times, he approximated the fingers of each hand, and presented them at the distance of three or four inches from the head or the stomach, leaving them in this position during one or two minutes ; then, withdrawing and approximating them alternately with more or less rapidity, he imitated the very natural movement which is performed when we wish to shake off a liquid which has moistened the extremity of our fingers. These different modes of operation have been adopted in all our experiments, without any preference of the one to the other. Frequently we employed only one, sometimes two, and in the choice we made, we were never guided by the idea that one method would produce an effect more readily and more conspicuously than the other.

In enumerating the facts observed, your committee shall not follow precisely the order of time in which they were collected ; it has appeared to them to be much more convenient, and, above all, much more rational, to present them to you classified according to the more or less conspicuous degree of the magnetic action recognized in each.

We have, therefore, established the following four divisions :

I. Magnetism has no effect upon persons in a state of sound health, nor upon some diseased persons.

II. In others, its effects are slight.

III. These effects are sometimes produced by *ennui*, by monotony, by the imagination.

IV. We have seen them developed independently of these last causes, most probably as the effect of magnetism alone.

I. *Magnetism without effect.* The reporter of the committee has several times submitted to the operation of magnetism. Once, amongst others, while in the enjoyment of perfect health, he had the patience to remain seated in the same position for a period of three quarters of an hour, with his eyes closed, in complete immobility ; and he declares, that, during the operation, he experienced no kind of effect, although the *ennui* of his position, and the absolute silence which he had recommended to be observed, might have been very capable of producing sleep. M. Demussy submitted to the same experiment with the same result. At another time, when the reporter was tormented with very violent and very obstinate rheumatic pains, he allowed himself to be repeatedly magnetised, and he never obtained by this means the slightest mitigation, although the acuteness of his sufferings made him vehemently desire to have them removed, or at least alleviated.

On the 11th of November 1826, our respectable

colleague, M. Bourdois, had experienced, during two months, an indisposition which required particular attention, upon his part, to his habitual mode of living. This indisposition, he told us, was not his ordinary or normal state, he knew the cause of it, and could indicate the point from which it proceeded. In these circumstances, which, as M. Dupotet affirmed, were favourable to the developement of the magnetic phenomena, M. Bourdois was magnetised by M. Dupotet, in presence of MM. Itard, Marc, Double, Gueneau, and the reporter. The experiment commenced at thirty-three minutes past three o'clock; the pulse was then at 84, which M. Double and M. Bourdois declared to be the normal state. At forty-one minutes past three the experiment terminated, and M. Bourdois experienced absolutely no effect. We only observed that the pulse had fallen to 72, that is to say 12 less than before the operation.

At the same meeting, our colleague, M. Itard, who had been afflicted for eight years with chronic rheumatism, the seat of which was then in the stomach, and who was suffering at the time from a recurrent crisis of the disease (*crise habituelle attachée à sa maladie*—these are his own expressions), caused himself to be magnetised by M. Dupotet. At fifty minutes past three o'clock, his pulse was at 60; at fifty-seven minutes past three he closed his eyes; at three minutes past four, the operation terminated. He told us that, during the time he had his eyes open, he thought that he felt the impression made upon his organs by the passage of the fingers, as if they had

been struck by a blast of warm air ; but that, after having closed them, and the experiment continuing, he had no longer the same sensation. He added that, at the end of five minutes, he felt a headach, which affected all the forehead and the base of the orbits, with a sensation of dryness in the tongue, although, when observed by us, the tongue was very moist. Finally, he said that the pain which he felt previous to the operation, and which he had described as depending upon the affection of which he complained, had disappeared, but that it was, in general, very variable. We remarked that the pulse had risen to 74, that is to say, 14 more than before the operation.

We might certainly have reported other observations in which magnetism manifested no sort of activity ; but besides the inconvenience of referring to facts unattended with any result, we conceived it sufficient for you to be made acquainted with the experiments which three of your committee made upon themselves, in order to have a more complete assurance of the truth of our investigations.

II. *Slight effects of magnetism.* It cannot have escaped you, gentlemen, that the last case in the preceding series presented a commencement of the magnetic action. We have, accordingly, placed it at the end of the section, in order to serve as a link to connect those which are to follow.

M. Magnien, doctor of medicine, aged 54 years, residing in the street St Denis, No. —, walked with great difficulty, in consequence of a fall he had some

years before upon the left knee, and very probably, also, in consequence of the growth of an aneurism of the heart, which carried him off in the month of September last. He was magnetised by the reporter upon the 18th, 19th, 20th, 21st, 22d, and 23d of August 1826. The number of pulsations was less at the end of five sittings, than at the commencement, the pulse falling from 96 to 90, from 96 to 86, from 76 to 71, from 82 to 79, from 80 to 78, and at the sixth sitting, the number was the same at the commencement and at the termination, viz. 83. The inspirations were equal, excepting upon one occasion, when they were 20 at the beginning, and 26 at the end. M. Magnien constantly experienced a sensation of coolness in all those parts of his body to which the fingers of the magnetiser were directed, and kept for a long time in the same direction. This phenomenon never once failed to present itself.

Our colleague, M. Roux, who complained of a chronic affection of the stomach, was magnetised six times by M. Foissac, on the 27th and 29th of September, and on the 1st, 3d, 5th, and 7th of October, 1827. 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 coolness in the face; the sensation of a vaporisation of ether, even when no manipulations were practised before him, and, finally, a decided disposition to sleep.

Anne Bourdin, aged 25 years, residing in the street *du Paon*, No. 15, was magnetised on the 17th,

20th, and 21st of July, 1826, at the *Hotel-Dieu*, by M. Foissac, in presence of the reporter. This woman said she complained of headach, (*cephalalgia*,) and of a nervous pain, (*neuralgia*,) which had its seat in the left eye. During the three magnetic sittings, we perceived the inspirations increase from 16 to 39, from 14 to 20, and the pulsations from 69 to 79, from 60 to 68, from 76 to 95. The head grew heavy during these three experiments,—the woman fell asleep for some minutes,—no change was effected in the nervous pain of the eye, but the headach was alleviated.

Theresa Tierlin was magnetised on the 22d, 23d, 24th, 29th, and 30th of July, 1826. She had been admitted into the *Hotel-Dieu*, complaining of pains in the belly and in the lumbar region. During the magnetic operations, we observed the inspirations increase from 15 to 17, from 18 to 19, from 20 to 25, and decrease from 27 to 24; and the pulsations increased from 118 to 125, from 100 to 120, from 100 to 113, from 95 to 98, and from 117 to 120. We remarked that this woman seemed to be afraid of the motions of the fingers and hands of the magnetiser, that she attempted to avoid them by drawing back her head,—that she followed them with her eyes in order that she might not lose sight of them, as if she dreaded that they would do her some injury. She was evidently teased and annoyed during the five sittings.

We observed in her frequent and long-drawn sighs, sometimes interrupted, winking and depression of the eyelids, rubbing 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 lumbar region.

Your committee, in arranging these different facts, has only wished to fix your attention upon the series of physiological phenomena which are developed in the two last cases. We can attach no importance whatever to the partial amelioration in the morbid symptoms of the very insignificant disorders of these two women. If these disorders existed, time and repose may have triumphed over them. If they did not exist, as is too frequently the case, the feigned malady might have disappeared as well without magnetism, as with it. Thus, gentlemen, we have only presented them to you as the first elements, as it were, of the magnetic action, which you will see more decidedly manifested in the sequel of this report.

III. *The effects observed are frequently produced by ennui, by monotony, and by the imagination.* Your committee has remarked upon several occasions, that the monotony of the gestures employed, the religious silence observed during the operations, the *ennui* occasioned by remaining long in the same position, have produced sleep in several individuals who were not subjected to the magnetic influence, but who were in the same physical and moral circumstances in which they had been previously set asleep. In these cases, it was impossible for us not to recognize the influence of the imagination ; an influence by the force

of which these individuals, believing that they were magnetised, experienced the same effects as if they really had been so. We shall adduce, in particular, the following observations.

Mademoiselle Lemaitre, 25 years of age, had been for three years afflicted with an affection of the sight, (*amaurosis*,) when she was admitted into the *Hotel-Dieu*. She was magnetised upon the 7th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, and 22d of July, 1826. We shall not here repeat the different phenomena which marked the commencement of the magnetic action, and which we have already detailed in the preceding section,—such as the winking, the depression of the eyelids, the rubbing of the eyes as if to get rid of a disagreeable sensation, the sudden inclination of the head and the swallowing of the saliva. These, as we have already said, are signs which we have constantly observed, and to which, therefore, we shall not revert. We shall only observe, that we remarked a commencement of drowsiness at the end of the third sitting; that this drowsiness increased until the eleventh; that, dating from the fourth, there were manifested convulsive motions of the muscles of the neck, of the face, the hands and the shoulder; and that, at the end of each sitting, we found a greater acceleration of the pulse than at the commencement. But what ought most to fix your attention is this, that after having been magnetised ten times, and having appeared during the eight last successively more and more susceptible of the magnetic action, at the eleventh sitting, the 20th of July, M. Dupotet,

her magnetiser, upon the suggestion of the reporter, seated himself behind her, without making any gesture, without having any intention of magnetising her, and that she experienced a more decided tendency to sleep, than upon any of the preceding days, accompanied, however, with less of agitation and convulsive motions. There was no perceptible improvement of her sight since the commencement of the operations, and she left the *Hotel-Dieu* in the same state as when she had been admitted.

Louisa Ganot, a servant, residing in the street *du Baltoir*, No. 19, was admitted into the *Hotel-Dieu* upon the 18th of July, 1826, in order to be treated for a *leucorrhœa*, and was magnetised by M. Dupotet on the 21st, 22d, 23d, 24th, 25th, 26th, 27th, and 28th of July, 1826. She told us that she was subject to nervous attacks, and, in reality, convulsive motions of an hysterical character were constantly manifested during all the magnetic sittings. Thus, the plaintive cries, the stiffness and contorsion of the superior members, the direction of the hand towards the pit of the stomach, the bending of the whole body backwards, so as to form an arch of which the concavity was in the back, some minutes of sleep which terminated this scene,—all denoted in this woman hysterical attacks, occasioned, it might have been believed, by the magnetic influence. We wished to ascertain how far the imagination might act upon her, and at the 6th sitting, upon the 26th of July, M. Dupotet, who had hitherto magnetised her, 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. The agitation, the convulsive motions, the long and interrupted sighs, the stiffness of the arms, did not fail to manifest themselves as at the preceding sittings. On the day after, the 27th, we placed M. Dupotet behind her, and she was seated in the great elbow-chair which she had used in the preceding operations. The magnetiser merely directed his fingers opposite the middle part of her back ; consequently, the back of the chair was interposed between the magnetiser and the magnetised.

In a short time, the convulsive motions of the preceding days were displayed with greater violence, and she frequently turned round her head. She told us when she awoke, that she had executed this motion because it appeared to her that she was annoyed by something which acted upon her from behind. Finally, after having observed, upon the 26th and 27th of July, the developement of the magnetic phenomena, although in the one case there were no manipulations at all, but only the intention, while, in the other, these very simple external acts (the direction of the fingers) were executed behind her back, and without her knowledge ; we were desirous of ascertaining whether the same phenomena could be reproduced in the absence of the magnetiser. The experiment was made upon the 28th of July. She was placed in precisely the same circumstances as in the former experiments,—the same hour of the day (half-past five

in the morning),—the same locality, the same silence, the same elbow-chair, the same persons present, the same preparations, all, in short, exactly the same as on the preceding days, with the exception of the magnetiser who remained at home. The same convulsive motions were evinced, perhaps with a little less promptitude and violence, but always with the same character.

A man, aged 27, subject, since his 15th year, to attacks of epilepsy, was magnetised fifteen times at the *Hotel-Dieu*; from the 27th of June to the 17th of July, 1826, by the reporter. Sleep began to appear at the 4th sitting, (1st of July,) and became stronger at the 5th, (2d of the same month.) In the following, it was rather slight and easily interrupted, either by noise, or by questions put to him. In the 13th, and 14th, the reporter took the precaution to place himself behind the elbow-chair in which he was seated, and there to perform his manipulations. At the 15th sitting, upon the 17th of July, he continued to place the patient, as in the case of the woman Ganot, in the same situation in which he had been placed since the commencement of the treatment; he also placed himself behind the elbow-chair, and the same phenomena of drowsiness were manifested, although he did not magnetise him. From this series of experiments we found ourselves necessarily bound to conclude, that these two women and this epileptic patient experienced the same effects when they were actually magnetised, and when they only believed themselves to be so, and that, conse-

quently, the imagination was sufficient to produce in them phenomena which with little attention, or with a prejudiced mind, might have been attributed to magnetism.

But we are anxious to declare that there are several other cases, not less rigorously observed, in which it would have been difficult for us not to admit magnetism as the cause of the phenomena. These we place in our 4th class.

IV. Thus, a child of 28 months, subject, like its father, of whom we shall have occasion to speak in the sequel, to attacks of epilepsy, was magnetised in the house of M. Bourdois, by M. Foissac, upon the 6th of October, 1827. Almost immediately after the commencement of the treatment, the child rubbed its eyes, bent its head to one side, supported it upon one of the cushions of the sofa where we had placed it, yawned, appeared agitated, scratched its head and its ears, seemed to contend against the approach of sleep, and soon rose, if we may be allowed the expression, grumbling; it was seized with the desire of making water, and after being satisfied in this respect, it appeared very sprightly. We magnetised it again; but as there appeared, this time, no symptom of drowsiness, we terminated the experiment.

There occurred to us a similar case of a deaf and dumb lad, eighteen years of age, who had long been subject to very frequent attacks of epilepsy, and upon whom M. Itard wished to try the effects of magnetism. This young man was magnetised fifteen times

by M. Foissac. We need scarcely say here that the epileptic attacks were entirely suspended during the sittings, and that they did not return until eight months afterwards; a circumstance unprecedented in the history of his disease; but we shall observe that the appreciable phenomena exhibited by this young man during the treatment were a heaviness of the eyelids, a general numbness, a desire to sleep, and sometimes *vertigo*.

A still more decided effect was observed in a member of the committee, M. Itard, who, as we have already observed, had submitted to the magnetic treatment, on the 11th of November, 1826, without having experienced any effect. When magnetised by M. Dupotet, on the 27th of October, 1827, he experienced a heaviness without sleep, a decided sensation of a peculiar nature,—a setting on edge (*agacement*) 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. The two first sittings produced headach, which lasted several hours, and, at the same time, his habitual pains were considerably diminished. A year afterwards, M. Itard, who had pains in the head, was magnetised eighteen times by M. Foissac. The treatment almost constantly produced a flow of saliva, twice with a metallic flavour. We observed little motion and muscular contraction, excepting some twitchings (*soubresauts, subsultus*) of the tendons of the muscles of the fore-arms and the legs. M. Itard

told us that his headach ceased each time, after a treatment of from 12 to 15 minutes, that it entirely disappeared by the 9th sitting, when it was recalled by an interruption of the magnetic operations for three days, and again dissipated by the same means. He experienced during the treatment 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.

These three cases appeared to your committee to be altogether worthy of remark. The two individuals who formed the subject of the two first,—the one a child of 28 months, the other a deaf and dumb lad, —were ignorant of what was done to them. The one, indeed, was not in a state capable of knowing it; and the other never had the slightest idea of magnetism. Both, however, were sensible of its influence; and most certainly it is impossible, in either case, to attribute this sensibility to the imagination. Still less is it attributable to this principle in the case of M. Itard.

It is not over men of our years, and, like us, always on their guard against mental error and sensible delusion, that the imagination, such as we view it, has any sway. At this period of life, it is enlightened by reason, and disengaged from those illusions by which young persons are so easily seduced. At this age we stand upon our guard, and distrust, rather than confidence, presides over the different operations of our

minds. These circumstances were happily united in our colleague ; and the academy knows him too well not to admit that he really experienced what he declares that he felt. His veracity was the same upon the 11th of October, 1826, when he declared that he felt nothing, and upon the 27th of October, 1827, when he affirmed to us that he was sensible of the magnetic action.

The somnolency observed in the three cases which we have just reported appeared to us to be the transition from the waking state to that which is called the magnetic sleep, or somnambulism—words which your committee have deemed improper, as they may give rise to false ideas ; but which we have been forced to adopt, in consequence of the impossibility of changing them with advantage.

When the individual subjected to the operation of magnetism is in the state of somnambulism, the magnetisers assure us that, in general, he only hears those persons who have been placed in magnetic connection (*en rapport*) with him, either the person who operates upon him, or those whom the operator has placed in communication with him, by means of joining hands or some species of immediate contact. According to them, the external organs of the senses become wholly, or almost wholly, dormant, (*assoupis*,) and, notwithstanding, he experiences sensations. They add, that there appears to be awakened in him an internal sense, a species of instinct which explains to him, sometimes the state of his own health, sometimes that of other persons with whom he is placed in mag-

netic connection (*en rapport.*) During the whole duration of this singular state, he is, say they, subjected to the influence of his magnetiser, and appears to obey him with an unreserved docility, without manifesting any strong exertion of internal volition, either by gestures or words.*

This singular phenomenon, gentlemen, appeared to your committee to be an object the more worthy of their attention and investigation, because, although M. Bailly seems to have had a glimpse of it, it was still unknown at the period when the subject of animal magnetism was submitted to the examination of the commissioners, who presented their Report upon it in 1784; and, besides, it was for the purpose of studying it that M. Foissac had, if we may use the expression, *disinterred* the question of magnetism. It was only in 1784, after the publication of the Report of the commissioners, that this phenomenon was observed for the first time at Buzancy, near Soissons, by one of the most zealous disciples and promoters of animal magnetism, M. de Puysegur.

Upon a subject which might be so easily got up by quackery, and which appeared to us so remote from all that was previously known, your committee felt that they were bound to be very rigid respecting the

* "Magnetised persons," says the illustrious and unfortunate Bailly, at the 7th page of his celebrated report presented to the Royal Academy of Sciences in 1784, "may appear to be plunged into a state of total insensibility; but the voice of the magnetiser, his look, a sign revives them; and we cannot hesitate to recognise in these invariable effects a great influence which acts upon the patients, governs them, and of which the magnetiser appears to be the depositary."

kind of evidence admitted to prove the phenomenon, and, at the same time, that they ought to keep themselves continually upon their guard against that illusion and imposture of which they might dread being made the dupes.

The committee request your attention to the following cases ; in the arrangement of which it has been their object, that the developement of this singular state, and the manifestation of the phenomena which characterize it, might be presented to you in a regularly increasing progression, so as to become more and more evident.

Mademoiselle Louisa Delaplane, aged 16 years, residing in the street Tirechape, No. 9, had a catamenial suppression, accompanied with pains, and with tension and swelling in the lower part of the abdomen, when she was admitted into the *Hotel-Dieu*, on the 13th of June, 1826. Leeches applied to the *labia vulvæ*, baths, and, in general, an appropriate treatment producing no relief, she was magnetised by M. Foissac, on the 22d, 23d, 24th, 25th, 26th, 27th, and 28th of June, 1826. She fell asleep at the first sitting, at the end of eight minutes. She was spoken to, but made no answer ; a white iron screen was thrown down near her—she continued in a state of complete insensibility ; a glass bottle was forcibly broken—she awoke with a start. At the second sitting she answered, by affirmative and negative motions of the head, to the questions which were addressed to her. At the third, she gave us to understand, that, in two days, she would speak and point

out the nature and seat of her complaint. She was pinched very strongly, so as to produce a livid mark,—she gave no sign of sensibility. A bottle-full of ammoniac was opened under her nose. She was insensible to the first inspiration,—at the second, she carried her hand to her nose. When she awoke, she complained of pain in the part which had been pinched, as also of the fumes of the ammoniac, and she drew back her head hurriedly. The parents of this girl resolved to remove her from the Hotel-Dieu on the 30th of the same month, because they heard that she was subjected to the magnetic treatment. She was still, however, magnetised there four times. In the course of these experiments she never once spoke, and answered only by signs to the different questions addressed to her. We shall add that, insensible to the tickling of a feather introduced into her nostrils, moved along her lips and the sides of her nose, and to the noise of a board thrown suddenly upon a table, she was awakened by the noise of a copper bason thrown against the floor, and at the noise of a bag of crowns which was emptied from above into the same bason.

At another time, upon the 9th of December 1826, M. Dupotet, in presence of the committee, magnetised Baptiste Chamet, carman at Charonne, whom he had magnetised two or three years before. At the end of eight minutes, repeatedly interrupted in order to ascertain from him whether he was asleep, he suddenly made an affirmative motion of the head. Several questions were put to him without obtaining an answer. As he seemed to suffer pain, he was asked

what ailed him, when he pointed with his hand to his breast. He was again asked what part that was. He answered that it was the liver, still pointing to his breast. M. Guersent pinched him severely on the left wrist, and he manifested no sense of pain. We opened his eyelid, which, with difficulty, yielded to our attempts, and we found the ball of the eye turned, as if convulsively, towards the top of the orbit, and the pupil perceptibly contracted.

In these two last cases, your committee witnessed the first appearance of somnambulism—of that faculty by means of which the magnetisers say, that in the dormant state of the external organs of sense, there is developed in the persons magnetised an internal sense and a species of instinct capable of manifesting themselves by rational external actions. In each of the cases above reported, your committee perceived,—whether in the answer given to questions put either by signs or by words, or in the prognostications, always deceitful, indeed, of events which never took place—the first traces of the expression of a commencement of intelligence.

The three following cases will prove to you with what distrust we ought to regard the promises of certain pretended somnambulists.

Mademoiselle Josephine Martineau, aged 19 years, residing in the street St Nicolas, No. 37, had been affected for three months with a chronic inflammation of the bowels, (*gastritis*), when she was admitted into the Hotel-Dieu, upon the 5th of August 1826, She was magnetised by M. Dupotet, in presence of

the reporter, fifteen days consecutively, from the 7th to the 21st of the same month, twice between four and five in the afternoon, and thirteen times from six to seven in the morning. She began to sleep at the second sitting, and at the fourth, to answer the questions which were addressed to her. We need not repeat to you, that at the end of each sitting, the pulse was more frequent than at the commencement, and that she preserved no recollection of any thing that took place during her sleep. These are ordinary phenomena, which have been previously well established by other magnetisers. Our business here is with somnambulism, and it is this phenomenon which we endeavoured to observe in Mademoiselle Martin-eau. In her sleep, she said that she did not see the persons present, but that she heard them; and no person was speaking. When cross-interrogated about this matter, she answered that she heard them when a noise was made. She said that she would not recover until she was purged; and for this she prescribed three ounces of manna, and English pills to be taken two hours after the manna. The next and following days, the reporter gave her no manna, but administered four pills of the crumb of bread in two days. During these two days she had four stools. She said that she would soon awake after five or ten minutes' sleep, and she did not awake until after seventeen and sixteen. She announced that, upon a certain day, she would give us a detailed account of the nature of her complaint; and when the day arrived,

she told us nothing. In short, she was at fault every time.

M. de Geslin, residing in the street *de Grenelle St Honore*, No. 37, wrote to inform the committee, on the 8th of July 1826, that he had at his disposal a somnambulist, Mademoiselle Couturier, lace-maker, aged 30 years, residing in the same house with himself, who, amongst other faculties, possessed that of being able to read the thoughts of her magnetiser, and to execute the orders which he communicated to her mentally. The proposal of M. de Geslin was too important not to be accepted with eagerness. M. Gueneau and the reporter waited upon M. de Geslin, who repeated the assurances which he had given us in his letter relative to the surprising faculties of his somnambulist; and after having set her asleep by the process we have already described, he requested them to inform him what they wished him to require, mentally, of his somnambulist.

One of us—the reporter—placed himself at a desk, for the purpose of writing down with the utmost exactness every thing that might occur; and the other, M. Gueneau, undertook to write upon slips of paper, which he communicated to his colleague, the orders which we both wished to be communicated to the patient.

Upon the first slip of paper, M. Gueneau wrote the following words: *Go and sit down upon the stool in front of the piano.* M. de Geslin, having conceived this mentally, told the somnambulist to do that which he required of her. She rose from her place, and

going up to the clock, she said it was twenty minutes past nine. M. de Geslin told her that was not what he required her to do ; she then went into the next room. She was informed that she was still mistaken, when she resumed her place. She was mentally bid to scratch her forehead. She stretched out her hand, but did not execute the motion required. The magnetiser complained that she did not do what he desired her : She rose and changed her seat. We requested that, when M. de Geslin held up his hand, she should hold up hers, and keep it suspended until that of the magnetiser fell. She raised her hand, which remained immoveable, and did not fall until five minutes after that of M. de Geslin. The back of a watch was presented to her,—she said it was thirty-five minutes past nine, and the hand pointed at seven o'clock. She said there were three hands, and there were only two. A watch with three hands was substituted, and she said there were two—that it was forty minutes past nine ; while the watch indicated twenty-five minutes past nine. She was placed *en rapport* with M. Gueneau, and told him a number of things with regard to the state of his health, which were altogether erroneous, and in direct contradiction to what our colleague had written upon this subject before the experiment. To sum up all, this lady did not fulfil any of the promises which had been made to us ; and we thought ourselves authorized to believe, that M. de Geslin had not taken all the proper precautions to prevent being led into error, and that this was the cause of his belief in the extraordinary

faculties he attributed to his patient,—faculties which we could in no degree recognize.

M. Chapelain, doctor of medicine, residing in the *Cour Batave*, No. 3, informed the committee, upon the 14th of March, 1828, that a woman of 24 years of age, residing in his house, and who had been recommended to him by our colleague M. Caille, had announced, when set asleep by the magnetic process, that next day, at fifteen minutes from eleven in the evening, *se tæniam productiorem brachio ejecturam esse*. Your committee had too great a desire to witness the result of this annunciation, to neglect the opportunity thus presented. Accordingly, MM. Itard, Thillaye, and the reporter, accompanied by two members of the academy, MM. Caille and Virey, as also Doctor Dance, at present physician to the hospital Cochin, repaired next day at fifty-five minutes past ten in the evening to the house of this woman. She was immediately magnetised by M. Chapelain, and set asleep at eleven o'clock. (*Here are omitted some indelicate details, of little or no importance in themselves, and only showing the futility of the patient's prognosis.*) Here, then, are three cases, well established, and we might quote others, in which there evidently was error, or an attempt to deceive, on the part of the somnambulists, either in what they promised to do, or in their annunciations of what was to happen.

In these circumstances, we ardently desired to elucidate the question, and we thought that it was essential, as well to the interest of the investigations in

which we were engaged, as to withdraw ourselves from the deceptions of quackery, to ascertain whether there was any sign by which we could be assured of the real existence of somnambulism ; that is to say, whether the magnetised person, when asleep, was—permit us the expression—more than asleep, whether he had arrived at the state of somnambulism.

M. Dupotet, whom we have already mentioned several times, proposed, on the 14th of November, 1826, to make your committee witnesses of certain experiments, in which he should reduce the question with regard to the magnetic somnambulism to an absolute certainty. He undertook, and we have his promise to this effect under his own hand, to produce at pleasure, and out of sight of those individuals whom he had placed in a state of somnambulism, convulsive motions in any part of their bodies, by merely directing his finger towards that part. These convulsions he regarded as an unequivocal sign of the existence of somnambulism. Your committee took advantage of the presence of Baptiste Chamet, already mentioned (page 136), to make experiments upon him, for the purpose of elucidating this question. Accordingly, M. Dupotet having placed this person in a state of somnambulism, directed the point of one of his fingers towards those of Chamet, or approximated them with a metallic rod : No convulsive effect was produced. A finger of the magnetiser was again directed towards those of the patient, and there was perceived, in the fore and middle fingers of both hands, a slight motion similar to that produced by the galvanic pile. Six

minutes afterwards, the finger of the magnetiser, directed towards the left wrist of the patient, impressed upon it a complete convulsive motion ; and the magnetiser then informed us, that in five minutes *he should do all that he pleased with this man*. M. Marc, then, placing himself behind the patient, indicated that the magnetiser should endeavour to act upon the fore-finger of the right hand : He directed his own fore-finger towards this part, and the convulsions took place in the left, and in the thigh of the same side. At a later period, the fingers were directed towards the toes, but no effect was produced. Some anterior manipulations were performed. MM. Bourdois, Guersent and Gueneau de Massy successively directed their fingers towards those of the patient, which became contracted at their approach. At a later period, motions were perceived in the left hand, towards which, however, no finger was directed. Finally, we suspended all our experiments, in order to ascertain whether the convulsive motions did not take place when the patient was not magnetised ; and these motions were renewed, but more feebly. Hence your committee concluded, that the approximation of the fingers of the magnetiser was not necessary for the production of the convulsions, although M. Dupotet added, that, when they have once commenced, they may be reproduced of themselves.

Mademoiselle Lemaitre, of whom we have already spoken (page 126), when treating of the influence of the imagination in producing the magnetic phenomena, also presented an instance of this convulsive mobility,

but sometimes these motions, pretty similar in quickness to those experienced from the approach of an electric spark, took place in a particular part, in consequence of the approximation of the fingers, sometimes, also, independently of this condition. Sometimes, too, we perceived them take place at a greater or less distance of time after the attempt made to excite them. Sometimes this phenomenon took place several times at one sitting ; sometimes it did not once make its appearance ; and sometimes the approximation of the fingers towards one part was followed by convulsions in another.

M. Chales, French consul at Odessa, furnished us with another example of this phenomenon. M. Dupotet magnetised him in our presence, on the 17th of November, 1826. He directed his finger towards the left ear, and immediately we perceived a motion in the hair behind the ear, which was ascribed to a contraction of the muscles of that region. The manipulations were renewed with a single hand, without directing the finger towards the ear, and we perceived in the ear a general and lively ascending motion. The finger was then directed towards the same ear, and no effect was produced.

It was principally in the case of M. Petit, tutor (*instituteur*) at Athis, aged 32 years, that the convulsive motions were developed with the greatest precision by approaching the fingers of the magnetiser. M. Dupotet presented him to the committee upon the 10th of August, 1826, informing them that this M. Petit was very susceptible of somnambulism, and that,

when in this state, he, M. Dupotet, could at pleasure, and without speaking, by the mere approximation of his fingers, produce visible convulsive motions in those parts which the committee should point out by writing. The patient was very speedily set asleep, and then the committee, in order to prevent all suspicion of collusion, handed over to M. Dupotet a note written at the moment in silence, in which they pointed out the particular parts which they wished to be convulsed. Provided with these instructions, he first directed his hand towards the left wrist, which became convulsed ; he then placed himself behind the patient, and directed his finger first towards the left thigh, then towards the left elbow, and, at last, towards the head. These three parts almost immediately became convulsed. M. Dupotet directed his left leg towards that of the patient, which became so much agitated that he was upon the point of falling. M. Dupotet then directed his foot towards M. Petit's right elbow, which became agitated ; he afterwards carried his foot towards the elbow and the left hand, and very strong convulsive motions were developed in the whole upper part of the body. One of the committee, M. Marc, in order still farther to prevent every kind of deception, put a bandage upon the eyes of the patient, and the same experiments were repeated with a slight difference in the result. After an instantaneous mimic signal from one or two of us, M. Dupotet directed his foot towards the left hand : at its approach both hands became agitated. We desired that the action should be carried at once to the

two inferior members. At first, the fingers were approximated without any result. Soon afterwards, the somnambulist first moved his hands, then drew back, then moved his feet. A few moments later, the finger approximated to the hand, made it draw back, and produced a general agitation. MM. Thilaye and Marc directed their fingers towards several parts of the body, and excited some convulsive motions. Thus, M. Petit was always affected with these convulsive motions, upon the approximation of the fingers, whether he had or had not a bandage upon his eyes ; and these motions were more decided when there was directed towards the parts subjected to experiment a piece of metal, such as a key or the branch of a pair of spectacles. To sum up the whole, your committee, although they have witnessed several cases in which this contractile faculty has been put in play by the approximation of the fingers or pieces of metal, have need of new facts in order to enable them to appreciate this phenomenon, upon the constancy and importance of which they do not conceive themselves sufficiently informed to entitle them to pronounce a decided opinion.

Reduced, in consequence, to the necessity of relying upon our own unceasing watchfulness, we pursued our researches, and multiplied our observations, with redoubled care, attention, and distrust.

Perhaps, gentlemen, you may remember the experiments which were made in 1820, at the *Hotel-Dieu*, in presence of a great number of physicians, some of whom are members of this academy, and un-

der the eyes of the reporter, who alone conceived the plan of them, directed the details, and consigned them, minute after minute, to a *procès-verbal*, which was subscribed by each of the assistants. Perhaps we should have abstained from alluding to them upon the present occasion, had it not been for a particular circumstance, which renders it imperative upon us to break silence. You may recollect that, in the midst of the discussions which were excited in the bosom of the academy, in consequence of the proposal to submit animal magnetism to a new investigation, a member, who, however, did not deny the reality of the magnetic phenomena, affirmed that, while the magnetisers proclaimed the cure of Mademoiselle Sanson, she requested of him to be again admitted into the *Hotel-Dieu*, where, he added, she died in consequence of an organic lesion which the physicians deemed incurable.

Nevertheless, this same Mademoiselle Sanson re-appeared, six years after her pretended death, and your committee, assembled on the 29th of December, 1826, for the purpose of making experiments upon her, were desirous of ascertaining, first of all, whether the individual presented to them by M. Dupotet, whose good faith was, moreover, perfectly well known to them, was the identical person, who, nine years before, had been magnetised at the *Hotel-Dieu*. MM. Briche-teau and Patissier, who had been present at these first experiments, had the goodness to comply with the request of the committee, and, conjointly with the reporter, they certified by a writing which they

signed, that it was the same person who had been the subject of the experiments made in the *Hotel-Dieu* in 1820, and that they perceived no other change in her than that which indicated a sensible amelioration of her health.

The identity having been thus verified, Mademoiselle Sanson was magnetised by M. Dupotet in presence of the committee. The manipulations had scarcely commenced when Mademoiselle Sanson became restless, rubbed her eyes, expressed impatience, complained, coughed with a hoarse voice, which recalled to the recollection of MM. Bricheteau, Patissier and the reporter, the same sound of voice which had struck them in 1820, and which then, as upon the present occasion, pointed out to them the commencement of the magnetic action. Soon after, she stamped with her foot, supported her head upon her right hand, which rested upon the elbow-chair, and appeared to fall asleep. We raised her eyelid, and perceived, as in 1820, the ball of the eye turned convulsively upwards. Several questions were addressed to her and remained unanswered; then, when new ones were put, she exhibited signs of impatience, and said with ill humour that we ought not to annoy her. At length, without having intimated his intention to any one, the reporter threw down upon the floor a table and a billet of wood which he had placed upon it. Some of those present uttered a cry of terror,—Mademoiselle Sanson alone heard nothing, made no sort of motion, and continued to sleep after as before the sudden and violent noise.

She was awakened four minutes afterwards, by rubbing her eyes in a circular manner with the thumbs. The same billet was then suddenly thrown upon the floor ; the noise made her start now that she was awake, and she complained bitterly of the fright that had been given her, although six minutes before she had been insensible to a much greater noise.

You have all likewise heard of a case, which, at the time, attracted the attention of the surgical section, and which was communicated to it at the meeting of the 16th of April, 1829, by M. Jules Clocquet. Your committee have thought it their duty to notice it here, as affording one of the most unequivocal proofs of the power of the magnetic sleep. The case is that of a lady, P——, aged 64 years, residing in the street of St Denis, No. 151, who consulted M. Clocquet, upon the 8th of April, 1829, on account of an ulcerated cancer on the right breast, of several years' standing, which was combined with a considerable swelling (*engorgement*) of the corresponding axillary ganglions. M. Chapelain, the ordinary physician attending this lady, who had magnetised her for some months, with the intention, as he said, of dissolving the swelling (*engorgement*) of the breast, had obtained no other result than that of producing a most profound sleep, during which all sensibility appeared to be annihilated, while the ideas retained all their clearness. He proposed to M. Clocquet to operate upon her while she was plunged in this magnetic sleep. The latter having deemed the operation indispensable, consented. The two previous evenings, this

lady was magnetised several times by M. Chapelain, who, in her somnambulism, disposed her to submit to the operation,—who had even led her to converse about it with calmness, although, when awake, she rejected the idea with horror.

Upon the day fixed on for the operation, M. Clocquet arriving at half-past ten in the morning, found the patient drest and seated on an elbow-chair, in the attitude of a person enjoying a quiet natural sleep. She had returned about an hour before from mass, which she attended regularly at the same hour. Since her return, M. Chapelain had placed her in a state of magnetic sleep, and she talked with great calmness of the operation to which she was about to submit. Every thing having been arranged for the operation, she undrest herself, and sat down upon a chair.

M. Chapelain supported the right arm, the left was permitted to hang down at the side of the body. M. Pailloux, house pupil of the hospital of St Louis, was employed to present the instruments, and to make the ligatures. A first incision commencing at the armpit was continued beyond the tumour as far as the internal surface of the breast. The second, commenced at the same point, separated the tumour from beneath, and was continued until it met the first: The swelled ganglions (*ganglions engorgés*) were dissected with precaution on account of their vicinity to the axillary artery, and the tumour was extirpated. The operation lasted from ten to twelve minutes.

During all this time, the patient continued to con-

verse quietly with the operator, and did not exhibit the slightest sign of sensibility. There was no motion of the limbs or of the features, no change in the respiration nor in the voice, no emotion even in the pulse. The patient continued in the same state of automatic indifference and impassibility, in which she was some minutes before the operation. There was no occasion to hold, but only to support her. A ligature was applied to the lateral thoracic artery, which was open during the extraction of the ganglions : The wound was united by means of adhesive plaster, and dressed. The patient was put to bed while still in a state of somnambulism, in which she was left for forty-eight hours. An hour after the operation, there appeared a slight hemorrhage, which was attended with no consequence. The first dressing was taken off on the following Tuesday, the 14th,—the wound was cleaned and dressed anew—the patient exhibited no sensibility nor pain—the pulse preserved its usual rate.

After this dressing, M. Chapelain awakened the patient, whose somnambulic sleep had continued from an hour previous to the operation, that is to say, for two days. This lady did not appear to have any idea, any feeling of what had passed in the interval ; but upon being informed of the operation, and seeing her children around her, she experienced a very lively emotion, which the magnetiser checked by immediately setting her asleep.

In these two cases, your committee perceived the most evident proof of the annihilation of sensibility during somnambulism ; and we declare, that, although

we did not witness the last, we yet find it impressed with such a character of truth, it has been attested and repeated to us by so good an observer, who had communicated it to the surgical section, that we have no fear in presenting it to you as the most incontestible evidence of that state of torpor and insensibility which is produced by magnetism. *

In the midst of the experiments in which your committee sought to appreciate the faculty of setting in motion, without contact, the contractility of the muscles of M. Petit of Athis (page 146), other attempts were made upon him with the view of observing the lucidity (*clairvoyance*), that is, the power of seeing through the closed eyelids, which he was said to possess during somnambulism.

The magnetiser informed us that his somnambulist would recognize, among twelve pieces of coin, that which he, M. Dupotet had held in his hand. The reporter placed there a crown of five francs, of the

* In M. Chardel's *Essai de Psychologie Physiologique*, to which the reader is referred, there will be found a number of additional curious particulars respecting this very extraordinary case. In a note, (p. 261,) M. Chardel also gives a short account of another case, in which a surgical operation was performed upon a somnambulist, in a similar state of insensibility.

John ———, farmer, had an abscess in the internal and upper part of the thigh; the operation required prudence, as the crural artery crossed the tumour. Count B—— placed the patient in a state of magnetic somnambulism, and produced complete insensibility. The operation was performed in the house of the Juge de Paix of the Canton of Condom, department of Gers, in the presence of several distinguished persons, by Dr Lar..., and is reported in the Journal of Toulouse.—*Note by the Translator.*

coinage of 1813, and afterwards mixed it with twelve others, which he arranged in a circle upon a table. M. Petit pointed out one of these pieces, but it was of the coinage of 1812. Afterwards, we presented to him a watch, the hands of which we had deranged, in order that they might not point out the actual hour of the day ; and twice, consecutively, M. Petit was mistaken in attempting to point out their direction. An attempt was made to explain these mistakes, by telling us that M. Petit had lost some of his *lucidity* since he had been less frequently magnetised ; however, at the same sitting, the reporter engaged with him in a game of piquet, and frequently attempted to deceive him by announcing one card or one colour instead of another ; but the bad faith of the reporter did not prevent M. Petit from playing correctly, or from ascertaining the colour of his adversary's point. We should add, that each time that we interposed a body—a sheet of paper or pasteboard between the eyes and the object to be perceived, M. Petit could distinguish nothing.

If these experiments had been the only ones in which we had sought to recognize the faculty of lucidity (*clairvoyance*,) we should have been led to conclude that this somnambulist did not possess it. But this faculty appeared in all its clearness in the following experiment ; and upon this occasion, the success entirely justified the expectations held out to us by M. Dupotet.

M. Petit was magnetised on the 15th of March, 1826, at half-past eight in the evening, and set asleep

in about one minute. The president of the committee, M. Bourdois, ascertained that the number of pulsations, since he was set asleep, diminished at the rate of 22 in a minute, and that there was even some irregularity in the pulse. M. Dupotet, after having put a bandage upon the eyes of the somnambulist, repeatedly directed towards him the points of his fingers, at the distance of about two feet. Immediately a violent contraction was perceived in the hands and arms towards which the action was directed. M. Dupotet having, in a similar manner approximated his feet to those of M. Petit, always without contact, the latter quickly withdrew his. He complained of great pain and a burning heat in the limbs, towards which the action had been directed. M. Bourdois endeavoured to produce the same effects ; and he succeeded, but less promptly, and in a more feeble degree.

This point being established, we proceeded to ascertain the lucidity (*clairvoyance*,) of the somnambulist. He having declared that he could not see with the bandage, it was taken off ; but then we determined to assure ourselves that the eyelids were exactly closed. For this purpose, a candle was almost constantly held, during the experiments, before the eyes of M. Petit, at a distance of one or two inches ; and several persons had their eyes continually fixed upon his. None of us could perceive the slightest separation of the eyelids. Mr Ribes, indeed, remarked that their edges were superimposed so that the eye-lashes crossed each other.

We also examined the state of the eyes, which were

forcibly opened without awakening the somnambulist; and we remarked that the pupil was turned downwards, and directed towards the great angle of the eye.

After these preliminary observations, we proceeded to verify the phenomena of vision with the eyes closed.

Mr Ribes, member of the academy, presented a catalogue which he took from his pocket. The somnambulist, after some efforts which seemed to fatigue him, read very distinctly the words: *Lavater. Il est bien difficile de connaitre les hommes.* The last words were printed in very small characters. A passport was placed under his eyes; he recognized it, and called it a *passe-homme*. Some moments afterwards, a *port d'armes* was substituted, which we all know to be in almost all respects similar to a passport, and the blank side of it was presented to him. M. Petit, at first, could only recognize that it was of a particular figure, and very like the former. A few moments afterwards, he told us what it was, and read distinctly the words: *De par le roi*, and on the left, *port-d'armes*. Again, he was shown an open letter; he declared that he could not read it, as he did not understand English. In fact it was an English letter.

M. Bourdois took from his pocket a snuff-box, upon which there was a cameo set in gold. At first the somnambulist could not see it distinctly; he said that the gold setting dazzled him. When the setting was covered with the fingers, he said that he saw the emblem of fidelity. When pressed to tell what this emblem was, he added: "I see a dog, he is as if on his

hind legs before an altar." This, in fact, was what was represented.

A closed letter was presented to him: He could not discover any of its contents. He only followed the directions of the lines with his finger: But he easily read the address, although it contained a pretty difficult name: To M. de Rockenstroh.

All these experiments were extremely fatiguing to M. Petit. He was allowed to repose for an instant: Then, as he was very fond of play, a game at cards was proposed for his relaxation. As much as the experiments of pure curiosity seemed to annoy him, with so much the more ease and dexterity did he perform whatever gave him pleasure, and this he entered into of his own accord.

One of the gentlemen present, M. Raynal, formerly inspector of the university, played a game at piquet with M. Petit and lost it. The latter handled his cards with the greatest dexterity, and without making any mistake. We attempted several times in vain to set him at fault, by taking away or changing some of his cards. He counted with surprising facility the points marked upon his adversary's marking card.

During all this time, we never ceased to examine the eyes, and to hold a candle near them; and we always found them exactly closed. We remarked, however, that the ball of the eye seemed to move under the eyelids, and to follow the different motions of the hands. Finally, M. Bourdois declared that, according to all human probability, and as far as it was pos-

sible to judge by the senses, the eyelids were exactly closed.

While M. Petit was engaged in a second game at piquet, M. Dupotet, upon the suggestion of M. Ribes, directed his hand, from behind, towards the patient's elbow, and the contraction previously observed again took place. Afterwards, upon the suggestion of M. Bourdois, he magnetised him from behind, and always at the distance of more than a foot, with the intention of awakening him. The keenness with which the somnambulist engaged in play resisted this action, which, without awakening, seemed to annoy and disconcert him. He carried his hand several times to the back of his head, as if he suffered pain in that part. At length, he fell into a state of somnolency, which seemed like a slight natural sleep; and some one having spoken to him when in this state, he awoke as if with a start. A few moments afterwards, M. Dupotet, always placed near him but at a certain distance, set him again sleep, and we recommenced our experiments. M. Dupotet being desirous that not the slightest shadow of doubt should remain with regard to the nature of the physical influence exerted at will upon the somnambulist, proposed to place upon M. Petit as many bandages as we might think proper, and to operate upon him while in this state. In fact, we covered his face down to the nostrils with several neckcloths; we stopped up with gloves the cavity formed by the prominence of the nose, and we covered the whole with a black handkerchief, which descended, in the form of a veil, as far as the neck. The at-

tempts to excite the magnetic susceptibility, by operating at a distance in every way, were then renewed; and, invariably, the same motions were perceived in the parts towards which the hand or the foot were directed.

After these new experiments, M. Dupotet having taken the bandages off M. Petit, played a game at *écarté* with him, in order to divert him. He played with the same facility as before, and continued successful. He became so eager at his game, that he remained insensible to the influence of M. Bourdois, who, while he was engaged in play, vainly attempted to operate upon him from behind, and to make him perform a command intimated merely by the will.

After his game, the somnambulist rose, walked across the room, putting aside the chairs which he found in his way, and went to sit down apart, in order to take some repose at a distance from the inquisitive experimentalists, who had fatigued him. There M. Dupotet awakened him at the distance of several feet; but it seemed that he was not completely awake, for some moments afterwards he again fell asleep, and it was necessary to make fresh efforts, in order to rouse him effectually.

When awake, he said he had no recollection of any thing that took place during his sleep.

It is most certain that, if, as M. Bourdois has recorded apart in the *procès-verbal* of this sitting, "the constant immobility of the eyelids and their edges superimposed so as that the eye-lashes appeared to cross each other, are sufficient guarantees of the luci-

dity (*clairvoyance*) of this somnambulist, it was impossible to withhold, if not our belief, at least our astonishment at all that took place at this sitting, and not to be desirous of witnessing new experiments, in order to enable us to fix our opinion in regard to the existence and the value of animal magnetism."

The wish expressed upon this subject by our president was not long of being gratified by three somnambulists, who, besides this *clairvoyance* observed in the preceding case, presented proofs of an intuition, and of a prevision very remarkable, whether for themselves or for others.

Here the sphere seems to enlarge; we no longer want to satisfy a simple curiosity,—no longer endeavour to ascertain whether or not there exists any criterion which may enable us to decide whether somnambulism has or has not taken place,—whether a somnambulist can read with his eyes closed,—whether, during his sleep, he can form combinations at play more or less complicated,—curious and interesting questions, the solution of which, especially of the last, is, considered as a mere spectacle, a most extraordinary phenomenon; but which, in point of real interest, and in the hope of benefiting the science of medicine, are infinitely beneath those with which your committee are now about to make you acquainted.

There is not one amongst you, gentlemen, who, amidst all that he has been told about magnetism, has not heard of that faculty which certain somnambulists have, not only of discovering the species of disease with which they themselves are affected—the endu-

rance and the issue of these diseases; but even the species, the endurance and the issue of the diseases of others with whom they are placed *en rapport*. The three following cases have appeared to us so important, that we have thought it our duty to make you acquainted with them at large, as affording most remarkable examples of this intuition and of this prevision; at the same time, you will find in them a combination of various phenomena which were not observed in the other magnetised persons.

Paul Villagrand, student of law, born at *Magnac Laval*, (Upper Vienne,) on the 18th of May, 1803, suffered a stroke of apoplexy on the 25th of December, 1825, which was followed by paralysis of the whole left side of the body. After seventeen months of different modes of treatment, by acupuncture, a seton in the nape of the neck, twelve applications of *moxa* along the vertebral column—modes of treatment which he followed at home, at the *Maison de Santé*, and at the *Hospice de Perfectionnement*, and in the course of which he had two fresh attacks,—he was admitted into the hospital *de la Charité* on the 8th of April 1827. Although he had experienced perceptible relief from the means employed before he entered this hospital, he still walked with crutches, being unable to support himself upon the left foot. The arm of the same side, indeed, could perform several motions; but Paul could not lift it to his head. He scarcely saw with his right eye, and was very hard of hearing with both ears. In this state he was entrusted to the care of our colleague, M. Fouquier,

who, besides the very evident paralysis, discovered in him the symptoms of hypertrophy of the heart.

During five months, he administered to him the alcoholic extract of *nux vomica*, bled him from time to time, purged him, and applied blisters. The left arm recovered a little strength; the headaches, to which he was subject, disappeared; and his health continued stationary until the 29th of August, 1827, when he was magnetised for the first time by M. Foissac, by order and under the direction of M. Fouquier. At this first sitting, he experienced a sensation of general heat, then twitchings (*soubresauts*,) of the tendons. He was astonished to find himself overcome by the desire of sleeping; he rubbed his eyes in order to get rid of it, made visible and ineffectual efforts to keep his eyelids open, and, at length, his head fell down upon his breast, and he fell asleep. From this period, his deafness and headaches disappeared. It was not until the 9th sitting that his sleep became profound; and at the 10th he answered, by inarticulate sounds, the questions which were addressed to him. At a later period, he announced that he could not be cured but by means of magnetism, and he prescribed for himself a continuation of the pills composed of the extract of *nux vomica*, sinapisms, and baths of Bareges. Upon the 25th of September, your committee repaired to the hospital *de la Charité*, made the patient be undressed, and ascertained that the inferior left limb was manifestly thinner than the right,—that the right hand closed much more strongly than the left,—that the tongue, when drawn out of the mouth,

was carried towards the right commissure,—and that the right cheek was more convex than the left.

Paul was then magnetised, and soon placed in a state of somnambulism. He recapitulated what related to his treatment, and prescribed that, on that same day, a sinapism should be applied to each of his legs for an hour and a-half; that next day he should take a bath of Bareges; and that, upon coming out of the bath, sinapisms should be again applied during twelve hours without interruption, sometimes to one place, and sometimes to another; that, upon the following day, after having taken a second bath of Bareges, blood should be drawn from his right arm to the extent of a *palette* and a-half. Finally, he added, that by following this treatment, he would be enabled, upon the 28th, *i. e.* three days afterwards, to walk without crutches on leaving the sitting, at which, he said, it would still be necessary to magnetise him. The treatment which he had prescribed was followed; and upon the day named, the 28th of September the committee repaired to the hospital *de la Charité*. Paul came, supported on his crutches, into the consulting-room, where he was magnetised as usual, and placed in a state of somnambulism. In this state, he assured us that he should return to bed without the use of his crutches, without support. Upon awaking, he asked for his crutches,—we told him that he had no longer any need of them. In fact, he rose, supported himself on the paralyzed leg, passed through the crowd who followed him, descended the step of the *chambre d'expériences*, crossed the second

court *de la Charité*, ascended two steps; and when he arrived at the bottom of the stair, he sat down. After resting two minutes, he ascended, with the assistance of an arm and the balustrade, the twenty-four steps of the stair which led to the room where he slept, went to bed without support, sat down again for a moment, and then took another walk in the room, to the great astonishment of all the other patients, who, until then, had seen him constantly confined to bed. From this day, Paul never resumed his crutches.

Your committee assembled again, on the 11th of October following, at the hospital *de la Charité*. Paul was magnetised, and he announced to us that he should be completely cured at the end of the year, if a seton were placed two inches below the region of the heart. At this sitting, he was repeatedly pinched, pricked with a pin, to the depth of a line, in the eyebrow and in the wrist, without producing any symptom of sensibility.

Upon the 16th of October, M. Fouquier received a letter from the *conseil general des hospices*, requesting him to suspend the experiments which he had commenced at the hospital *de la Charité*. We were obliged, therefore, to interrupt this magnetic treatment, the efficacy of which our paralytic patient said he could not sufficiently praise. M. Foissac procured his dismissal from the hospital, and placed him in the street *des petits Augustins*, No. 18, in a private apartment, where he continued the treatment.

Upon the 29th of the same month, your committee

met at the apartment of the patient, in order to examine into the progress of his cure; but before he was magnetised, they ascertained that he walked without crutches, and more firmly to all appearance, than at the preceding sitting. We then made him try his strength upon the *dynamometer*. When pressed by the right hand, the hand of the instrument indicated thirty *kilogrammes*, and by the left, twelve. The two hands united caused it to mount to thirty-one. He was magnetised. In four minutes somnambulism was manifested, and Paul assured us that he should be completely cured upon the 1st of January. We tried his strength: the right hand carried the hand of the *dynamometer* to twenty-nine *kilogrammes*, (one less than before his sleep,) the left hand (the paralyzed one,) to twenty-six, (fourteen more than before his sleep,) and the two hands united to forty-five, (fourteen more than before.)

While still in the state of somnambulism, he rose to walk, and got over the ground cleverly. He hopped upon the left foot. He knelt down on the right knee; then rose up, supporting himself with the left hand upon one of the assistants, and resting the whole weight of his body upon the left knee. He took and lifted up M. Thillaye, turned him round, and sat down with him on his knees. He drew the *dynamometer* with all his strength, and made the scale of traction (*echelle de traction*,) mount to sixteen *myriagrammes*. At our request that he would go down stairs, he rose quickly from his elbow-chair, took the arm of M. Foissac, which he quitted at the door, de-

scended and ascended the stairs, two or three at a time, with a convulsive rapidity, which, however, he moderated when he was bid to take them one by one. As soon as he awoke, he lost this astonishing augmentation of strength; in fact, the *dynamometer* then indicated no more than $3\frac{3}{4}$ *myriagrammes*, i. e. $12\frac{1}{4}$ less than when asleep. His walk was slow, but sure; he could not sustain the weight of his body on the left leg, (the paralyzed one,) and he made an ineffectual attempt to lift up M. Foissac.

We ought to remark, gentlemen, that a few days before this last experiment, the patient had lost two pounds and a-half of blood, that he had still two blisters on his legs, a seton in the nape of the neck, and another on the breast; consequently, you will perceive along with us what a prodigious increase of strength magnetism had produced in the diseased organs, that of the sound organs remaining the same, seeing that, during the whole time the somnambulism continued, the total strength of the body was more than quadrupled.

After this, Paul renounced all medical treatment, wishing to be magnetised only; and, towards the end of the year, as he expressed a wish to be placed and kept in a state of somnambulism, in order to complete his cure by the first of January, he was magnetised upon the 25th of December, and continued in a state of somnambulism until the 1st of January.

During this period, he was awakened about twelve hours, at unequal intervals; and in these short moments he was made to believe that he had been only

a few hours asleep. During the whole of his sleep, his digestive functions were performed with an increased activity.

He had been asleep three days, when, in company with M. Foissac, he set out on foot, on the 28th of December, from the street Mondovi, and went in search of M. Fouquier at the hospital *de la Charité*, where he arrived at nine o'clock. He recognized there the patients near whom he had slept before his discharge, the pupils who were upon duty in the room, and he read with his eyes closed, a finger having been applied to each eyelid, some words which were presented to him by M. Fouquier. All that we had witnessed appeared to us so astonishing, that your committee, being desirous of following out the history of this somnambulist to the end, again met, upon the 1st of January, in the house of M. Foissac, where we found Paul asleep since the 25th of December. Fifteen days before, he had taken out the setons in the neck and the breast, and had established, on the left arm, a cautery, which he was to continue all his life. Moreover, he declared that he was now cured, that, unless guilty of some imprudence, he should live to an advanced age, and that he should die, at last, of an attack of apoplexy. While still asleep, he went out of the house of M. Foissac, and walked and ran along the street with a firm and assured step. Upon his return, he carried, with the greatest facility, one of the persons present, whom he could scarcely have lifted before he was set asleep.

Upon the 12th of January, your committee met

again at the house of M. Foissac, where there were present M. E. Lazcase, deputy, M. De —, *aide-de-camp* to the king, and M. Segalas, member of the academy. M. Foissac told us that he was going to set Paul asleep, that in this state of somnambulism a finger should be applied to each of his closed eyes, and that, in spite of this complete occlusion of the eyelids, he should distinguish the colour of cards, that he should read the title of a work, and even some words or lines pointed out at random in the body of the work. At the end of two minutes of magnetic manipulations, Paul fell asleep. The eyelids being kept closed, constantly and alternately by MM. Fouquier, Itard, Marc, and the reporter, there was presented to him a pack of new cards, from which the paper covering bearing the government stamp was torn off. The cards were shuffled, and Paul easily and successively recognized the King of Spades, the Ace of Clubs, the Queen of Spades, the Nine of Clubs, the Seven of Diamonds, and Queen of Diamonds, and the Eight of Diamonds.

While his eyelids were kept closed by M. Segalas, there was presented to him a volume which the reporter had brought along with him. He read upon the title page : *Histoire de France*.* He could not read the two intermediate lines, and upon the fifth he read only the name, Anquetil, which is preceded

* Histoire de France depuis les Gaulois jusques à la mort de Louis XVI. par Anquetil. 13 Vol. 8vo. Paris, 1817.

The passage read by Paul is to be found upon the 89th page of the 7th volume.

by the preposition *par*. The book was opened at the 89th page, and he read in the first line—*le nombre de ses*—he passed over the word *troupes*, and continued: *Au moment ou on le croyait occupé des plaisirs du carnaval*. He also read the running title *Louis*, but could not read the Roman cypher which follows it. A piece of paper was presented to him, upon which were written the words, *Agglutination* and *Magnetisme Animal*. He spelt the first, and pronounced the two others. Finally, the *procès-verbal* of this sitting was presented to him, and he read very distinctly the date and some words which were more legibly written than the others. In all these experiments the fingers were applied to the whole of the commissure of both eyes, by pressing down the upper upon the under eyelid, and we remarked that the ball of the eye was in a constant rotatory motion, and seemed directed towards the object presented to his vision.

Upon the 2d of February, Paul was placed in a state of somnambulism in the house of Messrs Scribe and Bremard, Merchants, Street St Honoré. The reporter of the committee was the only member present at this experiment. The eyelids were closed as before, and Paul read, in the work entitled *The thousand and one nights*, the title-page, the word *preface* and the first line of the preface, with the exception of the word *peu*. There was also presented to him a volume entitled, *Lettres de deux amiés, par Madame Campan*. He distinguished on a print the figure of Napoleon; he pointed out the boots, and said that he also saw two female figures. He then read currently

the four first lines of the third page with the exception of the word *raviver*. Finally, he recognized, without touching them, four cards, which were successively presented to him two and two,—these were the King of Spades and the Eight of Hearts, the King and Queen of Clubs.

At another sitting, which took place upon the 13th of March following, Paul attempted in vain to distinguish different cards which were applied to the pit of the stomach; but he read, with his eyes still closed in a book opened at random, and, at this time, it was M. Jules Cloquet who kept his eyes shut. The reporter also wrote upon a slip of paper the words, *Maximilien Robespierre*, which he read equally well.

The conclusions to be drawn from this long and curious case are easy. They flow naturally from the simple exposition of the facts which we have reported to you, and we establish them in the following manner :

1. A patient, whom a rational medical treatment by one of the most distinguished practitioners of the capital could not cure of a paralysis, found his cure from the administration of magnetism, and in consequence of following exactly the treatment which he prescribed for himself when in a state of somnambulism. 2. In this state, his strength was remarkably increased. 3. He gave us the most undoubted proofs that he read with his eyes closed. 4. He predicted the period of his cure, and this cure took place.

In the following case, we shall see this foresight still more fully developed in a man belonging to the

lower class, quite ignorant, and who, assuredly, had never heard of animal magnetism.

Pierre Cazot, aged 20 years, by trade a hatter, born of an epileptic mother, had been subject for ten years to attacks of epilepsy, which occurred five or six times a-week, when he was admitted into the hospital *de la Charité* about the beginning of the month of August, 1827. He was immediately subjected to the magnetic treatment, was set asleep at the 3d sitting, and became somnambulist at the 10th, which took place upon the 19th of August. It was then, at 9 o'clock in the morning, that he announced to us that at four o'clock of the afternoon of that day, he should have an attack of epilepsy, but that it might be prevented by magnetising him a little previously. We preferred verifying the exactness of his prediction, and no precaution was taken to prevent its fulfilment. We contented ourselves with observing him without exciting in him any suspicion. At one o'clock, he was seized with a violent headach. At three, he was obliged to go to bed, and precisely at four the fit came on. It lasted five minutes. On the second day following, Cazot, being in a state of somnambulism, M. Fouquier suddenly thrust a pin of an inch in length between the forefinger and thumb of his right hand; with the same pin he pierced the lobe of his ear; his eyelids were separated, and the *conjunctiva* struck several times with the head of a pin, but the patient did not manifest the slightest sign of sensibility.

Your committee repaired to the hospital *de la*

Charité upon the 24th of August at nine o'clock in the morning, in order to witness the experiments which M. Fouquier, one of its members, proposed to continue to make upon this patient.

M. Foissac, who had already magnetised him, placed himself opposite, and at the distance of six feet from Cazot; he looked steadily at him, made use of no manipulations, preserved absolute silence, and Cazot fell asleep in eight minutes. Three times there was placed under his nose a bottle filled with ammonia: his face coloured, his respiration increased, but he did not awake. M. Fouquier thrust into his forearm a pin of an inch in length. Another was introduced to the depth of two lines obliquely under the breast-bone (*sternum*); a third also obliquely, at the pit of the stomach; a fourth perpendicularly into the sole of the foot. M. Guersent pinched him in the forearm, so as to produce a livid spot in the skin: M. Itard leant upon his thigh with the whole weight of his body. We endeavoured to produce tickling by bringing a small piece of paper under the nose and conducting it along the lips, the eyelids, the eye-lashes, the neck and the sole of the foot. Nothing could awaken him. We pressed him with questions. How long will your fits continue? For a year.—Do you know whether they will follow close upon each other? No.—Will you have any this month? I shall have one on Monday the 27th at twenty minutes from three o'clock.—Will they be severe? Not half so severe as the one I had last.—Upon what other day will you have another attack? After exhibiting

some symptoms of impatience, he answered : Fifteen days hence, *i. e.* on the 7th of September.—At what hour ? At ten minutes before six in the morning.—The indisposition of one of Cazot's children obliged him to leave the hospital this very day, the 24th of August. Maison agreed to make him return on the morning of Monday the 27th, in order that we might have an opportunity of observing the fit, which he told us was to take place that day at twenty minutes to three. The keeper having refused to admit him when he presented himself, Cazot went to the house of M. Foissac to complain of this refusal. The latter told us that he preferred putting a stop to this fit by magnetism, than to be the sole witness of it : Consequently, we could not ascertain the exactness of this prevision. But we had still to observe the fit which he had announced for the 7th of September, and M. Fouquier, who procured for Cazot admission into the hospital upon the 6th, under the pretext of subjecting him to some treatment which could not take place out of the establishment, made him be magnetised, in the course of the day, by M. Foissac, who set him asleep by the mere influence of his volition, and his fixed look. In this sleep, Cazot repeated that he should have an attack next day at ten minutes to six, and that it might be prevented by magnetising him a little before.

Upon a signal agreed upon and given by M. Fouquier, M. Foissac, of whose presence Cazot was ignorant, awakened him, as he had set him asleep, by the mere influence of his volition, in spite of the ques-

tions we addressed to the somnambulist, the only object of which was to conceal from him the moment when he was to be awakened. In order to witness the second fit, your committee met, at a quarter before six of the morning of the 7th of September, in the *Salle St Michel* of the hospital *de la Charité*. There we learnt that, upon the previous evening at eight o'clock, Cazot had been seized with a pain in his head which had tormented him all night; that this pain had caused the sensation of the ringing of bells, and that he had experienced shooting pains in the ears. At ten minutes to six, we witnessed the epileptic fit, characterized by rigidity and contraction of the limbs, the repeated projection and jerking back of the head, the arched curvature of the body backwards, the convulsive closing of the eyelids, the retraction of the ball of the eye towards the upper part of the orbit, sighs, screams, insensibility to pinching, squeezing of the tongue between the teeth. All these symptoms continued five minutes, during which there were two short intervals of remission, each of some seconds; and afterwards there ensued a relaxation (*brisement*) of the limbs, and general lassitude.

Upon the 10th of September at seven o'clock in the evening, your committee met at the house of M. Itard, in order to continue their experiments upon Cazot. The latter was in the parlour, where we entered into conversation with him, and kept it up until half-past seven,—the period at which M. Foissac, who had arrived after us and remained in the ante-chamber, which was separated from the parlour by two closed doors,

and at a distance of twelve feet, began to magnetise him. Three minutes after, Cazot said : “ I believe M. Foissac is there, for I feel myself stupified (*abasourdi.*”) At the end of eight minutes he was set completely asleep. We questioned him, and he again assured us, that in three weeks from that day, *i. e.* upon the 1st of October, he should have an epileptic fit at two minutes before noon.

We made it our business to observe, with as much care as we had done upon the 7th of September, the epileptic fit which he had predicted for the 1st of October. For this purpose, the committee repaired at half-past eleven upon that day to the house of M. Georges, hat-manufacturer, *Rue de Menetriers*, No. 17, where Cazot resided, and followed his employment. We learnt from this M. Georges, that Cazot was a very steady workman ; that his conduct was excellent, and that, whether from simplicity of character, or from moral principle, he was incapable of lending himself to any kind of fraud ; that Cazot, feeling himself indisposed, had remained in his room, and was not at work ; that he had experienced no attack of epilepsy since that which the committee had witnessed at the hospital *de la Charité* ; that there was now in company with Cazot an intelligent man, whose veracity and discretion might be depended upon, and that this man had not announced to Cazot that he had predicted an attack upon this day ; that it appeared certain that, since the 10th of September, M. Foissac had communication with Cazot, but from this no inference could be drawn that he had reminded

him of his prediction, on the contrary, M. Foissac appeared to attach very great importance to its being concealed from Cazot. M. Georges, at five minutes before noon, went up to a room situated under that inhabited by Cazot; and a minute afterwards, he came to inform us that the fit had commenced. We all went up in haste, MM. Guersent, Thillaye, Marc, Guineau, de Mussy, Itard, and the reporter, to the sixth story, where, upon our arrival, the watch of one of the committee indicated a minute before noon, true time. Assembled round the bed of Cazot, we found the epileptic fit characterized by the following symptoms. Tetanic rigidity of the trunk and limbs, the head and sometimes the trunk bent backwards, a convulsive drawing upwards of the balls of the eyes, of which nothing was to be seen but the white, a very decided suffusion of the face and neck, contraction of the jaws, partial fibrillary convulsions in the muscles of the fore-arm and of the right arm: Soon afterwards, *opisthotonos* so decided that the trunk was bent back into the arc of a circle, the body resting only on the head and feet, which motions were terminated by an abrupt relaxation. A few moments after this attack, *i. e.* after a minute's respite, another fit came on similar to the preceding. There were inarticulate sounds, the respiration was stifled and tremulous, the larynx being rapidly depressed and elevated, and the pulse beating from 132 to 160. There was no foam at the mouth, nor contraction of the thumb towards the palm. At the end of six minutes, the fit terminated with sighs, sinking down of the limbs, opening of the eye-

lids, which allowed him to look upon the bystanders with an air of astonishment, and he told us that he was lamed (*courbaturé*) especially in the right arm.

Although the committee could entertain no doubt as to the very decided effects which magnetism produced upon Cazot, even without his knowledge, and at a certain distance, we wished to have still another proof of its influence. And as it had been proved at the last sitting that M. Foissac had had communication with him, and might have reminded him of his having predicted the attack which was to take place on the 1st of October, the committee, in making new experiments upon Cazot, wished to lead M. Foissac into an error with regard to the day which the patient should predict as that of his next attack. In this way we should prevent every species of collusion, even if it could be supposed that a man whom we had always found to be upright and conscientious would enter into a compact with another, destitute of education and knowledge, in order to deceive us. We confess that we could never entertain an idea so injurious to the one and the other; and we must render the same justice to MM. Dupotet and Chapelain, of whom we have repeatedly had occasion to speak in this report.

Your committee, then, met in the cabinet of M. Bourdois, upon the 6th of October at noon, at which hour Cazot arrived there with his child. Here M. Foissac had been invited to meet us at half-past twelve; he arrived unknown to Cazot, and remained in the drawing-room, without having any communi-

cation with us. A person, however, was sent by a concealed door to tell him that Cazot was seated on a sofa about ten feet distant from a closed door, and that the committee requested that he might be set asleep and awakened at this distance, he remaining in the cabinet, and M. Foissac in the drawing-room.

At thirty-seven minutes past twelve, while Cazot was engaged in conversation with us, and in examining the pictures which hung round the cabinet, M. Foissac commenced his magnetic operations in the next room, and we remarked that, at the end of four minutes, Cazot winked slightly, appeared restless, and at length in nine minutes, fell asleep. M. Guersent, who had attended him at the hospital *des Enfants* for his epileptic attacks, asked him if he recognized him. He answered in the affirmative. M. Itard asked him when he should have another fit. He answered that he should have one in four weeks from that day (the 3d of November), at five minutes past four in the afternoon. He was then asked when he should have another. He answered, after collecting himself and hesitating, that it would be five weeks after the preceding, upon the 9th of December, at half-past nine in the morning.

The *procès-verbal* of this meeting having been read over in presence of M. Foissac, in order that he might sign it along with us, we wished, as we have said above, to lead him into an error; and in reading it over to him before getting it signed by the members of the committee, the reporter read, that Cazot's first fit should take place upon Sunday the 4th of November, instead

of Saturday the 3d, as predicted by the patient. He was equally deceived in regard to the second fit, and M. Foissac took a note of these false indications as if they had been correct; but some days afterwards, having placed Cazot in a state of somnambulism, as he was accustomed to do, in order to free him from his headaches, he learnt from him that the fit should take place upon the 3d, and not the 4th, and of this he informed M. Itard, believing that an error had crept into our *procès-verbal*.

In order to observe the fit of the 3d of November, the committee took the same precautions as in examining that of the 1st of October. At four o'clock in the afternoon, we repaired to the house of M. Georges, where we learnt from him, from his wife, and from one of the workmen, that Cazot had wrought, as usual, all the morning until two o'clock, and that, at dinner, he had felt a headach; that, nevertheless, he had come down for the purpose of resuming his work; but that the headach had increased, and having experienced a stupor, he had returned to his room, lain down in his bed and fallen asleep. MM. Bourdois, Fouquier, and the reporter then went up, preceded by M. Georges, to Cazot's room. M. Georges entered alone, and found him in a profound sleep, which he made us observe by the door upon the stair being left a-jar. M. Georges spoke loud to him, moved him, shook him by the arms, without being able to awaken him, and at six minutes past four, in the midst of these attempts to awaken him, Cazot was seized with the principal symptoms which characterize a fit of epilepsy, and in

all respects similar to those which we had previously observed.

The second fit announced at the sitting of the 6th of October, to take place upon the 9th of December, *i. e.* two months before, occurred at a quarter from ten, instead of half-past nine, a quarter of an hour later than had been predicted, and was characterized by the same precursory phenomena, and by the same symptoms as those of the 7th of September, 1st of October, and 3d of November.

Finally, upon the 11th of February, Cazot foretold the period of another fit, which was to take place upon Sunday the 22d of April, five minutes after noon, and this annunciation was verified, like the preceding, within about five minutes, that is to say, the fit took place ten minutes after noon. This fit, remarkable for its violence, for the fury with which Cazot bit his hand and his fore-arm, by the abrupt and repeated starts with which he lifted himself up, lasted thirty-five minutes, when M. Foissac, who was present, magnetised him. The convulsive state soon ceased, and gave way to the magnetic somnambulism, during which Cazot rose, sat down upon a chair, and said that he was much fatigued, that he should still have two fits—one in nine weeks from to-morrow (25th of June) at three minutes past six o'clock. He did not wish to speak of the second fit, because it would be necessary for him to think of what was to happen previously—(at this moment he sent away his wife, who was present)—and he added that, about three weeks after the fit of the 25th of June, he should become in-

sane, that his insanity should last three days, during which he should be so wicked as to fight with every body, 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."

It was upon the 22d of April that all these predictions were made; and two days afterwards, the 24th, Cazot, attempting to stop a spirited horse who had taken the bit in his teeth, was thrown against the wheel of a cabriolet, which shattered the arch of the left orbit, and bruised him shockingly. He was taken to the hospital *Beaujon*, and died there upon the 15th of May. Upon opening his skull, there were found a recent inflammation of the cerebral membranes, (*meningitis*,) a collection of purulent matter under the integuments of the cranium, and at the extremity of the *plexus choroides* a substance yellow within and white on the outside, containing small *hydatides*.

In this case, we see a young man, subject during ten years to attacks of epilepsy, for which he was under medical treatment at the hospital *des Enfants* and that of *St Louis* successively, and also exempted from military service. Magnetism acts upon him, although he is completely ignorant of what is done. There is an amelioration in the symptoms of his disease; the fits diminish in frequency; his oppression

and headaches disappear under the influence of magnetism ; he prescribes a mode of treatment adapted to the nature of his complaint, and from which he predicts a cure. When magnetised without his knowledge and at a distance, he falls into somnambulism, and is withdrawn from it as promptly as when he was magnetised near. Finally, he pointed out, with singular precision, one or two months before, the very day and hour when he was to have an access of epilepsy. However, although gifted with the faculty of foreseeing the fits which were so distant, nay, those which were never to take place, he could not foresee that, in two days, he should meet with a fatal accident.

Without attempting to reconcile all that may, at first sight, appear contradictory in such a case, the committee would request you to observe, that the prevision of Cazot related only to his fits ; that it was restricted to the consciousness of the organic modifications which were preparing, and which took place in him, as the necessary result of the internal functions ; that this prevision, although more extensive, is quite similar to that of some epileptic patients, who recognize the approach of a fit by certain precursory symptoms, such as headach, giddiness, moroseness, the *aura epileptica*. Is it surprising, then, that the somnambulists, whose sensibility, as you have seen, is extremely lively, should be capable of foreseeing their fits a long time before, in consequence of some symptoms or internal impressions, which escape the waking man ? It is in this manner, gentlemen, that we might explain the prevision attested by Aretæus in two

passages of his immortal works ; by Sauvage, who relates an instance of it, and by Cabanis. We may add, that the prevision of Cazot was not rigorous and absolute, but conditional, in as much as, when predicting a fit, he announced that it would not take place provided he were magnetised, and, in reality, it did not take place ; it was altogether organic and internal. Thus we can conceive how he did not foresee an event altogether external, *viz.* that he should accidentally meet a restive horse, that he should have the imprudence to attempt to stop it, and that he should receive a mortal wound. He might, then, have foreseen a fit which was never to take place. It is the hand of a watch, which, in a given time, ought to traverse a certain portion of the circle of the dial-plate, and which does not describe it, because the watch happens to be broken.

In the two preceding cases, we have presented you with two very remarkable instances of *intuition*, of that faculty which is developed during somnambulism, and by virtue of which two magnetised individuals perceived the diseases with which they were affected, pointed out the treatment requisite for their cure, announcing the term, and foreseeing the crises. The case of which we are now about to present you with an analysis, awakened in us a new species of interest. Here, the magnetised person, plunged into somnambulism, determines the diseases of others, with whom she is placed in magnetic connection, describes their nature, and points out the proper remedies.

Mademoiselle Celine Sauvage was placed in a state

of somnambulism, in presence of the committee, on the 18th and 21st of April, the 17th of June, the 9th of August, the 23d of December 1826, and 13th and 17th of January, and 21st of February 1827.

In passing into the state of somnambulism, she experienced a coolness of several degrees, appreciable by the thermometer, her tongue, from being moist and flexible, became dry and wrinkled, her breath, until then sweet, became fetid and repulsive.

The sensibility was almost entirely annihilated during the continuance of her sleep, for she made six inspirations, having a bottle filled with hydrochloric acid under her nostrils, without manifesting any emotion. M. Marc pinched her wrist ; a needle used in acupuncture was thrust to the depth of three lines into her left thigh ; another, to the depth of two lines into her left wrist. These two needles were united by means of a galvanic conductor ; very perceptible convulsive motions were produced in the hand ; and Mademoiselle Celine seemed quite unconscious of all that was done to her. She heard the voices of persons who spoke close to her and touched her ; but she did not remark the noise of two plates which were broken beside her.

It was while she was sunk in this state of somnambulism, that the committee recognized in her three times the faculty of discoursing upon the diseases of other persons whom she touched, and of pointing out the appropriate remedies.

The committee found, amongst its own members, one who was willing to submit to the investigations

of this somnambulist. This was M. Marc. Mademoiselle Celine was requested to examine attentively our colleague's state of health. She applied her hand to his forehead, and to the region of the heart, and in the course of three minutes she said, that the blood had a tendency to the head ; that, at that moment, M. Marc had pain on the left side of this cavity ; that he often felt an oppression, especially after having eaten ; that he must often have a slight cough ; that the lower part of the breast was gorged with blood ; that something impeded the alimentary passage ; that this part (pointing to the region of the xiphoid cartilage) was contracted ; that to cure M. Marc, it was necessary that he should be copiously bled ; that cataplasms of hemlock should be applied, and that the lower part of the breast should be rubbed with laudanum ; that he should drink gummed lemonade ; that he should eat little and frequently, and that he should not take exercise immediately after having made a meal.

We were anxious to learn from M. Marc whether he experienced all that this somnambulist had announced. He told us that, in reality, he felt an oppression when he walked upon leaving the table ; that, as she announced, he frequently had a cough ; and that, before this experiment, he had felt pain in the left side of the head, but that he was not sensible of any impediment in the alimentary passage.

We were struck with this analogy between the feelings of M. Marc and the announcement of the somnambulist ; we noted it with care, and awaited another opportunity of procuring a new confirmation of

the existence of this singular faculty. This opportunity was presented to the reporter, without his having sought it, by the mother of a young lady, whom he had attended for a very short time.

The patient was from twenty-three to twenty-five years of age, and had been afflicted, for about two years, with dropsy of the abdomen, (*ascites*,) accompanied with a number of obstructions, some of the size of an egg, some of the size of the fist, others as large as a child's head, which were situated principally on the left side of the belly. The belly externally was unequal and corrugated ; and these inequalities corresponded to the obstructions which had their seat within the abdomen. M. Dupuytren had already punctured this patient ten or twelve times, and had always withdrawn a large quantity of clear, limpid albumen, without smell, and without any mixture. An alleviation of the symptoms always followed this operation.

The reporter was once present at this operation, and it was easy for M. Dupuytren and him to ascertain the size and the hardness of these tumours, and, consequently, to become sensible of their inability to cure this patient. Nevertheless, they prescribed different remedies, and they attached some importance to the putting Mademoiselle — upon a regimen of goat's milk, the goat having been previously subjected to mercurial frictions.

Upon the 21st of February 1827, the reporter went in search of M. Foissac and Mademoiselle Celine, and conducted them to a house in the street of the *Faubourg du Roule*, without mentioning the name, or the

residence, or the nature of the disease of the person whom he wished to submit to the examination of the somnambulist.

The patient did not appear in the room where the experiment was made until M. Foissac had set Mademoiselle Celine asleep, and then, after having placed a hand of the one in that of the other, she examined her during eight minutes, not as a physician would do, by pressing the abdomen, by percussion, by scrutinizing it in every way ; but merely by applying her hand repeatedly to the stomach, the heart, the back, and the head.

Being interrogated as to what she observed in Mademoiselle ———, she answered that the whole belly was diseased, that there was in it a scirrhus and a large quantity of water on the side of the spleen ; that the intestines were very much puffed up ; that there were pouches containing worms ; that there were swellings of the size of an egg, containing a puriform matter, and that these swellings must be painful ; that at the bottom of the stomach, there was an obstructed gland, (*glande engorgée,*) of the thickness of three of her fingers ; that this gland was in the interior of the stomach, and must injure the digestion ; that the disease was of old standing ; and, finally, that Mademoiselle must have headaches. She prescribed the use of a diet-drink of borage and nitrated Peruvian bark (?) (*chiena ennitrée,*) five ounces of the juice of parietary taken every morning, and 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 pro-

per.* Besides, she prescribed cataplasms of flowers of elder constantly applied to the belly, frictions of this cavity with oil of laurel, or, instead of it, with the juice of this shrub combined with the oil of sweet almonds, a clyster composed of a decoction of Peruvian bark, (*kina*,) mixed with an emollient decoction. The diet should consist of white meats, milk and flour, and no lemon. She allowed very little wine, a little orange-flower rum, or the liqueur of spiced mint. This treatment was not followed; and if it had, it could not have saved the patient. She died a year afterwards. As the body was not opened, we could not verify what had been said by the somnambulist.

Upon an occasion of great delicacy, when very able physicians, several of whom are members of the academy, had prescribed a mercurial treatment for an obstruction (*engorgement*) of the glands of the neck, which they attributed to a syphilitic taint, the family of the patient under this treatment, alarmed at the appearance of some serious consequences, wished to have the advice of a somnambulist. The reporter was called in to assist at a consultation; and he did not neglect to take advantage of this new opportunity of adding to what the committee had already seen. He found a young married woman, Madame La C—

* Without attaching much importance to this singular agreement between the prescription made by the somnambulist of the milk of a goat rubbed with mercurial ointment, and the same prescription recommended to the patient by M. Dupuytren and the reporter, the committee were bound to notice this coincidence in their Report. It is presented as a fact, of which the reporter guarantees the authenticity, but of which no explanation can be given.

having the whole right side of the neck deeply obstructed by a great congeries of glands close upon each other. One of them was opened, and emitted a yellowish purulent matter.

Mademoiselle Celine, whom M. Foissac magnetised in presence of the reporter, placed herself in connection with this patient, and affirmed that the stomach had been attacked by a substance *like poison*; that there was a slight inflammation of the intestines; that, in the upper part of the neck, on the right side, there was a scrofulous complaint, which ought to have been more considerable than it was at present; that, by following a soothing treatment, which she prescribed, the disease would be mitigated in the course of fifteen days or three weeks. This treatment consisted of some grains of magnesia, eight leeches applied to the pit of the stomach, water gruel, a saline cathartic every week, two clysters each day—one of a decoction of Peruvian bark (*kina*), and, immediately after, another of the roots of the marsh-mallow,—friction of the limbs with ether, a bath every week; food made of milk (*laitage*), light meats, and abstinence from wine. This treatment was followed for some time, and there was a perceptible amelioration of the symptoms. But the impatience of the patient, who did not think her recovery proceeding with sufficient rapidity, determined the family to call another consultation of physicians, who decided that she should again be placed under mercurial treatment. From this period, the reporter ceased to attend the patient; and he learnt that the administration of the

mercury had produced very serious affections of the stomach, which terminated her existence, after two months of acute suffering. A *procès-verbal* upon opening the body, signed by MM. Fouquier, Marjolin, Cruveillier and Foissac, verified the existence of a scrofulous or tubercular obstruction of the glands of the neck, two small cavities full of *pus*, proceeding from the tubercles at the top of each of the lungs; the mucous membrane of the great *cul-de-sac* of the stomach was almost entirely destroyed. These gentlemen ascertained, besides, that there was no indication of the presence of any syphilitic disease, whether old or recent.

From the preceding observations it follows, 1. That in the state of somnambulism, *Mademoiselle Celine* pointed out the diseases of three individuals, with whom she was placed in magnetic connection; 2. That the declaration of the first, the examination which was made of the other after three punctures, and the *post mortem* examination of the body of the third, were found to correspond with the annunciations of the somnambulist; 3. That the different modes of treatment which she prescribed do not exceed the limits of that circle of remedies with which she might have been acquainted, nor the order of the things which she might reasonably recommend; and, 4. That she applied them with a species of discernment.

To all these facts which we have so laboriously

collected, which we have observed with so much distrust and attention, which we have endeavoured to classify in such a manner as might best enable you to follow the developement of the phenomena which we witnessed, which we have, above all, exerted ourselves to present to you disengaged from all those accessory circumstances which might have embarrassed or perplexed the narrative ; we might add those which ancient, and even modern history have recorded on the subject of previsions which have frequently been realized, on the cures effectuated by the imposition of the hands, on ecstasies, on the convulsionaries, on oracles, on hallucinations ; in short, on all that, remote from those physical phenomena which may be explained upon the principle of the action of one body upon another, enters into the domain of physiology, and may be considered as an effect depending upon a moral influence not appreciable by the senses. But the committee was appointed for the purpose of investigating somnambulism, for the purpose of making experiments relative to this phenomenon, which had not been studied by the commissioners of 1784, and of reporting to you. We should, then, have exceeded the limits prescribed to our inquiries, if, in attempting to support that which we ourselves had seen by the authority of others who had observed analogous phenomena, we had swelled out our report with facts which were foreign to it. We have related with impartiality what we have seen with distrust ; we have exposed in order what we have observed in different circumstances,—what we have prosecuted

with the most anxious, minute and unremitted attention. We are conscious that the report which we present to you is the faithful exposition of all we have observed. The obstacles which we have encountered in our progress are known to you. They are, in some measure, the cause of the delay which has taken place in presenting our report, although the materials have been for a long time in our hands. Nevertheless, we are far from wishing to excuse ourselves or to complain of this delay, since it confers upon our observations a character of maturity and of reserve, which ought to secure your confidence in the facts which we relate, divested of that prejudice and enthusiasm with which you might have reproached us, had we collected them in haste. We may add, that we are far from thinking that we have seen all ; we do not, therefore, pretend to desire you to admit, as an axiom, that there is nothing positive in magnetism beyond what we have noticed in our report. Far from setting limits to this part of physiological science, we hope on the contrary, that a new field has been opened up to it ; and warranting the authenticity of our own observations, presenting them with confidence to those who, after us, may wish to engage in the investigation of magnetism, we shall only deduce from them the following

CONCLUSIONS.

The conclusions of the report are the result of the observations of which it is composed.

1. The contact of the thumbs or of the hands ; frictions, or certain gestures which are made at a small distance from the body, and called *Passes*, are the means employed to place ourselves in magnetic connection, or, in other words, to transmit the magnetic influence to the patient. (Pp. 118, 119.)

2. The means which are external and visible are not always necessary, since, on many occasions, the will, the fixed look, have been found sufficient to produce the magnetic phenomena, even without the knowledge of the patient. (Pp. 171, 172, 174, 177.)

3. Magnetism has taken effect upon persons of different sexes and ages.

4. The time required for transmitting the magnetic influence with effect, has varied from half an hour to a minute.

5. In general, magnetism does not act upon persons in a sound state of health. (P. 120.)

6. Neither does it act upon all sick persons. (P. 121.)

7. Sometimes, during the process of magnetising, there are manifested insignificant and evanescent

effects, which cannot be attributed to magnetism alone ; such as a slight degree of oppression, of heat or of cold (p. 123,) and some other nervous phenomena, which can be explained without the intervention of a particular agent (p. 124,)—upon the principle of hope or of fear, prejudice and the novelty of the treatment, the *ennui* produced by the monotony of the gestures, (p. 126,) the silence and repose in which the experiments are made ; finally, by the imagination, which has so much influence on some minds and on certain organizations. (Pp. 126-129.)

8. A certain number of the effects observed appeared to us to depend upon magnetism alone, and were never produced without its application. These are well established physiological and therapeutic phenomena. (Pp. 130-132, 161, &c.)

9. The real effects produced by magnetism are very various. It agitates some, and soothes others. Most commonly, it occasions a momentary acceleration of the respiration and of the circulation (p. 124,) fugitive fibrillary convulsive motions resembling electric shocks (pp. 131-144,) a numbness in a greater or less degree (p. 131,) heaviness, somnolency (*ibid.*) and in a small number of cases, that which the magnetisers call somnambulism.

10. The existence of an uniform character, to enable us to recognize, in every case, the reality of the

state of somnambulism has not been established. (Pp. 141, 144-146.)

11. However, we may conclude with certainty that this state exists, when it gives rise to the development of new faculties, which have been designated by the names of *clairvoyance* (pp. 154-158, 166-169); *intuition* (p. 162); internal *prevision* (pp. 163, 170, 171); or when it produces great changes in the physical economy, such as insensibility (pp. 135, 136, 148-151, 163); a sudden and considerable increase of strength (pp. 164, 165, 171); and when these effects cannot be referred to any other cause. (Pp. 148, 149, 151, 152.)

12. As among the effects attributed to somnambulism there are some which may be feigned, somnambulism itself may be feigned, and furnish to quackery the means of deception. (Pp. 138, 140.)

Thus, in the observation of those phenomena which do not present themselves again but as insulated facts, it is only by means of the most attentive scrutiny, the most rigid precautions, and numerous and varied experiments, that we can escape illusion.

13. Sleep produced with more or less promptitude, is a real but not a constant effect of magnetism. (P. 161.)

14. We hold it as demonstrated that it has been produced in circumstances, in which the persons mag-

~~netised~~ could not see or were ignorant of the means employed to occasion it. (Pp. 130, 174.)

15. When a person has once been made to fall into the magnetic sleep, it is not always necessary to have recourse to contact, in order to magnetise him anew. The look of the magnetiser, his volition alone, possess the same influence. (P. 171.) We can not only act upon the magnetised person, 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. (Pp. 172-174.)

16. In general, changes, more or less remarkable, are produced upon the perception and other mental faculties of those individuals who fall into somnambulism, in consequence of magnetism.

a. Some persons amidst the noise of a confused conversation hear only the voice of their magnetiser ; several answer precisely the questions he puts to them, or which are addressed to them by those individuals with whom they have been placed in magnetic connection ; others carry on conversation with all the persons around them.

Nevertheless, it is seldom that they hear what is passing around them. During the greater part of the time, they are completely strangers to the external and unexpected noise which is made close to their ears, such as the sound of copper vessels struck brisk-

ly near them, the fall of a piece of furniture, &c. (P. 148.)

b. The eyes are closed, the eyelids yield with difficulty to the efforts which are made to open them ; this operation, which is not without pain, shows the ball of the eye convulsed, and carried upwards, and sometimes towards the lower part of the orbit. (Pp. 154, 155.)

c. Sometimes the power of smelling appears to be annihilated. They may be made to inhale muriatic acid, or ammonia without feeling any inconvenience, nay, without perceiving it. (P. 136.) The contrary takes place in certain cases, and they retain the sense of smelling.

d. The greater number of the somnambulists whom we have seen were completely insensible. We might tickle their feet, their nostrils and the angle of the eyes with a feather, we might pinch their skin so as to leave a mark, prick them with pins under the nails, &c. without producing any pain, without even their perceiving it. (P. 171.) Finally, we saw one who was insensible to one of the most painful operations in surgery, and who did not manifest the slightest emotion in her countenance, her pulse, or her respiration. (Pp. 150-151.)

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. (P. 174.)

18. The action at a distance does not appear ca-

pable of being exerted with success, excepting upon individuals who have been already magnetised.

19. We only saw one person who fell into somnambulism upon being magnetised for the first time. Sometimes, somnambulism was not manifested until the 8th or 10th sitting. (Pp. 126, 161.)

20. We have invariably seen the ordinary sleep, which is the repose of the organs of sense, of the intellectual faculties, and the voluntary motions, precede and terminate the state of somnambulism.

21. While in the state of somnambulism, the patients, whom we have observed, retained the use of the faculties which they possessed when awake. Even their memory appeared to be more faithful and more extensive, because they remembered every thing that passed at the time, and every time they were placed in the state of somnambulism.

22. Upon awaking, they said they had totally forgotten the circumstances which took place during the somnambulism, and never recollected them. For this fact we can have no other authority than their own declarations.

23. The muscular powers of somnambulists are sometimes benumbed and paralysed. At other times, their motions are constrained, and the somnambulists walk or totter about like drunken men, sometimes

avoiding, and sometimes not avoiding the obstacles which may happen to be in their way. (P. 158.) There are some somnambulists who preserve entire the power of motion; there are even some who display more strength and agility than in their waking state. (Pp. 164, 165, 166, 171.)

24. We have seen two somnambulists who distinguished, with their eyes closed, the objects which were placed before them (p. 155); they mentioned the colour and the value of cards, without touching them (p. 167); they read words traced with the hand (pp. 168-169), as also some lines of books opened at random. This phenomenon took place even when the eyelids were kept exactly closed with the fingers. (*Ibid*).

25. In two somnambulists we found the faculty of foreseeing the acts of the organism more or less remote, more or less complicated. One of them announced repeatedly, several months previously, the day, the hour, and the minute of the access and of the return of epileptic fits. (Pp. 171-172, 177). The other announced the period of his cure. (P. 165). Their previsions were realised with remarkable exactness. They appeared to us to apply only to acts or injuries of their organism.

26. We found only a single somnambulist who pointed out the symptoms of the diseases of three persons with whom she was placed in magnetic con-

nection. We had, however, made experiments upon a considerable number. (P. 183).

27. In order to establish with any degree of exactness the connection between magnetism and therapeutics, it would be necessary to have observed its effects upon a great number of individuals, and to have made experiments every day, for a long time, upon the same patients. As this did not take place with us, your committee could only mention what they perceived in too small a number of cases to enable them to pronounce any judgment.

28. Some of the magnetised patients felt no benefit from the treatment. Others experienced a more or less decided relief: viz. one, the suspension of habitual pains (p. 131); another, the return of his strength; a third, the retardation for several months of his epileptic fits (*ibid.*); and a fourth the complete cure of a serious paralysis of long standing. (P. 160, &c.)

29. Considered as a cause of certain physiological phenomena, or as a therapeutic remedy, magnetism ought to be allowed a place within the circle of the medical sciences; and, consequently, physicians only should practise it, or superintend its use, as is the case in the northern countries.

30. Your committee have not been able to verify, because they had no opportunity of doing so, other faculties which the magnetisers had announced as ex-

isting in somnambulists. But they have communicated in their report facts of sufficient importance to entitle them to think, that the Academy ought to encourage the investigations into the subject of animal magnetism, as a very curious branch of psychology and natural history.

Arrived at the termination of our labours, before closing this report, your committee have asked themselves, whether, in the precautions which we have multiplied around us, in order to avoid all surprise ; whether in the feeling of continual distrust, in which all our proceedings were conducted ; whether in the examination of the phenomena observed, we have scrupulously fulfilled our commission. What other course could we have followed ? What means more certain could we have adopted ? With what distrust more decided and more discreet could we have been actuated ? Our conscience, gentlemen, proudly answers, that you could expect nothing from us but what we have done. In short, have we been honest, exact and faithful observers ? It is for you who have long been acquainted with us, for you who see us continually near you, whether in the intercourse of the world, or at our frequent meetings,—it is for you to answer this question. Your answer, gentlemen, we expect from the long friendship of some of you, and from the esteem of all.

Indeed, we dare not flatter ourselves with the hope of making you participate entirely in our conviction

of the reality of the phenomena which we have observed, and which you have neither seen, nor followed, nor studied along with us. We do not, therefore, demand of you a blind belief of all that we have reported. We conceive that a great proportion of these facts are of a nature so extraordinary, that you cannot accord them such a credence. Perhaps we ourselves might have dared to manifest a similar incredulity, if, in changing characters, you came to announce them here to us, who, like you, at present, had neither seen, nor observed, nor studied, nor followed any thing of the kind.

We only request that you would judge us, as we should judge you,—that is to say, that you be completely convinced, that neither the love of the marvellous, nor the desire of celebrity, nor any views of interest whatever, influenced us during our labours. We were animated by higher motives and more worthy of you—by the love of science, and by an anxiety to justify the expectations you had formed of our zeal, and of our devotion.

Signed by BOURDOIS DE LA MOTTE, *President*;
FOUQUIER, GUENEAU DE MUSSY, GUERSENT, HUS-
SON, ITARD, J. J. LEROUX, MARC, THILLAYE.

Note.—MM. Double and Magendie did not consider themselves entitled to sign the Report, as they had not assisted in making the experiments.

APPENDIX.

APPENDIX.

ON THE SINGULAR PHENOMENON OF THE TRANSFERENCE OF THE FACULTIES FROM THEIR USUAL AND APPROPRIATE ORGANS TO THE EPIGASTRIUM AND OTHER PARTS OF THE NERVOUS SYSTEM, WHICH HAS BEEN OCCASIONALLY OBSERVED TO OCCUR IN CASES OF CATALEPSY AND SOMNAMBULISM.

“ Omnis verior interpretatio Naturæ conficitur per instantias, et experimenta idonea et apposita ; ubi sensus de experimento tantum, experimentum de Natura, et re ipsa judicat.”—BACON, *N. Organum*.

IN reviewing the history of knowledge, it is impossible to withhold our assent from the observation made by Bacon, and repeated by many of his most eminent disciples, that there is nothing more detrimental to the progress of philosophical discovery, than the formation of exclusive systems of science. It is, no doubt, natural to reflecting minds, to endeavour to bring the different branches of their acquirements into systematic arrangement ; and this method, under proper regulations and with due precautions, can be productive of no harm, but, on the contrary, may even facilitate their own studies and those of

others. The great danger lies—and this could be proved from the whole history of philosophy—in setting arbitrary limits to science ; so that, when we happen to stumble upon any new or unusual phenomena, which appear to be irreconcilable with our preconceived opinions, instead of being induced to suspect any imperfection in our system, we feel inclined to overlook the incompatible facts, to resort to immediate and unqualified rejection, and to make every possible effort to exclude the obnoxious and unwelcome intruders. Systematic pride engenders scientific blindness.

To none of the sciences are these observations more applicable than to physiology. Almost every writer on the subject agrees in pointing out and lamenting its barrenness in respect to carefully observed facts, and the general propensity to speculate, within its territory, upon ambiguous, erroneous, or insufficient *data*. The sciences of physiology and psychology, indeed, have many acquisitions yet to make ; we are still, confessedly, ignorant of many of the functions and capabilities of certain portions of the corporeal organism, as well as of the various modes in which they are liable to be affected by the powers and processes of nature. Of the basis of the mental manifestations we know little, and even that little is almost entirely hypothetical. We have yet to learn to distinguish between the intellect and the sensibility in the human constitution, to observe their different phenomena, and, if possible, to ascertain and discriminate their respective sources. And yet, in this

avowedly imperfect science, as in others, the system of exclusion has been unhappily permitted to prevail, and philosophers have exhibited a determined reluctance to admit any new facts, however well authenticated, when they appeared to militate against principles previously established upon a false or inadequate induction.

In these circumstances, at the risk of incurring the imputation of an irrational credulity, I am about to direct the attention of scientific men to certain very singular phenomena, occasionally occurring in cases of catalepsy and somnambulism, which, as it appears to me, have not, in this country at least, been hitherto sufficiently known or investigated, although they are unquestionably calculated to open up many new and most important views in physiological and psychological science, if not to operate an entire change upon the principles established in these departments of knowledge. I am aware, indeed, that the facts to be brought under notice must appear, at first sight, so very extraordinary, and so utterly unaccountable upon any known philosophical principle, that they will probably be rejected by many at once, and, without farther inquiry, as absurd and altogether incredible. Some, perhaps, may feel disposed to class them among those deceptions which, for some selfish purpose, have been frequently practised upon the credulity of the multitude by empirics and impostors. But before adopting such a hasty conclusion, it would undoubtedly be more philosophical to consider the character and probable motives of the observers—to weigh, carefully and impartially, the evidence by which the facts in question are sup-

ported—to reflect attentively upon their connection and analogy with each other,—to ascertain the conclusions to which they naturally lead, and, if possible, the causes to which they may be rationally ascribed. Let us satisfy ourselves, in short, of the credibility of the authorities, the accuracy of the experiments, and the reality and unambiguous nature of the facts. Let us remember, too, at the same time, that it is no good ground for rejecting a fact alleged to have been observed by competent witnesses, that, in the present state of our knowledge, we cannot immediately explain its cause.

There are more things in Heaven and Earth, Horatio,
Than are dreamt of in *our* philosophy!

To be assured, upon satisfactory evidence, that a fact, however extraordinary it may appear, is true, ought to be a sufficient incentive to farther inquiry; and it is only by means of accurate experiments, and a cautious inductive investigation, that we can hope, at length, to become acquainted with the causes of the more mysterious phenomena of nature.*

Van Helmont informs us that, at one time, he entertained an opinion, that many strong poisons might be employed with advantage as remedies, if we only knew how to regulate the doses, and to administer them at the proper time. In order to enable him to ascertain this fact, he resolved to make some experi-

* “*Quicquid oritur, quaecumque est, causam habeat a natura necesse est; ut etiam si præter consuetudinem exstiterit, præter naturam tamen non possit existere. Causam igitur investigato in re nova atque admirabili, si potes; si nullum reperies, illud tamen exploratum habeto, nihil fieri potuisse sine causa, eumque terrorem, quem tibi rei novitas attulerit, ratione naturæ depellito.*”—CICERO, *De Divinatione*.

ments upon himself with the *napellus*; and, accordingly, having rudely prepared a root, he tasted it with the point of his tongue. He swallowed none of it, and spat out a good deal of saliva. At first, he felt as if his head was bound tightly with a bandage; and soon afterwards, the following symptoms occurred: He perceived, with astonishment, that he no longer heard, thought, knew, or imagined anything by means of the cerebral organs, but that all their ordinary and peculiar functions appeared to be transferred to the *epigastrium*, or pit of the stomach. This, he says, he perceived clearly and distinctly, and he paid the greatest attention to it. His head still retained motion and feeling; but the reasoning faculty had passed to the *epigastrium*, as if his intellect had taken up its residence in that part of the corporeal organism. Struck with surprise and wonder at this unusual phenomenon, he studied himself carefully, observed all that he experienced, examined all his ideas, and felt that, during the whole continuance of this extraordinary state, his intellect, thus apparently transferred, possessed more than its usual energy and acuteness. This state lasted two hours; after which he experienced two attacks of *vertigo*. During the first, he felt that a new change was going on within him; and after the second, he found himself in his ordinary state. Van Helmont adds, that he afterwards repeatedly tried the same experiment with the *napellus*, but that he never succeeded in obtaining the same result.*

* Van Helmont, *Demens idea*, §. 11, *et seq.*

This case of Van Helmont may be considered by some as little more than a common instance of delirium ; and had it stood alone, it would scarcely have deserved any particular notice. It appears to me, however, to present some features analogous to those which have been observed to occur in other cases to be afterwards noticed, in which the phenomena were, with some variations, more decidedly developed ; and I have, therefore, thought proper to refer to it at the outset, as probably belonging to the same class, although exhibiting only the incipient stage of that very singular organic state, of which I have undertaken to demonstrate the occasional existence.*

These curious observations of Van Helmont do not appear to have attracted any attention, or given

* I am doubtful whether I ought to include under this description, that species of ecstatic delirium produced by the respiration of the nitrous oxide gas. Sir Humphry Davy has given the following account of his sensations, while under the influence of this intoxicating fluid :

“ By degrees, as the pleasurable sensations increased, I lost all connection with external things ; trains of vivid visible images rapidly passed through my mind, and were connected with words in such a manner, as to produce perceptions perfectly novel. I existed in a world of newly modified ideas. I theorised ; I imagined that I made discoveries. When I was awakened from this semi-delirious trance, my emotions were enthusiastic and sublime ; and for a minute I walked round the room perfectly regardless of what was said to me. As I recovered my former state of mind, I felt an inclination to communicate the discoveries I made during the experiment. I endeavoured to recal the ideas ; they were feeble and indistinct ; one collection of terms, however, presented itself ; and with the most intense belief and prophetic manner, I exclaimed : Nothing exists but thoughts ! the universe is composed of impressions, ideas, pleasures, and pains ! ” — *Researches, &c.* Lond. 1800.

rise to any experimental investigation, at the time. They either passed entirely unnoticed, or seem to have been considered by the learned as a merely fanciful conceit of this extraordinary and eccentric genius.

About a century and a half after the time of Van Helmont, however, the singular phenomena he observed seemed to derive a decisive confirmation, while others of a still more surprising character were elicited, by the following experiments which were made in France.

M. Petetin, an eminent physician, and honorary and Perpetual President of the Medical Society of Lyons, made a variety of experiments, with a view to verify this fact of the transference of the faculties to the epigastric region. These experiments arose from an accident. He had a cataleptic patient, who appeared to be, for a long time, in a state of 'absolute insensibility. No stimulant had any effect upon her; her eyes and ears had entirely lost the power of receiving sensations. M. Petetin, however, was greatly astonished by the accidental discovery, that she heard him perfectly when he spoke upon her stomach. Having satisfied himself of this fact by repeated trials, he afterwards perceived that the case was the same in regard to the senses of sight and smell. The cataleptic patient read with the stomach, even through an intervening opaque body. At last, he found that it was not necessary for him to speak immediately upon the stomach; but that it was quite sufficient to speak at the extremity of a conductor, of

which the other extremity rested upon the stomach of the patient. *

At the period when these experiments and discoveries were made, the doctrines of *animal magnetism* had begun to excite considerable sensation, in consequence of the exertions of Mesmer and his followers. M. Petetin, however, was by no means an advocate for the Mesmerian system, of which, at that time, he does not appear to have had any experimental knowledge. On the contrary, his opinion with regard to that doctrine seems to have coincided pretty nearly with that contained in the report of the first French commissioners. The magnetic crises he considered as very dangerous, and ascribed them, principally, to the influence of the imagination. He endeavoured to account for the singular phenomena evolved by his own experiments, upon a peculiar theory of animal electricity, which, at a subsequent period, was sufficiently refuted by M. Lullier Winslow and others, † and of which, therefore, it appears unnecessary to take any more particular notice.

Some years after the publication of the memoir, of which some account has just been given, M. Petetin found other cataleptic and somnambulic patients, who exhibited precisely the same phenomena as the former, with this difference, that, in some of the cases, the faculties were found to be transferred, not only to

* Vid. *Mémoire sur la decouverte des phenomenes que presentent la catalepsie et le somnambulisme*, &c. par M. Petetin, &c. 1787.

† Vid. M. Corvisart's *Journal de Medecine*, Vol. 18th for Oct. 1809.

the *epigastrium*, but also to the extremities of the fingers and toes.

The facts, indeed, which were brought to light in the course of these experiments, are of a nature so very extraordinary and surprising, that we should hesitate to admit them as well observed phenomena, without the most clear, unsuspecting and incontrovertible evidence of credible individuals, well qualified, in every respect, for conducting the investigation. Fortunately, in the present case, we have not only the advantage of capable and attentive observers, but also the concurrent testimony borne by a great variety of other instances in which the same appearances were manifested.

The experiments were tried by M. Petetin upon *eight* different patients, all of whom exhibited the same phenomenon of the transference of the faculties to the *epigastrium*, and to the extremities of the fingers and toes; with the addition, as in the case of Van Helmont, of a prodigious developement of the intellectual powers, and a presentiment or foresight of their future diseased symptoms.

The experiments were conducted in the following manner :

M. Petetin secretly placed pieces of cake, biscuit, tarts, &c. upon the stomach of one of these patients, which was immediately followed by the taste of the particular article in the mouth. When the substance was enveloped in silk stuff, no sensation was felt by the patient; but the taste was immediately perceived on removing the covering. An egg was covered over

with varnish, and the patient felt no taste until the varnish was removed. One of the patients distinguished a letter addressed to her, which was folded four times, inclosed in a semi-transparent box, and held in M. Petetin's hand upon her stomach. *

A letter was placed upon the fingers of one of the patients, who immediately said : " If I were not discreet, I could tell you the contents ; but to prove that I have read it, there are just two lines and a half." The same patient enumerated exactly the most remarkable articles which were in the pockets of a whole company.

These phenomena are sufficiently wonderful ; but the following experiments afforded still more surprising results. Another patient, Madame de St Paul, was in a state of as perfect somnambulism as the preceding, only that, during the crisis, she was incapable of speaking. She carried on a conversation, however, by means of signs, with the Chevalier Dolomieu, brother to the celebrated naturalist, who interrogated her mentally. " After placing the chain," says M. Petetin, " upon the *epigastrium* of the patient, I gave the ring to M. Dolomieu. No sooner had this gentleman touched his lips, than the features of Madame de St Paul expressed attention. Every question addressed to her mentally gave a

* Plutarch relates that a certain governor of Cilicia wished to try whether the oracle of Mopsus could read, without opening it, a sealed note, containing the following words : " Shall I sacrifice to thee a white or a black ox ?" The oracle returned the note unopened, with the answer, " black."—PLUTARCH, *On the cessation of Oracles*.

new expression to her countenance, and produced a great change upon that of the interrogator. She ended by smiling, and making two approving signs with her head. M. Dolomieu declared that this lady had answered categorically to his thoughts."

M. Dolomieu then requested the patient to answer, by affirmative or negative signs, to the questions which he was about to put to her aloud. He succeeded in making her express that what he had in his pocket was a silver seal with three sides, and the name of the animal engraved on his arms.

Finally, it was found, in the course of these experiments, that if several persons form a chain, the last having his hand upon the stomach of the patient, and the first, who is at the greatest distance, speaks in the hollow of his hand, the patient will hear perfectly well; but will cease to hear even the loudest voice, if the communication between the chain be interrupted by a stick of sealing-wax.*

The work of M. Petetin,† in which these remarkable observations are recorded, was published after

* I am aware that the greater part of these phenomena are sufficient to stagger all belief; and there may be individuals who would have been inclined to pass over the most wonderful of them unnoticed, in order the more readily to obtain credence for the others. I was unwilling, however, to exhibit the evidence in an imperfect or garbled state. All the facts rest upon the same respectable testimony,—they are all connected with each other, and have all been witnessed, and consequently confirmed by other observers; as I trust I shall be able to prove in the sequel, to the satisfaction even of the most sceptical.

† *Electricité animale prouver par la decouverte des phenomenes physiques et moraux de la catalepsie hysterique, et de ses varietés, &c.* par M. Petetin, &c. 1808.

his death, and contains a variety of other singular facts, which he still continued to explain upon his favourite hypotheses of *animal electricity*, although he found reason to change his opinion with respect to *animal magnetism*, after becoming better acquainted with the subject. The accuracy of the experiments made by this author, and the truth of the results, have, so far as I am aware, never been called in question. They were witnessed and attested by all the physicians and learned men in Lyons and the neighbourhood,—by MM. Coladon, Ginet, Dominjon, Dolumieu, Ballanches, Jacquier, Martin de Saint-Genis, Eynard, &c. all of whom declared that they had repeated the experiments upon Madame de St Paul, and were perfectly convinced of the reality of the phenomena.

I shall only add, upon the subject of these experiments, that, in refuting the theory of Petetin, M. Lullier Winslow, in the paper already referred to, admitted the accuracy of the facts, and the identity of the phenomena with those which occur in the magnetic practice; and he invited his brethren to make farther experiments and observations with a view to confirm them.

I am not aware that the recommendation of M. Lullier Winslow was immediately attended to in France. Catalepsy, I believe, is by no means a common disease, and it is possible, therefore, that opportunities of making farther experiments, similar to those of M. Petetin, may not have occurred to professional men. Some time after, however, an account

of a very curious case was published in Germany by the Baron de Strombeck,—a case of spontaneous somnambulism, in which phenomena equally remarkable with those recorded by Petetin were observed, minutely, and attested, by three eminent physicians besides the Baron himself.* Upon first discovering the strange fact of the transference of the faculties in this case, M. de Strombeck emphatically observes, that “he was as much horrified as if he had seen a spectre.”

Dr Bertrand, the very respectable author of a work upon animal magnetism and other writings, has shown that the same phenomenon repeatedly appeared among the Quakers, (*Trembleurs*,) of the Cevennes, the Nuns of Loudun, and the Convulsionaries of St Medard.†

* Histoire de la guérison d’une jeune personne par le magnetisme animal produit par la nature elle-meme. Par un temoin oculaire.

† Du magnetisme animal in France, par A. Bertrand. Paris, 1826.

“L’exorciste Surin, parlant des religieuses de Loudun, dit qu’il peut jurer devant Dieu et sur son eglise, qui plus de deux cents fois elles lui ont decouvert des choses tres secretes cachées en sa pensée ou en sa personne. Ainsi dans l’affaire de Marie Bucaille, cette meme faculté est egalement mise en avant; je copie textuellement les deux passages du factum redigé en sa faveur.

“Le sieur curé de Golleville rapporte que ladite Bucaille etant dans une de ses extases, il lui mit une lettre dans la main au sujet de la femme d’un de ses amis qui etait malade; et qu’aussitot, sans avoir ouvert la lettre ni entendu ce qu’en lui voulait, elle se mit à offrir à Dieu des prieres pour cette personne, qu’elle nomma.

“Le meme curé rapporte que pendant une autre extase, ayant mis un autre billet entre ses mains, plié et cacheté, ou un homme demandait eclaircissement sur plusieurs choses, elle repondit pertinemment aux demandes qui lui etaient faites, sans ouvrir le billet.”

With regard to the Convulsionaries of St Medard, M. Bertrand

The celebrated German physician and professor, Dr Joseph Frank, in his very learned work, entitled *Praxeos Medicæ Universæ Præcepta*, (Lipsiæ, 1817,) has given a long account of a curious and highly interesting case of this description, which occurred in his own practice, and in which several of the most extraordinary facts mentioned by Petetin were again witnessed and confirmed by competent observers. From this account I shall extract such of the particulars as illustrate the subject we are now investigating.

Louisa Baerkmann, a married woman, twenty-two years of age, was delivered of a child which died soon after birth. Sometime after, the mother was seized with a violent fever, accompanied with peculiar symptoms. She could not endure to be touched or moved, lay continually upon her back, suffered excruciating pain day and night, and scarcely slept. At first, she submitted to medical treatment; but afterwards lost all confidence in it, and followed the advice of certain empirics and old women. In consequence of an accidental fright, in her state of extreme weakness, she became delirious, and afterwards exhibited some cataleptic symptoms. The patient, worn to a skeleton,

quotes the following passage from the work entitled, *Coup d'œil sur les Convulsions*:

“ Un fait indubitable, certifié par une foule de personnes de merite et tres dignes de foi, qui l'ont vu et examiné avec tout le soin et l'attention possibles, est celui d'un convulsionnaire qui reconnait et distingue par l'odorat, au point de lire ce qu'on lui presente, quoiqu'on lui couvre exactement les yeux avec un bandeau tres epais, qui lui derobe entierement la lumiere. La supercherie ne peut avoir ici de lieu; nulle maladie ne saurait produire cet effet,” &c.—See Bertrand. pp. 451, &c.

rejected all human advice, put her whole trust in God, and prayed fervently day and night. After an interval of a week, her delirium returned, accompanied with singing and a renewal of the cataleptic symptoms. At length, she had two paroxysms every week regularly, between four and five o'clock in the afternoon, in the course of which she became first cataleptic, then ecstatic, and at last ended by singing, deploring her dreadful state, and praying aid from Heaven. Dr Frank was, at length, called in, and found her in a most deplorable condition, almost as if life were extinct. In vain he called her by her name, and shook her by the arm. She appeared to be quite insensible. This state lasted a short time, and then she recovered, and had some conversation with the Doctor, who consoled her as well as he could, and took his departure. He returned in the evening, and found her again immoveable, and apparently insensible, with the exception of a certain slight motion of the lips, as if she were praying and speaking to herself. In a short time, she began to sing, at first in a low, and afterwards in a loud and sonorous voice. The Doctor moved her arms without difficulty, and they always preserved the position in which he placed them, however incommodious. When the Doctor had witnessed this strange phenomenon for half an hour, he endeavoured in vain to rouse her, by repeatedly calling to her in a louder and louder tone. Her eyes were open, but fixed; the pupil immoveable; the eyelids did not wink even at the approach of the finger, and there were no symptoms of vision. When pierced

with a needle, no sign of pain was observed. The observations of Petetin then occurred to the Doctor; and having approximated his mouth to the epigastric region, he began to speak in a very low tone of voice, so as not to be heard by any of the bystanders. Immediately, the patient, as if returning to her senses, answered the questions put to her, nearly in the following manner :

Quest. Are you asleep? *Ans.* I was, but not now.

—*Quest.* Do you feel any pain? *Ans.* As usual, in the legs and loins.—The patient being now allowed to repose, she again became cataleptic, and after a few minutes, began to sing, as before. The Doctor then attempted to rouse her in the usual manner, but could not accomplish his purpose. But when he spoke upon the stomach, he received an immediate answer. Thus, the experiment succeeded twice, the intervals being filled up with catalepsy and singing. The Doctor declared this disease to be ecstasy combined with catalepsy; and he wished to have an associate and witness in a man rather incredulous, and not readily disposed to admit the reality of strange phenomena, viz. Andrew Sniadecki, professor of chemistry, and, at the same time, a skilful physician. Next day, about five o'clock in the afternoon, the whole scene of the previous day was repeated in his presence.

On the following day, she again answered when spoken to, in a very low tone, upon the stomach; and she also answered when spoken to by M. Sniadecki, in a low tone, near the right ear; but she did not seem to hear when any one spoke upon the pillow on

which her head rested. She answered when an iron rod, a yard and a half in length, was applied to her right ear, M. Sniadecki speaking, in a low tone, at the other extremity of it. M. Niskowski repeated the same experiment with the same success, applying the rod to the *os frontis*.

Upon another occasion, when several physicians were present, Dr Barankiewicz interrogated the patient, but received no answer. Dr Frank then requested this gentleman to give him his hand, he (Frank) keeping his other hand constantly upon the epigastric region. Dr Barankiewicz now asked her: "Who am I?" She immediately answered: "Dr Barankiewicz," although she had not previously perceived him enter the room. A cloth moistened with a solution of sugar in water was applied to the pit of the stomach, and she was asked what it was. She answered that it was sugared water; and being again asked how she came to know this, she said that she felt a sensation of moist heat ascending from that region to the tongue, which immediately became affected with a feeling of sweetness. The cloth was removed, and she awoke. She was then asked what it was that had been placed upon the epigastric region; and she answered that it was something moist; but she could not tell what.

At another time, the persons present formed a chain, each holding a hand of the other, Dr Frank placing one of his upon the epigastrium of the patient, and giving the other to Sniadecki. She answered the questions put to her by all, and named them in their

order. When the Doctor's hand was removed from the epigastrium, she could hear nothing ; but when it was replaced, she again heard and answered questions.

I must refer the reader to the work of Dr Frank for many other particulars of this curious case, which is altogether exceedingly interesting, recorded with great minuteness of observation, and affords a strong confirmation of the results of Petetin's experiments. We find in it the transference of the faculties of hearing and sight to the epigastric region, and other parts of the body ; of that of taste to the epigastrium ; and the experiment of the chain succeeded in this instance, as in those mentioned by Petetin. The respectability of the learned Doctor, and of the other medical gentlemen who witnessed the phenomena, precludes all suspicion of imposition or deception. I may add, that, in former times, this case would probably have been considered as one of demoniacal possession. The patient was cured.*

Some years ago, a very curious memoir upon this subject was read in the Philomathic Society, at Paris, by M. Francœur, the distinguished mathematician, who had recently returned from the waters of Aix, where he had been in the habit of associating with several respectable physicians, and particularly with M. Despine, principal physician to the establishment. These gentlemen mentioned to him that they had witnessed, during several months, the extraordinary phenomenon of the transference of the senses, and M. Francœur

* Jos. Frank, *Prax. Med. Univ. Præcepta*, Part ii. Vol. i. pp. 495, &c.

thought himself bound to communicate their observations to the society.

The following is the substance of the observations of M. Despine :—

In the first case, the patient, who was the subject of it, had the faculties of sight, hearing, and smelling transferred to the fingers and toes.

The second case is a great deal more curious. It is that of the daughter of M. R., a man of education, and much respected by all the inhabitants of the town of Grenoble, where he lived retired. He was much affected by his daughter's indisposition, which he made every effort to conceal, and declined the visits of the inquisitive.

Among the different phenomena successively manifested by Mademoiselle A., and which Dr Despine has described at considerable length, he dwells particularly upon that of somnambulism. M. Bertrand, in his work already referred to, has transcribed the following passage, relative to the transference of the seat of the senses of sight, of hearing, and of smelling.

“ Not only did our patient hear with the palm of the hand, but we saw her read without the assistance of the eyes, by means of the extremities of the fingers alone, which she moved with rapidity above the page she wished to read, and without touching it, as if to multiply the sentient surfaces ;—she read, I say, a whole page of Madame Montolieu's romance, entitled *Les Chateaux en Suisse*. In the page there were three proper names, of which she probably had never heard, and which she pronounced as correctly

as a reader in the Academy. At other times, we saw her select, from amongst a packet of upwards of thirty letters, one which had been previously pointed out to her ;—read upon the dial-plate and *through the glass* the hour indicated by a watch ;—open the watch, wind it up, and set it ;—write several letters (three of them are in my possession) ;—correct, upon a reperusal, the errors which had escaped her, always with the points of her fingers ;—re-copy one of her letters, word for word, reading with her left elbow, while she wrote with her right hand. We heard her describe the smell (of which the nostrils simulated the impression,) and the species of such and such a flower, the leaves of which were placed in the palm of her hand. During all the experiments, a screen of thick pasteboard intercepted, in the strictest manner, every visual ray which might otherwise have reached her eyes.

“ The same phenomena were manifested at the soles of the feet, the epigastrium, and, indeed, all the different parts of the surface of the body.” *

Doctor Delpit, in a curious memoir on two nervous affections, inserted in the *Bibliothèque Medicale*, has recorded a case very similar to that observed by Dr Despine.

“ One of the patients,” says this author, “ read very distinctly when her eyes were entirely closed to the light, by conducting her fingers over the letters. I made her read in this way, whether by day-light or

* Bertrand, p. 458, *et seq.*

in the most profound darkness, printed characters, by opening the first book which came to my hand ; and sometimes written characters, by presenting to her notes which I had prepared on purpose before I went to her. Was it the sense of touch which supplied that of sight ? I know not ; but I affirm that she read quite fluently by conducting her fingers along the letters. One day she even pretended that, with a little more exertion, (I quote her own expressions,) she should be able to read with her toes." *

* Bertrand, pp. 462, 463.—Upon the same authority I may mention that, in the short reflections made by Dr Delpit upon these experiments, a reference is made to several known authors, and particularly to Dumas. " Five years ago," says this celebrated author, " a young lady of the department of Ardeche, who had come to Montpellier in order to consult the physicians about an hysterical affection accompanied with catalepsy, presented an instance of a strange phenomenon. She experienced, during the whole continuance of her attacks, such a concentration of the sensibility in the precordial region, that the organs of the senses appeared to be entirely fixed there ; she referred to the stomach all her sensations of sight, hearing, and smelling, which were not, at these times, produced in the usual organs. This rare phenomenon, observed in a person so interesting, becomes an object of attention to medical men, and of curiosity to the public."

(Van Ghert, in his account of the magnetic treatment of the Demoiselle B., mentions a similar circumstance. In that case he observed the transference of the faculties to the pit of the stomach ; and the patient gave the following description of her feelings :—" When you fix your thoughts intensely upon me, I can see every thing ; at these times, the eyes and the brain leave my head, and take up their residence beside the stomach. Wonderful as this may appear, I assure you that it is true. When I am startled, or you are disturbed, then the eyes and the brain return to my head."—*Archiv. für den thierisch. Magnet.* Vol. ii. No. 1, p. 70.)

" I do not dissemble," continues M. Delpit, " that facts of this description, opposed to all the known laws of nature, should not easily and without restriction obtain the assent of men of sober and experi-

The case of Miss M'Avoy of Liverpool, which occurred a good many years ago, and occasioned a great deal of acrimonious discussion, presented phenomena perfectly analogous to the two preceding.

This young lady was about fifteen years of age, and became blind in the month of June 1816. In the middle of the month of October of that year, she accidentally discovered, for the first time, that she was able to read when she felt the letters of a book with her fingers. The following experiments were made upon her :—

Her eyes were bandaged in such a manner as to exclude every ray of light. Six wafers of different colours, placed between two plates of glass, were presented to her, and she named exactly the colour of each. When she touched the surface of the glass above the red wafer, she was asked whether that which was beneath might not be a piece of red cloth or paper ? She answered, “ No, I think it is a wafer.” She described the colour and figure of a triangular or semi-circular piece of wafer, placed, in a similar manner, between two plates of glass. She named the seven prismatic colours, which were painted upon a piece of paper, and said that the perception of these prismatic colours afforded her the greatest pleasure she had experienced since her blindness. The violet ray was the least agreeable to her.

enced minds. But if we multiply our observations of this kind,—if we scrupulously verify the most minute circumstances of each case, we shall be forced to recognize the possibility of a phenomenon, which, perhaps, only appears so marvellous in consequence of our want of a sufficient number of analogous facts to enable us to institute a comparison.”—See BERTRAND, Pp. 463, &c.

She read several lines of small print by touching the letters; and she afterwards read, by means of a convex glass, at a distance of nine inches from the book. When she read, she touched the surface of the glass gently with the points of her fingers. A pen-knife was laid upon the line she was reading, and she immediately perceived and named it. She could distinguish cut-glass from rock-crystal, and pronounced several pieces of ornament, which had previously been considered as crystal, to be glass, which was afterwards confirmed. Several other experiments were made, in this case, which it appears unnecessary to particularise. At certain times, she possessed this power of distinguishing colours and objects more perfectly than at others. Sometimes it disappeared entirely, and, indeed, suddenly; and, upon these occasions, everything appeared to her to be black. This sudden change she compared to that which she recollected to have experienced when a candle was extinguished, and she was left in darkness.

It does not appear that Miss M'Avoy could have had any conceivable motive for deception, even admitting that, with all the precautions that were taken during the experiments, any such deception had been possible. Her health was very infirm, and her disposition sensitive. The slightest noise was exceedingly disagreeable to her; and some of those persons whom curiosity brought to see her, did not always treat her with that delicacy which was due to her sex and circumstances.

The case of Miss M'Avoy excited a good deal of sensation among the physiologists; and a keen con-

troversy arose between the believers and the sceptics. The phenomenon was declared by the latter to be contrary to all the known laws of nature and philosophy,—fact, therefore, must bend to theory and preconceived opinion,—the thing was impossible, and could not be true,—the whole business, in short, was pronounced to be mere deception, and the young lady herself an arrant impostor. This reasoning, however, did not shake the conviction of many of those individuals who had witnessed the experiments,—investigated the whole circumstances,—and satisfied themselves of the reality of the facts. *

Another case of catalepsy occurred very recently, and appears to have presented phenomena in all respects similar to those already described. I regret exceedingly to find myself under the necessity of giving the particulars of this very curious case at third hand, in consequence of having no access to the original sources. The following account, therefore, is extracted from the *London Medical and Surgical Journal* for December 1832, which professes to have borrowed it from the French *Gazette Medicale* of the previous month.

“In a late number of the *Bulletin of Medical Sciences* of Bologna, there are details of the case of a young man treated in the hospital *della Vita*, in the month of September last, to which, indeed, no credence could be given, were they not furnished by persons of character, and likely to have taken due precautions

* See the pamphlets published upon this occasion by Dr Renwick, Mr Egerton Smith, and others. Also, Thomson's *Annals of Philosophy*, and the *Philosophical Magazine* for February, 1818.

against probable imposition. This man, who was of short stature, but well organized, and born of healthy parents, laboured under mental anxiety for some time previous to the 25th of July last, when, in affording aid to a person attacked with convulsions, his arm was grasped by the individual, and firmly held for a long time. From the impression produced by this last event, his health began to be affected, and he suffered particularly in the lower extremities.

“ On the 15th of August, the following symptoms took place, which recurred, for the most part, in a tertian type, and regularly at a particular hour. After a most violent agitation of all the muscles, those of the face excepted, intense coldness of the extremities, hurried respiration, and other *avant-couriers*, the man became insensible to surrounding objects; ceased to reply to questions, though put to him in a loud voice; suspension of vision, taste, and sense of smell; the skin insensible to pain when pinched, except at the epigastrium and palms of the hands, where feeling seemed to remain in all its energy. These symptoms usually lasted for about an hour and twenty minutes, and the patient had no recollection afterwards of any thing that occurred during the fit.

“ The most surprising part of the history, however, is, that he answered questions, when put to him in a low voice, provided the mouth of the speaker was placed near the epigastrium; and during this trial, great care seems to have been taken, by plugging, bandaging, &c. to block up the passages of the ears. He seems to have been capable of indicating, during the access, the nature of certain bodies when applied to

the epigastrium, or palms of the hands. It is stated that, when desired, (the voice of the speaker being directed to the part indicated,) he would open his hands, which were firmly clenched during the fit. By the latest accounts, the disease seemed to have been mollified," &c. by medical treatment.

Even in the meagre details which are given of this case in the account referred to, we cannot fail to recognize a striking resemblance between the facts observed, and those which occurred in the experiments of Petetin, as well as in all the other cases which have been particularly noticed. In all of them, the functions of the usual organs of sense appear to have been suspended, and transferred to the epigastrium and the extremities. There are, no doubt, pretty strong shades of difference between some of these cases; but in all, I think, the facts present analogous features, sufficient to entitle the phenomena to be arranged in the same class.

Here then, perhaps, I may be permitted to pause and enquire, whether in the curious observation of Van Helmont,—in the phenomena exhibited by some of the Quakers of the Cevennes, the nuns of Loudun, and the convulsionaries of Saint Medard,—in the numerous, minute, and careful experiments made by Dr Petetin,—in the other eight cases to which I have referred more or less at large;—whether, I say, in the instances and observations I have already brought forward, the fact in question has not been fully and satisfactorily established. The phenomena themselves were unambiguous and obtrusive. The cases in which they were manifested, it may be remarked,

occurred at different periods, and in different countries,—in France, Germany, England, and Italy; and they were all witnessed and recorded by the most competent observers,—medical men of eminence in their profession,—without any possible concert amongst each other; many of them, indeed, apparently ignorant of the observations of their predecessors, and stumbling upon the astonishing discovery, as it were, by mere accident.

But I have hitherto adduced scarcely one-half of the evidence upon record, with which I am acquainted, in support of the existence of this extraordinary phenomenon; and in the farther prosecution of this interesting investigation, I shall not hesitate to avail myself of the light thrown upon it by the professors of animal magnetism; because, whatever differences of opinion may prevail in the views entertained upon this subject, considered as matter of theory, or whatever doubts may be expressed with regard to the propriety or the efficacy of the magnetic treatment, as a sanative process, every intelligent and competent judge now admits that the most important facts, which are alleged to occur in the course of that practice, have been abundantly confirmed by evidence of the most irresistible cogency.

M. Tardy de Montravel* found that, during the magnetic somnambulism, in some cases, the region of the stomach was the seat of the sensitive faculties, and particularly of the sight. A somnambulist recognized the hour upon a watch, which was pressed close to the pit of his stomach. This species of per-

* *Traitement Magnet. de la Dem. N.* Vol. i.

ception was, at first, imperfect, but gradually became more and more distinct.

Dr Gmelin * made some interesting experiments, in order to verify this fact. He drew a card out of a mixed pack, and pressed the coloured side of it close upon the pit of the stomach of a somnambulist, so that no person could distinguish it. He then asked the somnambulist what card it was, and she answered that it was a pictured one. Some time after, she could distinguish whether it was a king, a queen, or a knave; she afterwards named the colour, and, at length, mentioned whether it was diamonds, clubs, &c. Upon looking at the card, she was always found to be in the right; and the result was always the same, when, to satisfy the sceptical, the eyes of the somnambulist were bandaged. M. Tardy also mentions the case of a somnambulist, who, with her eyes completely bandaged, so as to exclude the light, could read writings which were strange and unknown to her, provided they were placed close to the pit of her stomach, † When the somnambulists have cultivated this faculty by frequent exercise, it is no longer necessary to bring the object to be recognized into immediate contact with the patient; it is then quite sufficient if it is held, at some distance, opposite to the pit of the stomach. ‡ When this faculty becomes still more developed, somnambulists, it is said, can even distinguish objects through other intervening bodies, provided these be not electrical, such as sealing-wax, silk, &c.

The following case is very remarkable in many re-

* *Material. für die Anthropol.* Vol. ii.

† Tardy, *ut supra.*

‡ Gmelin, *ut supra.*

spects ; and the rank and character of the party, upon whose authority it rests, render it impossible for us to entertain the slightest doubt with regard to the truth of the facts related ; while the situation and known probity of the patient preclude all suspicion of deception. It occurs in a letter addressed by his Excellency the Russian Count Panin, formerly Imperial Ambassador at the Court of Prussia, to a society in Paris.* I propose to extract from this letter such passages only as bear upon the point of the transference of the faculties.

James Macgill, a Scotsman, 46 years of age, and of a phlegmatic temperament, had been more than twelve years in the Count's service, in the capacity of gardener, and was much esteemed by his master. He was always remarkable for his love of truth, and his abhorrence of falsehood.

While in the service of the Count, Macgill had always enjoyed good health ; but in the month of May, 1817, having gone upon a journey on some business of his master's, the horses ran down a declivity, and overturned the chariot, one of the wheels of which passed over his body. The fright and the shock occasioned by the fall, together with some considerable contusions, rendered bleeding advisable ; but, unfortunately, nobody thought of it, and Macgill had recourse only to palliatives. No advice was to be had, and two months elapsed before the patient had an opportunity of consulting an English physician, who resided in the neighbouring town. Before the arrival of the Count, Macgill had taken a great deal of medi-

* See the *Biblioth. du Magnet. Animal.* Vol. iii. p. 126.

cine without effect; and upon being questioned, the physician candidly confessed that he could not tell the nature of the gardener's complaint. The latter derived no benefit from the frictions, pills, and other remedies which were administered to him. He was extremely emaciated, and could not eat or drink without experiencing violent pains in the intestines. In these circumstances, the Count resolved to attempt a cure by means of *animal magnetism*. From this resolution he was not deterred by the presence of one of the Emperor's physicians, a man of high reputation, the English Dr Crichton, who was then upon a visit to a relation of the Count's in the neighbourhood.

After a consultation with the two able physicians referred to, upon the nature of this disease, which appeared to be both very serious and difficult to define, they declared that the man's recovery was very doubtful. The Count afterwards ascertained that these two medical gentlemen did not conceal that they considered the case to be a desperate one.

Upon the Count's recommendation, the patient now renounced all medical prescriptions; and the following are some of the results of the treatment to which he was subjected, and which terminated successfully in a complete cure:

At the third sitting (28th September, 1817,) between one and two o'clock in the afternoon, Macgill entered into the state of somnambulism, after having been manipulated about fifteen minutes; and soon after, he was able to answer questions. His first answers, however, were rather incoherent. A gold ring having been placed upon the pit of his stomach,

he was asked what it was. He answered that it was a ring; but he could not discover the colour of it, and took it for lead. During all this time, the patient's eyes were completely closed.

At the fourth sitting, an *eight of Hearts* was applied to the pit of the patient's stomach. He did not recognize it, but took it for a bound book. He saw a watch when placed in the same situation: He perceived the silver dial-plate and the hands, but could not tell the hour. Some moments afterwards, having been more effectually magnetised, he recognized a card applied to his stomach, called it first the *Queen of Diamonds*, but almost immediately correcting himself, he said that it was the *King*, which was the fact.

At the fifth sitting, several cards were successively applied to the pit of his stomach, and he recognized them all with more facility, and less hesitation, than the day before. At first, he mentioned the colour of the cards and of the marks impressed upon them, then their number, &c.

At the sixth sitting, a packet of calomel powder was applied to the pit of his stomach, and he was asked what he saw. He answered, without hesitation, that it was calomel, such as is prepared by the apothecaries; that it was divided into five small packets, and he described precisely the colour of the powder.

At the seventh sitting, a mixed powder, which he was to take as a medicine, was placed upon the pit of his stomach, and he exactly described the colour of the powder, although inclosed in paper.

Such are a few of the phenomena described by

Count Panin in his very interesting letter. The characters of the Count and of his patient, together with their relative situation, preclude all suspicion of deception in this case; the whole narrative contains only a plain statement of facts, without any attempt at embellishment; and these facts are analogous to a number of others, reported by different observers, all belonging to the same class.

In proceeding to the next case, I would beg leave to recal to the recollection of the reader, the particulars related, not only by Petetin, but by the Doctors Despine and Delpit, and others, who describe the faculties as having been apparently transferred, not merely to the *epigastrium*, but also to the extremities, as well as to other prominent parts of the body.

The celebrated Professor Kieser of Jena, an eminent anatomist and physiologist, and, otherwise, a man of extensive and varied acquirements, has given very ample and minute details of a most remarkable case of magnetic somnambulism, which occurred in the course of his own practice. The account is much too long to be given entire, besides that a great part of it is irrelevant to our present purpose. I shall therefore, extract from it only such of the particulars as have a direct reference to the subject I am now investigating. *

Anthony Arst, the son of a shoemaker in Jena, aged eleven years and a half, was constitutionally subject to frequent and severe attacks of epilepsy. The

* Archiv. für den thierischen Magnetismus. Vol. iii. No. 2.

professor, finding that the disease would not yield to the ordinary remedies, determined to subject the patient to the magnetic treatment. He was accordingly magnetised, and, after a considerable period, placed in a state of somnambulism. This appeared, at first, in the form of a simple sleep, accompanied with various other phenomena,—such as convulsions, catalepsy, *tetanus*, *risus sardonius*, St Vitus's dance,—until, at length, the somnambulism became perfect. While in this state, the visual power of the eye appeared to be completely annihilated, and the faculty of vision transferred to the whole surface of the patient's body, but especially to the more prominent parts. He saw distinctly with the points of his fingers, with the toes, the elbows, the shoulders, the abdominal region, the point of his nose, the chin, and the surface of the face. It was remarked, however, that this somnambulist required light in order to enable him to exercise this transferred faculty of vision, and that he could not see in the dark. But it was perfectly well ascertained that he did not see in the usual manner, as his eyes were closely bandaged.

These facts must, unquestionably, excite great surprise in the minds of all those who come, for the first time, to the investigation of this curious subject. The scientific reputation, however, and the honourable character of the learned professor, afford a sufficient guarantee for his veracity ; and we have not the slightest reason to suspect imposition or deception in the phenomena which he so carefully observed. In a demonstration of this nature, too, *ce ne que le premier*

pas qui coute ;—if we have once satisfied ourselves of the possibility of the transference of a particular faculty from its usual and appropriate organ to one part of the organism, we can have less difficulty in conceiving that, in peculiar circumstances, it may be also transferred to others. Besides, a vast variety of other instances of the same phenomena, which are more or less curious and interesting, will be found in the works of Petetin, Puysegur, Caullet de Veau-morel, Mouillesaux, Gmelin, Heinecken, Wienholt, and a number of other authors.

I should be afraid of exceeding all reasonable bounds, were I to proceed to enumerate all those particular instances in which this phenomenon of the transference of the faculties has been observed. Hitherto, I have been careful to bring forward only such cases as have been recorded by individuals of competent attainments, and whose characters are, otherwise, above all suspicion. I am perfectly aware that, in demonstrating the existence of a fact so extraordinary and incredible as this, the maxim of the lawyers peculiarly applies : *Testimonia ponderanda, non numeranda* ;—the character of the witnesses is a matter of much more importance, than their number ; and, therefore, I have been particularly careful in the selection of my authorities. In the only two other cases which I propose to adduce, I shall rigidly adhere to the same rule. These two instances are not only exceedingly remarkable in themselves, but they are supported by such evidence as even the most sceptical, I should think, would hesitate to reject.

They are extracted from the late very able and impartial Report,—already submitted to the reader,—of nine French physicians of eminence, members of the Royal Academy of Sciences, who were appointed a committee to investigate anew the reality of the phenomena of *animal magnetism*. The extreme caution with which these intelligent gentlemen conducted their experiments, and observed the results, would, of itself, afford an ample security against any species of deception or imposture. I must quote the passages having reference to the subject in question at full length; lest, amidst the various interesting matter contained in the Report, they should not have been pursued with that attention which their importance deserves.

M. Petit was magnetised, in presence of the committee, upon the 15th of March, 1826, at half-past eight o'clock in the evening, and was set asleep in the space of about one minute. The committee were determined to assure themselves that the eyelids were exactly closed. "For this purpose," in the words of the Report, "a candle was almost constantly held, during the experiments, before the eyes of M. Petit, at a distance of one or two inches; and several persons had their eyes continually fixed upon his. None of us could perceive the slightest separation of the eyelids. Mr Ribes, indeed, remarked that their edges were superimposed so that the eye-lashes crossed each other.

"We also examined the state of the eyes, which were forcibly opened without awakening the somnam-

bulist ; and we remarked that the pupil was turned downwards, and directed towards the great angle of the eye.

“ After these preliminary observations, we proceeded to verify the phenomena of vision with the eyes closed.

“ Mr Ribes, member of the academy, presented a catalogue which he took from his pocket. The somnambulist, after some efforts which seemed to fatigue him, read very distinctly the words : *Lavater. Il est bien difficile de connaitre les hommes.* The last words were printed in very small characters. A passport was placed under his eyes ; he recognized it, and called it a *passe-homme*. Some moments afterwards, a *port d'armes* was substituted, which we all know to be in almost all respects similar to a passport, and the blank side of it was presented to him. M. Petit, at first, could only recognize that it was of a particular figure, and very like the former. A few moments afterwards, he told us what it was, and read distinctly the words : *De par le roi*, and on the left, *port-d'armes*. Again, he was shown an open letter ; he declared that he could not read it, as he did not understand English. In fact it was an English letter.

“ M. Bourdois took from his pocket a snuff-box, upon which there was a cameo set in gold. At first the somnambulist could not see it distinctly ; he said that the gold setting dazzled him. When the setting was covered with the fingers, he said that he saw the emblem of fidelity. When pressed to tell what this emblem was, he added : ‘ I see a dog, he is as if on his

hind legs before an altar.' This, in fact, was what was represented.

"A closed letter was presented to him: He could not discover any of its contents. He only followed the direction of the lines with his finger: But he easily read the address, although it contained a pretty difficult name: To M. de Rockenstroh.

"All these experiments were extremely fatiguing to M. Petit. He was allowed to repose for an instant: Then, as he was very fond of play, a game at cards was proposed for his relaxation. As much as the experiments of pure curiosity seemed to annoy him, with so much the more ease and dexterity did he perform whatever gave him pleasure, and this he entered into of his own accord.

"One of the gentlemen present, M. Raynal, formerly inspector of the university, played a game at piquet with M. Petit and lost it. The latter handled his cards with the greatest dexterity, and without making any mistake. We attempted several times in vain to set him at fault, by taking away or changing some of his cards. He counted with surprising facility the points marked upon his adversary's marking card.

"During all this time, we never ceased to examine the eyes, and to hold a candle near them; and we always found them exactly closed. We remarked, however, that the ball of the eye seemed to move under the eyelids, and to follow the different motions of the hands. Finally, M. Bourdois declared that, according to all human probability, and as far as it was possible to judge by the senses, the eyelids were exactly closed."

After some other experiments, M. Dupotet played a game at *ecarté* with M. Petit, while still in a state of somnambulism, in order to divert him. The latter played with the same facility and dexterity as before, and with similar success.

The other case reported by the committee of the Royal Academy of Sciences, is that of Paul Villagrand, student of law, who had an attack of apoplexy, which was followed by paralysis of the whole left side. In this case, the magnetic treatment was pursued with remarkable success. The following phenomena were observed with regard to his exercise of the faculty of vision.

“Upon the 12th of January, your committee met again at the house of M. Foissac, where there were present M. E. Lazcase, deputy, M. De ———, *aide-de-camp* to the king, and M. Segalas, member of the academy. M. Foissac told us that he was going to set Paul asleep, that in this state of somnambulism a finger should be applied to each of his closed eyes, and that, in spite of this complete occlusion of the eyelids, he should distinguish the colour of cards, that he should read the title of a work, and even some words or lines pointed out at random in the body of the work. At the end of two minutes of magnetic manipulations, Paul fell asleep. The eyelids being kept closed, constantly and alternately by MM. Fouquier, Itard, Marc, and the reporter, there was presented to him a pack of new cards, from which the paper covering bearing the government stamp was torn off. The cards were shuffled, and Paul easily

and successively recognized the King of Spades, the Ace of Clubs, the Queen of Spades, the Nine of Clubs, the Seven of Diamonds, and Queen of Diamonds, and the Eight of Diamonds.

“While his eyelids were kept closed by M. Segalas, there was presented to him a volume which the reporter had brought along with him. He read upon the title-page: *Histoire de France*. He could not read the two intermediate lines, and upon the fifth he read only the name, Anquetil, which is preceded by the preposition *par*. The book was opened at the 89th page, and he read in the first line—*le nombre de ses*—he passed over the word *troupes*, and continued: *Au moment ou on le croyait occupé des plaisirs du carnaval*. He also read the running title *Louis*, but could not read the Roman cypher which follows it. A piece of paper was presented to him, upon which were written the words, *Agglutination* and *Magnetisme Animal*. He spelt the first, and pronounced the two others. Finally, the *procès-verbal* of this sitting was presented to him, and he read very distinctly the date and some words which were more legibly written than the others. In all these experiments the fingers were applied to the whole of the commissure of both eyes, by pressing down the upper upon the under eyelid, and we remarked that the ball of the eye was in a constant rotatory motion, and seemed directed towards the object presented to his vision.

“Upon the 2d of February, Paul was placed in a state of somnambulism in the house of Messrs Scribe and Bremard, Merchants, Street St Honoré. The

reporter of the committee was the only member present at this experiment. The eyelids were closed as before, and Paul read, in the work entitled *The thousand and one nights*, the title-page, the word *preface* and the first line of the preface, with the exception of the word *peu*. There was also presented to him a volume entitled, *Lettres de deux amis, par Madame Campan*. He distinguished on a print the figure of Napoleon ; he pointed out the boots, and said that he also saw two female figures. He then read currently the four first lines of the third page with the exception of the word *raviver*. Finally, he recognized, without touching them, four cards, which were successively presented to him two and two,—these were the King of Spades and the Eight of Hearts, the King and Queen of Clubs.

“At another sitting, which took place upon the 13th of March following, Paul attempted in vain to distinguish different cards which were applied to the pit of the stomach ; but he read, with his eyes still closed, in a book opened at random, and, at this time, it was M. Jules Cloquet who kept his eyes shut. The reporter also wrote upon a slip of paper the words, *Maximilien Robespierre*, which he read equally well.”

The two cases last referred to are, assuredly, very remarkable, and they appear to have been observed with uncommon care and attention, and every possible precaution. Nothing, indeed, is there said of that transference of the faculties which, as we have seen, is reported to have been manifested in various other instances : and with the exception of one unsuccess-

ful attempt in the last case, no experiments seem to have been made with the view of ascertaining the existence of that phenomenon. But the circumstance of its not having occurred or been observed in either of these two cases, affords no good ground for suspecting its reality in others. The phenomena occasionally developed in catalepsy and somnambulism, although, upon the whole, of a pretty uniform character, and capable of being arranged under one class, are exceedingly variable in different individuals; depending, probably, in a great degree, upon the perfection or imperfection of the crisis, as well as upon the particular idiosyncrasy of the patient. M. Rostan, in his article *Magnetisme Animal*, inserted in the new *Dictionnaire de Medecine*, mentions that he observed a somnambulist, who told him, exactly and repeatedly, the hour indicated by a watch placed behind his head. The celebrated physiologist, Dr George, also affirmed, that he had observed a somnambulist who presented the most astonishing phenomena of prevision and *clairvoyance*; in so much, he added, that in no work upon magnetism, not even that of Petetin, had he ever met with anything more extraordinary, nor even in all the other instances which he himself had witnessed. It is quite clear, indeed, from the description given of the state of the eyes of the patients, in the two cases reported by the French Academicians, that they could not possibly have exercised the faculty of vision in the usual manner; and this fact being once admitted, we can feel less

difficulty in assenting to the reality of the phenomena which have been observed to occur in other instances.*

From the many well-authenticated cases I have been enabled to adduce upon this interesting point, (and many more might have been brought forward, had it been thought necessary),—if there be any such thing as a rational belief in human testimony of the most cogent nature and most unimpeachable character—any faith to be reposed in the most complete demonstrative evidence,—I conceive myself fully entitled to conclude from this induction of facts, that individuals have been

* The following curious particulars appeared in the *Morning Chronicle* of the 28th March last, and in other newspapers.

“BOW STREET, *Second sight*.—Thomas M’Kean, the father of the boy who has made so much impression by his gift of the *second sight*, was yesterday charged at this office,” &c.

“Mr Burnaby, the clerk, having mentioned that the youth gifted with second sight was in the office, Mr Halls (the magistrate) expressed a wish to witness a little of his mysterious powers. His father then blindfolded him; and Mr Burnaby, taking out his watch, the father asked him of what metal it was composed. He promptly answered, ‘gold,’ which was the fact. Mr B. then took out his purse, when the father asked the boy (who was still blindfolded) of what material it was made? He answered, correctly, ‘of silk;’ and in answer to further questions, said there was gold at one end, and silver at the other; and even told the dates of the years when the shillings and sixpences had been coined.”

“The father stated that he had five children all gifted in the same extraordinary way.”

I know nothing more of the history of this boy or of his family; nor am I aware whether any investigation into his case has been made by professional men,—as *I would strongly recommend*. That the phenomena exhibited are of possible occurrence, I think I have sufficiently proved. At the same time, it is evident that, in cases of this description, there is much room for deception.

known to exercise the faculty of vision without the ordinary use of the natural and appropriate organ of sight, and that, in many cases of catalepsy and somnambulism, this faculty, along with others, has been observed to be transferred to the *epigastrium*, and to other parts of the organism.

This phenomenon, indeed, is probably by no means altogether of modern discovery. It seems to have occurred in ancient times, and in all ages; of which fact, did it not lead to a tedious, and not very useful inquiry, pretty strong evidence might easily be adduced. Previously, however, to the more general diffusion of knowledge, and to the recognition of that truly philosophical principle suggested by Lord Bacon, of carefully interrogating nature, and diligently treasuring up her answers, the subject appears to have been considered much too mysterious to be approached by the profane, and, therefore, was not likely to be subjected to a satisfactory scientific investigation. Nay, even within these last fifty years, when the extraordinary fact was again accidentally brought to light, carefully examined, honestly submitted to the consideration of the learned, and confirmed by numerous experiments in a variety of instances, a great deal of clamour was excited by the systematic physiologists, who set about demonstrating by long theoretical reasonings, that the thing was absolutely impossible—contrary to all the known laws of nature, and inconsistent with all the acknowledged principles of science. Their adversaries answered by merely opposing the facts to the reasonings, and by maintain-

ing that the laws of nature can only be legitimately deduced from an attentive observation of the phenomena of nature. They might have added, in the words of Fernelius : *desipientis arrogantia est, argumentationis necessitatem sensuum auctoritati anteponere* ; and here was a simple question of fact, which, laying all the other evidence aside, may be considered as having been completely set at rest by the decisive experiments made upon the cataleptic patients of Dr Petetin at Lyons.

In ascertaining the actual existence of a natural phenomenon, it is by no means necessary that we should be able to point out its cause. There are many facts in nature, of which, in the present state of our knowledge, we are unable to assign the causes. In the words of Vigneul de Marville, “ we are not acquainted with the whole of man’s constitution. His body is a delicate pneumatic, hydraulic and static machine, which possesses a million of secret springs, producing a million of effects which we do not know, and upon which we never reflect. When any strange phenomenon does force itself upon our notice, in consequence of some organic change ; not knowing to what cause we should ascribe it, we immediately exclaim : A miracle !—whereas, were we carefully to investigate the matter, we might probably find something of every day’s occurrence, when the secret has once been discovered, and that our surprise has been excited by nothing in the least degree wonderful.”

If these observations are just in reference to the changes that occur in the corporeal organism, much

more are they applicable to all our attempts to investigate and explain the operations of the vital principle within us. "I admit," says a most respectable writer in the *Bibliothèque du Magnetisme Animal*, "I admit that the phenomena produced by the *vital fluid* are very strange; some of them, indeed, are so extraordinary that we can scarcely believe our own eyes: I admit that they cannot be reconciled with the physical results hitherto collected, and that they are often apparently in manifest contradiction to the general laws of nature; so that the more learned we are, the less are we disposed to believe them. In short, it is more difficult to observe and become acquainted with the phenomena of the living world, although they take place within us, than with the phenomena of those physical worlds, of which the Keplers and the Newtons have discovered the laws: they have no resemblance to any thing we see elsewhere; and this made Buffon say that they were incomprehensible, because they were incomparable."*

I do not, therefore, conceive myself bound, as I unquestionably do not feel myself competently qualified, to offer any thing in the shape of a regular theory, as an attempt to account for the very extraordinary phenomena which I have thought proper to bring under notice. Indeed, in an investigation like the present, the unprofessional inquirer, at least, might be permitted to take shelter under the principle: *Ubi experientia constat, ratio peti non debet*. At the same

* Biblioth. du Magnet. Animal. Vol. i.—Mémoire sur le fluide vital, par M. le Docteur Ch (ardel?), Professeur, &c.

time, I trust I shall be excused for taking the liberty of referring the intelligent reader to the few hints I have ventured to throw out at the conclusion of the introduction to this volume. If not considered as entirely unphilosophical and inadmissible, they may perhaps be found to lead to a scientific explanation of other singular facts, besides those which almost daily present themselves in the practice of *animal magnetism*.

I shall conclude this paper with the following observations: For some time past, our physiological theories have manifested a decided tendency towards materialism. Of late, indeed, we seem to have got so much into the habit of speaking of the mental functions as being performed by certain organs, that we would appear to have entirely forgotten that every organism requires to be vivified by an active principle,—that the employment of an instrument presupposes the existence of an intelligent agent. In our speculations upon these matters, we become so much interested in the play of the puppets, that we totally overlook the moving power; while contemplating the conditions of intelligence, we become blind to the principle.

But sensation and thought, as has been frequently remarked, are neither the properties, nor any of the necessary effects of matter; material structure alone cannot be the cause of the vital phenomena; it may supply the organs or tools through the medium of which these are ostensibly manifested, but these manifestations cannot take place without the operation

of an intelligent cause. “ That there is some invisible agent in every living organized system, seems to be an inference to which we are led almost irresistibly. When we see an animal starting from its sleep, contrary to the known laws of gravitation, without an external or elastic impulse; without the appearance of electricity, galvanism, magnetism, or chemical attraction; when we see it afterwards moving its limbs in various directions, with different degrees of force and velocity, sometimes suspending and sometimes renewing the same motions, at the sound of a word or the sight of a shadow, can we refrain a moment from thinking that the cause of these phenomena is internal, that it is something different from the body, and that the several bodily organs are nothing more than the mere instruments which it employs in its operations?”*

In the human economy, this invisible agent—this intelligent principle, which operates through the medium of certain corporeal organs—is called the soul. In the normal state of the organism, we know that our faculties of sensation and perception, at least, are exercised through the instrumentality of certain material organs, and hence physiologists have been led to consider these instruments as the necessary conditions of the exercise of these faculties. But are we prepared to maintain that, in any circumstances, the soul is incapable of exerting its energies in a different manner? Do we hold that it is the eye alone that sees, the ear alone that hears, &c. or shall we admit that there is an internal sense to which the impres-

* Barclay On Life and Organization. p. 370.

sions of sight, hearing, &c. are conveyed, and to which the material organs are merely subservient? And if we are disposed to make this admission, can we deny the possibility of impressions being communicated to this internal sense, in some extraordinary manner, without the necessary intervention of the usual organs? This is a question which is capable of being solved by experience; and if the cases I have adduced in this paper have been accurately observed and faithfully reported, of which there seems no reason to doubt, the question may be considered as having been already satisfactorily decided in the affirmative. If the phenomena observed are calculated to excite our wonder, and to call forth our scepticism, if they appear to be inexplicable and irreconcilable with any of our previous notions, let us remember that the cause of this may be found in the narrowness and imperfection of our preconceived systems; and this consideration should lead us to a careful review of the principles of our knowledge, rather than to an obstinate and irrational denial of the facts presented to us by experience.

Nil adeo magnum, nec tam mirabile quidquam,
 Quod non paullatim minuant mirarier omnes.
 Desine quapropter, novitate exterritus ipsa,
 Expuere ex animo rationem; sed magis acri
 Iudicio perpende: et, si tibi vera videntur,
 Dede manus; aut, si falsum est, adcingere contra.

LUCRETIVS.

THE END.