

ISIS REVELATA:

(An Inquiry)

INTO

THE ORIGIN, PROGRESS, AND PRESENT STATE

OF

Animal Magnetism;

BY

J. C. COLQUHOUN, ESQ. ADVOCATE,

F. R. S. E.



SCULPTURE BY J. H. COOPER

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Ingenii commenta delet dies ; naturæ judicia confirmat.—CICERO.
Non fingendum, non excogitandum, sed inveniendum et observandum
quid Natura faciat aut ferat.—BACON.

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Πολλὰ δ' ἐξ ὀλίγης ὀδύνης μίγα γίνεται ἄλγος
Κοῦν αὖ τίς λύσαιτ' ἤπια φάρμακα δούς.
Τὸν δὲ παλαιῖς νοῦσοισι κοκώμενον ἀργαλίας τε
Ἀψάμενος χειρὶν ἀνέβα τίθησ' ὕγιῃ.

SOLON, *apud Stobæum.*

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

GROTIUS.

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W. A. R. E. L. C. R. O. T. I. U. S.

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PREFACE

TO THE

FIRST EDITION.

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 professional pursuits, and in every other respect more competent, had been induced to undertake the task which has now devolved on me. But see-

ing 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 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 in-

* 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.

fluences, 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 doctor 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

* 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.

† I trust, however, that we have no reason, in our days, to say with Hippocrates, *Medici fama quidem et nomine multi, re autem et opere valde pauci*.

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 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 the 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 text-book 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 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.

PREFACE

TO THE

SECOND EDITION.

WHEN the First Edition of this Inquiry was published, I was perfectly aware of the gross ignorance that prevailed, in this country, upon the subject of its contents, and of the prejudices I should probably encounter, and the ridicule to which I might expose myself, in attempting to recommend it to the serious notice of philosophers. Having occasionally bestowed a good deal of attention upon Animal Magnetism, however, during a period of more than twenty years; having carefully investigated its origin and progress, perused all the most important works which treated of its principles, explained its practice, and established the reality of its operation; and, moreover, having made a few successful experiments in order to satisfy

myself with regard to the truth of the facts and the alleged efficacy of the processes; I felt myself, in some measure, qualified to communicate to others an adequate portion of information upon this interesting but neglected subject. Accordingly, I had long determined to publish a short account of the discovery, provided I found a favourable opportunity, and was not anticipated by any other more competent individual. My object, I thought, would be amply attained, if I should only succeed in attracting public attention, and in exciting a spirit of investigation in more influential quarters. Perhaps the very circumstances that, as an individual, I was altogether unconnected with the medical profession, and otherwise unattached to any particular philosophical sect, and, consequently, could have no conceivable interest in the establishment or refutation of the statements to be made or the doctrines to be propounded, might operate as an assurance that I should divest myself of all scientific prejudices, and treat the subject as an honest and zealous, although an humble, inquirer after truth. Indeed, I had no philosophical theory to recommend to the favourable notice of the public; my sole object was to solicit their earnest and unbiassed attention to a class of very curious but hitherto much neglected facts, which I deemed of more than ordinary importance, and of the truth

of which every competent inquirer might satisfy himself, as I had done, by study and experiment.

But, notwithstanding the apparent simplicity of my project, I could not avoid feeling that, in carrying my determination into effect, I should have many serious difficulties and disadvantages to contend with. The subject—at least in its scientific relations—was new in this country, and almost, if not entirely unknown to the great majority of those to whom I should have to address myself: and, besides, so far as causes are concerned, it was by no means of easy explanation. Probably few, if any men of scientific pursuits, in this kingdom, were prepared for a serious investigation of the details to be submitted to their judgment. The terms, too, by which the doctrine has hitherto been designated, savoured of mysticism, with which, indeed, it had been generally—at one time, perhaps, not altogether unjustly—associated; while the very extraordinary character of the facts to be adduced must almost necessarily have caused them to be viewed with the utmost suspicion and scepticism, at least, if not treated with absolute ridicule. From the gentlemen of the medical profession, whose opinion would naturally have much weight with the inexperienced public, I had, for obvious reasons, nothing to hope, but, at the utmost, an armed neutrality; although it was principally in a deficient

knowledge of the technical lore peculiar to their craft, that I felt my own weakness and want of support.* The celebrated Report of the French Academicians, in 1784—to which I shall have occasion to advert hereafter—had nearly banished Animal Magnetism from the territory of science, consigned it to the realms of imagination and delusion, and presented formidable obstacles to its restoration, by erecting a strong barrier of preju-

* This neutrality, so far as I am aware, has been pretty strictly observed, and I may even venture to confess my obligations for the polite attention I have experienced from several of the junior, and consequently most unprejudiced and most inquisitive, members of the profession. I cannot help expressing some surprise, however, that the subject should have been viewed by medical men, in general, with such an apparently listless and apathetic indifference. Upon due inquiry (and this is all I ask for), they would find a number of very extraordinary and highly interesting facts, adduced upon the most incontrovertible evidence, to which sufficient attention has not been hitherto paid. These facts are most important to medical science, and ought to be seriously investigated. To this investigation they ought to be the most competent; and by neglecting it, they just leave a wide door open to quackery, besides depriving themselves of additional means of being useful to society, and, by abandoning the scientific study of their profession, becoming little better than mere empirics.

I must embrace this opportunity of returning my grateful thanks to the gentlemen connected with the medical periodical press, for the candour and courtesy with which they treated my former hasty and very imperfect production, and for the indulgence they shewed towards the many errors into which my ignorance of their science must necessarily have betrayed me.—
Veniam petimus damusque vicissim.

dice against all further inquiry. Any attempt, subsequently made, to re-introduce the subject to public notice, must have been regarded as implying a preference of private investigation and individual judgment, to the apparently solemn, deliberate and authoritative decision of a celebrated scientific body. Besides, the names of the greater number of those individuals—however respectable or distinguished among their own fellow-citizens—who had made Animal Magnetism the object of their researches upon the Continent, and given their countenance to that mode of treatment as a sanative process, were almost entirely unknown in this country, and, consequently, could have carried little weight along with them, if authority only were to be depended upon.

In more recent times, however,—fortunately for my projected undertaking,—a Committee consisting of some of the most distinguished members of one of those scientific societies, which had formerly pronounced a judgment so apparently unfavourable in this interesting matter—the Royal Academy of Medicine at Paris—have framed a new Report upon the subject, founded upon numerous experiments, which may be fairly considered as having now superseded the former Report of the Commissioners appointed in 1784, and thus placed Animal Magnetism upon a footing of respectability, by

conferring upon its study, at length, the sanction of that learned body. While the original Commissioners had formerly—in the very infancy of the inquiry—in the days of comparative ignorance—prematurely condemned the doctrine and practice of Animal Magnetism as delusive and dangerous; a recent Committee of competent persons, appointed from among their own body by one of the most learned scientific societies in Europe, have now, with far more ample and more mature knowledge of the subject, with an infinitely larger body of evidence before them, and with a praiseworthy zeal tempered with a truly philosophical caution, re-investigated the facts, reviewed the question, and found reason to reverse the hasty and inconsiderate sentence of their predecessors.*

It is curious, and by no means uninteresting, to

* Dr Bertrand states it as an important fact, that, in the discussions which preceded the recent investigation and Report by the Royal Academy of Medicine, there was scarcely one member who opposed the proposition for a new examination, who did not, at the same time, admit *that magnetism exerts a real action on the animal economy*. This affords one instance among many of the irrational inconsistency of some of the opponents of Animal Magnetism. They pretend to admit the existence of the agent, while they obstinately refuse to investigate the reality of the phenomena by which alone its efficacy can be demonstrated.

Nonnulli, tædio veritatis investigandæ, cuilibet opinioni potius ignavi succumbunt, quam explorandâ veritate pertinaci diligentia perseverare volunt.—MINUT. FELIX.

observe the different reception which these two reports respectively met with in the scientific world. The former, with all its numerous faults, imperfections, inconsistencies, and contradictions on its head, was, at once, almost universally hailed, by the professional physician and the philosopher, with the highest satisfaction and applause, as conclusive with regard to the reality, the merit, and the utility of an alleged important discovery, which had begun to disturb the calmness of their scientific repose. The latter has been viewed with suspicion and distrust, and treated with censure, contumely and ridicule, because it has opened up an obnoxious but highly interesting discussion; although this last Committee, carefully avoiding the controversial example of their predecessors, have merely laid before their brethren the result of their own experiments and observations, without one word of argument, or a single allusion to theory. This affords one instance, among many, of the extreme reluctance which is felt by philosophers to allow their partial convictions to be unsettled by new lights, and of the great difficulty of procuring a favourable reception for doctrines which are objectionable only because they are deemed to be incompatible with preconceived notions.

Were we even to go the length of holding that these two apparently conflicting Reports neutra-

lised each other—which, however, would be unfair, considering the very different situation and opportunities of the two Commissions, as well as the spirit by which they seem to have been respectively actuated—we should still be left in possession of the whole of the facts elicited by both Committees, together with all the other overwhelming evidence brought out by the numerous investigations of many competent and credible individual inquirers, in support of the reality of Animal Magnetism. Indeed, the last Report of the French Academicians contains but an inconsiderable fragment of the evidence in the case. So true is this, that even were the Report in question—however valuable as an auxiliary, as expressing the decided conviction, after the most anxious, the most ample, the most able and deliberate inquiry, of some of the most eminent scientific physicians in Europe—were this Report, I say, at this moment annihilated and forgotten, the most important facts which it recognises could, nevertheless, be established, in the most satisfactory manner, by evidence altogether independent of it, as I trust I shall be enabled to shew in the sequel. Nay, in this document, some of the most remarkable phenomena which occasionally occur in the magnetic practice, as will be seen hereafter, are scarcely even adverted to. In one point of view, at least, this last Report

unquestionably possesses a decided superiority over the former. It is limited to the facts alone which fell under the observation of the reporters, and cautiously avoids all doubtful, perplexing, and unsatisfactory theories.*

I am quite aware that a great many of the facts to which I shall have occasion to solicit the attention of the reader, especially when I come to treat

* Those ingenious persons who vainly imagine that they have demolished Animal Magnetism, when they have merely uttered some foolish quibbles, jokes, or invectives against the last Report of the French Academicians, ought to be made aware that they have not attempted, far less accomplished, one thousandth part of their necessary labours. They must proceed to examine and refute the voluminous works of Doctors Wienholt, Olbers (the astronomer), Treviranus, Heineken, Gmelin, Brandis, Passavant, Kluge, Ennemoser, Ziermann, &c. ; of Professors Kieser, Eschenmayer, Nasse, Nees von Esenbeck, &c. ; of MM. de Puysegur, Tardy de Montravel, Deleuze, de Lausanne, Roullier, Chardel, Fillassier, &c. They must invalidate the whole facts brought forward in these works, and in the various periodical and other publications which have appeared upon this subject, and prove that their authors were and are fools or knaves and liars ; for all of them speak of what they assert to have witnessed. Moreover, they must refute Nature herself, and demonstrate that, according to all the known principles of science, she is an arrant quack and impostor, and utterly unworthy of the slightest degree of credit, when she pretends to act in opposition to established notions. In attempting this arduous and very laudable task, I may admire their boldness, but cannot promise them success. Yet until they have done all this, they must not be allowed to boast of having refuted Animal Magnetism.

of the higher phenomena of Animal Magnetism, are of a very extraordinary character—upon the first view, perhaps, altogether incredible ; such, in short, as

“ May gratify our curiosity,

“ But ought not to necessitate belief.”

The evidence adduced in support of the reality of these facts, I freely admit, must be thoroughly sifted, and carefully examined, and accurately weighed—must be ascertained to be of the most ample, the most unsuspicious, the most cogent and irresistible nature—before their existence can be generally admitted. But a rational, a philosophical scepticism can be allowed to go no farther than this, however extraordinary, however incomprehensible the facts themselves may appear to be. That an individual, for example, in certain circumstances, in a peculiar state of the organism, should be able to see, or, at least, should appear to us to exercise the faculty of vision, at the pit of the stomach, the palms of the hands, or the points of the fingers, is, no doubt, most extraordinary, quite inconsistent with common experience, and incompatible with the principles of all established science—some, perhaps, will exclaim, *Marvellous ! impossible !**

* *Voici leur jargon : Cela est faux, impossible, absurde ! Eh ! combien y a-t-il de choses lesquelles, pour un temps, nous avons rejetées avec risées comme impossibles, que nous avons été contraints d'avouer après, et encore passer outre à d'autres plus*

But the phenomenon, when its reality has once been established, and its conditions ascertained, by satisfactory and irrefragable evidence—when once we are assured that it is a positive natural fact—the phenomenon, I say, however extraordinary and remote from common experience it may be, is no more miraculous or incredible, than that the same individual, in different circumstances, in the ordinary state of the organism, should see with his eyes. We are too apt to judge of the reality of things by their more familiar external appearances, and, forgetting the first aphorism of Lord Bacon, to expect that Nature will always accommodate her operations to our preconceived notions of possibility, and adapt her phenomena to our arbitrary systems of philosophy. In a certain sense, indeed, universal nature may be said to constitute one grand and incomprehensible miracle of Divine Power. In our present ordinary state of existence, we are permitted to see only “as through a glass—darkly.” We are yet confessedly ignorant of many of the powers and processes of nature, as well as of the causes to which they are to be ascribed. We are, therefore, not entitled to prescribe limits to her operations, and to say to her; *Hitherto shalt thou go, and no farther*. We must not presume to assign bounds to the exercise of her powers. Et, au rebours, combien d'autres nous ont été comme articles de foi, et puis vains mensonges !—CHARRON, *De la Sagesse*. Liv. I.

of the power of the Almighty; nor are these operations and that power to be controlled by the arbitrary theories and capricious fancies of man. To borrow the language of an old and eloquent English author, "The ways of God in nature, as in providence, are not as our ways: Nor are the models that we frame any way commensurate to the vastness, profundity, and unsearchableness of His works, which have a depth in them greater than the well of Democritus."^{*}

In this *age of intellect*, it seems, we have become much too enlightened to believe in miracles, and yet we are constantly surrounded by miracles; for, essentially, every thing in nature is a miracle. The human eye, with its power of vision, which is placed in intimate and immediate connexion with the soul, is a miracle; and so of the other senses. The motion of the muscles at the command of the will is a most astonishing and incomprehensible miracle. The regular return of the seasons, the fertility of the earth, the origin and nature of man, the millions of worlds around us, and their unvaried revolutions, the principle of gravitation, the phenomena of electro-magnetism, &c.—all these things are miracles, which do not owe their existence and preservation to themselves, but depend upon determined laws assigned them by that great, omni-

* Joseph Glanvill.

scient, and omnipotent Being by whom they were originally created. But because they are universal and continually recurring, they no longer appear to us as miracles; all this has become so natural to us, that we conclude it could not have been otherwise than it is. But do these miracles, which pervade all nature, cease to be miracles, because they are common to all existence? They are still miracles, only subject to certain laws which are generally recognised. Hence it comes, that we only consider as a miracle whatever appears to us to deviate from these general laws, and does not seem to coincide with the other common phenomena. For instance, were the exalted psychical powers of some individuals, such as the *clairvoyance* of somnambulists, a property common to all men in general, nobody would consider it as miraculous, but as an endowment conferred by nature upon all mankind. Exceptions, deviations from a general rule, however, are disputed and denied, unless they become as obvious to the senses as the influence of the magnet, which we recognise when it attracts iron, although we do not comprehend its cause. Nature supplies us with facts, and of these men form theories and systems by means of a more or less perfect process of generalization. But, unfortunately, in the course of time, these theories are permitted to supersede nature, our systems are

completed, and thenceforward we become obstinately indisposed to admit the reality of any fact, however clearly demonstrated, which does not fall within our established general laws.

We know a number of instances in which wounds and diseases have been cured by sympathy; but many persons, who are sceptics in regard to all other super-sensible phenomena, do not hesitate to deny all such effects of sympathy, of which they have not been witnesses, or which they have not themselves experienced. Others have had a presentiment of certain events which has been subsequently verified in the most wonderful manner. These persons profess their belief in such presentiments, but reject the influence of sympathy, the *clairvoyance* of somnambulists, and other extraordinary phenomena. But if the one be true, the others are, at least, possible; and experience must determine the reality of both. Now, the reality of the extraordinary phenomena alluded to, as shall hereafter be shewn, has been demonstrated by such satisfactory evidence as must put even the most obstinate scepticism to silence; and the most learned and enlightened physicians, who have condescended to investigate the subject impartially, no longer attempt to deny facts which either they themselves, or others, have frequently witnessed, and which incontrovertibly prove that there are

hidden powers in the human constitution, which are capable of being developed on particular occasions, and under favourable circumstances, and which the ignorant then gaze upon as miracles.*

It has hitherto been too much the custom with all the zealous partizans and apostles of new doctrines and systems of science, however suspicious or fanciful, to make a clamorous and impatient, and often very unreasonable, appeal to the faith or credulity of the public. I have too high an opinion of the candour of my readers, and too much respect for their intelligence, to make any such appeal upon the present occasion. Firm, indeed, as is my own individual conviction of the reality and importance of the facts I am about to submit to the consideration of the public, I do not now, I never did, and never shall, call upon any one to profess his belief in them:—

“ Let me be censur'd by th' austerest brow,
Where I want art or judgment, tax me freely :
Let envious censors, with their broadest eyes,
Look through and through me, I pursue no favour ;
Only vouchsafe me your attention.”†

I merely solicit the patient attention of the honest and unprejudiced inquirer, and humbly invite him to read, and reason, and investigate, and request

* See some striking observations upon this subject in a work by Professor W. Stilling, entitled : *Der Zusammenhang der Seele mit der Geisterwelt*. Ludwigsburg, 1834.

† Ben Jonson.

that he will believe nothing but upon the most cogent evidence of its truth. Conviction, when ultimately obtained in this way, will be less apt to be mingled with error—will be more valuable in itself, more powerful and more permanent. Let it be remembered that I am not going to open up any new views of religious faith, nor even to expound any new system of human science. I am merely about to lay before the public a class of very interesting natural facts, which, although many of them have been occasionally observed during thousands of years, have hitherto been too much disregarded by philosophers, and, consequently, still await a satisfactory elucidation. Should I have occasion to bring forward any theoretical or speculative notions upon this subject, it will only be for the purpose of exhibiting the analogy that exists between these facts and other known phenomena of nature, or of shewing how ingenious men have attempted to explain things which to many appear to be perfectly anomalous and inexplicable. I trust, however, that the intelligent reader will carefully distinguish between theory and fact, and beware of permitting the former to withdraw his attention from the latter. It was by vigorously attacking the theories of the first magnetizers, and denying or suppressing the facts, or keeping them in the back ground, or misrepresenting and subjecting

them to ridicule, that the adversaries of Animal Magnetism on the Continent so long succeeded in their opposition to that doctrine, in the face of daily experience; and as it is extremely probable that the same disingenuous mode of hostility may be attempted upon its first introduction into this country, we should be cautious of allowing ourselves to lose sight of the facts, when we have once become satisfied of their reality.

The great book of Nature lies open and accessible to all. Some individuals may be more, while others are less, capable of decyphering the characters in which it is written, and of comprehending, and duly appreciating, the truths it reveals. But if we would peruse it with advantage, we must prepare ourselves for the study, by previously shaking off all prepossession. Some, perhaps, have the misfortune to be naturally blind; but the proverb truly teaches us, that there are none so blind as those who *will* not see.* The scepticism of

* *Certe et labor irritus et nullus effectus, offerre lumen cæco, sermonem surdo, sapientiam bruto.*—ST CYPRIAN.

“ It often happens, however, that an object is not seen, from not knowing how to see it, rather than from any defect in the organ of vision. Mr Babbage has given a striking illustration of this fact: Conversing with Sir John Herschel on the dark lines observed in the solar spectrum by Fraunhofer, he inquired whether Mr Babbage had seen them; and on his replying in the negative, Sir John Herschel mentioned the extreme difficulty he had had, even with Fraunhofer's description in his hand, and the long time which it had cost him in detecting

science, which hath certainly rid us of many errors, sometimes repels, with too much contempt, the investigation of phenomena which it deems impossible, or inconsistent with some preconceived system. But this pre-occupation of the mind is incompatible with the enlarged study of nature; and there are no prejudices so difficult to eradicate, and, at the same time, so detrimental to the real progress of useful knowledge, as the prejudices of self-satisfied and exclusive science.

Although, at this time of day, it may appear to those conversant with the subject to be something like a work of supererogation to attempt to answer, at any great length, the objections formerly urged by ignorance and prejudice against the magnetic treatment; yet it may be proper to take some short notice of the most prevalent; the more especially as they may happen to be revived in this country by persons who are not aware that they have been already repeatedly and most effectually refuted.

them: He then added, 'I will prepare the apparatus, and put you in such a position that they shall be visible, and yet you shall look for them and not find them: after which, while you remain in the same position, I will instruct you *how to see them*, and you shall see them, and not merely wonder you did not see them before, but you shall find it impossible to look upon the spectrum without seeing them.' On looking as he was directed, notwithstanding the previous warning, Mr Babbage did *not* see them; and, after some time, he inquired how they might be seen, when the prediction of Sir John Herschel was completely fulfilled."—THOMAS MARTIN, *Character of Lord Bacon*, &c.

In the first place, then, it was once loudly asserted by many, and is still faintly repeated by a few, that Animal Magnetism is altogether a system of mere quackery and delusion. This objection—which might, perhaps, have some plausibility during the infancy of the discovery—has now become utterly ludicrous, and betrays either consummate ignorance of the subject, or gross dishonesty. For in this assertion it is implied that hundreds of learned, intelligent and eminent individuals—physicians, philosophers and others—in various parts of Europe and at different periods of time, many of them without any personal knowledge of each other, and having no immediate communication, had actually conspired together for the purpose of palming a paltry piece of deception upon the scientific world; and that, with this sole object in view, they had wantonly sacrificed, not their time and talents only, but their character, their respectability and their honour; and all this without the slightest prospect of advantage to themselves, for hitherto, it is believed, the practice of Animal Magnetism has been by no means a profitable occupation. And this calumny, be it remembered, is uttered against such men as the Doctors Wienholt,*

* Wienholt, in conjunction with his colleague Dr Olbers the celebrated astronomer, successfully employed the magnetic treatment in a variety of cases where all the ordinary resources

Olbers, Gmelin, Heinecken, Treviranus, Hufeland, Brandis, Kluge, Passavant, Ennemoser, &c. ; the Professors Sprengel, Kieser, Eschenmayer, Nasse, &c.—M. Tardy de Montravel, the Marquis de Puysegur, M. Deleuze, M. de Lausanne, M. Chardel, the Russian Count Panin, Baron de Strombeck, the nine eminent physicians who subscribed the recent Report of the French Royal Academy of Medicine, and hundreds of other intelligent individuals of the most undoubted respectability. Indeed, considering the many accomplished professional gentlemen who have countenanced this method of practice, the mere mooted of such an objection as this implies a degree of scepticism which is utterly ludicrous and absurd. Upon what evidence, I would ask, are we to be permitted to believe any series of facts? What amount of proof is required to justify the general introduction of any new medicine or mode of treatment? If Ani-

of the medical art had entirely failed to produce any beneficial effect. The results of this practice were published in four volumes, which I would earnestly recommend to the attention of the student of Animal Magnetism. All the other eminent individuals above mentioned have recorded their faith in the salutary effects of the magnetic processes, and in the reality of the most remarkable phenomena ; most of them have written scientific or practical works upon the subject, and those still living, and belonging to the medical profession, are, I believe, in the constant habit of employing a mode of treatment, the efficacy of which has been fully demonstrated by experience.

mal Magnetism be an imposture, where shall we look for reality?

That quackery may be exhibited here, as in the regular medical profession, it would be absurd to deny. Yet we have never heard physicians urge this circumstance as an objection to the practice of their art. And supposing that cases occasionally do occur in which imposture is active, and the phenomena are feigned;—an hundred such cases could not affect the truth of the facts really manifested, and attested by competent and credible witnesses. There might be a thousand false sovereigns in circulation; but he would be rather a strange logician who should attempt to prove from thence that there is no such thing as a genuine coin of that denomination. Because there are many quacks, is there no such thing in nature as an honest and skilful physician? Because rogues abound, are there no honest men? This, indeed, is rather a singular argument in the mouth of a medical man, especially when we reflect that by far the greater number of the phenomena of Animal Magnetism have been elicited by the investigation of regular graduates, and rest upon medical evidence. Moreover, if medicine be not altogether a system of quackery, the very circumstance that the magnetic practice may give occasion to the exercise of quackery and deception, is one of the very best reasons why honest

and respectable professional men should endeavour to wrest it out of the hands of the empiric, and take it under their own protection.

In the second place, it has been urged as an objection against the practice of Animal Magnetism, that it is uncertain in its operation. But it is illogical to conclude that, because the magnetic treatment does not invariably produce the desired effect, it is therefore altogether inoperative and useless. Certain unknown, perhaps accidental, circumstances may counteract its usual efficacy in particular instances; indeed, several of these circumstances have been already discovered and made known, and others may be detected upon farther experience. The same thing, however, it may be observed, sometimes occurs in the ordinary medical practice. The prescribed medicines do not, upon every occasion, operate in the precise manner expected by the physician; yet, from this circumstance, no sane person would attempt to demonstrate the total inutility of medicine. A thousand unprolific marriages take place; yet, upon the strength of this fact, no one would be foolish enough to deny that the multiplication of mankind is brought about by the union of the sexes. An hundred unsuccessful experiments cannot redargue the evidence of established facts. A million of blind persons will never prove that the natural healthy eye is sightless.

It is quite certain that the magnetic treatment has been successfully employed in many instances where the ordinary resources of medical skill had entirely failed to produce any beneficial effect; and in some cases it is considered as nearly a specific.

In the third place, it has been alleged, and upon apparently high authority, that the practice of Animal Magnetism is dangerous. Now, if by this allegation it is meant that the administration of this remedy by unskilful persons, and in improper circumstances, may be attended with dangerous consequences, the objection must be admitted. But here, again, the objection equally applies to the ordinary medical practice. May not the same thing be said of the imprudent administration of opium, of arsenic, of foxglove, of mercury, or of any other medicinal drug? Nay, is it not equally applicable to the unskilful use of surgical instruments? The best medicines, it has been said, and probably with reason, are poisons in the hands of the imprudent; whereas, the strongest poisons are medicines, when cautiously administered by the experienced physician. Besides, it is implied in this objection, that the treatment in question does produce some effects; and this admission, on the part of its most strenuous opponents, is exceedingly valuable. In short, this objection is wholly founded upon the argument *ab abusu ad usum*—from the

abuse to the use of any article whatever ; and it has therefore no force when directed against Animal Magnetism in particular. But it affords another powerful reason for taking the practice out of the hands of the empiric, and confiding it entirely to the intelligent and skilful physician.

Fire and water are dangerous and destructive elements ; but would we banish them entirely from the universe, lest we should be burnt or drowned ? The elements of the unceasing activity of nature will continue to exist, whatever short-sighted mortals, in their spurious wisdom, may be pleased to determine in regard to them. Let us study the properties, the relations, the powers of these tremendous elements ; and so shall we best learn to use them with advantage, and to protect ourselves from their injurious effects.

Objections, such as I have now briefly noticed, were, for a considerable period, urged against the practice of Animal Magnetism upon the Continent, and perhaps with some shew of reason, so long as it was exercised principally by unprofessional, ignorant, and, it may be, unprincipled persons, and intimately associated with absurd mystical theories. But the circumstances are now entirely changed. The mind of every competent and conscientious inquirer was at length completely overwhelmed by the irresistible force of the evidence of the facts

accumulated by experience; a number of eminent physicians adopted and improved the treatment, and subjected the phenomena to a more scientific investigation; the doctrine assumed a more philosophical form; and the objections alluded to, having now become utterly ludicrous and contemptible when viewed in opposition to the facts, were ultimately abandoned by every enlightened antagonist of the system. So far as I am aware, there is now, upon the Continent, no longer any question regarding the reality of Animal Magnetism as a fact, at least among those who have thoroughly investigated the subject, and of such alone I speak; that question has been completely set at rest by a vast multitude of well-conducted and decisive experiments; the only points still controverted relate to the causes to which the effects ought to be ascribed, and to the efficacy and utility of the treatment;—in short, the question is now reduced to one of theory alone, and here, it must be confessed, there is much scope for speculation.

That one human being, in certain circumstances, and under certain conditions, is capable of producing a very perceptible, and, in some instances, a most remarkable effect upon the organism of another, by the exertion of some hitherto unknown, and consequently inexplicable influences, either

physical or psychical, or both combined—for this has not been precisely ascertained—has been frequently asserted as a fact, in ancient and in modern times. Many instances of it are upon record; and this fact, upon whatever principles it may ultimately be found to depend, has now been established beyond the possibility of rational doubt, by the result of the processes of Animal Magnetism. It is a fact, however, which has probably been believed by many without sufficient inquiry, and certainly rejected by others without any adequate or satisfactory investigation. The apparent mystery which envelopes the subject is well calculated to feed credulity in some, and to generate scepticism in others;—in either case erecting a barrier against all sober and scientific inquiry. The only persons who are entitled to have an authoritative voice in the decision of a question of this nature, are either such as have themselves made an adequate experimental investigation, or such as have carefully studied the subject, and impartially weighed the whole evidence. From such competent judges, Animal Magnetism has nothing to apprehend. The phenomena alleged to have resulted from the magnetic practice are either true, or some hundreds of enlightened and respectable individuals, otherwise of unimpeachable veracity, have, in this instance, been guilty of the most

daring and unparalleled effrontery—of the most wanton, gratuitous, and abominable falsehood; while many thousands of sober and sensible men, most of them originally sceptical in regard to the facts, have permitted themselves to be imposed upon by the grossest delusion; and this, too, in cases where deception appears to have been impossible, or, if possible, could be productive of no imaginable advantage, and was, besides, of easy detection. Moreover, almost every individual may have an opportunity of verifying these phenomena, for his own particular satisfaction, by complying with the requisite conditions. In short, an obstinate denial of the reality of these facts, in the face of all the evidence, is not only irrational in itself, but would annihilate the grounds of all philosophical belief, and tear up all science by the roots.

There is one particular method of treating novel facts, which appear hostile to established theories or systems of science, to which I would briefly call the attention of the reader, although it is perhaps the most dangerous of any, because apparently the most rational, and certainly the most plausible of all. I think it right, indeed, to put the honest inquirer upon his guard against all those specious and sophistical practices, which tend to perpetuate ignorance and error, and to prevent or retard the advancement of truth. The method to which I

now allude, is that by which a clever but disingenuous writer, with a very superficial knowledge, or no knowledge at all, of a particular subject, resting upon principles generally conceived to have been already sufficiently established, combines his powers of wit and ridicule, with every species of tortuous sophistry, and brings the whole battery to bear against doctrines which he deems incompatible with received notions. He feels his advantage in combating new opinions, and arguing on the side of the many against the few. His object is victory, not truth; and he knows that the more he can perplex and darken the subject, the better chance he has to profit by the obscurity. He is quite an adept in the art of distorting facts, and perverting arguments, of making a false application of known principles, and of contriving to throw an air of ridicule over the most serious subjects. Never was the Sphynx more captious in her enigmas, than such an antagonist in his propositions. He knows how to give them a form which may impose upon the soundest logic. He himself contrives to assume the appearance of a good logician: he attacks with vigour—he evades with address; and when arguments fail him, he has recourse to wit. From a consequence which is just, and which he places in the strongest and fairest light, he passes to a number of other con-

clusions, which are utterly false, but which he knows how to clothe in the same colours with the first. By means of this disguise, they pass current in the train, like well counterfeited coin, and are believed to be of the same nature, and of the same value. When hard pressed by unanswerable arguments, he squirts out a profuse quantity of inky matter around him, and, like the cuttle-fish, makes his escape amidst the obscurity. Sometimes, too, a vigorous sarcasm astounds the reader, and extricates the writer from a serious embarrassment, occasioned by the invincible opposition of some stubborn, unmanageable, and insuperable facts: like Hannibal, who, when arrested in his march by the rocks of the Alps, is said to have employed vinegar to dissolve them, and thus cleared a passage for his army. Such a writer securely relies upon having all the ignorant and indolent upon his side, and, accordingly, addresses himself principally to those who are disposed to mistake wit for argument, and ridicule for refutation—to those who, at all times, would rather be amused than instructed. But I need not enlarge any farther upon this method—which, when skilfully employed, is exceedingly effective—because it is in very general use, and many admirable specimens of it are to be found in our modern reviews. I trust, however, that the majority, at least, of those to whom this

publication is addressed, possess too much intellectual discernment to be imposed upon by sophistry of this description, or to accept of an argument, a sneer, or a sarcasm, as a sufficient refutation of a demonstrated fact. Let them remember that *Veritas non est de ratione faceti*; or, to borrow the words of the English poet,

“ Reason is ill refuted with a sneer.”

I am aware it may very naturally occur to the reader, that the topics I have undertaken to investigate in the following pages, would have been treated with much more scientific and technical skill and precision, and with much greater felicity of illustration, by some intelligent member of the medical profession, than by an individual who must be presumed to be little conversant with the cognate departments of knowledge. Nay, I may perhaps be reminded of the very judicious advice of the poet,

“ quid medicorum est
Pertractent medici; tractent fabrilla fabri.”

Now, I have not the slightest hesitation in amply acknowledging, as I deeply feel, my own deficiencies in the essential qualifications requisite for the adequate performance of the task I have, perhaps too arrogantly, undertaken; and, had I observed a disposition on the part of any gentleman of professional

education, in this country, to take up and investigate the subject, to communicate the result of his intelligent and impartial inquiries, and to add his acknowledged acquisitions to the already accumulated treasures of science, I should unquestionably never have presumed to obtrude myself upon public notice as an expounder of the apparent mysteries of Animal Magnetism; but, on the contrary, I should have been most happy to withdraw from the field, and abandon the task to hands more skilful than mine. But I regret having been at length compelled to relinquish all hope of any such professional and unprejudiced investigation. I am sorry to have found the medical gentlemen in Great Britain, with a very few honourable exceptions, divided into two classes in relation to this interesting study. The one is composed of individuals who place themselves in an attitude of determined hostility, resolved, it would appear, not even to listen to facts, far less to be convinced by reason—individuals whose object, it seems to be, not only to render their own minds impenetrable to all rational conviction, but to endeavour to argue, to frighten, or to ridicule the rest of mankind out of the use of their natural faculties—to persuade them to shut their eyes, to close their ears, and to steel their understandings against the admission of even the evidence of truth, and to resign themselves impli-

citly, like true Catholics, to all the prejudices of foreclosed science. The other class consists of such as look upon the whole details of the subject with a listless and apathetic indifference, and whom it seems in vain to attempt to rouse out of that state of torpor and inanition—that more than magnetic sleep—into which they have permitted themselves to sink, as into a *slough of despond*.

It is not easy to discover the cause of this most extraordinary hostility and indifference, unless, perhaps, we may ascribe it to that propensity of the mind, which, after a certain routine of study and labour, indisposes it for the reception of new truths, which are supposed to stand in opposition to previous acquirements. The subject itself is sufficiently curious and interesting, and worthy of the most serious investigation; and it is difficult to imagine how any class of men, professing a love for the pursuits of science, and possessing every facility for extending their knowledge in an important department, can look with coldness upon an overwhelming mass of accumulated evidence, which has already forced complete conviction upon the minds of thousands of the most learned and enlightened individuals in Europe, and promises to open up many new and most interesting views in the philosophy of man. It is well known to all who are conversant with the subject, that, upon

the Continent, the record in this case, to use a legal phrase, has long been closed, and a favourable judgment pronounced by the learned; and the only opponents of the doctrine of Animal Magnetism are now to be found, either among those who are too supercilious, too indolent, or too prejudiced to submit to the labour of inquiry; or among such as, like Zeno and Pyrrho of old, relying upon the quirks and quibbles of a perverted logic, would disprove the possibility of motion, or discredit the evidence of their own senses. *

In these circumstances, therefore, conceiving it to be the duty of every man to impart to others that knowledge of which he believes himself to be in possession, more especially when, from its nature, it appears calculated to benefit mankind in general, I resolved to summon up that moral courage which, in the cause of truth, however unfa-

* It seems the more extraordinary, that medical men in this country should obstinately decline the investigation of this subject, which promises not only to enlarge their professional knowledge, but to augment their practical means, and thus increase the sphere of their usefulness, considering the manifold imperfections which all great physicians have acknowledged to exist in their science. These imperfections have been fairly stated, and candidly admitted, by the celebrated Dr Abercrombie of Edinburgh, in his recent work *On the Intellectual Powers*, who does not hesitate to acknowledge, that "the uncertainty of medicine, which is a theme for the philosopher and the humorist, is deeply felt by the practical physician in the daily ex-

shionable or unpalatable, enables us to bid defiance to the sneers of ignorance and the prejudices of science, and to communicate to my countrymen some information with regard to those facts, of which both the authenticity and the value had long been recognised by our neighbours. I trust, however, that, in respect of my acknowledged deficiency in much of that species of learning, which, had I possessed it, would have rendered the execution of my task more easy, more perfect, and probably more acceptable to the profession, the following attempt to investigate a difficult subject will be treated with some corresponding indulgence.

“ Ne nostros contemne ausus, medicumque laborem :

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Scilicet hac tenui rerum sub imagine multum
Naturæ, fatigue subest, et grandis origo.”

Some of the observations contained in the fol-

ercise of his art ;” and having noticed the different departments of medical science, he ingenuously admits, that extended observation has only tended to render its deficiencies the more remarkable. Hence, no doubt, the daily success of quacks and empirica. Immediately previous to the observation above quoted, Dr Abercrombie alludes to the apologue which, according to D'Alembert, was made upon this subject, by a physician, a man of wit and of philosophy : “ Nature is fighting with the disease ; a blind man armed with a club, that is the physician, comes to settle the disturbance. He first tries to make peace ; when he cannot accomplish this, he lifts his club, and strikes at random ; if he strikes the disease, he kills the disease ; if he strikes nature, he kills nature.”

lowing work may perhaps be thought to have rather too controversial a complexion. This has been occasioned principally by the ignorance, prejudice and petulance with which the subject has generally been treated in this country. But the author disclaims all intention of offending the feelings of any individual.

The first edition of this Inquiry was an exceedingly hasty, and, consequently, a very imperfect production.* In it, my principal object was to draw the attention of the public to the recent Report of the French Academicians. The volume seems to have excited some small sensation in different quarters; but I soon became aware that the

* In hurrying it through the press, a slight error had, *per incuriam*, crept into the title-page of the first edition, which professed to give the translation of a Report by a Committee of the *Medical Section of the French Royal Academy of Sciences*, instead of the *Royal Academy of Medicine*. The error was altogether of a trivial nature, and the title was correctly given on the leaf preceding the Report. But—*parva leves capiunt animos*—a great deal is said to have been attempted to be made of this circumstance by the sceptics and opponents; nay, some, I am told, were disposed even to view it as decisive of the merit and fate of Animal Magnetism. Ridiculous! as if any such casual and unimportant error of mine could affect the credibility of the phenomena described, or as if the Royal Academy of Medicine were not the most competent tribunal before which this particular question could have been investigated. Whatever may be thought by individual members, an impartial inquiry into the pretensions of Animal Magnetism could have reflected no disgrace upon the Institute, or Royal Society of France.

introductory and explanatory matter which accompanied the Report, did not convey sufficient information to those to whom the subject was entirely new, or who had not the means or the leisure to prosecute the study in the writings of other authors. Besides, many most interesting phenomena were scarcely noticed, far less explained to the inquisitive reader; and I was anxious to exhibit a more extensive view both of the facts and of the evidence. Although, therefore, I have announced the present publication as a second edition of the former, it has been, in fact, almost entirely recomposed, and may be considered as nearly a new work. All the most important information contained in the former has been retained in this edition, whilst a great deal of new matter has been added. The French Report, which was the principal object of the former publication, I now deem of inferior importance, and I have therefore thrown it into the Appendix. Valuable as that document undoubtedly is, I found many persons disposed to consider it as containing the whole evidence in the case, instead of being, as it is in reality, a mere fragment.

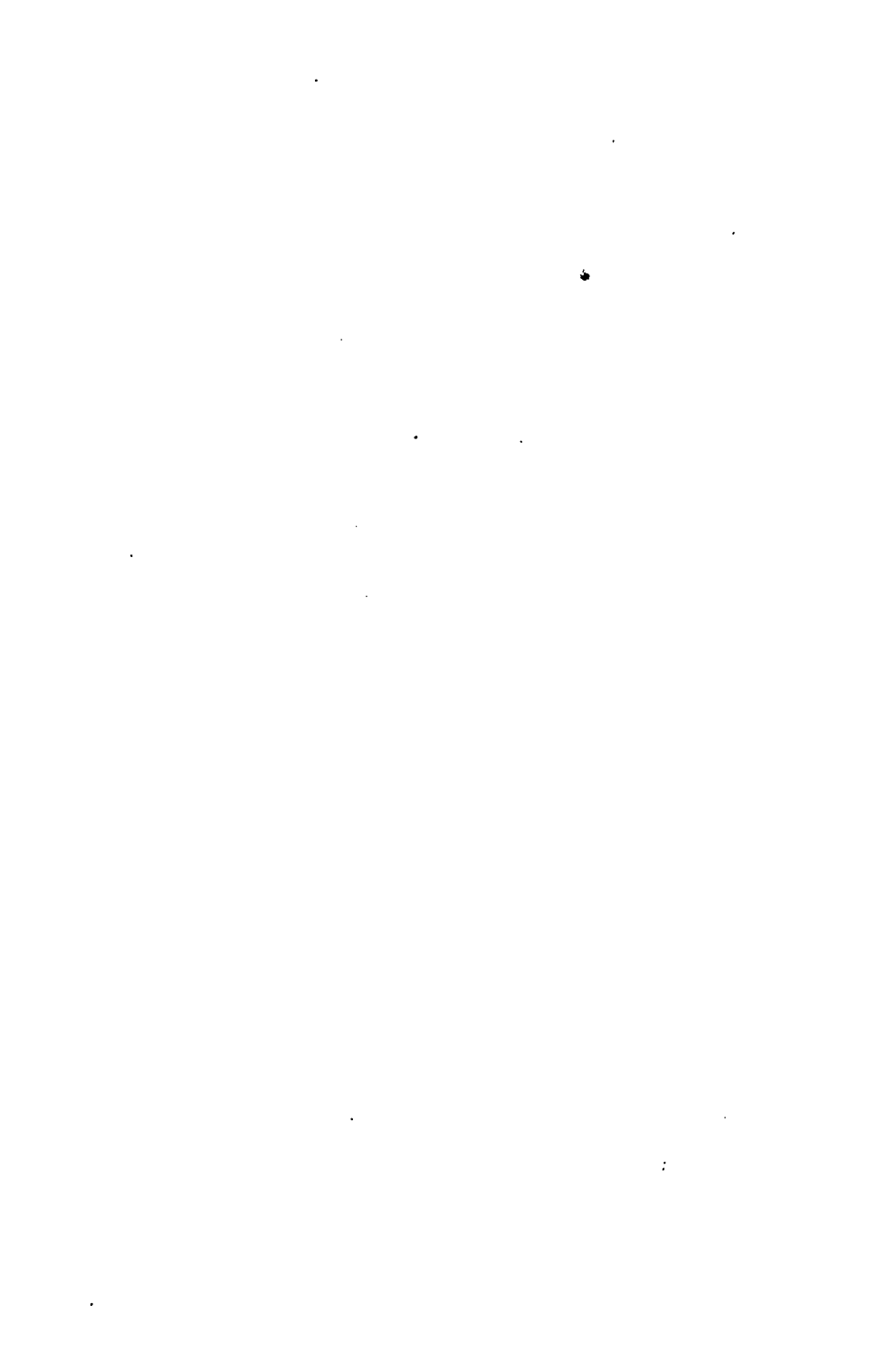
I must still be permitted to express my hope, that this very interesting subject may soon engage the attention of some more competent inquirer.

EDINBURGH, 15th April 1836.

INTRODUCTION.

**Miretur populus miracula ; nil mihi mirum
Præter eum, solus qui facit illa, DEUM.**

OWEN.



INTRODUCTION.

It is not uncommon for persons, ignorant of the nature of the alleged phenomena of Animal Magnetism, to denounce them as pretended miracles, and hold them up to ridicule. This is extremely irrational. A miracle is a violation of some general and known law of nature, in consequence of the immediate interposition of a Superior Power; and, in the sense of this definition, it is not pretended by any of the philosophical adherents of the doctrine, that there are any miracles in Animal Magnetism. The experiments, indeed, by which the reality of its peculiar phenomena has been established, have disclosed a number of extraordinary and most interesting facts; but the occasional occurrence of every fact, however uncommon, is capable of being demonstrated by evidence; it can be shewn to be the result of natural causes; and it then becomes quite unphilosophical to regard it as a real or pretended miracle.

Previous to the wonderful discoveries which have been made in modern times, relative to the

properties and action of Heat, of Electricity, of Galvanism, &c., had any man ventured to anticipate the powers and uses of the Steam-engine, the Electrical Machine, the Voltaic Pile, or of any other of those mighty instruments by means of which the mind of man has acquired so vast a dominion over the world of matter, he would probably have been considered as a visionary or a madman; and had he been able to exhibit the effects of any of these instruments, before the principles which regulate their action had become generally known to philosophers, they would, in all likelihood, have been attributed to supernatural agency; and we should then, perhaps, have heard of the miracles of Mechanical Philosophy, as we now hear of the miracles of Animal Magnetism. In the strict and proper sense of the word, there are no miracles either in the one or in the other; both are merely conversant with the natural effects of natural agencies. There is no error more arrogant or more irrational than that which leads us to measure the reality of phenomena, or the possibilities of nature, by the line of our own limited experience—to weigh them in the balance of our own partial understanding—with an utter disregard of positive facts, established by real and satisfactory evidence. Every man who has passed the mere threshold of science, ought to be aware, that it is quite possible for us to be in

possession of a fact, or even of a series of facts, long before we become capable of giving a rational and satisfactory explanation of them; in short, before we are enabled to discover their causes; and to such unexplained facts, especially when they appear to be attended with mystery, the vulgar give the name of miracles.* But this is an abuse of language—unphilosophical and dangerous—which ought to be stigmatized and exploded.†

Indeed, were we to regard all extraordinary and

* The conduct of some of the opponents of Animal Magnetism, is the most irrational that can be conceived. They sneer at our labours, and ridicule our facts, and then call upon us to explain the phenomena. They first discourage all investigation, and then taunt us with not doing that which investigation only can accomplish.

† Many *natural miracles*, along with their scientific explanations, will be found in Sir David Brewster's learned and amusing *Letters on Natural Magic*. Take the following as one instance. We have probably all heard of the celebrated *Spectre of the Brocken*, one of the Hartz Mountains in Germany. This spectre consists of a gigantic figure, which has, from time immemorial, occasionally appeared in the heavens to a spectator on the top of the mountain, and given rise to the traditional belief that it is haunted by supernatural beings. This figure has been seen by many travellers. In speaking of it, M. Jordan says, "In the course of my repeated tours through the Hartz Mountains, I often, but in vain, ascended the Brocken, that I might see the spectre. At length, on a serene morning, as the sun was just appearing above the horizon, it stood before me, at a great distance, towards the opposite mountain. It seemed to be the gigantic figure of a man. It vanished in a moment." In September 1796, the celebrated Abbé Haüy visited this country. He says,

apparently unaccountable phenomena as miracles, I suspect that we should have a great many more of such miracles than those of Animal Magnetism. Every science, in short, would have its own peculiar miracles. We should then have the miracles of Astronomy, of Chemistry, of Mineral Magnetism, of Electricity, of Galvanism, and as many more classes of miracles as there are departments of natural knowledge. For of many of the phenomena that occur in these sciences, what more do we know than that they have been demonstrated to exist in certain circumstances, and under certain condi-

“ After having ascended the mountain for thirty times, I at last saw the spectre. It was just at sunrise, in the middle of the month of May, about four o'clock in the morning. I saw distinctly a human figure of a monstrous size. The atmosphere was quite serene towards the east. In the south-west, a high wind carried before it some light vapours, which were scarcely condensed into clouds, and hung round the mountain upon which the figure stood. I bowed; the colossal figure repeated it. I paid my respects a second time, which was returned with the same civility. I then called the landlord of the inn, and having taken the same position which I had occupied before, we looked towards the mountain, when we clearly saw two such colossal figures, which, after having repeated our compliments, by bending their bodies, vanished.” Here, then, was a popular miracle, so long as the phenomenon continued unexplained.

Now, the following is the simple explanation of this singular and apparently preternatural apparition.

“ When the rising sun throws his rays over the Brocken upon the body of a man standing opposite to fleecy clouds, let the beholder fix his eye steadily upon them, and, in all probability, he will see his own shadow extending the length of 500 or 600 feet, at the distance of about two miles from him.”

tions? and this we also know in regard to the phenomena of Animal Magnetism. If no facts were to be admitted in science, excepting such as are found to coincide with our own previous observation, or such as could be immediately referred to some known principle as their cause, our whole knowledge might be compressed within very narrow bounds; there would be an end to all farther advancement, and the book of Nature would henceforth be to us a sealed volume.

With regard to Astronomy, the celebrated Sir John Herschell, in the Introduction to his late admirable treatise upon that interesting study, observes, that "there is no science which draws more largely upon that intellectual liberality, which is ready to adopt whatever is demonstrated, or to concede whatever is rendered highly probable, however new and uncommon the points of view may be in which objects the most familiar may thereby become placed. *Almost all its conclusions stand in open and striking contradiction with those of superficial and vulgar observation, and with what appears to every one, until he has understood and weighed the proofs to the contrary, the most positive evidence of his senses.*"*

* When the early philosophers of the Italian school explained to their disciples, upon the principles of their astronomical system, the very simple causes of the solar and lunar eclipses, and other natural phenomena, which were generally regarded by

“How strangely,” says one of the very few intelligent English disciples of Mesmer (the late Mr Chenevix)—“how strangely must they estimate nature, how highly must they value themselves, who deny the possibility of any cause of any effect, merely because it is incomprehensible! For, in fact, what do men comprehend? Of what do they know the causes? When Newton said, that gravitation held the world together, did he assign the reason why the heavenly bodies do not fly off from each other into infinite space? He did but teach a word, and that word has gained admittance, as it were, surreptitiously, amid causes, even in the minds of the most enlightened, insomuch that to doubt it now were a proof of ignorance and folly.

“Let an untutored Indian hear, for the first time, that the moon which rolls above his head is suspended there by the power of gravitation; that she obeys the influence of every little speck which his eye can discern in the firmament; of orbs

cotton trade, spindles that used to revolve fifty times a minute, now revolve, in some cases, eight thousand times a minute. At one mill at Manchester, there are 136,000 spindles at work, spinning one million two hundred thousand miles of cotton thread per week. Mr Owen, at New Lanark, with 2500 people, daily produces as much cotton-yarn as will go round the earth twice and a half. The total machinery in the kingdom is calculated now to be equal to the work of four hundred millions, and might be increased to an incalculable extent under proper management.

placed beyond them again, but invisible to us, because their light has not yet reached our globe; that the earth cannot be shaken, and the shock not communicated through the whole system of the universe; that every pebble under his feet as virtually rules the motions of Saturn as the sun can do. Let him then be told that one sentient being, placed in the vicinity of another sentient being, can, by a certain action of his nervous system, produce the daily phenomenon, sleep, and the rarer one, somnambulism; and which of these lessons would he be the most prompt to credit? Certainly not that which inculcates an impalpable action and reaction between infinite masses, separated by infinite distances. The pride of learning, the arrogance of erudition, deem it ignoble to believe what they cannot explain; while simple instinct, struck with awe by every thing, is equally open to credit what it cannot as what it can comprehend, and admits no scholastic degrees of marvellousness."

Now, if there be any individuals who are disposed to reject the alleged phenomena of Animal Magnetism, at once, and without any serious examination of their reality, as utterly inexplicable, marvellous, and incredible, I would humbly recommend to them, before taking such a precipitate and, I may be allowed to say, irrational step, to consider well whether it were a greater miracle

that these facts should be true, or that some hundreds of the most sober, enlightened, respectable, and competent observers, in all parts of Europe, at different periods of time, without any possible concert amongst each other, and without any imaginable motive for falsehood and deception, should have wilfully and recklessly compromised their own honourable and scientific characters, by declaring that they had witnessed certain phenomena of a most remarkable and unambiguous description, which, in reality, had no existence; that these learned and most respectable individuals should have accidentally stumbled upon and trodden the same extraordinary path of paltry and unprofitable deception, and openly, anxiously, and impudently proclaimed their own folly, and dishonesty, and moral turpitude, to the world at large; and, moreover—most miraculous of all!—that this foolish and false testimony should happen to be supported and confirmed, in almost all its essential particulars, by strong collateral evidence of the most unsuspecting nature. To adopt this last alternative, I do not hesitate to affirm, implies, in my humble opinion, our belief of a much greater miracle than any credence we might accord to the facts themselves; which last, indeed, lose all their miraculous character the moment we abandon all theoretical prejudices, lay our minds open to demonstration, and

become satisfied that they are real, natural phenomena. The best means of obtaining conviction, especially in the case of professional gentlemen—and to them, principally, I would seriously recommend the inquiry—is to make careful experiments, for which an extensive practice must afford them many valuable opportunities; and should they pursue the appropriate methods in the right spirit, and in suitable circumstances, I may safely assure them that their efforts cannot fail to be crowned with success. Indeed, I cannot anticipate that the enlightened professors of the healing art, animated with that zeal and benevolence which essentially characterise their fraternity, will much longer shut their eyes to some of the most interesting and important phenomena of nature—that they will much longer neglect a method of treatment, which, besides increasing their therapeutic knowledge, promises to multiply their resources, by enabling them more effectually to cure or alleviate many of those diseases which afflict humanity.

I have been thus earnest in my endeavours to persuade my readers to throw aside all prejudice and prepossession, and submit to patient and unbiassed investigation, because I have almost invariably found that those persons, however otherwise learned and intelligent, to whom any of the more extraordinary phenomena of Animal Magnetism

have been for the first time mentioned, have either listened to the circumstances with an incredulous wonder, or attempted to demonstrate the impossibility of their occurrence upon some commonly received principle of science. Now, what I am desirous of impressing upon their minds is this—that an alleged fact is not necessarily false, because it may seem extraordinary, unaccountable, or apparently inconsistent with some assumed scientific principle. Human wisdom is fallible ; but Nature, when viewed with unjaundiced eyes and unprejudiced judgment, cannot deceive us in the end ; nor can her manifestations ever come into real collision with the conclusions of a just philosophy : *Nunquam aliud natura, aliud sapientia dixit.* The fact itself must first be strictly investigated ; and if this investigation be conducted with skill and impartiality, it may possibly turn out, not that the alleged phenomenon is false, but that the adverse theory is either unfounded, or at least imperfect, or perhaps inapplicable in the peculiar circumstances of the case. In a subsequent part of this volume, I shall have occasion to direct the attention of the reader to a very remarkable, a very extraordinary, state of the human organism, which sometimes occurs naturally or spontaneously, sometimes in consequence of a morbid state of the system, and is sometimes produced artificially by means of the magnetic pro-

cesses. Of the occasional existence of this extraordinary state—which is generally, although perhaps not very properly, denominated *Somnambulism**—it is impossible to doubt; but its very singular phenomena have never yet been sufficiently investigated by physiologists. To those who have made adequate inquiry, it must be abundantly obvious, that the state of Somnambulism is totally different from the ordinary organic state of existence, and that the appearances it presents are incapable of explanation upon the common principles of physiology. But it would be very unphilosophical indeed, to regard this inconsistency as a proof of the non-existence of that peculiar state, in the face of our actual experience. The proper method of proceeding would be, first to ascertain the reality of the facts, and then to alter or enlarge our theory, so as to enable it to comprehend, and, if possible, account for the newly-observed phenomena.

I could easily point out to the notice of my readers many striking instances illustrative of the

* The impropriety of the term *Somnambulism*, or sleep-walking, when employed to distinguish the state in question, has been remarked by many authors, and several others have been suggested as more characteristic of the affection. That of *Somno-vigil* appears to me to be the most appropriate, signifying that the mind is awake while the body sleeps. I am aware, however, of the difficulty of altering expressions which have become fixed, as it were, by general use; and I would recommend to my readers to attend to things rather than to words.

difficulty of obtaining credence to the statement of new, rare, or unnoticed facts, however well established, when they appear extraordinary in themselves, or seem calculated to invalidate a favourite theory, or to contradict preconceived opinions.* I need not remind my readers of those days of scientific darkness, in which eclipses of the sun and moon, the appearance of comets, meteors, and other natural phenomena, were generally looked upon as miracles, frequently as harbingers of Divine wrath to mankind; nor will I go back to Galileo's restored doctrine of the earth's motion, or to Sir Isaac Newton's splendid discoveries in physics, because these, I apprehend, must be familiar to most of us; but shall take my examples from the latest history of scientific discovery.

The very first instance I shall adduce, strongly illustrates the influence of prejudice and pre-conceived opinion, even over otherwise enlightened minds.—“It is not without reason,” says a recent writer, “that the epithet *uncouth* has been applied to the *Dodo*; for two distinguished naturalists, in their day, maintained, for many years, that such a

* Every one knows how much opposition the Copernican theory experienced, for a long time, from prejudice and prepossession, and in what contempt it continued to be held by the learned as well as the vulgar. The persecution of Galileo, the tardy reception of the theory of Harvey, and of the discoveries of Newton, are equally notorious.

form had never existed but in the imagination of the painter. One of these individuals, however, at length had an opportunity of inspecting the well known specimen of the head of the Dodo, which is preserved in the Ashmolean Museum at Oxford; and was then convinced that such a bird had really existed. But so far was he from producing the same conviction in the mind of his friend by the description of the specimen, that he incurred the charge of an intentional deception; and the result was, that an interminable feud arose between them: for although they were attached to the same institution, and lived within its walls,..... they never again spoke to each other.”*

The next example to which I shall refer, relates to one of the most curious and most beneficial discoveries that have been made in modern times; and it affords an apt illustration of the absurdity of denying the possibility of facts before investigating their reality.

“Authorities,” says M. Arago,—who, however eminent in the physical and mathematical sciences, is, I am informed, a decided opponent of Animal Magnetism,—“authorities, I admit, are of little weight in matters of science, in the face of positive facts; but it is necessary that these facts exist,

* See Dr Kidd's *Bridgewater Treatise*.

that they have been subjected to severe examination, that they have been skilfully grouped, with a view to extract from them the truths they conceal. He who ventures to treat, *a priori*, a fact as absurd, wants prudence. He has not reflected on the numerous errors he would have committed in regard to many modern discoveries. I ask, for example, if there can be any thing in the world more *bizarre*, more incredible, more inadmissible, than the discovery of Dr Jenner?—Well! the *bizarre*, the incredible, the inadmissible, is found to be true; and the preservative against the small-pox is, by unanimous consent, to be sought for in the little pustule that appears in the udder of the cow.”*—So far M. Arago. I have read of an eminent physician at Berlin, whose prejudice against this discovery was so inveterate, that, to the last moment of his life, he never ceased to inveigh against vaccination, as the *brutal inoculation*.

* These observations appear to be exceedingly applicable to their author himself, in so far as regards the opinions he is said to have uttered respecting the phenomena of Animal Magnetism. M. Arago, however, I believe to be no less distinguished for his liberality, than for his talents and scientific acquirements; and I would, therefore, humbly recommend to that eminent individual to investigate the subject more thoroughly and more minutely, before he ventures to pronounce a decided opinion upon it. I think he will admit that the evidence could not have been feeble, which produced conviction in the mind of his celebrated countryman, Cuvier.

Dr Elliotson, in one of his medical lectures, when speaking of the prejudices that prevailed against the original introduction of inoculation for the small-pox into England, observes, that "many clergymen and dissenting ministers raved against it from the pulpit, and called inoculation the *offspring of atheism : those who performed it were called sorcerers, and the whole thing was said to be a diabolical invention of Satan.* Others, however, were of a different opinion, and Bishop Maddox and Dr Doddridge defended it, and in doing so employed scriptural quotations. You know," continues Dr Elliotson, "that the devil can quote Scripture to suit his own purposes, and therefore it was very fair for good men to quote Scripture too. However, the reasonable side of the question at last prevailed." I have thought it proper to make this reference to the analogous case of the introduction of inoculation, because I am aware that similar arguments (if such they can be called), have been, and may still be employed, by certain well-meaning, perhaps, but weak, ill-informed, and mistaken persons, in relation to the study, the practice, and the phenomena of Animal Magnetism.

The two next instances I shall bring forward, in illustration of this subject, seem still more apposite to our own case; inasmuch as they relate to facts which had been observed for many ages, before

their authenticity was fully established by demonstration.

The first of these relates to the curious phenomenon of *spontaneous combustion*, or that internal burning to which animal bodies are occasionally liable. This fact appears to have been known to the ancients, and many instances of it have been recorded. The reality of this phenomenon, however, although believed by some, was, for a long time, doubted by many, until, in recent times, Sir David Brewster, in his amusing and instructive *Letters on Natural Magic*, has shewn that it has been completely established by evidence; and I believe it is now generally admitted by physicians and philosophers.

The last instance I shall particularly refer to, is derived from the discovery of what are called *meteoric stones*.

That solid masses fell from above upon the earth, connected with the appearance of meteors, had been advanced as early as 500 years before the Christian era, by the Greek philosopher Anaxagoras; and the same idea had been brought forward in a vague manner, by other inquirers among the Greeks and Romans, and was revived in modern times; but it was regarded by the greater number of philosophers as a mere vulgar error, until so late as 1802, when Mr Howard, by an accurate examina-

tion of the testimonies connected with events of this kind, and by a minute analysis of the substances said to have fallen in different parts of the globe, proved the authenticity of the circumstance, and shewed that these meteoric productions differed from any other substance belonging to our earth ; and since that period, a number of these phenomena have occurred, and have been minutely recorded. Some of my readers, too, may perhaps recollect the various theories which were advanced with a view to account for this remarkable phenomenon ; and there can be little doubt that the difficulty of explaining it upon intelligible and satisfactory principles, in this, as in other instances, prolonged the disbelief or the disregard of the fact.

I have hinted that the two last mentioned examples may be regarded as pretty apposite illustrations of the fate which has hitherto attended Animal Magnetism. It has been asserted by some individuals, little conversant with the subject, that the facts of Animal Magnetism are new,—that the pretended discovery is altogether of recent origin. This assertion, even if it were true, would be a matter of no earthly consequence, because it could have no effect in invalidating the evidence of the existence of the phenomena. But it is not only unimportant, but demonstrably false, as will be seen hereafter. Many of the most important facts

alluded to appear to have been well known to the ancients ; they may be traced among different nations and in remote times ; and they have been referred to and reasoned upon by several old authors, although it is only at a recent period, indeed, that men of science have condescended to devote to them an attention commensurate with their value.

We have thus seen that many things which were, for a long time, treated as fabulous and incredible, have, at length, been proved to be authentic facts, as soon as the evidence in support of them was duly subjected to scientific investigation, and the requisite experiments, when possible and necessary, were made with a view to ascertain their truth. We have seen that, in the case of meteoric stones, more than 2000 years elapsed between the first recorded observation of the phenomenon and the ultimate confirmation and general recognition of the fact. Do not these examples teach us that an obstinate scepticism, and neglect of adequate investigation, are quite as detrimental to the progress of scientific discovery, as an excess of credulity without due inquiry ? For, if we adopt the unphilosophical principle of rejecting, and at once without examination or inquiry, all facts which appear to us to be extraordinary, inexplicable, and mysterious, and which have not happened to fall immediately under our own limited observation, we place ourselves precisely in

the same predicament with that Indian Prince, who, relying exclusively upon his own experience, and probably conceiving that it was quite impossible for any thing to exist of which he was ignorant, denied the possibility of the production of ice by the freezing of water, and treated all accounts of the phenomenon as apocryphal, fabulous, and utterly unworthy of credit. We are informed that, in more recent times, another sage Indian potentate, in the same spirit, imagined that a certain European traveller was actually sporting with his credulity, when he was merely attempting to give him an accurate description of the steam-engine.

It may be reasonably maintained that, in the sciences of Physiology and Psychology, as in others, one important fact, when well established, is of infinitely more value than hundreds of the most brilliant but baseless hypotheses; and nothing can be more irrational than to attempt to ridicule or depreciate a well authenticated fact, either because we are incapable of accounting for it, or because it appears, *a priori*, to be inconsistent with some received theory. "Concerning the publication of novel facts," says the late celebrated Sir H. Davy, "there can be but one judgment, for facts are independent of fashion, taste, and caprice, and are subject to no code of criticism; they are more useful, perhaps, even when they contradict, than when

they support received doctrines; for our theories are only imperfect approximations to the real knowledge of things."

Theories, indeed, have been pretty justly described as "the mighty soap bubbles, with which the grown-up children of science amuse themselves, whilst the honest vulgar stand gazing in stupid admiration, and dignify these learned vagaries with the name of science."*

It may be stated as one of the many great advantages attending the study of Animal Magnetism, that it tends to approximate the sciences of Physiology and Psychology—the phenomena of the material and those of the spiritual man—by demonstrating, experimentally, the intimate connexion that subsists between them. The study of Physiology has of late been generally confined to an investigation of the component parts and mere material structure of the organism, with little or no regard to the principles which regulate their action in living beings. Psychological science, strictly so called, on the other hand, has been for a long time greatly neglected in this country, and its phenomena, even when they presented themselves to notice, have been almost entirely disregarded, although of paramount interest to every intelligent

* SIR WILLIAM DRUMMOND; *Academical Questions*.

living being, and of the utmost importance to the philosophy of man.* This has probably arisen

* I find the following striking, and, as it appears to me, extremely appropriate observations upon the present state of philosophy in England, in the *London Review* for April 1835 :

“ In the intellectual pursuits which form great minds, this country was formerly pre-eminent. England once stood at the head of European philosophy. Where stands she now ? Consult the general opinion of Europe. The celebrity of England, in the present day, rests upon her docks, her canals, her railroads. In intellect, she is distinguished only for a kind of sober good sense, free from extravagance, but also void of lofty aspirations ; and for doing all those things which are best done where man most resembles a machine, with the precision of a machine. Valuable qualities, doubtless ; but not precisely those by which man raises himself to the perfection of his nature, or achieves greater and greater conquests over the difficulties which encumber his social arrangements. Ask any reflecting person in France or Germany his opinion of England ; whatever may be his own tenets—however friendly his disposition to us—whatever his admiration of our institutions, and even his desire to introduce them into his native country ;—however alive to the faults and errors of his own countrymen—the feature which always strikes him in the English mind, is the absence of enlarged and commanding views. Every question he finds discussed and decided on its own basis, however narrow, without any light thrown upon it from principles more extensive than itself ; and no question discussed at all, unless Parliament, or some constituted authority, is to be moved to-morrow, or the day after, to put it to the vote. Instead of the ardour of research, the eagerness for large and comprehensive inquiry, of the educated part of the French and German youth, what find we ? Out of the narrow bounds of mathematical and physical science, not a vestige of a reading and thinking public, engaged in the investigation of truth, *as truth*, in the prosecution of thought for the sake of thought.

from the peculiar direction which has been given to the study of nature. We are generally taught to investigate only the materiality and mechanism of things, without paying much regard to those immaterial—or rather, those invisible, intangible and imponderable—forces, which are incessantly active throughout the universe, and are the mainsprings of the vital organization. Even in Physics, however—a science more immediately conversant with matter and mechanism—we dare not overlook the perpetual operation of these important powers, although we should never be enabled to ascertain

Among no class, except sectarian religionists—and what they are we all know—is there any interest in the great problem of man's nature and life: among no class whatever is there any curiosity respecting the nature and principles of human society, the history or the philosophy of civilization; nor any belief that, from such inquiries, a single important practical consequence can follow. Guizot, the greatest admirer of England among the continental philosophers, nevertheless remarks, that, in England, even great events do not, as they do every where else, inspire great ideas. Things, in England, are greater than the men who accomplish them."

In the preceding representation, it is to be feared there is but too much truth. In England, the very name of science is perverted, and the epithet of philosopher is almost exclusively conferred upon the mathematician, the chemist, and the mechanic. Upon the Continent, England, in the present day, is not considered as holding any high rank in the scale of intellectual pursuit; and for one work which issues from the British press in the course of a year, on any subject connected with the science of mind, probably twenty make their annual appearance in France and Germany.

the principles of their action. As Dr Roget observes in his treatise on Electricity, " besides the well-known mechanical forces which belong to ordinary ponderable matter, the phenomena of nature exhibit to our view another class of powers, the presence of which, although sufficiently characterised by certain effects, is not attended with any appreciable change in the weight of the bodies with which they are connected. To this class belong Heat, Light, Electricity, and Magnetism." And with still more immediate reference to our present subject, M. Buffon, when treating of the sympathies that exist between the different parts of the living organism, remarks, that " the correspondence which certain parts of the human body have with others very different and very distant..... might be much more generally observed ; but we do not pay sufficient attention to effects, when we do not suspect their causes. It is undoubtedly for this reason that men have never thought of carefully examining these correspondences in the human body, upon which, however, depends a great part of the play of the animal machine.....A great many of these might be discovered, if the most eminent physicians would turn their attention to that study. It appears to me that this would be, perhaps, more useful than the nomenclature of anatomy.....The true springs of our organization are, not these

muscles, these arteries, these nerves, which are described with so much care and exactness: there reside, as we have said, internal forces in organised bodies, which do not follow the laws of that gross mechanical system which we have invented, and to which we would reduce every thing. Instead of attempting to obtain a knowledge of these forces from their effects, men have endeavoured to banish even the idea of them, and to exclude them from philosophy. They have, however, re-appeared, and with more *eclat* than ever, in the principle of gravitation—in the chemical affinities—in the phenomena of electricity, &c. But, notwithstanding their evidence and their universality—as they act internally, as we can only reach them by means of reasoning, as, in a word, they elude our vision, we admit them with difficulty: we always wish to judge by the exterior; we imagine that this exterior is all; it appears that we are not permitted to penetrate beyond it, and we neglect all the means which might enable us to approach them.

“ The ancients, whose genius was less limited, and whose philosophy was more extended, wondered less than we do at facts which they could not explain: they had a better view of Nature, such as she is; a sympathy, a singular correspondence, was to them only a phenomenon, while to us it is a paradox, when we cannot refer it to our pre-

tended laws of motion: they knew that Nature operates by unknown means the greater part of her effects; they were fully convinced that we cannot enumerate these means and resources of Nature, and that, consequently, it is impossible for the human mind to limit her, by reducing her to a certain number of principles of action and means of operation; on the contrary, it was sufficient for them to have remarked a certain number of relative effects of the same order, to justify them in constituting a cause.

“ Let us, with the ancients, call this singular correspondence of the different parts of the body a Sympathy, or, with the moderns, consider it as an unknown relation in the action of the nervous system: this sympathy, or this relation, exists throughout the whole animal economy; and we cannot too carefully observe its effects, if we wish to perfect the theory of medicine.”

Thus far Buffon.—It is unquestionably true, that, in modern times, at least, and especially in this country, far too little attention has been hitherto paid to the spiritual nature of man—to the effects of those immaterial and invisible influences, which, analogous to the chemical and electric agents, are the true springs of our organization, continually producing changes internally which are externally perceived, as the marked effects of unseen causes,

and which cannot be explained upon the principles of any of the laws of mechanism: and it adds no small value to the study of Animal Magnetism, that it has brought pretty fully to light a most interesting class of phenomena, heretofore little investigated, a knowledge of which is essentially necessary to the perfection, not of Medicine only, but of Philosophy in general.

The medical student applies himself to the study of Anatomy, and endeavours to acquire a competent knowledge of the different parts of the human body—of the bones, and joints, and nerves, and muscles—of the thews and sinews of a man—in short, of the mere animal mechanism; and this is indispensable to the skilful exercise of his future profession. He turns to Physiology, and seeks to become acquainted with the uses and functions of the various portions of the material structure; and this, too, is essentially necessary. Chemistry, *Materia Medica*, Pathology, &c. are also necessary acquisitions. But a great deal more than this is requisite to constitute an accomplished physician. He must study profoundly the various sympathies and susceptibilities of the human frame—its capability of being affected, in various ways, by those imperceptible physical and moral influences, whose existence is constantly manifested in the living body, but which we should in vain attempt to detect

or trace in the inanimate subject. All truly eminent physicians have admitted the high importance of this last species of knowledge, and the success of their professional practice has mainly depended upon its skilful application. Yet it is certain, that, for more than a century, men of science have betrayed a strange indisposition towards all investigations of this nature—an obstinate scepticism with regard to the results of all such inquiries, and a propensity to disparage and ridicule the labours of those who are engaged in them. So far, indeed, has this spirit of hostility been carried, that individuals pretending to discovery in this department of science might esteem themselves fortunate, if, along with the depreciation of their pursuits, and the ridicule of their alleged facts, they were not also denounced and persecuted as worthless, or even noxious impostors. Of such persecution there are abundant instances in the history of all incorporated academies and colleges.

When Mesmer first commenced the magnetic practice—of the efficacy of which he had, perhaps accidentally, made the discovery—at Vienna, he was immediately assailed by a virulent persecution on the part of the medical faculty, which eventually drove him from that city. The same hostile spirit pursued him into France. It was in vain that he succeeded in curing the most obsti-

nate diseases by processes until then unknown or disregarded, and by means apparently inadequate; —it was in vain that he boldly published authentic reports of his cures; it was in vain that some of his most respectable patients attested the reality of these cures. The whole faculty, instead of calmly investigating the matter, rose up in arms against this single unprotected stranger, denied the success of his practice in the face of the most positive and irrefragable evidence, loaded him with every imaginable species of calumny and abuse, loudly accused him of jugglery, and proclaimed him a quack and an impostor, although himself a regularly graduated physician. It was conceived to be highly presumptuous in any member of the medical profession to pretend to cure diseases according to a method not recommended, or sanctioned, or even known, by the faculty; and, unfortunately for their victim, the words *Animal Magnetism* were not to be found in the *Materia Medica*. The patrimony of the college was in danger, and the heretic disciple of *Æsculapius* must be put down by all means.

There is probably no instance, however, in which a real and valuable discovery has been ultimately suppressed by methods so violent and irrational as this. Mesmer persevered—made a few learned converts, who shared the persecution inflicted upon their master—bid defiance to all the malice of

his enemies, and gallantly maintained his ground against the united efforts of incorporated power, of learning, argument, wit, ridicule, falsehood, and invective. The result—at least so far as posterity is concerned—was such as it were to be hoped might always be the case when truth is opposed by oppressive authority, as well as by despicable arts and manœuvres. In vain did the French Academicians of that day attempt to stifle the embryo discovery. *Magna est veritas, et prævalebit.* The seed had been abundantly sown in fertile soil—the plant grew up healthy and vigorous—the number of labourers daily increased—the fruit arrived at maturity, and the harvest was ultimately secured. After the retirement of Mesmer, indeed, the practice of Animal Magnetism—although generally discountenanced by scientific and professional men, and, for some time, apparently in abeyance—was still partially exercised in private by learned and unlearned individuals; and the extraordinary facts which were gradually brought to light, no less than the remedial efficacy of the treatment, at length forced complete conviction upon the minds of thousands. Several eminent physicians at last embraced the practice, and made great additions to the evidence in favour of the authenticity of a doctrine which now stands much too firmly to be in any danger of being shaken down

by the impotent efforts of an ignorant ridicule. Of late, it has been almost universally recognised upon the Continent, and it has claimed the attention, and obtained the countenance, of some of the most celebrated scientific societies in Europe. For several years, the Royal Academy of Berlin has openly encouraged the investigation, and assigned prizes to the best memoirs on the subject; and in the late report of the French Royal Academy of Medicine, Animal Magnetism is recommended as worthy of being allowed a place within the circle of the medical sciences. Indeed, it may be truly said, that the physician who is contented to continue in "happy ignorance" of its interesting phenomena, and of the results which may be legitimately deduced from them, wilfully relinquishes one of the most useful acquirements essential to his professional success, and neglects some of the most remarkable and most important discoveries of modern philosophical investigation.

" There are some secrets which who knows not now,
Must, ere he reach them, climb the heapy Alps
Of science, and devote seven years to toil."

The details to be submitted to the attention of the public in this publication, are partly physiological, partly psychological, and partly falling more immediately within the medical department of the-

rapeutics, or the method of curing diseases; and in order that my readers may be in some measure aware of the great interest and importance of the subjects to be discussed, I shall here take the liberty of premising a short and succinet account of the new views to be brought under their notice in each of these sciences respectively.

The science of Physiology professes to explain the functions of organised beings. Human Physiology relates to the animal, vital, or natural functions of the human organism.

This science is acknowledged by almost all who have made it the object of their researches to be in a very imperfect and unsatisfactory state; and this imperfection may, perhaps, be justly ascribed—as, indeed, it is directly attributed by many—to the circumstance, that most authors have appeared a great deal more anxious to establish some favourite theory or hypothesis of their own, upon certain points, than to devote themselves to an attentive, steady, and judicious generalization of the actual phenomena of Nature. 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* (Lec. 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 a propensity to the premature formation of theories and systems of science, which, in the course of time, are found inadequate to explain all the phenomena that occur; so that, when any new facts are discovered, the doors of science are closed against them, and they are at once rejected, not because they can be demonstrated to be false, but

because they are, or are supposed to be, irreconcilable with our preconceived notions.*

Much, no doubt, has been done for this science, since Mr Lawrence gave the above description of the situation in which he found it; and the names of Sir Charles Bell, Bichat, Flourens, Magendie, his learned translator, Dr Milligan,† and others,

* This propensity of the learned was frequently exposed and reprobated by Lord Bacon, as extremely detrimental to the progress of science:

Error est præmatura atque proterva reductio doctrinarum in artes et methodos, quod cum fit, plerumque scientia aut parum aut nihil proficit.—*De Augment. Scient.*

† I entertain all due respect for the microscopic observers of the animal economy, but they must learn to entertain a little more respect for such as take a more enlarged view of nature than themselves. The investigations of the former extend no farther than the mere structure and functions of the various organs; and all this is very good, and very useful to know. But man and other animals possess not only various organs, but also a moving power, a vital principle, without which these organs would be entirely useless. The microscopic observers, indeed, ridicule all inquiry into the manifestations of this principle, as absurd and useless. Yet I do not hesitate to affirm that any system of Physiology is incomplete, which excludes all consideration of these manifestations, which are phenomena of nature, and a fit subject for philosophical investigation. What should we think of the wisdom of that philosopher, who, in attempting to communicate an adequate idea of the operation of the steam-engine, should content himself with a mere description of its mechanism,—of its wheels and levers, and cylinders, and pistons,—keeping entirely out of view the moving power—the steam, and ridiculing all investigation into the nature, application, and phenomena of this power?

In the Preface to the first edition of M. Magendie's Com-

whose successful labours in this department of knowledge have been recently laid before the pub-

pendium of Physiology, the author sets out by observing, that his principal object in composing the work was "to contribute to the introduction of the Baconian method of induction into Physiological science;" and on the 89th and 90th pages of the fourth edition of Dr Milligan's Translation, there occurs the only reference which M. Magendie has been pleased to make to the subject of Animal Magnetism. It is as follows:—

"The professors of magnetism, and particularly those of Germany, speak a great deal of a sense which is present in all the others, which wakes when they sleep, and which is displayed more especially in *sleep-walkers*; those persons receive from it the power of predicting events. The instinct of animals is formed by this sense; and it enables them to foresee dangers which are near. It resides in the bones, the bowels, the ganglion, and the plexus of the nerves. To answer such reveries would be a mere losing of time."

This is all, so far as I have observed, that M. Magendie has condescended to say about Animal Magnetism; a ludicrously imperfect allusion to one of those hundred theories which have been put forth with a view to account for a certain class of phenomena. On the subject of the phenomena themselves he is quite silent. Now, I would just take the liberty of asking M. Magendie, in what part of the writings of Bacon he has found a single passage which, either directly or by implication, can warrant us in excluding from philosophy the consideration of any class of facts which have been established by incontrovertible evidence, and of the reality of which every intelligent man may satisfy himself by experiment and observation? Lord Bacon was not quite such a blockhead as some of his pretended disciples would make him.

In one of his notes to the work of M. Magendie, Dr Milligan observes that "*sleep-walkers* afford a most perplexing object of study." Now, surely that labour is not useless, that time is not mispent, which are occupied in attempting to unravel this perplexity, in the true spirit of the Baconian philosophy, by collecting and classifying the facts.

lic, will be honourably distinguished by posterity. But although much has been already done for this science, in the way of collecting materials for its future improvement, a great deal still remains to be performed, before it becomes capable of affording us a just and comprehensive insight into the human constitution, and the action, sympathies, and susceptibilities of the various parts of the vital economy. Some very interesting discoveries, indeed, have been made; but the attempts to generalize the facts discovered have been founded upon too limited an induction, and the theories which have resulted from these imperfect generalizations have consequently been too partial and exclusive. Hence we are still so far from having hitherto arrived at a knowledge of that important link which connects the phenomena of nature—mind and matter. To me, indeed, it is quite incomprehensible how the interesting inquiries of the enlightened professors of Animal Magnetism, upon the Continent, should have been so entirely overlooked and neglected in this country, and such a truly ludicrous, if not absolutely disgraceful, ignorance of the whole subject should still be allowed to prevail among professional men. Setting aside all theory, the various important and undoubted facts which have been brought to light by that practice, are not only exceedingly curious in themselves, but are,

moreover, calculated to open up many new views in physiological science, and to explain many obscure passages in the book of Nature. The multitude of these indisputable facts, now accumulated by the intelligent disciples of the doctrine, afford the most overwhelming answer to the reiterated, ignorant parrot-cries of quackery and imagination. Physicians of the very highest eminence have borne the strongest testimony to the reality and importance of this discovery, and have anticipated from it the most valuable accessions to their professional knowledge.*

I am perfectly willing to agree with those who hold that all our knowledge ought to rest ultimately upon Physics†—a science which embraces, or

* The name and reputation of the celebrated Dr Hufeland, Physician to the King of Prussia, is, or ought to be, well known to every professional gentleman in this country ; and no one acquainted with the character and writings of this practical physician, will accuse him of any deficiency of scientific acquirements, or of any predisposition to enthusiastic feelings. I presume, then, that the opinions of a man so eminent, and in every respect so well qualified, will be allowed to have some weight even with those who are themselves indisposed to investigation, and prefer an indolent scepticism to the labour of enquiry. Now, in his illustrations of and additions to Dr Stieglitz's Ideas upon Animal Magnetism, Dr Hufeland observes. " We stand before the dawning of a new day for science and humanity,—a new discovery, surpassing any that has been hitherto made, which promises to afford us a key to some of the most recondite secrets of nature, and thus to open up to our view a new world."

† Is it necessary to remind any persons pretending to the cha-

ought to embrace, all nature. But our prevailing physical theories have been recently described, perhaps with too much justice, as “merely ingenious methods, of no other utility than to facilitate the calculation of results.”* Hitherto the science of Physics has been unable to discover the element of motion, and now abandons the research as fruitless. Physiology, too, is ignorant of what *life* really is, and yet pretends to explain its phenomena; and Psychology, not knowing in what manner the spiritual faculties are united to the organization, is compelled to investigate the operations of the intellect, as if they were performed altogether independently of the body; whereas they are only manifested, in the ordinary state of existence, through the intermediate agency of the corporeal organs; and Nature nowhere exhibits to our visual perceptions a soul acting without a body.

Now, in the course of this volume, I shall have occasion to direct the attention of my readers to a

racter of philosophers, that the term *Physics* is derived from a Greek word (*phusis*) signifying Nature? How, then, do they pretend to limit it to matter and mechanism? Are not the phenomena of Spirit as much a part of nature as those of Matter?

* See *Essai de Physiologie Psychologique*, par C. Chardel. Paris, 1831. In a subsequent part of this volume, I shall take the liberty of laying the ingenious writings of this author more largely under contribution.

number of new and most important facts—facts, too, to which sufficient attention does not seem to have been paid, especially by medical men, in this country—relative to the more remarkable powers, sympathies, and susceptibilities of the human organism, and to the energies and occasional manifestations of the vital functions. These facts are clear and unambiguous in themselves, and their reality has been demonstrated by numerous and decisive experiments; they are consequently supported by the most unimpeachable evidence, and must ultimately, in my humble opinion, greatly modify, if not entirely change, the whole aspect of the science.*

With regard to Psychology, or that science which treats of the nature and functions of the immaterial, or spiritual, or vital principle, which animates and governs the organism, I hope to be able to bring forward a numerous class of facts, of a character perhaps still more important, and certainly more interesting to science and to humanity.†

* The microscopic philosophers need be under no alarm. Their labours are useful, and we respect them, and require only the same respect from them. The object of their investigations is matter,—ours is spirit, and the manifestations of spirit. Our paths are different, and why should we turn aside to quarrel with each other? The objects of science are sufficiently numerous to afford occupation to all, and sufficiently separated to prevent the necessity of perpetual collision.

† Our investigations, however, must not be confounded with those of the mere metaphysician. He dwells in the region of

It is a complaint as old, at least, as the days of Cudworth, that, in their psychological researches, most individuals seemed disposed to give an undue bias to the principles of materialism; and Bishop Berkeley asks, "Have not Fatalism and Sadducism gained ground during the general passion for the corpuscularian and mechanical philosophy, which hath prevailed for about a century?" The later facts and speculations of Lord Monboddo, otherwise calculated to revive the study of Spiritual Philosophy, appear to have made little or no permanent impression upon the minds of philosophers. There is no doubt, indeed, that, for a considerable period, our psychological theories have in general displayed a decided leaning towards materialism; they have too much disregarded the manifestations of the vital principle—the *vis motrix*,—and relied too exclusively upon the mere acts of the material organization, as if there were nothing else deserving investigation. Hence, by a very partial and perverse examination of human nature, many philosophers and physiologists were induced to conclude, that the soul—if indeed any such hypothetical being could be rationally presumed to exist—

abstract ideas, and endeavours to reduce these to the clearness of mathematical axioms; we are occupied with facts and observations tending to demonstrate, and, if possible, explain the manifestations of the spiritual principle; his proofs are logical; ours are derived entirely from experience.

was inseparably connected with the body—that it was the mere product or offspring of organization—that both grew up to maturity together, existed in indissoluble union, and perished at one and the same moment of time.*

* These opinions are very old; they are of Pagan, not of Christian, origin. The doctrine, with the reasons which led to the belief of it, is thus stated by Charles Blount, and subsequently plagiarised by other writers, in his Treatise entitled *Anima Mundi*.

“As first to behold the soul in its infancy very weak, and then by degrees with the body to grow daily more and more vigorous, till it arrived to its perfection, from which state together with the body it declined, till the decrepitude of the one and dotage of the other, made it seem to them probable that both should likewise perish together :

Gigni pariter cum corpore, et una
Crescere sentimus, pariterque senescere mentem.”

Other ancient and modern poets have dilated upon the same idea. Thus Seneca, the Tragedian :

Post mortem nihil est, ipsaque mors nihil.
Mors individua est noxia corpori,
Nec parcens animæ.
Toti morimur, nullaque pars manet nostri.

And the same sentiment is re-echoed by Voltaire :

Est-ce la ce Raion de l'Essence suprême,
Que l'on nous peint si lumineux ?
Est-ce la cet Esprit survivant à nous même ?
Il naît avec nos sens, croît, s'affaiblit comme eux :
Hélas ! il perira de même.

This doctrine was held by some of the Greek and other heathen philosophers ; it was maintained, amongst others, by the Jewish sect of the Sadducees, and it was embodied in what has been called the Arabian heresy. It seems to have originated from a want of due attention to the obvious and important dis-

But the facts and observations I am about to submit to the serious consideration of my readers; in this volume, lead us to conclusions precisely the reverse of this, and are calculated, as I conceive, to demonstrate, incontrovertibly, the separate existence and independent activity of the soul of man, as well as its powerful influence over the corporeal organism; in short, that it governs, instead of being governed by, the body;* and thus, by the most

inction between the merely physical and material, and the moral and spiritual nature of man, without which the various phenomena of the human constitution cannot be properly comprehended and explained. The doctrine, however, although certainly very ancient, never became generally popular, even in the heathen world. As Cicero observes, there always remained in the minds of men *quasi sæculorum quoddam augurium futurorum*,—an internal presentiment of immortality, which opposed a stubborn resistance to all the ingenious sophistry of atheism. The opinion, too, was always philosophically refuted, as often as it was seriously propounded in a tangible shape. It was attempted to be revived by many of the French philosophers and *esprits forts*, previous to the first revolution, and even infected some thinking people among ourselves. I trust, however, that we have no reason, at present, to express ourselves in the language of an old and learned writer: “Surely we are fallen into an age declining from God, in which many are fond of those things which lead us farthest from Him; and the rabble of atheistical epicurean notions, which have been so often routed, and have fled before the world, are now faced about, and afresh recruited, to assault this present generation.”—SIR C. WOLSELEY; *Unreasonableness of Atheism*, p. 37.

* Spiritus intus alit; totamque infusa per artus
Mens agitat molem.—VIRGIL.

Some of the ancient philosophers ascribed much greater in-

ample and irrefragable evidence, to set for ever at rest that apparently interminable controversy between the Materialists and the Spiritualists—that *questio vexata*, as it has been called—which has been the great opprobrium of philosophy, from the earliest dawn of science even to our own times.

This indeed is perhaps the most interesting discovery, in a scientific point of view, which has hitherto resulted from the investigations of the professors of Animal Magnetism—a study which, it will thus be perceived, is of the very highest importance, not to medical science only, but to general philosophy.

With regard to the therapeutic department of Animal Magnetism, it cannot be expected that I should enter at any great length into its details, beyond a mere enumeration of the conditions, a description of the processes, and a statement of their attested efficacy. A dry narrative of cases of treatment, and a still drier list of cures and failures—for both have been amply recorded—however acceptable to the gentlemen of the medical profession, could possess little interest for the general reader. With a reference, therefore, to the numerous works

fluent to the soul, as the poet, Spenser, has expressed their doctrine in the following couplet :

“ For of the soul the body form doth take ;

“ For soul is form, and doth the body make.”

in which these cases are to be found minutely recorded, it may be almost sufficient for me to observe at present, that, by means of a few apparently insignificant manipulations, or even by an energetic exercise of the volition, accompanied by a vehement desire to relieve the afflicted, diseases of the most inveterate and obstinate nature, which had previously baffled all the ordinary resources of medical skill, have been radically cured, or greatly alleviated, and the patient, according to the nature of the particular case, has been restored to perfect or comparative health and strength. This sanative efficacy of the processes might be demonstrated by the most ample and most satisfactory evidence. In the mean time I shall take the liberty of merely alluding to one or two facts.

The judicious Dr Wienholt of Bremen, a physician of great respectability, and in extensive practice, who had long been sceptical in regard to the alleged efficacy of the magnetic treatment, was at length induced by circumstances to make trial of it, and gives the following account of his own experience.

“It became every day more and more evident to me, that, in the phenomena produced by the magnetic treatment, there was manifested the influence of a hitherto unknown agent, and that it was impossible to ascribe them either to mechani-

cal excitation, or to moral effects, as their source. But I found a still more valuable and more interesting reward of my perseverance, in the successful and complete termination of many serious and inveterate diseases, where my art failed me, and I could derive no aid from it in future.

“The best encouragement I experienced was in the successful and radical cure of my own child, a boy near six years old. For some years he had been almost constantly in a complaining state, and afflicted with many ailments, especially of the stomach, which appeared to be of a spasmodic kind. At length, when he had attained his sixth year, he exhibited symptoms which led me to apprehend confirmed epilepsy; and now, as all my previous efforts had failed, I resorted to Magnetism, of the efficacy of which I had already acquired sufficient experience. His mother undertook the treatment. In a few days he became somnambulist, and manifested precisely the same phenomena, making allowance for his age, as other patients who have been placed in the same state. In a few weeks he was cured, continued subsequently free from all those spasmodic attacks, and is at this moment the model of a strong and healthy youth.

“The cases in which, during a series of years, I have either administered Animal Magnetism myself, or caused it to be administered by others,

amount *now* to between 75 and 80. By far the greatest number of these cases consisted of diseases in which I could obtain no relief, or, at the utmost, a very equivocal alleviation, from the ordinary medical treatment—diseases of various kinds, acute and chronic, nervous and other tedious complaints. Among the patients there were persons of every age, rank, and sex, married as well as unmarried. In the cases of several of these patients, no other phenomenon was observed but a state similar to sleep; in others, there was feverish excitement; in many there were disagreeable and painful feelings, and in not a few convulsions. These reactions either appeared singly, or, as in most cases, in combination. I had frequent opportunities, too, to observe the phenomenon of Somniloquism, with all its various shades and attributes; although this state has occurred much more seldom in my experience than it is said to have done in that of others. I have seen it in grown persons, as well as in children, in males as well as in females, in the married and in the unmarried. In many patients, however, Magnetism produced no perceptible symptoms, and the complaints abated during the process of manipulation, or the patients were restored to health by this treatment, without my being able to discover the cause. But not all of the magnetized patients

recovered. Many continued in the same state as before the treatment; others found only an alleviation of their sufferings; nay, some died. In some the cure was transient; several were only partially, but many were completely, cured."

In another passage, Wienholt adds: "Above all things, the competent judge will not overlook the nature and duration of the diseases which came under treatment. He will soon be convinced, that by far the greater part of the cases here reported fall under that class in which the skill of the physician usually fails, which our forefathers, therefore, designated by the significant name of *Scandala medicorum*, and which even our present physicians, notwithstanding all the boasted progress made in the healing art, have not been able to take out of that predicament."*

Captain Medwin, in his Memoir of Shelley, the poet, informs us that "Shelley was a martyr to a most painful complaint, which constantly menaced to terminate fatally, and was subject to violent paroxysms, which to his irritable nerves were each

* See the Preface to WIENHOLT'S *Heilkraft des Thierischen Magnetismus*, a work which I would earnestly recommend, as written with great sobriety and good sense, and by an eminent practical physician, to every student of Animal Magnetism. In his magnetic practice, Wienholt was assisted by the Drs Olbers, Heinecken, Treviranus, &c. all of whom were perfectly satisfied of the efficacy of the treatment, and the reality of the phenomena.

a separate death." Captain Medwin continues, "I had seen magnetism practised in India and at Paris, and, at his earnest request, consented to try its efficacy. Mesmer himself could not have hoped for more complete success. The imposition of my hand on his forehead instantaneously put a stop to the spasm, and threw him into a magnetic sleep, which, for want of a better word, is called Somnambulism. Mrs Shelley and another lady were present. The experiment was repeated more than once.

"During his trances, I put some questions to him. He always pitched his voice in the same tone as mine. I inquired about his complaint, and its cure—the usual magnetic inquiries. His reply was, 'What would cure me would kill me' (alluding probably to lithotomy). I am sorry I did not note down some of his other answers. Animal Magnetism is, in Germany, confined by law to the medical professors; and with reason—it is not to be trifled with"....."It is remarkable, that, in the case of the boy Matthew Schwir, recorded by Dr Tritzschler, the patient spoke in French, as Shelley in Italian. He improvised also verses in Italian, in which language he was never known to write poetry. I am aware that, in England, the phenomena of Animal Magnetism are attributed to the imagination. I only state those facts that may

perhaps shake the incredulity of the most sceptical.”*

I could easily adduce a host of other eminent and unimpeachable authorities upon this subject ; but I am afraid of exceeding the limits I have pre-

* A very curious instance of *improvisation* during the magnetic sleep will be found in a work on Animal Magnetism by Mr Baldwin, British Consul in Egypt.

In the Memoir referred to in the text, Captain Medwin adds that Shelley was afterwards magnetised by a lady, to whom he addressed some verses, supposed to have been spoken to himself by his female physician during the operation ; and which, although carelessly thrown together, possess a good deal of that “wild and wondrous” charm, mingled with refined sensibility, which distinguishes the poetical effusions of that gifted but unfortunate genius.

“ THE MAGNETIC LADY TO HER PATIENT.

“ Sleep on ! sleep on ! forget thy pain ;
 My hand is on thy brow,
 My spirit on thy brain,
 My pity on thy heart, poor friend ;
 And from my fingers flow
 The powers of health, and, like a sign,
 Seal thee from thine hour of woe ;
 And brood on thee, but may not blend
 With thine.

“ Sleep on ! sleep on ! I love thee not ;
 But when I think that he,
 Who made and makes my lot
 As full of flowers as thine of weeds,
 Might have been lost like thee ;
 And that a hand which was not mine
 Might then have chased his agony,
 As I another’s—my heart bleeds
 For thine.

scribed to myself, and must therefore refer my readers to the subsequent parts of this work, and to the writings of those authors whom I shall have occasion to notice hereafter.

In concluding this Introduction, I again beg to be permitted to repeat, what I formerly observed, that I do not expect my readers to place implicit confidence in all the statements I shall have occa-

“ Sleep, sleep, and with the slumber of
 The dead and the unborn :
 Forget thy life and woe ;
 Forget that thou must wake for ever ;
 Forget the world's dull scorn ;
 Forget lost health, and the divine
 Feelings that die in youth's brief morn ;
 And forget me—for I can never
 Be thine.

“ Like a cloud big with a May shower,
 My soul weeps healing rain
 On thee, thou withered flower ;
 It breathes mute music on thy sleep ;
 Its odour calms thy brain !
 Its light within thy gloomy breast
 Speaks like a second youth again.
 By mine thy being is to its deep
 Possess.

“ The spell is done. How feel you now ?
 ‘ Better—quite well’—replied
 The sleeper.—What would do
 You good, when suffering and awake ?
 What cure your head and side ?
 ‘ ’Twould kill me what would cure my pain ;
 And as I must on earth abide
 Awhile, yet tempt me not to break
 My chain.’ ”

sion to make, merely because I may have brought them forward as facts. I shall honestly lay before them the evidence in support of these statements, and thus endeavour, to the utmost of my power, to place them in a situation to judge for themselves. I assure the public that I am no proselytising enthusiast;—I have no desire to make converts to any particular doctrine, but am anxious only to stimulate to inquiry, in order that truth, when ultimately discovered, may be duly acknowledged. In short, I do not call upon any of my readers to believe; I merely solicit their candid attention, and humbly invite them to think, and investigate, and decide according to their respective convictions. A blind credulity, and an obstinate scepticism, are frequently both the offspring of ignorance, and both are equally injurious to our progress towards scientific truth.

With regard to myself, I expect neither fame nor fortune from literary or scientific labour; I have no personal interest in the reality of the facts I am about to establish; I am content to act merely in the humble capacity of a pioneer, and endeavour to clear the way for others more competent to the task, and more ambitious of the honours and rewards of successful investigation. Upon this occasion, however, I would remind all those who may approach the discussion of this interesting but in-

tricate subject, in the words of an old and ingenious English writer, the celebrated Dr Henry More—that “exquisite disquisition begets diffidence ; diffidence in knowledge, humility ; humility, good manners and meek conversation. For mine own part, I desire no man to take any thing I say upon trust, without canvassing. I would be thought rather to propound than to assert : But continually to have expressed my diffidence had been languid and ridiculous.”

ANIMAL MAGNETISM.

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

AN INQUIRY, &c.

CHAPTER I.

THE name of *Animal Magnetism* has been given to that organic susceptibility which renders the nervous system of one individual capable of being affected, in various ways, by particular processes performed by another, especially when accompanied with faith, or, at least, a certain abandonment in the patient, and with an energetic effort of volition on the part of the operator. The same name is also employed to designate the processes themselves, by means of which the desired effects are sought to be produced.*

* The name, *Animal Magnetism*, has been by many considered improper, because it conveys no adequate idea of the nature and extent of the subject; and, also, because it seems to imply a questionable theory. This latter objection, indeed, has evidently misled many ingenious but superficial enquirers, who

This definition, however, applies only to the most ordinary manner in which the effects alluded to are most frequently developed. But the same or similar phenomena have been observed to occur, in a variety of instances, in consequence of the probable influence of certain organic or inorganic substances upon the living organism—nay, sometimes spontaneously, or without any apparently adequate cause; and as all these analogous phenomena are

seem to have conceived that they had demolished the whole doctrine, and invalidated the whole facts, when they had merely shewn, like the French Academicians, in 1784, that the existence of a *magnetic fluid* of this nature is an improbable hypothesis, and that, in the present state of our knowledge, we are not warranted in attributing the effects produced to any species of magnetism. But the name which Mesmer was originally induced to give to his discovery, in consequence of certain circumstances which shall be explained hereafter, could not now be changed without considerable inconvenience; nor is it, perhaps, desirable that it should. Several of the sciences, it may be observed, have long since out-grown the names by which they were at first designated: As an instance among many, the science of *Electricity* was originally so called from a Greek word signifying *Amber*. Whether the phenomena evolved during the processes practised by Mesmer and his disciples have any thing in them analogous to Magnetism, is to this day a moot point. The greater number of the practical magnetisers are decidedly of opinion that such an analogy does exist. But, really, this is a matter of comparatively little consequence. It is much easier to classify these phenomena, than to give an appropriate and entirely unobjectionable name to that department of science under which they fall to be arranged; especially so long as their cause is obscure or ambiguous. It is of more consequence to science, however, to collect and classify facts, than to stickle about names.

—*Res, non verba.*

conceived to depend upon the same principle, they have consequently been all included under one category.

This influence, from whatever cause it may be alleged to proceed, appears so very mysterious and inexplicable, and the effects said to have been produced by the processes employed seem so very extraordinary and unaccountable, that the greater part of physical philosophers, especially in these later times, have, without sufficient examination, generally regarded the whole subject, *prima facie*, with the utmost scepticism; and many uninformed persons, seduced by the prejudices of the learned, have not hesitated to treat it with unbounded ridicule.* Nevertheless, it will be shewn in the se-

* I might give many amusing specimens of this ignorant levity, but *cui bono*? Some will probably occur hereafter. To me they have completely demonstrated the truth of the French poet's observation:

Les plus grands foux sont ceux qui ne pensent pas l'être.

In the mean time, I must be permitted to express my regret that my friend, Professor Napier, in a late number of the *Edinburgh Review*, should have lent his countenance, and that of the publication over which he presides, to mere vulgar clamour, and affected to sneer at what he, or his contributor, is pleased to denominate "the *folies* of Animal Magnetism." I have no hesitation in telling Professor Napier, that he who attempts to hold up to ridicule a scientific subject, of which he is profoundly ignorant, has but small pretensions to the character of a philosopher. Indeed, I cannot sufficiently express my astonishment that a gentleman who once boldly undertook the task of expounding the philosophy of Bacon, should expose his utter igno-

quel, that manifest traces of the reality of this influence may be discovered in all ages and amongst all nations ; it has always constituted an element of popular belief ; it is supported by some striking

rance and contempt of its most elementary principle, by passing a condemnatory sentence, without previous investigation, upon a series of facts, entirely elicited by inductive enquiry ;— facts, too, which attracted the serious attention of such men as La Place, Cuvier, Hufeland, Dugald Stewart, and many other eminent philosophers and physicians. Such conduct merits general reprobation ; for when incompetent persons are permitted to erect themselves into judges and oracles in matters of literature and science, when adventitious circumstances afford them opportunities of influencing popular opinion, and when they proceed, at once, to decide upon the character and value of particular subjects, without condescending to enquire or having the capacity to comprehend, they only mislead others, become blind leaders of the blind, retard the progress of useful knowledge by discouraging investigation, and thus contribute to perpetuate the reign of prejudice, ignorance, and error.

Judex damnatur cum nocens absolvitur.

In a subsequent number of the same publication (October 1835, p. 240), it is said, with the same profound and deplorable ignorance of the subject :

“ In the provinces, a believer in *Animal Magnetism* or German Metaphysics has few listeners and no encouragement ; but in a place like London, they make a little coterie ; who herd together, exchange flatteries, and take themselves for the apostles of a new gospel.”

Now, this may, perhaps, be thought a very smart sentence in the pages of a review ; but, in the first place, it is quite clear that the writer knows just as much of German Metaphysics as he does of *Animal Magnetism*—that is, in fact, nothing at all of either ; secondly, it is absolute nonsense in itself ; and, thirdly, so far as it relates to *Animal Magnetism*, it is just the very reverse of the truth. The doctrines and practice of *Animal Mag-*

natural analogies ; it has been seriously maintained in the writings of many profound and ingenious philosophers ; and, during the last half century, its existence has been experimentally demonstrated by such ample and incontrovertible evidence, as precludes all rational doubt in the mind of every honest and intelligent inquirer.

When a series of experiments, however, has been instituted and successfully conducted, with the view of investigating the reality of certain alleged facts which are of comparatively rare occurrence, and consequently not immediately obvious to com-

netism were actually proscribed in Paris, Vienna, and other large cities,—proscribed even by the respective governments, at the instigation of the learned rabble. They were, for a considerable period, cultivated almost exclusively in the provinces : and it was there that by far the greater proportion of the overwhelming evidence was collected, which afterwards flowed back into the different capitals, Paris, Vienna, Berlin, &c., carrying conviction into the minds of many even of the most obstinate and prejudiced opponents. But it is unnecessary to dwell upon facts which are sufficiently well known to all who have enquired into the subject, with the view of rectifying the errors and misrepresentations of those who prefer an ignorant dogmatism to philosophical investigation. For my own part, I disclaim all connexion with any such coterie as that described by the critic, and of which I doubt the existence ; as well as all pretensions to the character of an apostle of any new gospel. At the same time, I assure the public, that not even the smartest sayings of the very smartest of Reviewers, shall ever deter me from investigating the phenomena of Nature, and endeavouring to diffuse the truths she reveals to the humble and conscientious inquirer.

mon observation, it is often exceedingly difficult to impress minds, hitherto unprepared for the reception of these particular truths, with an adequate conviction of the accuracy of the result, or of the value of the discovery. The difficulty, too, is greatly increased, when the phenomena evolved are remote from the ordinary paths of scientific inquiry; when they are of a nature to excite our wonder, rather than to satisfy our reason; and when they appear to baffle every effort to bring them under any ascertained general laws, or to subject them to the rules of any previously-recognised philosophical theory. In some instances, indeed, the very first aspect of the alleged facts is sufficient to insure their immediate rejection. There is always, it is true, an ample fund of credulity in the world, accompanied with a ready disposition to believe any thing that is new, and apparently marvellous, and incomprehensible. But it is not among the ignorant and the credulous that the true philosopher looks for a rational approbation of his labours, or for an accurate appreciation of the truth and the 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 reality of any series of singular phenomena, which do not fall immediately within

the sphere of their own habitual investigations, which seem inconsistent with the results of their previous acquirements, and of the conditions of whose existence they are yet necessarily ignorant. Nor is this caution perhaps 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. Unfortunately for science, however, there are few minds possessed of that philosophical energy, which enables them to divest themselves of all prejudice, and to welcome the evidence of truth, from whatever quarter it may approach them.*

In all cases, however, where a class of extraordinary facts is presented to us for the first time, 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 their reality, appear to be,—

1. To consider the nature of the subject, the

* It has been hitherto the fate of Animal Magnetism, to have to contend not only with scientific prejudice, but with professional interest, with Academies of Sciences and Colleges of Physicians; in short, with all the great monopolists of learning and wisdom. In such circumstances, it is not a little surprising that it should have survived until the present day; nay, that it should recently have started up, like Antæus, from the earth, with renovated vigour. Its ultimate triumph, which is probably now not far distant, will afford a most striking proof of the innate and unconquerable force of truth.

number of the observations and experiments which have been made, and the analogy of the phenomena which have been observed to occur in similar circumstances.

2. To satisfy ourselves with respect to the general character, intellectual fitness, and consequent credibility of the witnesses.

3. To scrutinize the circumstances in 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, of their dependence upon the same principle, 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. *

* The strictest attention to this last requisite is absolutely necessary. Attempts have occasionally been made, by the opponents of the system, to throw discredit upon Animal Magnetism, in consequence of the alleged failure of certain injudicious experiments made by ignorant and unskilful persons. This is most unfair. Are we prepared to peril the reality of the phenomena of Chemistry upon the bungling experiments of some awkward novice, who is utterly destitute of all knowledge of the elementary principles of the science, and of the necessary conditions of successful manipulation? Do not our most eminent professors occasionally fail in producing the expected result?

By judiciously following these rules, every intelligent and candid enquirer may succeed in obtaining complete conviction ; whereas, he who declines to enquire is not entitled to decide.

In proceeding to the execution of the task I have undertaken in the present publication, however, I am quite aware that I may expose myself, in the eyes of some individuals, to the charge of drawing largely upon the credulity of my countrymen. For such a charge, indeed, I am fully prepared, and do not eschew it ; but, fortunately, I may share the burden with a numerous host of individuals of far higher attainments and scientific reputation than any to which I can pretend ; while I may hope to find the weight diminish, in proportion as knowledge extends. My sole object is to ascertain the truth in an important subject of inquiry ; and this can only be done by an examination of the evidence applicable to the different points of the case. And here I may take the opportunity of declaring, 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 habits and attainments, by their perspicacity and cautious spirit of research, for investigating the reality of the circumstances which they profess to have witnessed ;—and who, besides, could have no motive for deception, no conceivable inte-

rest in the practice of imposition, or the propagation of falsehood;—even if the high respectability of their characters, and their responsibility towards the public, did not constitute a sufficient security against any suspicion of the kind. I may be allowed to 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; and the minute correspondence of the facts which have fallen under my own observation with those recorded in the experiments of more practised manipulators, induces me to place entire confidence in the evidence for those other phenomena which I have had no opportunity of verifying by direct experiment. My object, however, at present, is not so much to force conviction upon the unwilling minds of the careless, or the obstinately incredulous, as to solicit the earnest attention of the philosophically inquisitive to a subject of rational and most interesting inquiry; and, if possible, to excite a corresponding spirit of investigation amongst all the genuine and liberal 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 must

admit or reject, either on the incontrovertible evidence of competent observers, hereafter 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 to be submitted to his consideration, that candour of mind, and that perfect freedom from prejudice and prepossession, which we ought to preserve in all our researches after truth. Indeed, I would strongly recommend to all who apply themselves to the investigation of this subject, to abstain, in the mean time, from any attempt to explain the facts presented to their notice upon the principles of any preconceived theory, or of any theory whatever. It were best, in the present state of our knowledge, to confine ourselves to the observation and classification of the authenticated phenomena. It is the facts, and the facts alone, which ought to engage all 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, or unsatisfactory, in the peculiar circumstances of the case.

Moreover, I feel it indispensably necessary to warn the reader, again and again, against the absolute and precipitate rejection of any alleged fact, without adequate investigation, merely because it may appear to him to be extraordinary, unaccount-

able, improbable, incredible, or even miraculous *; or because the means employed seem, at first sight, incapable of producing the particular effects. Let him remember that *le vrai ne'est pas toujours le vraisemblable*; that Nature is wonderful and inexhaustible in her manifestations, whilst our faculties of perception and comprehension are limited; and that there are many facts in science which we are compelled by evidence to admit, although we are unable to discover 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, of galvanism, of gravitation;—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 satis-

* “ Les miracles sont selon l'ignorance en quoi nous sommes de la nature, non selon l'estre de la nature.

“ Il ne faut pas juger ce qui est possible et ce qui ne l'est pas selon ce qui est croyable ou incroyable a notre sens; et est une grande faute, en laquelle la plupart des hommes tombent, de faire difficulté de croire d'autrui ce qu'eux ne sauroient ou ne voudroient faire.”—MONTAIGNE.

A celebrated philosopher (Bayle) has said with reason: “ On ne prescrit point contre la verité par la tradition generale, ou par le consentement unanime des tous les hommes.” Another sage (Averroës) had previously declared, that “ a whole army of doctors was not capable of changing the nature of error, and of converting it into truth.”

factory principle as their cause, our whole knowledge would be confined within exceedingly narrow bounds. *

* " In every scientific investigation, it must be kept in mind, that efficient causes are beyond our reach. The objects of our research are physical causes only, by which we mean nothing more than the uniform sequences of events, as ascertained by extensive observation. What we call the explanation of phenomena, consists in being able to trace distinctly all the links of such a chain of sequences, so as to perceive their uniform relation to each other. Thus, there may be many instances in which we are acquainted with facts forming part of such a chain, and are satisfied that they are so connected, while we cannot explain their connexion. This is occasioned by the want of some fact which forms an intermediate part of the chain, and the discovery of which would enable us to see the relation of the whole sequence, or, in common language, to explain the phenomena. Such a chain of facts was, at one time, presented by the rise of water in a vacuum to the height of thirty-two feet. The circumstances were well known, as well as their uniform relation, that is to say, the fact of a vacuum—the fact of the water rising—and the fact of this uniformly taking place. But the phenomenon could not be explained; for an intermediate fact was required to show the manner in which these known facts were connected. The doctrine of nature abhorring a vacuum afforded no explanation, for it furnished no fact; but the fact required was supplied by the discoveries of Torricelli on atmospheric pressure. The chain of events was then filled up, or, in common language, the phenomenon was accounted for.

" There are, indeed, many cases in which the investigation of intermediate events in the chain of sequences is beyond our reach. In these, we must be satisfied with a knowledge of the facts, and their actual connexion as we observe them, without being able to trace the events on which the connexion depends. This happens in some of the great phenomena of Nature, such as gravitation and magnetism. We know the facts, but we can-

I may here observe, that the most eminent philosophers—those who have made the most profound researches into the laws and operations of Nature—are generally the most disposed to speak with becoming modesty of such facts as they themselves have had no opportunity of investigating, and of which they can only judge from the evidence of others, and from known analogies. In proof of this, I may refer to the following remarks of the most illustrious disciple of Newton, which are peculiarly applicable upon the present occasion. The celebrated M. de Laplace, in his *Essai sur les Probabilités*, observes, that “of all the instruments 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 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

not account for them; that is, we are ignorant of certain intermediate facts, by which those we do know are connected together.”—ABERCROMBIE, *Inquiries concerning the Intellectual Powers*, 4th edition, pp. 413–415.

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 them."

The late justly celebrated Baron Cuvier, too, (an authority not to be treated lightly in a matter of this kind) has, in the second volume of his *Ana-*

tomie Comparée, expressed his opinion, in regard to Animal Magnetism, in the following terms :—" I must confess that it is very difficult to distinguish the effect of the imagination of the patient from the physical effect produced by the operator. The effects, however, which are produced upon persons already insensible before the commencement of the operation, those which take place in others after the operation has deprived them of sensibility, and those which are manifested by animals, do not permit us to doubt that the proximity of two animated bodies, in certain positions and with certain motions, has a real effect, independently of all participation of the imagination of one of them. It seems sufficiently evident too, that these effects are owing to some sort of communication which is established between their nervous systems."

I shall have occasion hereafter to refer to the opinions expressed upon this subject by the late Professor Dugald Stewart, and by other eminent philosophers and physicians. In the mean time, I may observe, that the foregoing specimens of philosophical judgment present a striking contrast to the supercilious, disingenuous, and irrational methods by which the greater number of the antagonists of Animal Magnetism have attempted to discredit the discoveries of the professors of that doc-

trine, and to discourage and ridicule all inquiry into its phenomena.*

* In an annotation on Southey's *Life of Wesley*, the Methodist, the late ingenious Mr Coleridge has left us the following curious record of his opinion of Animal Magnetism. It is pretty much what we might have expected from such a man of independent thought and inquiry, who had derived some knowledge of the subject from books and conversation, but was practically unacquainted with it.

Mr Coleridge remarks, that "the coincidence throughout of all these methodist cases with those of the magnetists, makes me wish for a solution that would apply to all. Now, this sense or appearance of a sense of the distant, both in time and space, is common to almost all the *magnetic* patients in Denmark, Germany, France, and North Italy, to many of whom the same or a similar solution could not apply. Likewise, many cases have been recorded at the same time, in different countries, by men who had never heard of each other's names, and where the simultaneity of publication proves the independence of the testimony. And among the magnetisers and attesters are to be found names of men, whose competence in respect of integrity and incapability of intentional falsehood is fully equal to that of Wesley, and their competence in respect of physio-psychological insight and attainments, incomparably greater. Who would dream, indeed, of comparing Wesley with a Cuvier, Hufeland, Blumenbach, Eschenmeyer, Reil, &c.? Were I asked what I think, my answer would be, —that the evidence enforces scepticism and a *non liquet*; —too strong and concurrent for a candid mind to be satisfied of its falsehood, or its solvibility on the supposition of imposture or casual coincidence; too fugacious and unfixable to support any theory that supposes the always potential, and under certain conditions and circumstances, occasionally active, existence of a correspondent faculty in the human soul. And nothing less than such an hypothesis would be adequate to the *satisfactory* explanation of the facts; though that of a *metastasis* of specific functions of the nervous energy, taken in conjunction with extreme nervous excitement, *plus* some delusion, *plus* some illusion, *plus* some

“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.”†

There is no doubt that, when phenomena of an extraordinary character are presented to us for the first time, to which we can perceive nothing ana-

imposition, *plus* some chance and accidental coincidence, might determine the direction in which the scepticism should vibrate. Nine years has the subject of Zoo-Magnetism been before me. I have traced it historically, collected a mass of documents in French, German, Italian, and the Latinists of the sixteenth century, have never neglected an opportunity of questioning eye-witnesses, *es. gr.* Tieck, Treviranus, De Prati, Meyer, and others of literary or medical celebrity, and I remain where I was, and where the first perusal of Kluge's work had left me, without having moved an inch backward or forward. The reply of Treviranus, the famous botanist, to me, when he was in London, is worth recording:—*Ich habe gesehen was (Ich weiss das) Ich nicht würde geglaubt haben auf ihren Erzählung, &c.*—‘I have seen what I am certain I would not have believed on *your* telling; and in all reason, therefore, I can neither expect nor wish that you should believe on mine.’—COLERIDGE; *Table-Talk*, vol. i. pp. 107, &c.

* NICOLE; *Oeuvres*, tom. vii. let. 45, p. 238.

† *Hist. Crit. des Superst.* l. i. ch. 7.

logous in our previous knowledge, it is quite 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 proceed with great caution, and to suspend his belief until he shall have obtained evidence of a character and weight sufficient to satisfy his judgment, and to remove every reasonable doubt. But when such satisfactory evidence has once been obtained, we can no longer continue to withhold our assent, without totally abandoning the use of our reason, and surrendering our minds to the perverse dominion of an irrational scepticism.

* “ In the acquisition of facts, we depend partly upon our own observation, and partly on the testimony of others. The former source is necessarily limited in extent, but it is that in which we have the greatest confidence ; for, in receiving facts on the testimony of others, we require to be satisfied, not only of the veracity of the narrators, but also of their habits as philosophical observers, and of the opportunities which they have had of ascertaining the facts. In the degree of evidence which we require for new facts, we are also influenced, as was formerly stated, by their probability, or their accordance with facts previously known to us ; and, for facts which appear to us improbable, we require a higher amount of testimony, than for those in accordance with our previous knowledge. This necessary caution, however, while it preserves us from credulity, should not, on the other hand, be allowed to engender scepticism ; for both these extremes are equally unworthy of a mind which devotes itself with candour to the discovery of truth.”—*ABERCROMBIE ; Inquiries concerning the Intellectual Powers*, p. 378.

CHAPTER II.

THE effects which are alleged to have been produced through the influence of that agent which has been denominated Animal Magnetism, appear to have hitherto excited little sensation in this country, excepting as an occasional subject of ridicule. In the case of persons who have never made any serious inquiry into the subject, the very extraordinary, and apparently mysterious and unaccountable, character of the facts, so startling upon a first view, might almost justify the derision with which they invariably seem disposed to treat them. But he who once enters into a sober investigation of these facts, and becomes, in some degree, aware of their number, their universality, the conditions under which they occur, their analogy with each other, and the superabundant evidence which exists in favour of their reality, must 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 (where, indeed, the practice has now

been pretty generally introduced), and a vast variety of cases, of the most remarkable 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 a 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, have been conducted, not by ignorant empirics alone,* as is too generally supposed, but chiefly, as will be seen in the sequel, although not limited to them, by professional gentlemen of learning, talents, and high respectability, whose characters hold out sufficient security against all suspicion of deception, even supposing that, in

* It is frequently thrown out as a reproach to Animal Magnetism, that it was, at one time, practised principally by empirics and unprofessional persons. The fact is, in some degree, true, but the reproach is altogether unmerited. It will be seen hereafter, that Animal Magnetism was prohibited; that the doctrine was condemned, and its most enlightened advocates persecuted by the profession; and it was natural enough that the practice should have fallen into other hands. The reproach might, with far greater justice, be directed against those who, although they ought to have been the best qualified for the investigation, neglected the opportunity of extending and improving the discovery, and of rendering it more and more useful to science and to humanity. Throughout the entire annals of scientific discovery, we meet with nothing more mean-spirited, narrow-minded, and disgusting, than the conduct of the Faculty of Medicine towards Mesmer and his disciples.

the particular circumstances, there existed any motive for deception, or that it had been practicable, or had been actually attempted.

Before I proceed to the history of this interesting discovery, and to describe the various remarkable phenomena which have been brought to light by the magnetic treatment, I conceive it may be useful to advert briefly to certain curious opinions and customs, which have prevailed, almost universally, among mankind, in all ages of the world, and therefore would appear to have some probable foundation in nature. In what degree they may be held to be connected with the doctrine of Animal Magnetism, to be afterwards explained, I may leave to the judgment of my readers.*

* I understand that the facts I stated, and the observations I took the liberty of making upon these matters of popular faith, in the first edition of this volume, have called forth a vast deal of merriment among the wiseacres and wittlings in certain quarters (I wish I could make them at once merry and wise); and I have myself heard an infinite number of jokes—a few good, many bad, and some indifferent—sporting in relation to this and other subjects connected with the study of Animal Magnetism.

Now, I do not in the least regret that I have thus furnished a rattle to amuse these half-grown-up children of science; most willingly would I leave them in the undisturbed enjoyment of their harmless and unmeaning mirth, provided I am permitted patiently to grope my way along the lowly paths of experience and observation, and to cast an humble but not an undiscerning eye upon all that I meet of the realities of nature. If we are desirous of making any assured progress in the study of the philosophy of man, we must not neglect those popular opinions,

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, scarcely engage our attention, and consequently give rise to no reflection. We find, indeed, a number of floating opinions relative to the object and efficacy of some of these seemingly trifling operations, which have been transmitted from age to age, until they have at length been permitted to settle down and mingle with the elements of popular belief; but men of education and science, especially in this age of intellect, 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. Upon due inquiry, however, it will probably be found, that Nature never confers a general instinct without having a

those habits of thinking, those instinctive principles and feelings, which Nature herself, for the wisest of purposes no doubt, seems to have originally implanted in the minds even of the rudest of mankind. These are frequently more valuable as materials for thought, more fertile in interesting results to the inquisitive mind, than all the airy speculations of a fanciful philosophy, and will be disregarded, despised, or derided only by the self-conceited and the wilfully ignorant.

I will therefore venture to take leave of these laughing philosophers in the words of St Austin: *Rideat me ista dicentem, qui non intelligit; et ego doleam ridentem me*—"Let them laugh at me for speaking of things which they do not understand; and I must pity them, while they laugh at me."

particular end in view ; and it is quite possible that these instinctive practices may have their special objects, and that the opinions alluded to may constitute the surviving relics of some rude branches of knowledge, cultivated in remote periods of society, which have been almost entirely swept away, and nearly obliterated from the records of human acquirements, leaving but a few faint traces of their former prevalence 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 this instinctive operation, and scarcely any attempt has been made to assign a reason for the soothing influence of the process.

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 colic, &c. we naturally seek relief from the application 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 sensation, 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 (*champooing*), 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 stum-

ble 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 magnetising, from father to son, for centuries. Their treatment, he adds, consists in conducting the great toe along the principal ramifications of the nerves. Professor 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, indeed, of what is now called Animal Magnetism, 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, corresponding with that practised in the modern School of Barbarin. *Fuerunt*, says he, *ante Hippocratem multi viri docti, qui nulla prorsus medicina corporea usi sunt, sed sola spiritus et animae facultate.*

* KIESER; *System des Tellurismus*, &c. vol. i. p. 381, sect. 127.

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* (l. vi. ch. 4), mentions several monks who were in the practice of curing diseases by the touch. Athanasius Kircher asserts that there are some persons who cure the most obstinate diseases by the mere touch of the hand (*solo attactu incurabiles morbos tollunt quidam*). Pujol, in his work on *Trismus*, relates a curious circumstance which occurred during the treatment 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 attempting to dry her eyes and chin upon those occasions, 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 effects, it is believed, have generally been ascribed to the mere friction, and to the increased local excitement and activity of circulation 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 (hence called the King's Evil) by means of the touch of

* 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.

their hand. 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.*

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

That the Kings of England, for several hundreds of years, actually exercised their touch for the cure of scrofulous complaints, is proved by abundant historical authority ; and the sanative efficacy of the process is also sufficiently attested.—See POLYDORE VIRGIL, lib. viii. *Hist. Angl.* 1 ; TOOKER, *Chariema, sive donum sanationis*, &c. 1597. Mr Wiseman, principal surgeon in King Charles First's army, and sergeant-surgeon to King Charles II. after the Restoration, says : " I myself have been a frequent eye-witness of many hundreds of cures performed by his Majesty's touch alone, without any assistance of chirurgery ; and those, many of them, such as had tired out the endeavours of able chirurgeons before they came thither."—WISEMAN'S *Chirurgical Treatises*, vol. i. p. 387. See also Mr Beckett's *Enquiry into the Antiquity and Efficacy of Touching for the Cure of the King's Evil*. The method adopted upon these occasions was to accompany the touch with prayer, and to hang a gold medal about the neck of the patient.

Sir William Davenant, in his Tragedy of *Macheth*, referring to the exercise of this power by Charles II. of England, observes :

" How this good King solicited Heaven
Himself best knew : but strangely-visited people,

These circumstances, relative to the popular belief of the sanative efficacy of the touch of the human hand, accompanied, as we have seen, with some evidence of its reality, are certainly curious. I am aware that many of the writers upon Animal

The mere despair of surgery, he cured,
Hanging a golden stamp about their necks,
Put on with holy prayers."

And that very eminent divine, Bishop Bull, assures us of the truth of this fact, in the following passage of his fifth sermon :— "That divers persons, desperately labouring under the King's Evil, have been cured by the mere touch of the Royal hand, assisted with the prayers of the priests of our church, is unquestionable."

It has been seen, that it was usual, upon these occasions, to hang a gold medal about the necks of the patients. To those who are in the habit of ridiculing the efficacy of charms, amulets, &c. I would recommend a serious consideration of the following case, which was related by Mr Dicken, sergeant-surgeon to Queen Anne, to a respectable physician. "A woman came to him, begging that he would present her to be touched by the Queen. As, from her appearance, he had no great opinion of her character, he told her the touch would be of little service to her, as he supposed she would sell her medal, which must continue about the neck to make the cure lasting. She promised to preserve it; was touched; had the medal given to her; and soon after her sores healed up. Forgetting her promise, and now looking upon the piece of gold as useless, she disposed of it; but, soon after, her sores broke out once more. Upon this she applied to Mr Dicken a second time, earnestly entreating him to present her again to the Queen. He did so, and once more she was cured."—DOUGLAS, Bishop of Salisbury; *The Criterion*, p. 205.

An analogous anecdote is told by Deleuze, towards the conclusion of his *Defense du Magnetisme Animal*. "A Doctor of Medicine, who enjoys a high reputation, and who will not be accused of ignorance, for he is a Professor and a Member of the

Magnetism do not admit that there is much, if any, analogy between this mode of cure and the magnetic processes. I should not have conceived it proper, however, to have omitted all notice of the belief and corresponding practices 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 causes which operate in producing the phenomena of Animal Magnetism; and it has never yet been correctly ascertained in how far these phenomena may depend upon the physical means employed, or upon the psychical influences which are exerted, or developed, during the treatment. The general, almost universal, prevalence of the popular belief respecting the existence of the influence in question, appeared to be a circumstance of too much importance to be passed over entirely without notice.*

Academy of Sciences, declared to me that he knew a lady who was long afflicted with palpitations of the heart. She was advised to wear on her breast a hazel-nut, hollowed out, and then filled with mercury, and well stopped. As soon as she began to wear this amulet, the palpitations ceased. After a few days she thought herself cured, and laid aside the amulet. The palpitations returned; and the same thing took place during several years."

* *Φήμη δ' οὐ τις πάντων ἀπόλλυται, ἢν τινα πολλοὶ
ἄνθρωποι φημίζουσι.*

*Fama vero nulla prorsus perit, quam quidem multi
Populi divulgant. Hesiodi Opera et Dies, v. 761.*

Some of the writers upon Animal Magnetism have been induced to ascribe a great deal of influence to the human eye; and in this opinion, also, 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, there is none 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, courage, jealousy, innocence, and guilt, are revealed by that powerful

* "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 fœminas in Scythia, quæ vocantur Bithyæ, prodit Apollonides: 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.—Plin. *Nat. Hist.* vii. 2.

and delicate organ; every species of passion, in short, is immediately portrayed 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 character. *Nec enim, says Wierius, ullum reperias in humani corporis fabrica organum; quod tanta spirituum copia scateat, et ex quo eorum fulgor usque adea emicet, ut de oculi pupilla certum est.**

The force and fascination of the eye, indeed, have been always proverbial, and the common belief of the people has ascribed to this influence 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:—

* *De Præstigiis Daemonum*, lib. ii. c. 49.

† The mighty mind of Bacon did not disdain, like many of our physical philosophers of the present day, to grapple with this interesting subject. This great philosopher defines *fascination* to be “the power and act of imagination, intensive upon other bodies than the body of the imaginant.” The reality of this influence he does not seem disposed to deny; for, after remarking that the school of Paracelsus, and the disciples of natural magic, had too much exalted this power of the imagination, he observes, that “others, that draw nearer to probability, calling to their view the secret passages of things, and specially of

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, 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, and upon evidence, too, that the human eye manifests a powerful influence in subduing the natural courage and ferocity of wild animals, insomuch that bulls, tigers, &c. it is alleged, have been known to retire in dismay before the firm and fixed look of man. Some sin-

the contagion that passeth from body to body, do conceive it should likewise be agreeable to nature, that there should be some transmissions from spirit to spirit, without the mediation of the senses." After alluding to the means used "to raise and fortify the imagination," he concludes: "Deficiencies in these knowledges I will report none, other than the general deficiency, that it is not known how much of them is verity, and how much vanity;" in other words, that the subject had not yet been philosophically investigated.

* As there are some who are said to fascinate by their aspect, so Rodericus a Castro (*Med. Polit.* l. 4. c. 1.), says: "E converso, quosdam esse quorum oculi creduntur habere vim beneficam ad res inspectas: vulgo *Bensedeiros*."

gular and almost incredible instances of this influence will be found in Van Helmont's *Treatise on the Plague*, and in other works. *

The breath and the saliva have both been al-

* See, in particular, *Secrets et Remedes éprouvés, dont les préparations 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 previous 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 complete 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." Van Helmont had, long ago, made a similar remark: "*In omni duello, a pavori hostis conspicuo, animus hostilis roboratur.*" *TUMULUS PESTIS*. " That this does not hold, as is usually supposed, in the case of bees, appears from a circumstance 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,

leged 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 per-

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 a furious maniac, who had broke loose from confinement in a mad-house."

* *Hist. Nat.* lib. xxviii. c. 6.—Delrio treats at large of those magnetic doctors who cured their patients by anointing them with their spittle, by breathing upon them, and by manipulation. Rodericus a Castro (*Medic. Polit.* l. 4. c. 3.) seems to admit the reality of these cures, and tells us: "*In confirmationem adducunt experientiam et varia curationum genera mire frequentia, et praxin*

sons. 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 it is 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 may have experienced the alteration produced upon this secreted fluid by corporeal disease : the passions seem to exercise a strong influence over it ; and madness 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 *Ensalmdores* in Spain, who, according to Delrio, cured diseases by means of the saliva and the breath. *

quotidianam militum qui solo afflatu, osculo, aut nudi lintei applicatione, sanant etiam atrocissima vulnera, qui omnes dono sanitatis in variis morbis se præditos gloriantur."

* DELRIO, *Disquisit. Magic.* Mogunt. 1606, tom. i. p. 69.

It is scarcely necessary for me to repeat, that the alleged efficacy of these simple natural influences has been brought under notice, merely in deference to the very general popular belief. The reader is at liberty to attach what degree of credit he pleases to the accounts given of their sanative virtues. The spiritual magnetist may hold that there is no efficacy in the things themselves, but that the salutary influence is derived from the will and intention of the individual who employs the processes. Even in this view, however, the circumstances are not undeserving of attention, as they may be considered as indicating the employment of certain means towards a particular end, without any knowledge of the operating principle. *

* Flenus, in his well known work, *De Viribus Imaginationis*, ascribes immense influence to the acts of the mind *per potentiam imaginativam*. "Etenim," says he, "infiniti authores diversas et admirandas virtutes ei adscripserunt: ipsummet vulgus et totus mundus dicit, et quasi pro comperto habet, per imaginationem mirabiles effectus contingere et corpore proprio et alieno: et non tantum hoc viri mediocriter docti, sed et mulierculæ ipsæ norunt et prædicant." He then refers to the authority of Aristotle, Avicenna, and other eminent persons, for the truth of the fact. The last-mentioned author expressly asserts, among other things, "*animam humanam posse corpus sanum ad ægritudinem, et ægrum ad sanitatem convertere*." Were we to reject all the other evidence of the reality of this fact, it could be completely substantiated by the indisputable phenomena of Animal Magnetism.

CHAPTER III

IN order to enable us to prosecute, with any prospect of success, our inquiries into the operation of those influences, the alleged effects of which have been considered in the preceding chapter; it may be useful to direct our attention, for a short time, to some of those more remarkable sympathies which have been found to exist between the different parts of the corporeal frame, and also between the mind and the material organism. Here, indeed, we are led into an inquiry of vast extent, interest, and importance, as regards both philosophy and medicine. I confess that I feel myself quite incompetent to do justice to such a subject—a subject which has been hitherto too little investigated by physicians; and I have in vain sought for adequate information upon it, in the writings of professional men. There are some points, however, to which it is necessary that I should advert, in consequence of their connexion with the general object of this work.

From a quotation I formerly made from M. de

Buffon,* the reader must have perceived the great value which that eminent naturalist set upon this inquiry ; but the hints he threw out respecting its more extensive prosecution, so far, at least, as I am aware, do not seem to have attracted sufficient attention from those most competent to the investigation. Yet, as calculated to afford us some insight into the nature of those hidden springs which stimulate the animal motions and influence the vital functions—to unveil, in part, the causes of corporeal change and of moral affectability, especially in those cases where they are clearly seen to act and react reciprocally upon each other—the inquiry is of infinite importance to physiology in general, and more particularly to the study of Animal Magnetism. Craving the indulgence of the reader, therefore, for the very imperfect manner in which I am enabled to treat this highly interesting subject, I shall proceed to lay before him the scanty information I have been able to collect ; trusting, at the same time, that it will soon be rendered more satisfactory, by the co-operation of other individuals far better qualified for the investigation.

Of the first of those kinds of sympathy to which I have alluded, there is none more remarkable than that which has been so frequently observed to exist between the stomach and every other part of the

* See *Introduction*, p. 27.

body—with the head, for instance, and *vice versa*, with the kidneys and other organs, with the skin, &c.—that particular sympathy of the heart and lungs with the stomach and bowels—the sympathy of the heart with the lungs, &c. From all which it evidently appears that the stomach is the principal seat of all the most remarkable sympathetic affections which occur in valetudinary states of the body—a circumstance to which, although well known to medical men, both in ancient and modern times, I would take the liberty of seriously directing the attention of physiologists and professional physicians, with a view to farther investigation.* Every disorder accompanied with severe pain affects the stomach; while this viscus affects, not only in its diseased state, every part of the system, but at other times, the effects of healthful stimulants applied to it are instantly communicated to the rest of the body—as when we take food, wine, medicine, &c.

Mental emotions also exercise a very powerful influence upon the stomach. Dr Paris observes, that “the passions of the mind, fear, anxiety, and rage, are well known to affect the nervous system, and, through that medium, the stomach; and so

* Van Helmont seems to have been fully aware of the great importance of this inquiry; but since his time, the subject appears to have been much neglected.

immediately are its consequences experienced, that a person receiving unpleasant intelligence at the hour of a repast, is incapable of eating a morsel, whatever might have been his appetite before such a communication.

“ Read o’er *this* ; and after *this* ; and then
To breakfast with what appetite you may.”*

Moral causes, indeed, have the most powerful, and immediate, and permanent effect, of any, upon the state of the stomach. Among these have been reckoned excessive grief, mental depression, from whatever cause, anxiety about worldly affairs, intense thought, &c. combined with the deprivation

* Mr Carbut, in his *Clinical Lectures*, makes some very pertinent observations to the same purport. “ As every person,” says he, “ has probably experienced, the emotions of the mind have a powerful influence on the stomach. Let a person who is going to sit down to dinner, with a good appetite, receive a piece of news, either exceedingly joyful, or exceedingly distressing, his appetite goes in a moment. Children who are about to set out on a pleasant journey, it is well known, cannot eat. This, when I was a child, used to be called being ‘ journey proud.’ On the other hand, a blow upon the stomach will sometimes take away life instantly ; and a drink of cold water, when the body has been very hot, has often had the same effect. Attend to your companions when on a journey a-foot ; as their stomachs grow empty, how sullen and silent the whole party becomes ! Let a crust of bread, a little cheese, a glass of ale or wine, be taken, and cheerfulness immediately reigns, even long before any nutriment had time to reach the general circulative system. These things all shew the general sympathy between the stomach and every other part of the body.”

of sufficient bodily exercise and free air. "In this country," says Dr James Johnson, "where man's relations with the world around him are multiplied beyond all example in any other country, in consequence of the intensity of interest attached to politics, religion, commerce, literature, and the arts; where the temporal concerns of an immense proportion of the population are in a state of perpetual vacillation; where spiritual affairs excite great anxiety in the minds of many; and where speculative risks are daily run by all classes, from the disposers of empires in Leadenhall Street, down to the potato-merchant in Covent Garden;—it is really astonishing to observe the deleterious influence of these mental perturbations on the functions of the digestive organs. The operation of physical causes, numerous as they are, dwindles into complete insignificance when compared with that of anxiety or tribulation of mind."*

The celebrated Dr Cullen, in his *Physiology*, remarks, that there is one very general case of very great influence in almost the whole of the doctrines of the *materia medica*, as this particular sympathy is concerned in the operation of the most part of

* The effect of cheerfulness and occasional mirth in the preservation of health, and the promotion of convalescence, must be familiar to all medical men. I think it was Dr Arbuthnot who used to say that laughing lengthens life, and that the arrival of a single mountebank in a town contributes more to promote the health of the inhabitants than a dozen of physicians.

medicines, and explains the operation of many which is otherwise difficult to be understood.

“This is the operation of medicines upon the stomach, from which motions are often propagated to almost every distant part of the human body, and peculiar effects produced in those parts, whilst the medicine itself is only in contact with the stomach.

“The stomach is the part by which the most part of substances introduced into the interior parts of the body generally pass; and it is endued with a peculiar sensibility, which renders it ready to be affected by every substance entering into it that is active with respect to the human body. Every thing, therefore, of this kind introduced into the stomach, operates almost always there, and for the most part only there. It is now, however, well known to physicians, that the most considerable instance of the sympathy mentioned above, is afforded by the stomach, so connected with almost every other part of the system, that motions excited there are communicated to almost every other part of the body, and produce peculiar effects in those parts, however distant from the stomach itself. This, indeed, is very well known; but that the effects of many medicines which appear in other parts of the body are entirely owing to an action upon the stomach, and that the most part of medicines acting upon the system act immediately upon

the stomach only, is what has not been understood till very lately, and does not seem even yet to be very generally and fully perceived by the writers on the *materia medica*." This opinion the learned Doctor proceeds to confirm by many sound reasons and striking illustrations.

It would thus appear that the region of the stomach is a great and most important centre of nervous sensibility; but even those writers who have been forced by experience into an acknowledgment of this fact, do not seem to have made any adequate attempt to explain it; although they might naturally have been led to inquire how this sympathetic sensibility comes to be distributed from this centre throughout the whole system, in the manner above described. The nature and functions of the *plexus solaris*, or great concatenation of sympathetic nerves, situated in this region, have not yet been sufficiently investigated, although it evidently appears to act a very important part in the animal economy, especially in certain morbid states of the system, or disturbed sensibility. The investigation, if conducted with a view to the general sympathy in question, might perhaps lead to some interesting results.*

* Dr Bertrand, the ingenious author of a learned work on Somnambulism, thinks it more than probable that, in relation to the internal life, the *plexus solaris* performs the same functions which we ascribe to the brain, as the organ of the intellec-

There are also various other sympathies, although of less importance in relation to our sub-

tual faculties in the waking state, in relation to the external life.

In the solar *plexus*, which some of the ancients called the *cerebrum abdominale*, the soul is thought to derive the materials necessary for the formation of its intuitive judgments.

A number of eminent German and French anatomists and physiologists, in recent times, have bestowed considerable pains in investigating the structure and course of the nervous *ganglia* and *plexus*, and of the various abdominal nerves connected with them. (See J. F. MECKEL; *De vera nervi intercostalis origine. In diss. de quinto pari nervorum cerebri.* Goeting. 1784.—J. G. WALTER; *Tabulae nervorum thoracis et abdominis.* Berolini, 1783.) Bichat in France, and Hufeland in Germany, came, about the same time, upon the idea that all these nerves, although organically connected with the cerebral nerves, constituted a peculiar and independent system of nervous influence. (See Bichat's *General Anatomy*, and C. W. Hufeland's *Pathologie*.) This idea was subsequently farther pursued, and expounded with much clearness and ingenuity, by Autenrieth (*Handbuch der Physiologie*), Burdach (*Physiologie*), and especially by Reil (*On the peculiar properties of the Ganglionic System, and its relation to the Cerebral System*; in the *Archiv für Physiologie*, vol. vii. No. 2, pp. 189–254). Humboldt (in the *Gazette Littéraire de Berlin*, 1788, p. 312) afterwards extended this theory, by his evidence in favour of the external expansion of the nervous influence.

As it would lead me too far, were I to enter minutely into the details of this ingenious theory, I think it may be sufficient for me to have pointed out the various works in which it is unfolded, and to recommend farther investigation by competent inquirers. I may observe, however, that the theory is of great importance to Animal Magnetism; as most of the magnetic phenomena seem capable of being explained only by the relation in which the cerebral and ganglionic systems stand towards each other.

ject, besides those already mentioned ; such as that of the internal membrane of the *bronchi* with the skin, on the application of cold to the surface of the body, in the production of a catarrh—that of the skin with the stomach and bowels, and *vice versa*, at the commencement and during the continuance of fevers, &c. So universal, indeed, is this sympathetic connexion between the different parts of the living system, that we might safely subscribe to the *dictum* of the great father of physic—*Confluxio una, conspiratio una, consentientia omnia*.

This universal sympathy of the whole frame with a particular part or parts, appears to owe its existence to that unity and contiguity of substance in the brain and nerves, by means of which all the different parts of the system are so intimately connected with each other, by means of the *ganglia* and *plexus*, that if any one part is affected, the rest must suffer more or less. That this reciprocal sympathy, indeed—this action and re-action—has its origin in the various minute ramifications of the nervous system, seems liable to no doubt. We know that the nerves, which are so many elongations of the medullary substance of the brain, are conductors of part of the vital principle to all the organs of the body, for the purposes of life, sensation, and action, and that it is through the medium of the nerves that the vital principle is acted up-

on. In short, the nerves are the conditions of the corporeal *affectability*. It is also well known to the profession, that many eminent physicians and physiologists have suspected, assumed, or found themselves compelled to admit a certain permeability of the nerves, i. e. that they contain, secrete, circulate, transmit, or in some manner conduct some fluid or substance, and, consequently, that they have cavities, whether discoverable by human optics or not. To this hypothesis, and the conclusions to be drawn from it, I shall have occasion to revert hereafter. In the mean time, I have merely alluded to it as affording apparently the best explanation of those mutual sympathies which are known to exist in the human frame.

I believe there has been of late some controversy regarding this sympathy between different and distant parts of the organism—whether it may be traced to nervous irritation, and “a necessary and permanent consent” of these parts, or whether it arises simply from the effects of “certain *mental sensations*.” In an ingenious paper by Professor Alison, *On the Physiological Principle of Sympathy*, inserted in the 2d volume of the Transactions of the Medico-Chirurgical Society of Edinburgh, in which he supports the latter of these views, the learned author observes: “As this is a subject of considerable intricacy and difficulty, so I think it

is one of those which has of late years not attracted as much attention from medical inquirers as its importance deserves. In consequence of this, the progress which had been already made in the inquiry by physiologists of the last age, seems to have been overlooked, and speculations brought forward, which a careful consideration of the facts collected by them might perhaps have repressed." In his observations, Dr Alison remarks, that he has chiefly in view "the excitation or alteration of action in the animal economy, by the irritation of distant parts;" and he proceeds thus: "This striking and important general fact in physiology, used to be regarded as denoting, or as depending on, a necessary and permanent *consent of parts*; and the reason of this was anxiously looked for in connexions or anastomoses of the nerves of the parts irritated, and the parts thrown into action by the irritation, whereby it was supposed that an irritation applied to the one might operate on the other, in like manner as if applied to itself. But the researches of Dr Whytt and Dr Monroe on this subject were, as I think, quite successful in establishing two points in regard to such phenomena; 1st, That they cannot be explained by the connexions of the nerves of the sympathising parts; and, 2dly, That they do not indicate any necessary consent or sympathy between *individual parts of*

the body, but are, in general, simply the effects of certain mental sensations; and that, in these instances, one part of the body sympathizes with another, only in so far as the sensation, which is the natural and appropriate stimulus of the one, is excitable by irritation of the other."

In a Note to the preceding passage, the learned Professor makes the following observations: "We know that a certain portion of the nervous system (at the origin of the nerves of sense), and cannot doubt that a certain change in that portion, is necessary to the production of every sensation, of which an animal is susceptible. The mode in which that physical change excites a mental act, and the mode in which that or any other mental act, in its turn, excites a physical change in any part of the nervous system, and thereby acts on muscles or other organs, are things not only unknown, but manifestly inscrutable. We have, therefore, no means of judging, whether it is strictly speaking from mental sensations, that the different sympathetic phenomena proceed, or whether they are more properly the results of those physical changes in the nervous matter, which immediately precede and cause the sensations, and which are known to us only through them. But if the sensations are the only antecedents, in the order of time, which can be pointed out as uniformly pre-

ceding the sympathetic changes, I apprehend that we may lawfully assign them as the causes of these changes, without giving ourselves any trouble as to that indeterminable question."

In a subsequent passage, Dr Alison makes the following most important remarks, in which I most cordially agree with that learned physician: "I am aware, that some physiologists consider all particular reference to the acts or affections of mind, and to the distinctions existing among these, as foreign to the proper business of their science, and expect no result from such discussions, but endless and nugatory metaphysical disputes. But although it must be admitted, that such disputes are to be found in most writings on the physiology of mind, yet I will venture to maintain, on the other hand, that it is absolutely incumbent on every one who studies the physiology of the nervous system in the human body, to consider carefully the laws of the mental phenomena, as made known to us by our consciousness, and as generalized in the writings of metaphysicians.

"Whether the nervous system be intended to serve other purposes in the animal economy or not, *it is certain that it is intended to serve the grand and essential purpose of maintaining the connexion between mind and body.* The study of its functions, therefore, necessarily embraces the consideration

of two distinct kinds of phenomena; and however minutely the physiologist may have examined the anatomy of the brain and nerves, and however accurately he may have noted the effects of injuries of these parts, in experiments on animals, and in observations on disease; still, unless he has carefully considered and generalized the mental part of the processes, of which the brain and nerves are the instruments, he has done but half his work." *

At the conclusion of his interesting paper, the ingenious Professor observes, that his object had been to state the grounds of his belief in these two principles in Physiology, "*first*, That what are called sympathetic actions are, in general, actions caused by sensations; and, *secondly*, That no anatomical explanation can be given of the fact, that certain sensations act upon certain nerves only. †

* These are sound philosophical views, and it were very desirable that a professional physician of Dr Alison's high acquirements should apply himself to a more extensive inquiry into this most interesting subject, combining mental with physical physiology.

† This last ground of belief is opposed to Sir Charles Bell's views, as I find them expressed in the following passage of his *Bridgewater Treatise*: "Experiment proves, what is suggested by anatomy, that not only the organs of the senses are appropriated to particular classes of sensations, but that the nerves intermediate between the brain and the outward organs are respectively capable of receiving no other sensations but such as are adapted to their particular organs."

Into the merits of this controversy, for the reasons above

The discussion in Professor Alison's paper is too strictly professional to entitle me to enter into it more at large; indeed, I do not conceive myself competent to give any decided opinion upon the subject. But I am not aware that he has stated any thing that can invalidate the propositions I have advanced, upon the authority of many eminent physicians, from Hippocrates downwards, relative to the sympathies that really exist between different and distant parts of the animal economy, through the mediation of the nervous system. My business is with facts, rather than the explanation of facts. Whether these sympathetic actions originate from a connexion between the different nerves, which are the sole instruments of all sensations; or whether they are determined by mental sensations, as maintained by Dr Alison—these are questions which I willingly leave to be decided by scientific physiologists and physicians.

stated, I do not mean to enter; but in the sequel of this work, I shall have occasion to bring forward some matters, not of theory, but of fact, which, I trust, may occasion some farther investigation into the powers and susceptibilities of the nervous system.

C

CHAPTER IV.

THE second class of sympathies to which I formerly referred, is composed of those which are found to exist between the mind and the body. These are of infinitely greater importance in the present investigation, but, perhaps, still more difficult to account for upon intelligible and satisfactory principles; inasmuch as it must be easier to trace and explain the actions and re-actions of one homogeneous substance, than to discover the principle which renders this substance susceptible of being acted upon by another being of a totally different nature and quality.* The very interesting nature of the facts, however,—and these are matters of observation—independently of any at-

* “As vital properties do not differ from the properties of inanimate nature, in degree, or by any other modification, but have nothing in common with them, it follows, that when living bodies affect each other only by their vital properties, the result must be such as bears no analogy to any of the properties of inanimate nature; and, consequently, that in all processes which have any such analogy, one of the agents must operate by the properties of inanimate nature.”—Dr W. PHILIP, *On the Vital Functions*, 3d ed. p. 202.

tempt to explain their causes, will do more than repay the labour of inquiry.

Bodily suffering always affects the mind, in a greater or less degree; while impressions made upon the mind have been known to produce surprising changes on the habit of the body. The remarkable histories of John de Poitiers and Henry IV. of France, have been recorded by historians, and corroborated by physicians. *

It is quite notorious, indeed, that the passions of the mind occasionally exert a most extraordinary influence over the corporeal frame. An excess of joy or of fear has been known to occasion speedy death; and the same thing, or, in some cases, insanity, has been produced by sudden sur-

* The former having been convicted of being an associate in the conspiracy of the Constable of Bourbon against Francis I., and condemned to lose his head, became so much distracted by fear and violent passion, that, in one night, his hair turned entirely grey; and he was seized with so violent a fever, that, though his daughter procured his pardon from the king, no remedies could preserve his life. The latter, when he heard the unexpected and mortifying news, that Henry III. had published the edict of July 1585, against the Huguenots, was so greatly affected, that, in an instant, one of his mustachios was turned grey.—See MORERI, art. *Diane de Poitiers*; THUANUS, lib. iii.; ANSELME, *Palais d'honneur*; SULLY, *Memoires*, tom. i.—Another story of the same kind is related in HOWEL's *Letters*, p. 179; and a still more curious one in VERDUC, *Operat. de Chirurg.* cap. xiv. p. 337.

prise. An eminent medical writer * mentions, upon unquestionable authority, that, upon the arrival of the alarming news of the taking of Bergen-op-Zoom, in the year 1747, such was the general consternation, that many women were known to die of fright soon after the intelligence was communicated to them. Sudden death, from an excess of joy, although equally certain, is more uncommon ; but there are many instances of it upon record. Livy relates, that two women at Rome died of excessive joy, upon finding their sons return, safe and unhurt, from the battle of Tharsymene. There are numerous instances of sudden surprise having occasioned imbecility, insanity, or death itself. †

The mental affections exert a very remarkable influence over the bodily secretions. Of this many familiar instances might be noticed ; but they will readily occur to the reader. I shall therefore content myself with quoting the following case, because it has been less commonly observed, rests upon the best authority, and is of great importance to our argument.

* Dr GARDINER, *On the Animal Economy*, p. 40.

† This is corroborated by the observation of the celebrated Dr Mead : “ Annon hominum pessundare vehementes animi affectiones sæpe experiuntur ? Subitus terror multos interimit ; et ipsa quandoque supra modum exultans lætitia fuit exitio.”—MEAD, *Medica Sacra*, p. 70.

My old, ingenious, and highly respected friend, Mr Wardrop of London, one of the most eminent surgeons of whom this or any other country can boast, observes, in one of his very able surgical lectures, that “ the only circumstance of importance to be particularly attended to, when operating upon an infant, is the management of the *nurse*. I am convinced, says he, that in many cases where operations on infants have proved fatal, the death has been caused by changes produced in the nurse’s milk, in consequence of the mental agitation which, as you may suppose, is often produced in the mind either of the nurse or the mother, when an operation on her young charge becomes necessary. I have seen several remarkable instances of this kind, and similar cases are recorded by authors. The first case which came under my own notice, took place some years ago in an infant from whom I had removed a small, very hard tumour, which was situated behind the ear. No fever or inflammation supervened; and after suppuration had been established, and the wound was granulating in the most healthy manner, the child died suddenly of convulsions. On inquiry, I found that the mother had been thrown into a violent fit of passion late at night, and that she suckled her infant soon afterwards, immediately subsequent to which the fatal convulsion succeeded. In another

instance, I was sent for in great haste to see an infant in a convulsive fit, and on inquiry found, that the nurse who was employed to suckle the infant had been guilty of some misconduct, for which she had been severely reprimanded. Soon after this mental agitation, the infant was suckled by her, and that occurrence was followed by the convulsive attack referred to. The late Sir Richard Croft, who had the immediate care of the child, informed me, that he had frequently known similar cases, and that *all the mischief was to be attributed to the pernicious effects which moral excitement produces on the milk of the nurse*—an effect with which, in some degree, every one is familiar. Mr North, in his treatise on the *Convulsions of Infants*, makes allusion to this circumstance, and has mentioned examples of it.”

It is of importance, however, to observe, that impressions made upon the mind may exert a beneficial as well as a prejudicial influence upon the state of the body;—they may restore as well as destroy healthy action. This, indeed, is agreeable to reason, and the fact has been abundantly confirmed by experience. There are numberless well-authenticated instances, in which diseases have been found to be alleviated, if not entirely removed, by passions excited in the mind—by fear, terror, anger, joy, &c.

It is somewhere recorded, that a person afflicted with silent melancholy having been put into a violent passion, immediately recovered his sanity of mind. Another, who was going to drown himself, fell in with robbers, defended himself vigorously against them, and returned home cured of his suicidal propensities. Fright, sudden affections, vehement emotions, have, in hundreds of cases, operated the instantaneous removal of insanity.

It has been usual to refer all such cases to the influence of the imagination—a very convenient mode of explanation, but which, in reality, only serves as a cloak to cover our ignorance, and seems to be resorted to for the purpose of saving us the trouble of investigation. It appears quite evident that, in all these instances, there is some action exerted on the vital principle, probably through the medium of the nervous system.

The same eminent physician to whom I lately referred—the late Dr John Gardiner of Edinburgh, observes in his treatise on the *Animal Economy*, that “in chronic diseases, accompanied with a preternatural irritability in the nerves, and a variety of different complaints, arising from a morbid mobility of particular parts, as in hysterical and hypochondriac patients, in persons afflicted with chronic asthma, or with a fit of the gout, toothach, or rheumatism, I have known these several disorders suspended for

a time, when the mind has been under the influence of fear, surprise, or roused to a fixed attention to some interesting object. I have frequently observed in practice, delicate hysterical women, who for many months had seldom enjoyed one day's health, suddenly relieved from every complaint, when a favourite child was attacked with a disease in which danger was apprehended, and they continued in appearance to be in perfect health during the whole course of the illness, and exhibited an unusual alertness in discharging their duty as nurses and as parents."—"A gentleman of great courage and honour," says Dr Gardiner, "who had become valetudinary, and subject to the asthma, by a long service in India, as an officer in the land forces, told me that, during their encampment, he was attacked with a severe fit of that disorder, which usually lasted ten or twelve days: That, upon the third or fourth day of his illness, when he could only breathe in an erect posture, and without motion, imagining that it was not in his power to move six yards to save his life, the alarm guns were fired for the whole line to turn out, because a party of the Mahrattas had broke into the camp, and fearing certain death if he remained in his tent, he sprung out with an alacrity that astonished his attendants, instantly mounted his horse, and drew his sword with great ease, which, the day before,

he could not move from its scabbard, though he used his whole strength in the attempt. From the instant of the alarm and surprise, the debility left him, together with the asthma; nor did the disorder return till its usual period.”*

“From the above instances,” continues Dr Gardiner, “and others of a similar nature, where the ordinary course of a disease, or the disease itself, is suspended for a time, we have reason to believe that, in disorders of the body, as well as in those of the mind, there is an irregular and an unequal distribution of the powers of action, which seems to be rectified by a sudden and continued exertion of the powers of the mind. *This exertion gives greater stability to the nerves as conductors. Their condition is immediately changed from a morbid to a*

* Cases of the same kind will be found in the *Memoires de CHAVAGNAC*, p. 332; in GASSENDI, *Opera*, vol. iv. p. 307; in PECHLINI, *Obs. Physico-Medicæ*; Hamb. 1692, pp. 453, 454, 456, 457.

HIPPOCRATES was so fully aware of this species of influence, that he expressly recommended *ὀργισμὸς*—anger, sudden excitement—as of great service in certain diseases; and in this opinion he is supported in the strongest manner by ARETAEUS, PAULUS, and GALEN. See GALEN, in *Lib. de Theriaca*.

The same opinion has been confirmed by eminent medical writers in more modern times. See, in particular, FIENUS, *De viribus Imaginationis*, and PECHLINUS, *ut sup.*

I may here observe, by-the-by, that the elder writers appear to use the terms, *Imaginatio*, *Phantasia*, in a somewhat different and more definite sense than that which seems to be attached to them at the present day.

more vigorous state : The whole system acquires such a degree of strength as enables it to resist, in a surprising manner, the ordinary action of the cause of the disease." " *These facts shew the necessity and great use of constantly employing the mind, either by business or amusement, in the cure of certain diseases accompanied with a preternatural irritability of particular parts.*

" As a solution of opium taken into the stomach, injected into the bowels, or applied to any part of the body, so as to have its full effect on the nerves, never fails, in proportion to the quantity used, to lessen or destroy the sensibility, and the powers of the nerves to which it is applied ; and as these effects are speedily communicated, in a less degree, to the rest of the system ; in like manner, when any part of the body, from its diseased state, comes to be endued with such a preternatural degree of irritability, as to be, from the slightest causes, almost in constant pain, and this for a number of days or weeks together, it has always the effect to render the rest of the nerves irritable to a morbid degree, or, to use a term in music, to bring the rest of the nerves more in unison with those of the diseased part than they were before. This effect of long-continued pain, in rendering the system more irritable, is not perhaps so observable as the effects of opium in a contrary way."

Again: "If we wish to moderate the severity of pain, or to take off a particular spasmodic affection, in any part of the body, a dose of laudanum or opium is prescribed, suitable to the age, constitution, or habit of the patient in the use of this medicine. In a few minutes after its application to the nerves of the stomach, they become less sensible. The same diminished sensibility is soon communicated to the whole nerves, and the pain in the diseased part is proportionably abated, or entirely removed." The learned Doctor afterwards proceeds to mention, that "we sometimes meet with a patient who, from a singularity of constitution, disagrees with opium, in whatever form it is given;" and in such cases, and where the effects of an opiate are considered necessary for the removal of pain, he endeavours to point out the best means of obviating this inconvenience.

I need make no apology for introducing this long quotation from the excellent work of Dr Gardiner, because his observations appear to be not only judicious, and of great importance to medical science, but also exceedingly interesting, when considered in relation to the doctrine of Animal Magnetism. If by any means whatever (the more simple assuredly the better) we can succeed in soothing the preternatural irritability of the ner-

vous system, and in any way facilitate a restoration of the healthy action of the vital functions, do we not go a great way towards the effectual cure of a variety of serious complaints, by lulling painful sensations, and alleviating or removing the morbid symptoms, leaving the rest to be performed by the *vis medicatrix naturæ*? Now, these are precisely the effects generally produced by the magnetic processes—they act, at the same time, as a sedative and a tonic or corroborant, in a degree far beyond any article in the *Materia Medica*; and a better description of these salutary effects could hardly be given, than by using the language of Dr Gardiner, when speaking of the proper administration of opiates. These effects, indeed, in the case of Animal Magnetism, have been said to depend upon the influence of the imagination*—a hack-

* Those of the opponents of Animal Magnetism who adopt the imagination-hypothesis, have never yet, so far as I am aware, condescended to inform us what they mean by Imagination. Do they use the term in the sense of the Archæus of Paracelsus and Van Helmont—the *anima medica*, the vital spirits, the intelligence, the *life*, of other eminent physicians? If they do, then let them say so; for, in that case, it may perhaps appear upon this, as upon many other occasions, that our controversy is more verbal than real. The Animal Magnetists have incontrovertibly demonstrated, that the phenomena of which they speak cannot, with any propriety, be ascribed to the imagination, according to the common meaning of the word. As well might we attempt to refer the effects of ordinary medicines solely to the influence of the imagination.

neyed and unmeaning assertion, which, so far as it is at all intelligible, has been completely disproved by the experience of every practical magnetiser, and contradicted by all who have any real knowledge of the subject, but which I do not at present intend to combat. But if we must have a determinate cause assigned for every known effect, will any physician be kind enough to inform us upon what principle he depends in the case of the administration of opiates? Or, if ignorant of this, why he ever employs these, or, indeed, any other medicines? To me it appears, that all we can know, in the one case, as in the other, is, that certain antecedents are generally followed by certain consequents; and this is quite sufficient for all practical purposes. And let them depend upon whatever principle they may, those means are certainly to be accounted the best, which, according to experience, do most safely, and, at the same time, most effectually, promote the object in view, viz. the relief of the patient; and for accomplishing this object, in many cases, the superior success of the magnetic treatment is unquestionable. Those individuals who decline to listen to the doctrine, until they receive an explanation of the cause of the phenomena, resemble petted children, who refuse to eat their bread and butter, until informed what particular cow produced the milk from which

the butter was made. "If medical men assert," says Mr Chenevix, "that the alleged cures of Mesmerism are performed by the mind, and that this is the peculiar province of imaginative therapeutics, do they not culpably neglect the most powerful agent of mental medicine, if they do not practise Mesmerism? If imagination can cure diseases, and if this be its most energetic exciter, then excite it thus:—Cure by imagination, and the sick will bless you.* If the cause be analogous to a rotatory or a rocking motion"—this was the opinion of some of the professional gentlemen who witnessed Mr Chenevix's experiments—"then whirl or rock your patients into sleep and health. If it be a new agency, find it out, and prove it by experiment."

To these recommendations of Mr Chenevix, I would beg leave to add—Do not allow yourselves to lose sight of the facts, while attempting to discover their causes;—do not overlook or disregard the effects, although the principle should for ever remain undetected.

* See the opinion and advice upon this subject of the late celebrated Professor Dugald Stewart, to be quoted hereafter.

CHAPTER V.

HIPPOCRATES long ago affirmed, that Nature herself frequently cured diseases; and he thought that her most vigilant attendants and observers were the best physicians. The observation has since been often repeated, and the opinion appears to have given rise to the various hypotheses concerning the nature of this sanative principle. *

* " There is no curable malady from which the patient does not sometimes recover, without the aid of foreign remedies, by the unassisted efforts of the vital principle. *A fortiori* ought this cure to take place, when, by means of a methodical and well understood communication of an effective fluid, the defective fluid of the patient is restored, and better directed in its action. And let it not be thought that it is essentially the quantity or the quality of drugs which effects cures; Nature alone cures, by restoring, in some manner or other—whether by natural or by artificial means—order in the disturbed functions. A cure is nothing else than a victory obtained by the vital principle over the adverse forces presented by the disease."—*Memoir sur le Fluide Vital, &c.* par M. le Docteur Ch. in the *Biblioth. du Magnet. Anim.* t. ii. p. 26.

These opinions are corroborated, in part, by the experience of the celebrated Dr Hoffmann, and by the great success, in recent times, of the homoeopathic system of medicine, which has proved such a *shibboleth* to the profession.

Hence, no doubt, the *Archæus* of Paracelsus and Van Helmont, the *Anima medica* of Dr Nichols, the *Vital Senses* of Dr Lawrence, the *Intelligence* of Stahl, the *Life* of Hunter and Abernethy, and the *Imagination* of the modern antagonists of Animal Magnetism. "Whether the great dexterity and seeming contrivance of the vital economy, in the general conduct and frequent cure of diseases, be only the necessary and mechanical result of that stupendous wisdom exerted in the fabric and constitution of the body, for its own temporary security in a vital state; or whether any conscious intelligence, distinct from the mind, acts with real sagacity and intention for the same purpose, seems very difficult to ascertain." The fact affirmed by Hippocrates, however, is, I believe, generally admitted by the most learned and experienced physicians; and much less confidence is now placed in the efficacy of the drugging system, so prevalent in the medical practice of a former age. To such practitioners as are still attached to the employment of the chemical remedies, and the chemical remedies alone, in the cure of all complaints, I would humbly recommend the following observations of another eminent physician, Dr Thomas Simson, in his *Inquiry into the Vital and Animal Actions*. "The power of the mind in raising sensations, and with them the consequences that

attend them, is past all contradiction. The sight of an orange gives an agreeable taste, and causes the discharge of the saliva: the sight of a vomit or purge will sometimes produce the effects which ordinarily attend them when taken inwardly: bread pills, taken with a confidence that they were mercurial, have produced a salivation. By all which," says the Doctor, "I persuade myself it must be admitted, that there is scarce an action performed by any kind of *stimulus*, but what can be copied and performed by the fancy, or a strong idea of what effects a certain stimulus has produced." Now, I do not see how any physician who makes such ample admissions as these, can, in candour, presume to deny the alleged efficacy of the magnetic processes, in the face of an overwhelming body of evidence, without any investigation of the facts, without any knowledge or study of the conditions upon which that efficacy is said to depend. While upon this subject, too, of the prevailing attachment to physical means of cure, I may quote the high authority of the celebrated Dr Frederic Hoffmann, who, in one of his works, thus declares his confidence in simple and familiar remedies: "I affirm with an oath," says he, "that there was a time when I ran after chemical remedies with great ardour; but age and farther experience have persuaded me, that a few medicines, judiciously

chosen, taken from substances the most simple, and the most unpromising in appearance, relieve, with greater promptitude, and with greater efficacy, the general run of diseases, than all the chemical preparations, the most rare and the most *recherchées*."

We have thus seen, that, in consequence of some sympathetic connexion, impressions made on the mind are occasionally capable of producing extraordinary changes on the corporeal habit; and of this fact we are as certain as that a change can be wrought on it by means of medicines, or any other external cause. *

* In the curious journal of his disease and cure, which has been left us by Aristides the orator, the writer informs us, that he dreamt one night that a bull attacked him, but did him no other injury than giving him a push under the right knee. Upon awaking, he found a small carbuncle on that part of his body. We find in the life of Conrad Gessner, that he once dreamt of having been bitten by a serpent, at a time when a malignant epidemic disorder was raging in the neighbourhood. He predicted that a boil would appear on the spot, and it was accordingly observed next day. A man dreamt that he was struck by a stone on the breast, and awoke in a fright. When light was brought him, he perceived a large black mark on the spot where he felt pain.—(*Ephemerid. Nat. Curios.* Dec. i. Ann. ii. Obs. 128.) Similar effects have been produced in the waking state. Malebranche tells us, that a young girl suffered severe pain for several days in that part of the foot where she had seen blood drawn from another person. A young man of fourteen, in 1777, fainted on witnessing an execution on the wheel, and suffered violent pain, and had blue spots on the parts of his body corresponding to those where the criminal had been hit by the

I am now about to notice another species of this influence, which has furnished nearly all the opponents of Animal Magnetism with what they seem to consider a decisive argument against that mode of treatment;—although the influence in question can be demonstrated to be very real and very general;—and although it may be said to constitute one of the greatest, most important, and most curious *arcana* in medical science. It is laid down by the advocates of the particular treatment alluded to, that *faith* in the operator, and *confidence* in the patient, are very important conditions of its success. Now, it does appear somewhat strange to me, that such a circumstance as this should be considered as rendering suspicious the alleged facts of Animal Magnetism, seeing that the same faith and confidence are required in all medical practice—nay, are essentially necessary to the success of every important transaction in life. In the ordinary medical practice, would not the prospect of success be greatly diminished, if, in any instance, the physician had no faith in the efficacy of his medicines, while the patient, on the other hand, had no confidence in the skill of his physician? Is it not the primary object of every great physician to inspire his patient with confidence in the

wheel.—(Sigaud de la Fond, *Diction. des Merveilles de la Nature*, &c.)

efficacy of the treatment employed? And is not the faith of the patient in the efficacy of the treatment a mighty means of recovery?

“That the eager confidence of the patient in the skill of his physician, and the firm expectation of relief by his means, have sometimes a wonderful efficacy in restoring health, is a point not to be doubted of. FIENUS, besides corroborating this opinion by the authority of GALEN and others, tells us, that, in general, all physicians subscribed to it; and he gives us several instances of cures brought about by the use of means, in themselves of no efficacy, if not ridiculous, nay, which to all appearance were hurtful, but which the strong desire and confidence of the patients endowed with a sanative virtue.* PECHLIN, also, is very full,

* *De Viribus Imaginationis*, p. 169-170.—“Etenim Galenus, 1. prognost. dicit confidentiam ægri de medico plurimum facere ad salutem, idque se in seipso expertum esse; et propterea illum medicum melius sanaturum, qui melius poterit persuadere. Albertus Magnus, 4. de anima, scribit ægrum per confidentiam de suo medico tantum sanare ipsum quantum medicus medicamentis.....Communiter omnes medici, magnam vim ejusmodi confidentiæ ascribunt.....Probatur quoque experientia et exemplis.....Docet etiam experientia multos in febribus habentes summum cibi alicujus desiderium, et fortissimam imaginationem quod talis cibus esset eos sanatuos, comedendo eum, sæpissime fuisse sanatos, etiamsi ipsi cibi secundum regulas medicinæ illi morbo noxi et contrarii haberentur.....Quod cum non fiat virtute naturali ipsorum ciborum, reliquum est, ut non fiat nisi virtute firmæ ægrorum confidentiæ et in-

to the same purpose. In his opinion, vast is the power of the mind in determining the operation and efficacy of medicines. It will, according to him, not only diminish or increase their usual effects, but also change them to a manner of operation directly contrary; and communicate a healing quality to the most inadequate means, even to a bread-pill disguised as a medicine, and swallowed with a vast confidence in the skill of the person who administers it."*

This subject of the sanative influence of faith and confidence in medical practice, is treated with profound knowledge, and much philosophical acumen, by a learned and able writer in a French publication, at one time, I believe, of considerable celebrity and extensive circulation. The writer in question observes, that, "if it be true (and indeed it cannot be doubted) that among the causes which are capable of modifying the state of the vital functions, there are none more rapid, more powerful, and more infallible, than moral impressions, of what mighty importance is it for the physician to acquire a practical knowledge of the curative effects which these impressions may produce! And how tense imaginatiois."—Flenus quotes many other authorities and gives several examples of the efficacy of the principle.

* PROMAN, Obs. p. 421-422.—The above quotation is from Douglas, Bishop of Salisbury's treatise, entitled, *The Criterion*, &c.

can he be permitted to remain ignorant of the influence exerted on the state of the sick by that confidence which they accord to the remedies which are administered to them.

“In its most feeble degree, this confidence, produced by the slightest causes, determines those ameliorations, already sufficiently perceptible, which are constantly observed in the case of certain patients, every time they change their physician or the remedies.

“More decided effects are manifested when a physician, employing, for the first time, a new remedy, communicates to the patient the hope of an efficacy, the precise limits of which have never been indicated by any experience; and this is a source of error from which even the most experienced physicians do not always escape. How many new substances are there, the efficacy of which, supported at first by many wonderful cures, has at length been reduced to nothing in the hands of experimentalists, who have made trial of them with a sort of doubt and distrust? To what shall we ascribe the curative effects of the magnet and of Perkinism, and that of acupuncture so recently extolled? It is a demonstrated fact, that the prussic acid no longer produces those effects which were observed at the time when hopes were entertained that it would prove a preservative against phthisis.

Has not a well known physician recently announced, that he had administered successively, without the slightest effect, enormous doses of that narcotic, of which some fractions of a grain were at first sufficient to soothe with almost complete certainty?

“ When the new remedy is kept secret, the excess of confidence inspired in some minds by the mystery which surrounds it, renders its curative effects still more decided, especially in certain complaints in which the imagination plays a great part. Hence the miracles produced at all times, and in all countries, by the superstitious *recipes* against madness.

“ But, in order to observe the effects of confidence in its most elevated degree, we must look for them among pious patients, who, with lively faith, invoke the aid of superior intelligences. In them every requisite is combined—implicit faith—a firm and unbounded confidence in the support of a protecting Power which has no limits—finally, religious exaltation, which, considered in itself, is sufficient to render the organism soft as wax to all the modifications induced by the imagination.* It is

* Nothing can be more manifestly unjust and unphilosophical, although there is nothing more usual, than to maintain that all which takes place in cases of mental exaltation is mere deceit and imposition. Such an opinion can only arise from a want of due attention to those psychological principles which

in such cases, therefore, that are manifested those miraculous cures in which all religious sects, without exception, have gloried in their commence-

frequently manifest their extraordinary effects on the human constitution: For it cannot be doubted that the influence of the soul on the body is often as great as that of the body on the soul, although, hitherto, physicians have confined their studies principally to the latter. Even in the ordinary state, we can relieve ourselves from pain and suffering by a firm exercise of volition, by fixing the attention upon other objects; nay, very serious complaints may occasionally be cured in this way. It is well known, as has been already observed, what astonishing effects may be produced upon the human body by violent joy, surprise, terror,—how easily fear and anxiety of mind may generate corporeal diseases. How, then, can it be denied that a profound devotional feeling, which in some individuals far surpasses all other feelings in power and intensity, may likewise have the greatest influence upon the human body?

Indeed, it would be much more incomprehensible if this were not the case, than that it is so; and it must appear at least equally incomprehensible that wine, which exhilarates, and to a certain degree elevates the soul of man, should also be an admirable medicine in many diseases, as that a firm confidence in God should penetrate body and soul, and again restore the sinking energies.

No true physician, therefore, will be surprised, when men are relieved from corporeal suffering by a strong and lively faith; and he will readily permit the more ignorant to represent these cures as miracles, while he sees in them only the effects of the same universal power of nature, of the same Spirit, which lies at the bottom of all other phenomena. The miraculous cures, so called, must interest him even as mere natural phenomena, as from them he can derive new proofs of the high importance of the *medicina psychica*, and he will be equally edified in his way by these facts, as that devout mind which contemplates them as miracles.

ment, even when the exaltation of their followers did not go the length of producing the ecstatic crisis, along with the incomprehensible phenomena which accompany it. In fact, to the manifestation of miraculous cures nothing more is necessary than a general and lively faith; and there is no religion which, even in its decline, has not endeavoured to re-ignite the zeal of its followers, in order to obtain them. When Paganism, everywhere in ruins, was rapidly disappearing before the numerous miracles performed by the faith of the new Christians, it still endeavoured to maintain its credit in the public estimation, by the supernatural cures performed in the temples of Æsculapins; and to these the defenders of Christianity could only object by ascribing them to the devil.*

* The practice of ascribing these physical or magnetic cures to his Satanic majesty and his ministers, prevailed down to a very late period, and is, perhaps, not even yet entirely extinct. The belief in question appears to have been powerfully encouraged by the "three black Graces—Law, Physic, and Divinity." Amongst a variety of writers upon this subject, I may refer the reader to the commencement of the second partition of old Burton's *Anatomy of Melancholy*, in which he will find a variety of learned opinions upon this question. Nicholas Taurillus says that "common experience confirms to our astonishment, that magicians can work such feats, and that the Devil without impediment can penetrate through all the parts of our bodies, and cure such maladies, by means to us unknown." But, then, with regard to the lawfulness of such cures:—"It matters not," saith Paracelsus, "whether it be God or the devil, angels, or unclean spirits cure him, so that he be eased." In

"If we wished to assign a particular rank to the phenomena which are produced in our days by the partizans of Animal Magnetism, we should place their cures immediately after those which result from religious exaltation, and far above all that can be produced by confidence in an ordinary remedy, however new, and however secret. The ardent zeal of the magnetizers, the almost supernatural marvellousness of the phenomena they describe, the nature of their processes, which require a long continued *recueillement*—all this is amply sufficient to explain the difference which exists to their advantage."*

We may all recollect something of the wonderful cures alleged to have been wrought at the tomb of the Abbé Paris in France, and of the acrimonious controversies to which the circumstances gave rise. By the friends of the Saint, these cures were ascribed to the miraculous interposition of Divine Power; whilst his enemies, in order to get rid of them, were forced into an utter denial of their reality. Both parties were completely blinded by false

opposition to such atheistical opinions, honest old Burton himself magnanimously contends,—“much better it were for such patients that are so troubled, to endure a little misery in this life, than to hazard their soul's health for ever; and (as Delrio counselleth) *much better die, than be so cured.*” This last opinion would probably be most popular among the faculty.

* *Le Globe*; No. 89, 18th July 1826.

zeal, and both were most egregiously in the wrong. Some of these cures, at least, if not all, were undeniable; but they were no miracles, in the proper sense of the word. The learned Bishop of Salisbury, who had carefully investigated the subject, admits, that "whoever attentively weighs the evidence urged in support of some of them, must own that few matters of fact ever were confirmed by more unexceptionable testimony. They were performed openly, in the sight of the whole world; in the heart of one of the greatest cities in the universe; on persons whom every body could see and examine; whose diseases could not be counterfeited, because we have the certificates of the most eminent physicians who had previously attended or examined them; and whose recovery every inhabitant of the city of Paris could satisfy himself of, because they lived on the spot. And that the facts were examined into with all the art and address of the ruling part of the clergy, backed by the civil magistrate, is too notorious to admit of a dispute; as it is, also, that some of them could stand the examination, and remained undetected."* Ac-

* *The Criterion*, by John Douglas, D. D., Lord Bishop of Salisbury.

Scenes of a similar character again occurred in more recent times, and occasioned a renewal of the same discussions. I shall take the liberty of quoting the following observations upon the

cordingly, the Bishop very properly admits the reality of these cures, and justly ascribes them to the principles I have already noticed—religious enthusiasm, a lively faith, and unbounded confidence.

subject, by an ingenious writer, to whom I have already referred.

“ There has been lately discovered at Lyons an old tomb, which, right or wrong, is believed to be that of St Jubin. Hereupon, the imaginations of the pious have become exalted, and some diseased persons, anxious to experience the virtue of new relics, have found their complaints alleviated near this tomb. We are told that a woman, who had been suffering from paralysis, was completely cured. These circumstances have given great umbrage to some philosophers, the wrath of certain journalists has been kindled, and apparently to punish this woman for having been, or believed herself to have been cured, they have hastened to acquaint the public that she had become insane. It is difficult to perceive how this insanity could diminish the reality of her miraculous cure. In the mean time, the account appeared of importance, and was repeated in all the journals which espoused the same side; which drew down upon the whole of them a positive contradiction on the part of the *Gazette Universelle de Lyon*, which, reasonably enough, defended the miraculous cure.

“ With regard to our liberals, why will they not allow the relics, and the newly discovered tomb of the saint, to produce in our days, the same effects which the relics and the tombs of all the saints have produced in all times? St Jubin may well be permitted to do, for some time, at Lyons, that which St Paris did, during more than ten years, at Paris, in the middle of the 18th century—that which Prince Hohenlohe, all alive as he is, has been doing, since the commencement of the 19th century, throughout the whole extent of Catholic Europe. It is an incontestible fact, and demonstrated by the religious history of all times, that, whenever a lively faith in superior power was combined with firm confidence, surprising cures were the result. Why, then, obstinately deny them? Assuredly, we ought not

In concluding these few observations upon the vast sanative influence of faith and confidence, I shall take the liberty of laying before my readers the following extract of a communication from a gentleman at the Havannah, which will be found in the *Monthly Magazine* for February 1820.

“Since my arrival, for about a year, I have witnessed the successive extinction of about four-fifths of those who have arrived from Europe. A terrible disorder—the *vomito negro*, or yellow fever—almost invariably attacks the newly-landed. In vain do I inquire what is the cause of this disease, and what are the remedies provided against it. The physicians of the country are as uninformed on this subject as I am; as evidently appears from the different prescriptions which they distribute, and which all tend to one common result—that of

to believe, upon light grounds, events which are almost always exaggerated by enthusiasm; but instead of feeling annoyed when similar accounts are published, philosophers would do well to investigate and ascertain the facts, to present them in their just degree of importance, and to enlighten the public on the subject of their nature and causes. I am much deceived if such conduct would not make a greater impression than a ridiculous exasperation, or stale raillery, which are more calculated to excite fanaticism, than to destroy it. It is time that science should frankly take possession of these miraculous cures, which are so evidently within its domain, and which constitute a very interesting chapter of that powerful influence of the moral over the physical nature of man, so frequently appealed to, and yet hitherto so little appreciated in its more curious results.”—*Le Globe, ut sup.*

conducting their unhappy patients to the grave. At the same time"—and to this passage I would especially direct the attention of the reader—"at the same time, *the Negro women are much more successful in their treatment of the fatal fever than the regular faculty ; they inspire confidence, which calms the patient, and then, probably, Nature does the rest.* The very captains, who have brought away the Negresses from the coast of Africa, are obliged to implore their benevolent assistance, and are frequently indebted for the preservation of their lives to those whom they have deprived of their country and their liberty."

Now, these Negro women were undoubtedly quacks, and, as such, I presume, would have been liable to prosecution and punishment, at the instance of the Faculty, in every civilized and well-governed realm. Yet the sanative processes, so successfully employed by them, would appear to have been truly Hippocratic; and it must be evident to all who are conversant with the subject, that they bore a striking resemblance to the magnetic treatment.*

• "The following account of the first appearance of the venereal disease is given by Villalba. When, in 1493, this previously unknown disease appeared at Seville, the king and queen, Ferdinand and Isabella, ordered their physicians to attend the persons afflicted with it in the hospital of San Salvador. Many physicians and professors laboured for seven or eight months,

I have said that faith and confidence are requisite conditions of the success of every important transaction of life, as well as of medicine and magnetism.* This is a principle which scarcely requires illustration. What, I would ask, was the grand secret of the brilliant successes of all those great men, who, at different periods, have astonished the world by the almost never-failing accomplish-

applying thousands of remedies without benefit. The famous physician Mæstro Francisco de Gebralion, and the celebrated Doctors Bodiga, Aragones, and Infantos, held councils, the result of which was a declaration that the disease was a scourge of Heaven, which attacked alike all ages and complexions, cities, and villages, and that all physical remedies had till then proved inefficacious; they were therefore of opinion, that every one who had greater experience should be allowed to undertake the cure of the disorder, and prayed the king to permit non-graduates to try their skill upon it. The consequence was, that a weaver actually cured most of the patients with a sort of ointment."—*Literary Gazette*, for February 18. 1832.

* "We all know that, in undertaking any difficult task which requires moral energy, the confidence we have in our powers, and the hope of success, contribute much towards enabling us to surmount obstacles. When one body of troops marches to the attack of another, if it is well convinced of its superiority, if it has no doubt of obtaining the victory, it will possess a prodigious advantage over the enemy, even although the latter should be superior in numbers. When soldiers make an assault, we see them scale walls and clear ditches, which would certainly have arrested them, if they were not previously convinced that nothing could resist their impetuosity. Magnetism has for its principle a moral action; it is the will which darts forth the fluid as it impresses motion; and is it surprising that confidence should augment its energy?"—DELEUZE; *Defense du Magnetisme Animal*, p. 106.

ment of their splendid, their glorious, their wonderful achievements—the Alexanders, the Hannibals, the Cæsars, the Mahomets, the Tamerlanes, the Charleses, the Cromwells, the Frederics, the Bonapartes, &c. ? I answer, that it is to be found, in a great measure, in an unbounded confidence in their own powers, a firm, a lively faith, and an energetic, a despotic volition. In the words of the poet : *Possunt quia posse videntur*—they were capable of performing great things, because they had a strong, an unflinching faith in their own ability, and confidently looked for success in all their enterprises. The professors of Animal Magnetism will tell us, that these were all magnetic men—men who possessed, in an extraordinary degree, that nervous power, that determined volition, and that indomitable confidence, which gave additional vigour to all their energies, and enabled them to perform actions which, to ordinary mortals, might almost appear impossible. I may add, in the language of a noble living author, that “one of the surest marks of a great mind is the confidence with which it knows how to inspire others.”*

I have already observed, I believe more than once, that our modern physiological systems betray far too great a leaning to materialism ; they treat of man as a merely passive being—as little

* Lord Mahon, *History of the War of the Succession in Spain.*

more than a machine; while the study of his spiritual nature has been almost totally neglected.* Yet the latter is, at least, equally interesting to the physician, and far more so to the philosopher. It makes us better acquainted with the various sympathies and susceptibilities of our being, and leads us to the discovery of the true springs of our actions, which will always be the more admirable, the farther they are removed from materialism and mechanism—the nearer they approach to the nature of the incorporeal, the spontaneous, the spiritual—the more immediately they proceed from our independent moral energies—the more manifestly they evince the dominion of mind over matter. *Si volueris magna operari*, says William Maxwell, one of the most ingenious of the predecessors of Mesmer, *corporeitatem a rebus pro posse deme, vel corpori de spiritu adde: Nisi aliquid horum fecerisnihil unquam magni operaberis.*†

* One great cause of this neglect may probably be found in the circumstance, that Physiology has been more cultivated by medical writers than by philosophers; and we are told by Hoffmann and Conringius that *Medico, qua Medicus, ignota est Anima.*

† If you would accomplish great things, you must divest objects, as much as possible, of their materiality, or add spirit to matter: Unless you do one or other of these, you will never perform any thing great.

CHAPTER VI.

AFTER the preceding, I trust not altogether unnecessary or uninteresting and uninteresting, episode upon the subject of those sympathetic and moral influences, which are occasionally operative in the cure of diseases—and which, if treated at the length their importance deserves, would probably occupy far too great a proportion of this publication ;—I shall now proceed to a much more extraordinary topic, and direct the attention of my readers to some very remarkable instances which have been recorded of the wonderful power of human volition, first, over the corporeal organism of the individual exerting it, and then over that of others.

The most surprising cures, indeed, are said to have been occasionally effectuated psychically, and, as it were, magically, without employing any tangible or ponderable remedy, or any visible medium, by the mere influence of the will and determination of the individual over the corporeal organs. The celebrated German metaphysician, Kant, wrote a small treatise, addressed to Dr Hufeland, upon the

power of mental resolution in overcoming painful sensations arising from some derangement of the animal economy ; and he observed, that this power was most efficaciously exerted in the case of spasmodic affections. This observation has been confirmed by the experience of the animal magnetizers, who have occasionally witnessed cases of a similar description, and have themselves performed cures, by means of 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 description ; 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

* *Untersuchungen über den Lebens Magnetismus und das Heilsehen.* Von Dr J. C. Passavant. Frankf. à M. 1821.

him to yield to the attack.* 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), informs us, 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 paralyzing his limbs at pleasure, by an effort of volition. Cardanus relates of himself, that he could voluntarily place himself in a state of ecstatic insensibility.† St Austin, in his

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

† Quatuor mihi indita sunt a natura, quæ nunquam aperiri volui, et omnia (meo judicio) admiratione digna. Quorum primum hoc est, quod quoties volo, extra sensum quasi in ecstasim transeo, &c.—*De Rerum Varietate*, lib. viii. c. 43. Something similar

work *De Civitate Dei*, has recorded two cases of a similar description; the one of a man who could 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 have 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 have been verified by the most exact observation, and substantiated 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

is related of that singular character Emanuel Swedenborg; and also, it is believed, of Jacob Behmen.

* Illud multo est incredibilius, quod plerique fratres memoria recentissima experti sunt. Presbyter fuit quidam, nomine Restitutus, in parocia Calamensis ecclesiæ, quando ei placebat, rogatus aut ut hoc faceret ab eis qui rem mirabilem coram scire cupiebant, ad imitatis quasi lamentantis cujuslibet voces, ita se auferebat a sensibus, et jacebat simillimus mortuo; ut non solum bellicantes atque pungentes minime sentiret, sed aliquando etiam igne ureretur 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 referebat.

† Cheyne, *English Malady*, &c.

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 its usual beating. He composed himself on his back, and lay in a still posture for some time; 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

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 farther 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 foregoing instances, we perceive the astonishing power which certain individuals appear to have possessed over their own bodily organization; and I am now going to bring under the view of the reader a still more incredible power, treated of by many authors, which is said to enable one individual, by an energetic effort of volition, to produce very extraordinary effects upon the corporeal organism of another. The existence of such a power was maintained by several ancient writers*; and, in modern times, by a numerous sect of physicians and philosophers, during the sixteenth and seventeenth centuries. It would be tedious to attempt a minute examination of the various opinions of this numerous class of writers, and to point out their several coincidences. Much of that which they

* Vide FIENUS, *De Viribus Imaginationis*.

assert or relate, may have been taken up too credulously, upon trust, and without due investigation; but still there are many things which they affirm upon their own experimental knowledge, or upon the credible testimony of others, and these deserve a serious consideration. Of these authors, I may mention, as the most eminent, Pomponatius, * Rodolphus Goclenius, † Athanasius Kircher, ‡ Van Helmont, § Sir Kenelm Digby, § William Maxwell, ¶ J. G. Burgrave, ** Sebastian Wirdig, ††

* PETRUS POMPONATIUS, *De Incantationibus*. Basil, 1667.

† ROD. GOCLĒNI *Tract de Magnet. Vuln. Curat.* Marburgi, 1608, et Francof. 1613.

‡ ATHAN. KIRCHER, *Magnes, sive de Arte Magnetica*. Colon. 1643, et Rom. 1654.—*Magneticum Natura 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, *Medicina Magnet. libri tres, &c.* Frankf. 1679,

** J. G. BURGRAVE, *Biolyohnium, seu Lucerna vita, 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.

Joannes Bohnius, * &c. All of these writers, and many others, assumed 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 certain perceptible effects upon the organism of other living beings, even at a considerable distance.

This last 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

* JOANNES BOHNIUS, *De Spiritum 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 Nettesheim, *De Occulta Philosophia*; Christopher Irving; N. Papin; Fludd, and a variety of others, who have either written expressly upon the subject, or, at least, incidentally alluded to it.

† Petrus Pomponatius was born at Mantua in 1462, and died in 1525. He was Professor of Philosophy at Padua.

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." *

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. †

* "Possibile est apud me, quod homo habeat talem dispositionem qualem diximus. 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.

† "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 already 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 aliquod impertiri.*"—L. iv. dial. 5.

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 magnetisers: 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. *

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 Nettesheim, 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 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.

* "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.

It must not be concealed, however, that Pomponatus ascribes a much more comprehensive 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 modern discovery of Animal Magnetism, as Van Helmont;† indeed, in perusing some parts of his works, we might almost conceive that we were occupied with the lucubrations of some disciple of Mesmer. His treatise,

* “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. —In speaking of Van Helmont, the learned Conringius says: “Helmontio multum debemus, quod philosophantium sui ævi errores acriter perstringendo, atque impugnando, excitavit torpentia ad naturalem philosophiam ingenia, et post Verulamium ad experimenta à nugacissimis quandoque ratiocinationibus revocavit.”—H. Conringii, *Introduct. in Univers. Art. Medic.* l. 23.

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 considerable 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 shews 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,

* Magnetismus, quia passim viget, præter nomen, nil novi continet; nec paradoxus nisi iis qui cuncta derident, et in Satanae dominium ablegant quæcunque non intelligant.

† Sic vocitamus eam occultam coaptationem qua absens in

he designates by the name of the *Magnale 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 the will. 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, the author proceeds to say, that he had hitherto delayed the communication of

absens per influxum agit, sive trahendo vel impellendo fiat.—Sect. 69.

* Igitur in sanguine est quaedam potestas ecstática, quae si aliquando ardente 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.—Sect. 76.

Eadem vero anima, magica virtute non nihil expergefata, extra suum ergastulum, in aliud distans objectum solo nutu agere posse, per media deportato ; in eo nempe sitam esse totam basin magiae naturalis, nullatenus autem in ceremoniis variisque superstitionibus.—Sect. 122.

Postremo est virtus magica a corpore quasi abstracta, quae fit excitamento interioris potestatis animae, unde fiunt potentissimae procreationes et validissimi effectus, et per phantasiam suam agit, et quo spiritualior eo potentior.—Sect. 157.

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 remote 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.†

Van Helmont 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 imagi-

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

† To this may be added our ignorance of the causes of Gravitation, of the common Magnetism, of Electricity, &c. The day, perhaps, is not far distant, when the remarkable anticipation of Kant will be realised, and when it will be generally recognised and admitted, that all of these phenomena are the product of one single and simple principle, differently modified.

nation of the individual who gathers, prepares, or administers 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 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—at least in its essential points—as we shall

* *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.—Sect. 172.*

afterwards see, is quite coincident with the modern doctrine of Animal Magnetism introduced by Mesmer, and established by the numerous experiments and observations of his successors.

There is nothing more striking, and probably to most persons, upon a first view, 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 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 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 I 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 that the effects of their operation may be impeded by the resistance of that which is operated upon. A magician† will operate with much more certainty upon weak than upon robust beings; because the power of operating effectually by means of volition has its limits, and he who possesses energy of mind can easily resist it.‡

* Est ergo tertia actio spiritibus incorporeis propria, qui non requirunt ad agendum radium directum, nec aspectum subjecti, nec ejus propinquitatem, dispositionem aut colligationem; sed agunt solo nutu potestativo, longe vi influentiali efficaciore.—*Act. Regimin. Sect. 39.*

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

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

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 mean time, 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 at length 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

* *Promissa Auctoris*, col. iii. sect. 7.

investigation. But the style in which most of these treatises were written, was so shrouded in mystical expression ; the vague 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 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. About that period, too, chemical science, and its application to medicine, began to be cultivated with great zeal, and prosecuted with eminent success ; and it was not to be expected that much attention should be devoted to a subject so remote from the fashionable scientific pursuits of the age. On the contrary, the magnetic authors gradually came to be generally regarded as idle visionaries and 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, were 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 undisturbed, 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 attention of philosophers upon the Continent, and many of the most extraordinary opinions they maintained were almost daily receiving fresh confirmation from experience, 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.

I am quite aware that attempts may still be made, by the incredulous, to get rid of these authorities in a short and easy way, by representing them as quacks, mystics, and visionaries—a charge which is frequently brought against all those individuals who maintain uncommon opinions, or who adopt a mode of practice different from that which is sanctioned by their professional brethren. But now we are enabled to subject the obnoxious tenets to the test of experiment; and in all cases it is surely more rational and philosophical to investigate the truth of certain opinions, and the reality or possibility of certain facts, than to evade all inquiry, and endeavour to excite prejudice by the employment of silly and preposterous ridicule, or by using opprobrious names. If Van Helmont merits the name of quack, what physician of su-

perior attainments can hope to escape the imputation of quackery? Opinions supported by evidence, however, cannot be invalidated by any such irrational mode of opposition; and many of the opinions I have noticed are not only corroborated by some striking natural analogies, but confirmed by unquestionable and unequivocal facts. Similar opinions, too, were embraced, at a later period, by authors of a much more popular character, who did not hesitate to maintain them openly, and to give good reasons for the faith that was in them. As an instance, I shall take the liberty of laying before the reader an exceedingly curious passage from the works of a very ingenious old English writer, which, I think, will sufficiently prove that some, at least, of the facts which are said to have been elicited by the magnetic practice, are not quite such mere visionary chimeras of modern mystics, as many persons, not conversant with the subject, may have been induced to suppose. The author to whom I allude is Joseph Glanvill, with whose entertaining and instructive writings some of my readers may be acquainted; and who relates, as will be perceived, with great confidence, the following remarkable and amusing story.

“ That one man should be able to bind the thoughts of another, and determine them to their

particular objects, will be reckoned in the first rank of impossibilities :* Yet by the power of advanced imagination, it may very probably be effected ; and story abounds with instances. I'll trouble the reader but with one ; and the hands from which I had it, make me sure of the truth on't. There was very lately a lad in the University of Oxford, who being of very pregnant and ready parts, and yet wanting the encouragement of preferment, was by his poverty forced to leave his

* Dr Bertrand mentions two very curious facts, falling within his own experience, which seem to prove that somnambulists are capable of penetrating the thoughts of others with whom they are placed *en rapport*. In performing upon his first somnambulist, the process by means of which he was accustomed to awaken her, with a firm determination, at the same time, that she should not awake, she was instantly seized with violent convulsions. On his enquiring what was the matter, she answered, " How ! you bid me awake, and you dont wish me to awake."

The other example is the following :—A poor woman, uneducated and unable to read, was said to be capable, in somnambulism, of understanding the meaning of words, of the signification of which she was ignorant when awake ; and, in point of fact, she explained to Dr Bertrand, in the most exact and ingenious manner, what we ought to understand by the word *encephalon*, which he proposed to her ; a phenomenon which, unless we assume the hypothesis of an accident as difficult to admit as the supposed faculty, can only be explained by acknowledging that this woman read, in the very thoughts of the doctor, the signification of the word about which she was interrogated.

This fact of the intimate *rapport* existing between the operator and the patient, may afford us a key to many of the mysteries of Animal Magnetism ; but it is not the less extraordinary in itself.—BERTRAND, p. 439.

studies there, and to cast himself upon the wide world for a livelihood. Now, his necessities growing daily upon him, and wanting the help of friends to relieve, he was at last forced to join himself to a company of *vagabond Gypsies*, whom occasionally he met with, and to follow their trade for a maintenance. Among these extravagant people, by the insinuating subtilty of his carriage, he quickly got so much of their love and esteem, as that they discovered to him their mystery; in the practice of which, by the pregnancy of his wit and parts, he soon grew so good a proficient, as to be able to out-do his instructors. After he had been a pretty while well exercised in the trade, there chanced to ride by a couple of scholars, who had formerly been of his acquaintance. The scholars had quickly spied out their old friend among the Gypsies, and their amazement to see him among such society had well-nigh discovered him; but by a sign he prevented their owning him before that crew; and taking one of them aside privately, desired him with his friend to go to an inn, not far distant thence, promising there to come to them. They accordingly went thither, and he follows. After their first salutations, his friends inquired how he came to lead so odd a life as that was, and to join himself with such a cheating, beggarly company? The scholar-Gypsy, having given them an account

of the necessity which drove him to that kind of life, told them that the people he went with were not such imposters as they were taken for, but that they had a traditional kind of learning among them, and could do wonders by the power of Imagination, and that himself had learnt much of their art, and improved it further than themselves could. And to evince the truth of what he told them, he said he'd remove into another room, leaving them to discourse together; and upon his return tell them the sum of what they had talked of; which accordingly he performed, giving them a full account of what had passed between them in his absence. The scholars being amazed at so unexpected a discovery, earnestly desired him to unriddle the mystery; in which he gave them satisfaction, by telling them that what he did was by the power of Imagination, his Fancy *binding* theirs; and that himself had dictated to them the discourse they held together while he was from them: That there were warrantable ways of heightening the Imagination to that pitch as to bind another's; and that when he had compassed the whole secret, some parts of which he said he ~~was~~ yet ignorant of, he intended to leave their company, and give the world an account of what he had learned."*

* Lord Bacon (long before Glanvill), in his *Sylva Sylvarum* (Century x. sect. 946), tells the following story confirmative of the same principle.

Such is the story told by Glanvill, an author perfectly worthy of all credit, who afterwards maintains that this strange power of the imagina-

"I related one time to a man that was curious and vain enough in these things, that I saw a kind of juggler, that had a pair of cards, and would tell a man what card he thought. This pretended learned man told me, it was a mistaking in me; 'for,' said he, 'It was not the knowledge of the man's thought, for that is proper to God, but it was *the enforcing of a thought upon him, and binding his imagination* by a stronger, that he could think no other card.' And thereupon he asked me a question or two, which I thought he did but cunningly, knowing before what used to be the feats of the juggler. 'Sir,' said he, 'do you remember whether he told the card the man thought, himself, or bade another to tell it?' I answered, as was true, that he bade another tell it. Whereunto he said, 'So I thought; for,' said he, 'himself could not have put on so strong an imagination; but by telling the other the card, who believed that the juggler was some strange man, and could do strange things, that other man caught a strong imagination.' I hearkened unto him, thinking for a vanity he spoke prettily. Then he asked me another question. Saith he, 'Do you remember, whether he bade the man think the card first, and afterwards told the other man in his ear what he should think; or else that he did whisper first in the man's ear that should tell the card, telling that such a man should think such a card, and after bade the man think a card?' I told him, as was true, that he did first whisper the man in the ear, that such a man should think such a card: upon this the learned man did much exult and please himself, saying, 'Lo, you may see that my opinion is right; for if the man had thought first, his thought had been fixed; but the other imagining first, bound his thoughts.' Which, though it did somewhat sink with me, yet I made it lighter than I thought, and said, I thought it was confederacy between the juggler and the two servants; though, indeed, I had no reason so to think, for they were both my father's servants, and he had never played in the house before."

tion is no impossibility, and contends that this extraordinary influence seems no more unreasonable than that of "one string of a lute upon another, when a stroke on it causeth a proportionable motion in the sympathizing consort, which is distant from it, and not sensibly touched."*

In the sequel of this publication, I shall have occasion to bring forward many stories equally strange, marvellous, and incredible—stories grave-

* A still more curious observation occurs in Gardiner's *Music of Nature* :—"It has been found that, in a watchmaker's shop, the time-pieces or clocks, connected with the same wall or shelf, have such a sympathetic effect in keeping time, that they stop those which beat in irregular time; and if any are at rest, set a-going those which beat accurately."

The sympathy between stringed musical instruments, alluded to by Glanvill, although more familiar to us, is perhaps as extraordinary as any of the phenomena of Animal Magnetism. This subject brings to my recollection the following affecting anecdote, related by Kotzebue in his *Journey to Paris*. A young lady used to play upon the harpsichord, while her lover accompanied her on the harp. The young man died, and the harp had remained in her room. After the first excess of her despair, she sank into the deepest melancholy, and some time elapsed before she could again sit down to her instrument. At last she did so—gave some touches, and, hark! the harp, tuned alike, resounded in echo. The poor girl was at first seized with a secret shuddering, but soon felt a kind of soothing melancholy. She became firmly persuaded that the spirit of her lover was softly sweeping the strings of the instrument. The harpsichord, from this moment, constituted her only pleasure, as it afforded to her mind the certainty that her lover was still hovering about her. One of those unfeeling men, who want to know and clear

ly told by learned, intelligent, and sober men, physicians, professors in universities, and others, all of them persons of unimpeachable veracity, having no conceivable motive for falsehood, honestly relating what fell under their own observation, or that of other persons equally credible, boldly publishing the results to the world at large, anxiously challenging criticism, and loudly calling upon physicians and philosophers to investigate the alleged facts. Let my readers, however, remember that I do not insist upon their conceding a blind and implicit belief to any one of these stories : I only request them to pause and inquire before they determine to reject them ; and to exercise a little of that academical scepticism, which teaches us to suspend our judgment until we have obtained rational conviction.

up every thing, once entered her apartment ; the girl instantly begged him to be quiet, for at that very moment the dear harp spoke most distinctly. Being informed of the amiable illusion which overcame her reason, he laughed, and, with a great display of learning, proved to her by experimental physics, that all this was very natural. From that instant, the young lady grew melancholy, drooped, and soon after died.!

CHAPTER VII.

THERE are some persons whose minds are so sceptically constituted, as to find great difficulty in bringing themselves to believe any uncommon fact, or series of facts, however incontrovertibly established by evidence, unless they are placed in a situation, at the same time, to give a rational and apparently satisfactory explanation of the principles upon which they depend. Such persons generally continue sceptics both in regard to religion and to philosophy. But the explanation required by these individuals is by no means essential to our conviction of the reality of any phenomenon, nor, in many cases, can it be easily afforded. Facts are every day believed upon observation, or upon testimony, which we should be exceedingly puzzled, if called upon to account for. In the Introduction to this work, I have shewn that there are facts which had been observed during thousands of years, before even their existence was generally admitted. A common proverb tells us that "there is nothing new but what has been forgotten."

The phenomena of Animal Magnetism are of a

nature so very extraordinary, that it is exceedingly difficult to account for them upon any rational and satisfactory hypothesis. The difficulty, too, has been greatly increased by the very irrational manner in which the subject has been hitherto treated by many learned men, and especially by professional physicians. With such, for a long period, the great and sole object appears to have been to get rid of the facts altogether, by argument, by ridicule, by contempt, or by any means by which they might be brought into general discredit. They determined not even to investigate, far less to admit the reality of that which, had they taken the trouble to make the slightest inquiry, they would have found completely demonstrated. The advocates of the doctrine, on the other hand, were compelled, by this obstinate hostility and incredulity of the learned, to multiply their experiments and observations, until they had obtained such a body of evidence as should constitute an insubvertible basis for their system. This, at least, they must be admitted to have accomplished in the most satisfactory manner; for it is quite impossible for any candid inquirer to study even one half of what has been written upon this subject, without having complete conviction forced upon his mind. Indeed, scepticism, in this matter, is now confined entirely to those persons who obstinately refuse to inquire.

These circumstances, however, have not been very favourable for the philosophical investigation of the subject. The individuals who, at first, addicted themselves to Magnetism, were better qualified for the accurate observation of facts, than for the construction of satisfactory theories. The opponents, too, certainly demanded too much, when they insisted upon such explanations. Mathematical reasoning is wholly inapplicable to the phenomena in question, nor could they be explained upon the ordinary principles of Physics or Physiology. There were serious difficulties in the way of the investigation of these facts, the nature of which I cannot better express than in the language of Dr Roget.

“ In the investigation of the powers which are concerned in the phenomena of living beings,” says that distinguished philosopher, “ we meet with difficulties incomparably greater than those that attend the discovery of the physical forces by which the parts of inanimate nature are actuated. The elements of the inorganic world are few and simple; the combinations they present are, in most cases, easily unravelled; and the powers which actuate their motions, or effect their union and their changes, are reducible to a small number of general laws, of which the results may, for the most part, be anticipated and exactly determined by calcula-

tion. What law, for instance, can be more simple than that of gravitation, to which all material bodies, whatever be their size, figure, or other properties, and whatever be their relative positions, are equally subjected; and of which the observations of modern astronomers have rendered it probable that the influence extends to the remotest regions of space? The most undeviating regularity is exhibited in the motions of those stupendous planetary masses, which continually roll onwards in the orbits prescribed by this all-pervading force. Even the slighter perturbations occasioned by their mutual influence, are but direct results of the same general law, and are necessarily restrained within certain limits, which they never can exceed, and by which the permanence of the system is effectually secured. All the terrestrial changes dependent on these motions partake of the same constancy. The same periodic order governs the succession of day and night, the rise and fall of the tides, and the return of the seasons; which order, as far as we can perceive, is incapable of being disturbed by any existing cause. Equally definite are the operations of the forces of cohesion, of elasticity, or of whatever other mechanical powers of attraction or repulsion there may be, which actuate, at insensible distances, the particles of matter."

After observing that all these phenomena, to-

gether with those of Chemistry, of Light, of Heat, of Electricity, and of Magnetism, "have been, in like manner, reduced to laws of sufficient simplicity to admit of the application of mathematical reasoning;" and that, "to whatever department of physical science our researches have extended, we every where meet with the same regularity in the phenomena, the same simplicity in the laws, and the same uniformity in the results;" the author proceeds:

"Far different is the aspect of living Nature. The spectacle here offered to our view is every where characterised by boundless variety, by inscrutable complexity, by perpetual mutation. Our attention is solicited to a vast multiplicity of objects, curious and intricate in their mechanism, exhibiting peculiar movements, actuated by new and unknown powers, and gifted with high and refined endowments. In place of the simple combinations of elements, and the simple properties of mineral bodies, all organic structures, even the most minute, present exceedingly complicated arrangements, and a prolonged succession of phenomena, so varied and so anomalous, as to be utterly irreducible to the known laws which govern inanimate matter."—Dr Roget's *Bridgewater Treatise*, vol. i. pp. 7, &c.

"If we are to reason at all, we can reason only

upon the principle, that for every effect there must exist a corresponding cause; or, in other words, that there is an established and invariable order of sequence among the changes which take place in the universe. But though it be granted that all the phenomena we behold are the effects of certain causes, it might still be alleged, as a bar to all further reasoning, that these causes are not only utterly unknown to us, but that their discovery is wholly beyond the reach of our faculties. The argument is specious only because it is true in one particular sense, and that a very limited one. Those who urge it do not seem to be aware that its general application, in that very same sense, would shake the foundation of every kind of knowledge, even that which we regard as built upon the most solid basis. Of causation, it is agreed that we know nothing; all that we do know is, that one event succeeds another with undeviating constancy," &c.

This is sound philosophy, and the most zealous Animal Magnetist could not object to its application to his doctrine. The phenomena of the living organism are unquestionably much more difficult of explanation than those of inorganic matter; but this difficulty ought not to deter us from collecting and endeavouring to classify the facts. And, after all, what do we know of the common Magnetism, of Electricity, of Galvanism, &c. but the facts

which have been elicited by the labours of experimental inquirers, and the laws which have been deduced from their generalization? And would it be considered a sufficient reason for the absolute rejection of any of these facts, or of a whole class of facts, that we are still ignorant of the principle upon which they depend, and perhaps may never become acquainted with it? If we carry the undisputable phenomena of Animal Magnetism along with us, and regard them as calculated to open up many new and interesting views in the physiology of man, it is quite possible that, in proportion as we advance in our knowledge of the subject—in proportion as we succeed in ascertaining the conditions of their reality—we may ultimately become enabled to give as satisfactory an explanation of the principles upon which these phenomena depend, as in the case of any other science, or as is compatible with the limited stretch of our faculties. But to discourage all investigation is not the best way to extend our knowledge of Nature.

In order, in some measure, however, to gratify those who require some theoretical explanation of all natural phenomena, and to shew to all that the professors of Animal Magnetism are not entirely destitute of rational principles and scientific analogies in confirmation of the doctrines they maintain, I shall briefly direct the attention of the reader to

the following philosophical view of the subject. Whether it shall be thought satisfactory or not, I beg leave to remind him, that the reality of the facts does, in no degree, depend upon the accuracy of the explanation.

I formerly observed, that it is through the medium of the nerves that the vital principle appears to be acted upon—that they are the source of the animal affectability—the connecting link between matter and mind; and that many eminent physicians and physiologists had found themselves compelled to assume the fact of the permeability of the nerves, and also the existence of a nervous fluid, without any actual demonstration of their reality. Indeed, this supposition of a nervous secretion and circulation, with its utmost difficulties, seems much more rational and satisfactory than any other hypothesis with regard to their nature and action. It has been maintained, upon speculative grounds, by the ablest physiologists, and enables us to account for many phenomena which appear to be otherwise inexplicable. But this hypothesis has been almost reduced to a certainty, in recent times, by the interesting researches of Reil, Autenrieth, Humboldt, Burdach, Bichat, Beclard, and others, who have gone far towards the actual demonstration of the fact of the secretion and circulation of a nervous fluid, and even rendered it extremely

probable that this circulating fluid is capable of an external expansion, which takes place with such energy as to form an atmosphere, or sphere of activity, similar to that of electrical bodies. If it be said that this is a mere hypothesis, yet it must be admitted that it is an hypothesis, not only very probable in itself, but calculated to enable us to give a scientific explanation of many facts which cannot be accounted for upon any other principle.* Moreover, this hypothesis may now be considered as having been almost completely demonstrated by the researches of the celebrated French anatomist and physiologist, Bécclard. This skilful experimentalist having cut a nerve of considerable size, adjoining a muscle, which induced paralysis in this part, perceived the contractile action reappear, when he approached the two ends of the nerve at the distance of three lines. It is quite evident

* I have somewhere read of late, although I cannot, at this moment, refer to my authority, that a recent experimentalist had succeeded in injecting the nerves with some fluid. I believe there are other physiologists who maintain, that the nerves are merely the conductors of some fluid from the brain and spinal chord to the different parts of the body. This hypothesis would equally suffice for our explanation.

Dr Roget (*Bridgewater Treatise*, vol. ii. p. 367), observes that "the velocity with which the nerves subservient to sensation transmit the impressions they receive at one extremity, along their whole course, exceeds all measurement, and can be compared only to that of electricity passing along a conducting wire."

here, that an imponderable substance, that is to say, a fluid of some kind, traversed the interval of separation, in order to restore the muscular action. Another experiment of the same philosopher not only proves the existence of this fluid, but seems also to demonstrate its striking analogy to electricity. Having frequently placed a magnetic needle in connexion with the extremity of a divided nerve, he constantly perceived the deviation of the pole of the needle, caused by the reciprocal attraction of the two opposite fluids.* To all this may be added the experiments which have been made with regard to the action of Galvanism upon dead men and other animals ; as also the galvanic phenomena exhibited by a pile composed of alternate layers of brain and muscle.

Farther : It appears, says Dr Ure, that the gal-

* I do not know in what work of Beclard's these experiments are detailed, but I find them alluded to in a memoir transmitted to the Royal Academy of Berlin, by Dr Leonard, entitled :—*Magnetisme, son histoire, sa theorie*, &c. published at Paris in 1834. Some experiments are also said to have been made, with a view to demonstrate, more conclusively, the intimate analogy that exists between the nervous fluid and electricity ; but it is sufficient for me to have drawn attention to the subject, and I shall, therefore, leave the farther prosecution of it to more competent inquirers. I may, however, refer the reader to Haller's *Elements of Physiology*, to Mr Abernethy's *Physiological Lectures*, and to Dr W. Philip's work on *The Vital Functions*. The experiments of the last mentioned author are particularly curious and interesting.

vanic energy is capable of supplying the place of the nervous influence, so that, while under it, the stomach, otherwise inactive, digests food as usual. Certain experiments clearly shew a remarkable analogy between galvanic electricity and nervous influence, as the one may serve as a substitute for the other. When the lungs are deprived of nervous influence, by which their function is impeded, and even destroyed, when digestion is interrupted, by withdrawing this influence from the stomach, these two vital functions are renewed by exposing them to the influence of the galvanic trough.*

If we are justified, then, in assuming the existence of this nervous fluid—whether secreted or merely conducted by the nerves—of its analogy to

* I understand that Professor Keil of Jena, has recently made some very interesting experiments tending to demonstrate the susceptibility of the nervous system for the magnetic influence, and the efficacy of the magnet in the cure of certain diseases. The result of these experiments, I believe, was communicated by the Professor to a meeting of the Royal Society of London, about the beginning of the year 1833.

Some of the late German Journals give an account of a singular machine, recently invented by a person of the name of Portius, at Leipsic, called the *Psychometer*. The object of this machine is to indicate the temperament and character of each individual. At first, we should be apt to look upon such a machine as a mere toy, but it is seriously spoken of, and described as exhibiting great accuracy. It is constructed upon the principle of a supposed affinity existing between the nervous fluid of the animal body, and the electric and magnetic fluids.

the other known, active, and imponderable fluids, and of its capability of external expansion, as in the case of electricity; it does not appear to be a very violent or unwarrantable proceeding to extend the hypothesis a little farther, and to presume that it is also capable of being transmitted or directed outwards, either involuntarily, or by the volition of one individual, with such energy as to produce certain real and perceptible effects upon the organism of another, in a manner analogous to what is known to occur in the case of the *Torpedo*, the *Gymnotus electricus*, &c. Indeed, the fact of the actual transference of nervous or vital power, in certain circumstances, from one individual to another, is now admitted by some of our own most eminent medical writers, amongst others by the learned Dr Copland. In his *Dictionary of Practical Medicine*, this experienced physician observes, that "this fact"—that of the transference of vital power—"however explained, has been long remarked, and is well-known to every unprejudiced observer; but," he adds, "it has been most unaccountably overlooked in medicine." The learned Doctor gives several instances which, along with others recorded in history, leave no doubt of the fact. Now, admitting that such a transference takes place—where, I would ask, does this vital power reside, and how is the transference in question effected? Is it not

pretty evident that this power resides in the nerves, and that it is transmitted from one individual to another, in certain circumstances, in consequence of some connexion between their nervous systems, and in a manner analogous to heat or electricity? And do not these circumstances give a powerful confirmation to the views of the Animal Magnetists?

Physical science presents us with many facts analogous to the transference in question. Take, for example, the case of the transmission of heat: "If two solid bodies" — I quote from Dr Lardner — "if two solid bodies, having different temperatures, be placed in close contact, it will be observed that the hotter body will gradually fall in temperature, and the colder gradually rise, until the temperatures become equal. This process is not, like radiation, sudden, but very gradual; the colder body receives increased temperature slowly, and the hotter loses it at the same rate. Different bodies, however, exhibit a different facility in this gradual transmission of heat by contact. In some it passes more rapidly from the hotter to the colder; and in others, the equalization of temperature is not produced until after the lapse of a considerable time." Similar phenomena are exhibited in Magnetism, Electricity, Galvanism, &c.; and there appear no good grounds for holding it to be impos-

sible, or improbable, that nervous energy may, in certain circumstances capable of being ascertained, be transmitted from one animal body to another, in some analogous manner; on the contrary, experience, without the aid of theory, seems to afford us abundant proofs that such a transmission does occasionally take place.

The foregoing theory, if acknowledged to be founded upon just *data*, might enable us to account for many of the more ordinary phenomena of Animal Magnetism, and particularly for the sanative efficacy of the processes; considering this efficacy to depend upon a transference of vital energy, and a consequent restoration of the vital functions, through the medium of the nervous system, to a more healthy state of action. There appears to be nothing unreasonable in supposing that health may be communicated in the same manner as disease; and, as in all morbid states of the system, the nerves are always more or less affected, if not the actual seat of the malady, it does not seem irrational to conclude, that their tone may be restored by the action of a healthy organism, and fresh vigour thus diffused throughout the whole frame. Some medical writers, I believe, have spoken of a contagion of health, as well as of disease.*

* It is inconceivable that any persons acquainted with the most ordinary phenomena of physical science, and especially

It is but fair to observe, however, that there is a variety of other magnetic phenomena—and these

with the changes produced upon inanimate bodies by apparently trivial and inadequate causes, should obstinately deny the possibility of the facts of Animal Magnetism—the effects, perhaps, of analogous causes upon the living organism—without condescending to make any inquiry into their reality. To all such I would beg leave to submit the following observations.

The superposition of two different metals produces Galvanism. The friction of a plate of glass generates Electricity. M. Häüy discovered that the simple pressure of the hand upon a tourmaline rendered it electrical. The point of contact confers all its force upon attraction. Iron attaches itself to the magnet by the point of contact, and becomes magnetic itself by friction: it follows the direction of the magnet at a distance, even across intermediate solid bodies. The touch developes caloric. Friction causes the wheels of a carriage to take fire. Phosphorus emits light in consequence of friction. Chemistry teaches us that friction causes surprising detonations. The union of hydrogen with an elementary substance which has been called *cyanogen*, produces the *hydrocyanic acid*. This acid, more commonly called the *Prussic*, possesses the most singular physical properties. It freezes at 15°, and begins to boil at 26°—an interval so short, that, if a single drop be exposed to the air, the evaporation of a part produces a sufficient degree of cold to freeze the rest. In its pure state, this acid is the most deadly poison. The smallest drop, placed on the tongue of an animal, kills it like a bullet or a thunderbolt. The same substance which, when combined with hydrogen, produces this frightful poison, when united with oxygen produces fulminating powders.

Iron filings, immersed in a liquid as cold as itself, instantly produce a violent ebullition, and vapours susceptible of inflammation. Nay, this metal, solid as it is, is afterwards destroyed, in some measure, by the above fluid, and unites with it in such a manner, as to pass with it through the closest filter. Another

by much the most extraordinary—as will be seen in the sequel, of which this theory does not imme-

limpid liquor suddenly dissolves this union, and causes the iron to fall to the bottom of the vessel in the form of an impalpable powder.

M. Döbereiner, by projecting a mixture of oxygen and hydrogen on a small mass of spongy platinum, observed that this simple contact combines the two gases, and produces such a degree of heat as to redden the metal—thus producing a red heat by means of a blast of cold air. Oxygenated water, when thrown upon very oxidable metals (such as arsenic), causes them to burn and emit light—thus presenting the curious spectacle of combustion produced by water: a single drop is sufficient to produce the effect. On the contrary, when thrown upon gold, silver, or platinum, the oxygen suddenly becomes free, with an explosion, and restores the water to its former state, without producing any alteration on the metal. The oxides of the same metals produce this effect with still greater force.

Baron Cuvier observes, that “all those innumerable substances whose action maintains the admirable and complicated spectacle of animated nature, those substances which, independently of the body which has produced them, are still so astonishing in the variety of their effects, whether as delicious aliments or formidable poisons—whether as objects or instruments of such numerous and such various arts,—only differ from each other, at least in the eye of chemistry, in the proportion of three or four elements. A little more or a little less of hydrogen or of carbon, is all the distinction we at present see between that strychnia which kills like thunder, and those savoury and wholesome fruits which constitute the delicacies of our tables; and, what is still more astonishing, it is all that distinguishes that blood which conveys nutrition and life to all parts, those nerves which connect us with external nature, those muscles which give us dominion over her. These are effects greater than their apparent causes; which gives us sufficient reason for believing that they have causes which are still concealed from our view.”

diately appear calculated to afford any satisfactory or complete explanation. With regard to these, therefore, it will be best, perhaps, for us, in the mean time, to avoid all premature theory, and to content ourselves with collecting, arranging, and classifying the facts, until we shall, at length, become enabled to obtain some insight into the principle upon which they depend. For this reason, I shall proceed, in the next, and some of the subsequent chapters, to present the reader with an historical deduction of the magnetic doctrines and practice, and shall afterwards endeavour to make him acquainted with all the more remarkable phenomena which have been elicited by experiment.

By simple contact, cotton and woollen articles are infected, and carry contagion from one hemisphere to another, &c.

Now, with what efficacy may not the same, or, at least, analogous causes, act upon living bodies, on irritable and sensible parts, on the nerves, the brain, the phrenic plexus, &c.? At all events, why so readily admit the reality of the phenomena in the one class of cases, and so obstinately deny it in the other? Are not both equally susceptible of proof? Do they not equally depend upon evidence? Are not their causes equally obscure?

CHAPTER VIII.

IN all ages, and amongst all nations, phenomena similar to those which are now known to be produced by Animal Magnetism have been occasionally observed. The ancient writers, indeed, are full of allusions which, when carefully examined, leave no room to doubt, that some knowledge of these processes, probably, and certainly of these susceptibilities, obtained in early times. Amongst other inexplicable phenomena, how are we otherwise to explain, in any thing 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 immediately ascribed to the miraculous influence of some beneficent presiding deity? At a subsequent period, indeed, the reality of these facts was either entirely denied, or the singular effects in question were attributed to imagination and delusion, or to the impositions of the priesthood, aided by the ignorance and credulity of the people. Other causes, into which I am unwilling to enter at present,

tended to strengthen and perpetuate the scepticism entertained upon this subject. I may observe, however, that to deny a fact is not to refute it, nor can it be invalidated by ascribing it to an erroneous or inadequate cause. Many of those miracles, as they were called, were probably just as real as those said to have been performed at the tomb of the Abbé Paris, and in other instances, and may be considered as depending upon the principles I formerly explained. And 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 that they 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 Greek and Roman authors, occasional expressions, which cannot well be explained, unless upon the supposition, that some memory, at least, of these very ancient practices had been preserved by tradition.

In the following verses of Solon, we have, so far as I have been able to discover, the earliest and most direct testimony to the practice of manipulation, as a sanative process, to be found in an-

tiquity. It seems 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 various allusions to this process which occur among the ancients.

Πολλάκι δ' ἐξ ὀλίγης ὀδύνης μέγα γίγνεται ἄλγος

Κοῦκ ἂν τίς λύσαιτ' ἤπια φάρμακα δοῖς.

Τὸν δὲ κακῆς νόσοισι κυκώμενοι ἀργαλείαις τε

Ἀψάμενος χειρῶν, ἄνφα τίθησ' ὑγιῆ.

SOLON, *apud Stobæum*. *

The following remarkable expressions occur in the *Amphitryo* of Plautus: *Quid, si ego illum tractim tangam, ut dormiat*. These expressions are evidently used euphemistically or ironically, for “What if I should 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 ducta,*

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

quæ pustiones 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 considered ambiguous. Quidni ego feliciorem putem Mucium, qui sic tractavit ignem, quasi illum manum tractatori præstitisset.—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. Sects. 5, 6.

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. The theory of Animal Magnetism, indeed, appears to have been known in the East long before it was ever thought of in Europe. It is said that there are individuals in Asia who make the practice of that theory their profession, and that these persons are persecuted by the Mollahs.

When we reflect that, after the fall of the Roman Empire, literature, science, the arts, medicine, &c. took refuge in the monasteries, might we not be led to suspect that many of the secrets and practices of the ancient Egyptians, the Greeks, and the Romans, which had always been confined to the temples, may have passed into the monasteries which succeeded them, and that in them the magnetic medicine had been mysteriously preserved? Indeed, we have pretty good evidence that this was actually the case. Thiers tells us that Protogenes, priest of Edessa, cured the children, his pupils, by prayer and *the touch of his hand*; and that the monk, John, had received from God the gift of curing the gout, and of replacing dislocated limbs. The monk, Benjamin, cured all kinds of diseases by *the touch of his hand*, and anointing with holy oil, &c.*

* THIERS; *Traité de Superst.* l. vi. ch. 4.

Petrus Thyraeus, the Jesuit, in his work entitled *Dæmoniacy, hoc est de Obsessis, &c.* refers to a number of cures performed by ecclesiastics, by the imposition of the hands, and by other means analogous to the magnetic.

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 efficacy 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; some have treated the whole subject as a matter for ridicule; while 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 and unprejudiced investigation of 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 ridicule, 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, or idiosyncrasy, 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 conduct us to a more profound knowledge, and more accurate appreciation of these apparently anomalous occurrences, and thus prove highly interesting and advantageous to the study of the philosophy of man?

Some curious facts respecting the great confidence which the North American Indians place in the professors of the magical art, will be found in Hearne's Journey. Such is said to be 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 incurring 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, drooped, and died in the course of a few days !

Here we have a very simple case, in which we can have little difficulty in ascribing the whole effect produced, primarily, if not solely, to the influence of the imagination. But even here, it is conceived, we must presume that the imagination exerted a real and most remarkable action upon the nervous system of the individual. To this power, indeed—the imagination—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, as will appear hereafter, which do not admit of being explained upon this hypothesis.

The following case, in some of its features, bears a striking resemblance to the effects of Magnetism. 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 prisoners were convicted, and had sentence of imprisonment.

This trial is curious, as affording an instance of the rude belief in witchcraft, still prevalent, it would appear, 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 or technically 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 probably call them, the *magnetic* remedies.

Philosophical medicine was a subject much cultivated by the physicians of a former age; but seems now much neglected by the profession, as Dr Heberden remarks in his *Commentaries*. It seems to have been now almost entirely superseded by a mere empirical practice. Upon the subject of the psychical or magnetic remedies, just alluded to, however, I must beg permission to make a quotation from a work by an eminent foreign physician, whose talents and experience entitle his observations to be treated with great attention and respect.

“It is a proof,” says Dr Ziermann,* “of partial and narrow views, which constitutes a great and a just reproach to medical science in our days; that

* Steiglitz's *Ideen über den Thierischen Magnetismus*. *Beleuchtet* von Dr J. C. L. Ziermann. Hanover, 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 pretty fully admitted the reality of 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—nay, he even went so far as to recommend it in all *desperate* cases; but his book, upon the whole, was composed in a hostile spirit, and it was evident that he viewed the magnetic practice with considerable prejudice and professional jealousy.

its professors should conceive that all diseases must be cured merely by medicinal preparations. This opinion certainly betrays as great a deficiency of science and experience, as is objected to those who rely exclusively 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, 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 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 also 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 how, 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 knowledge 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.”*

In the following chapter, I propose to bring under notice some instances of individuals, who are

* Another eminent German physician makes the following excellent observations on the *Medicina Psychica*.

“It is a much more difficult matter to apply the psychical method of cure, than to write a prescription. Dr Kreysig says, in his classical work on the *Diseases of the Heart*: Psychical medicine cannot be comprehended in words or rules; it presupposes a theoretico-practical knowledge of the human heart, which it is the imperative duty of the physician to acquire, and the first rule for its application is this:—Obtain the entire confidence of the patient by thy whole conduct, so that he firmly relies upon thy power and thy will to relieve him. When the physician has accomplished this, and knows how to preserve the advantage by his intellectual and moral character, he constitutes himself a beneficent ruler and guardian of the mind of his patient; and this he must do, because all patients resemble children in mind, and require a conductor. In this first maxim lies the whole secret of psychical medicine, whose deeply penetrating effects will always remain an enigma even to ourselves. By the application of it, there arises a real *rapprochement* between physician and patient, or a certain spiritual connexion, which inspires the patient with the hope of that cure which the physician anticipates, before the reasons for this hope and anticipation are clearly perceived. This is the *res secretum* of our art, which must always render it equally beneficent and important.

See Remarks by Dr Müller, Physician to the Court at Würzburg, in the *Zeitschrift für die Anthropologie*, edited by Dr Nasse. Vol. i. p. 197.

known to have cured diseases, and to have produced various remarkable phenomena upon the human organism, by means analogous to the magnetic, previous to the discovery of Animal Magnetism, or without any knowledge of its principles.

CHAPTER IX.

ABOUT the middle of the seventeenth century, there appeared in England 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 appears to have been made by men of science, at that period, to ascertain the precise state of the facts, or to investigate the subject physiologically ; on the contrary, the effects of their treatment soon came to be regarded by some as a mere piece of jugglery, and by others as the consequence of a peculiar virtue specially conferred by Nature upon these individuals.*

* The learned Pechlinus, in his work, entitled, *Observationum Physico-Medlicarum libri tres*, Hamburgh, 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, *A Brief Account of Mr Valentine Greatrakes, &c.* London, 1666.

The efficacy of the treatment adopted by Greatrakes, is at-

The method of Greatrakes consisted in applying his hands to the diseased parts, and rubbing gently downwards. This is very similar to the most common and most simple process adopted by the present magnetizers; and it is remarkable, that the effects produced by this treatment appear to have borne a striking analogy to some of the most ordinary phenomena of Animal Magnetism, viz. increased excitement, different kinds of excretions, 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 early disciples of Mesmer.

Many interesting particulars relative to Greatrakes have been related by Joseph Glanvill—an

tested by a number of the most respectable witnesses (amongst others, by that celebrated experimental philosopher, and truly pious Christian, Mr Boyle); who also bear ample testimony to the simplicity of his manners, the general excellence of his character, and his reverence for the principles of religion. The philosophic Cudworth was among his patients, and had firm faith in the efficacy of his treatment.

author to whom I formerly referred—to whom they were communicated in letters from Dr G. R. (George Rust), Lord Bishop of Derry in Ireland. These all represent him as a simple, unpretending man, and sincerely pious. With regard to his cures, the Bishop says, “I was three weeks together with him at my Lord Conway’s, and saw him, I think, lay his hands upon a thousand persons ; *and really there is something in it more than ordinary ; but I am convinced it is not miraculous. I have seen pains strangely fly before his hands, till he hath chased them out of the body—dimness cleared, and deafness cured by his touch ; twenty persons, at several times, in fits of the falling sickness, were in two or three minutes brought to themselves, so as to tell where their pain was ; and then he hath pursued it till he hath drawn it out at some extreme part : Running sores of the king’s evil dried up, and kernels brought to a suppuration by his hand : Grievous sores of many months’ date in a few days healed : Obstructions and stoppings removed ; cancerous knots in the breast dissolved, &c.*”

“But yet,” continues the Bishop, “I have many reasons to persuade me that nothing of all this is *miraculous*. He pretends not to give testimony to any doctrine ; the manner of his operation speaks it to be natural ; the cure seldom succeeds without reiterated touches, his patients often relapse, he

fails frequently, he can do nothing where there is any decay in nature, and many distempers are not at all obedient to his touch. So that, I confess, I refer all his virtue to his particular temper and complexion; and I take his spirits to be a kind of elixir and universal ferment, and that he cures (as Dr M. expressed it) by a *Sanative Contagion*."

To these particulars communicated by the Bishop of Derry, Glanvill himself afterwards adds, "that many of those matters of fact have been since critically inspected and examined by several sagacious and wary persons of the Royal Society, and other very learned and judicious men, whom we may suppose as unlikely to be deceived by a contrived imposture, as any others whatsoever."

In short, the evidence in support of the processes and cures of Greatrakes appears to me to be as satisfactory and unobjectionable as is possible in the circumstances of the case. A mere denial cannot invalidate the facts so strongly attested, and the evidence is far beyond the reach of sophistry.*

* Since the above was written, I have seen a very curious pamphlet by Henry Stubbe, Physician at Stratford-upon-Avon, containing *An Account of Mr Greatarick and his Miraculous Cures*, with the appropriate motto, *Non ideo negare debet apertum, quia comprehendi non potest quod est occultum*. This author, an eye-witness in part, confirms, from his own experience, and that of others, all that has been said of Greatrakes in the text. The pamphlet was addressed to the celebrated Dr Thomas Willis. "I do not," says he, "relate unto you the reports of interested

A great many years afterwards, there appeared a still more extraordinary character, 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. Having taken up a notion that most diseases arose from demoniacal possession, and could be cured by exorcism, he commenced by curing some of his parishioners

monks and friars concerning things done in monasteries and private cells : An infinite number of the nobility, gentry, and clergy of Warwickshire and Worcestershire, persons too understanding to be deceived, and too honourable and worthy to deceive, will avow, that they have seen him publicly cure the lame, the blind, the deaf, the perhaps not unjustly supposed demoniacs and lepers ; besides the asthma, falling sickness, convulsion fits, fits of the mother, old aches and pains." After relating some of his own observations on the cases he had witnessed, Dr Stubbe proceeds, " I considered that there was no manner of fraud in the performances, that his hands had no manner of medicaments upon them, nor was his stroking so violent, as that much could be attributed to the friction. I observed that he used no manner of charms or unlawful words ; sometimes he ejaculated a short prayer before he cured any, and always, after he had done, he bade them give God the praise." Now, where is the imposture in all this ?

I find from the *Life of Flamsteed*, recently published, that that celebrated astronomer had also been a patient of Greatrakes ; and although he does not seem to have himself derived much benefit from the treatment, yet he, too, bears ample testimony to the reality of the cures performed upon others, and to the general efficacy of the processes. Divines, physicians, and philosophers, therefore, and those cotemporaries and eye-witnesses, all unite in giving the most unequivocal evidence in favour of Greatrakes.

in this manner, and excited considerable sensation in the neighbourhood. He went first to reside with the Bishop of Constance, and afterwards, in 1774, to the Archbishop of Ratisbon at Elwangen, where he performed a number of astonishing cures, especially among patients affected with spasmodic and epileptic complaints. The power which he appears to have possessed and exercised over the organism of his patients would be absolutely incredible, were it not supported by the most ample and most respectable evidence. A public officer took regular and copious minutes of his procedure, which were attested by many individuals of the first rank and the highest respectability. The phenomena which occurred assuredly were of the most extraordinary character; the facts, however, so far as I am aware, never were denied, nor attempted to be refuted, at the time; although, at a subsequent period, persons who had not witnessed the treatment, and could not explain these phenomena to their own satisfaction, found it most convenient, as is usual in such cases, to throw discredit upon the whole procedure, and to ascribe the effects alleged to have been produced entirely to quackery and imposture.*

* A full account of Gassner and his proceedings will be found in one of the volumes of the German Archives of Animal Magnetism (*Archiv für den Thierischen Magnetismus*).

A number of other instances might be adduced of persons who, without any knowledge of Magnetism, have cured diseases by the touch of the hand, believing themselves to have been 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 be able to 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 means of manipulation. He was visited, it is said, by multitudes, from ministers of state and noblemen down to the lowest beggars; and he cured them all indiscriminately and gratuitously. He refused every kind of recompense; and when 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

Liegnitz, of a healthy and vigorous constitution, and the best reputation. Some account of this man will be found in the second volume of Kausch ; *Memorabilien der Heilkunde*.

There was also another natural magnetizer in Germany, in recent times, of the name of Grabe, a groom, I believe, by profession, of whom I have read some published accounts. He appears to have possessed great powers of curing diseases by manipulation, and was very indefatigable and disinterested in exercising them. Although a man of perfectly good character and active beneficence, his proceedings gave great umbrage to the Faculty, at whose instance he suffered continual persecution.* At the same time, he was patronized by some medical men and other respectable individuals, who bore ample and satisfactory testimony to the propriety of his conduct, and the efficacy of his treatment.

There are, doubtless, other instances of indivi-

* Nothing can be more absurd and disgraceful than such persecution. When facts are attested by evidence, it is surely more rational to examine them philosophically, than to attempt to invalidate them by discreditable means. False statements of facts can never gain any permanent credit ; but when such statements are opposed, not by reason, but by ridicule and persecution, a considerable bias in their favour is naturally generated in the minds of all sober, and serious, and disinterested inquirers. No doctrine, probably, was ever thoroughly eradicated by the persecution of its adherents.

duals who exercised similar powers; but great pains appear to have been always taken, upon such occasions, by sceptics and interested persons, to ridicule, disparage, and discredit their proceedings, and to represent themselves as mere impostors. If we carefully and impartially weigh the evidence, however, by which the reality of their cures is attested, we cannot fail, I think, to find a strong confirmation of the propositions laid down by the old magnetic writers, relative to the sanative efficacy that may be exerted by one individual over the organism of another.

But it was not until towards the conclusion of the eighteenth century, that this most interesting inquiry was systematically revived, and that, after an ample series of experimental investigations, the remarkable efficacy of this mode of treatment by manipulation was fully developed, and firmly established by induction. For this discovery—if such we may be permitted to call it—the world is principally indebted to a man, whose character, motives, and actions 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 and impartial examination of those labours upon which his reputation, good or bad, 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 contrived to practise upon the credulity of mankind.*

* The greatest caution is requisite in perusing the statements of the opponents of Mesmer. The partial and hostile spirit is everywhere apparent, and sometimes degenerates into absolute malignity. Even the most sober of them appear to be more desirous of throwing discredit upon the system, than of boldly meeting and fairly investigating the facts. I am not aware that the slightest stigma has been attached to the moral character of Mesmer; and there can be no doubt that he was thoroughly impressed with a perfect conviction of the truth and importance of his discovery. The same conviction accompanied him in his retirement from the world, as fully appears from the accounts given of him by individuals who visited him in his latter days.

CHAPTER X.

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 is said to have manifested a decided 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 which 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 an inaugural dissertation *On the Influence of the Planets upon the Human Body*. This treatise drew down upon him the almost universal

ridicule of his professional brethren, who regarded him, from that period, as a strange and eccentric visionary; and it is probable that this first display of his natural 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 was 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 Astronomy at Vienna*; for which rea-

* Hell was born at Chemnitz in Hungary in the year 1720, and 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. François, who had the charge of the Jesuits' Observatory at Vienna, in his observations, and took an active part in promoting the establishment of an institution for experimental physics

son, 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 accomplish his object 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

in that city. Having taught the mathematics for some years at Clausenberg in Transylvania, he was recalled to Vienna, to fill the situation of astronomer and keeper of the Observatory. From 1757 to 1786, he published his 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 accomplishing his purpose, he returned to Vienna in August 1770. Of his subsequent connexion 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*; *Wardahusii in Finnmarchia observato*, 1770; *De parallaxi Solis ex observatione transitus Veneris anni 1769*. 1773, &c.

It does not appear that Hell can justly claim much of the merit due to the discovery of Animal Magnetism. He may, no doubt, have originally suggested the use of the mineral magnet, to which he always continued to ascribe the remedial efficacy; whereas the experiments of Mesmer, as will be seen in the sequel, 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 connexion or affinity with his magnets, and had at length the pleasure of witnessing the most satisfactory results. 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 reconciled.

As several individuals had been relieved from the most obstinate complaints by this treatment, some of whom had been induced to communicate accounts of their cure 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, whilst others totally denied its efficacy.

The magnetic remedy, indeed, was not generally sanctioned or patronized 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 from that capital. Accordingly, in the years

1775 and 1776, he made travels of discovery into Bavaria and Switzerland, and performed several remarkable cures, both in private circles, and in the public hospitals at Bern and Zurich. Upon this occasion, too, he is said to have paid a visit to the famous exorcist Gassner, at Ratisbon.

Upon his return to Vienna, in order to be enabled to prosecute 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 the 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. *

* ENNEMOSER (p. 30.) says, that Mesmer was led to the discovery of Animal Magnetism by the following circumstance. Being present on one occasion when blood was drawn from a patient, he found a remarkable difference in the flowing of the blood when he approached or retired. Having afterwards repeated the experiment, the same phenomenon was manifested. Hence, he was induced to conclude, that his person was endowed with this magnetic influence, which may have been stronger in him than in other men, as different pieces of iron or steel may possess different degrees of magnetic power. I do not re-

He observed that, in the case of nervous patients, in particular, he was enabled to produce a variety of phenomena of a very peculiar character, 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 emanating 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 at all, 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 body of 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 in contact with them. *

member to have met with this remark in any of Mesmer's own writings, but it is possible I may have overlooked it.

* 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 conducting substance. Yet, if we may give credit to some of the

Partly swayed by the fact ascertained by previous experiments, that, in like manner, by re-

more recent writers upon Animal Magnetism, there is a peculiar virtue in certain metals, which is capable of affecting the human frame in various ways. But into this subject we have no occasion to enter at present.

The history of Perkinism, however, and of its alleged refutation by Dr Haygarth, affords strong collateral evidence, if any such were wanted, in confirmation of the reality of Animal Magnetism.

Perkins invented certain instruments called *Metallic Tractors*, with which he is admitted, even by his enemies, to have frequently relieved pain, and performed remarkable cures. In order to refute Perkinism, Dr Haygarth made *wooden tractors*, with which he and others produced similar effects; nay effects, it was alleged, even greater and more wonderful than what was related of the patent *metallic tractors* of Perkins. The patent tractors of Perkins, therefore, were a piece of quackery. True;—and so also were the *wooden tractors* of Dr Haygarth. And physicians may raise the outcry of quackery as loudly and as often as they please—they will never succeed in getting rid of the obnoxious humbug, in one form or another, until they shall condescend to submit, like their brethren upon the continent, to a philosophical investigation of the principles and processes of Mesmer and his disciples. The effects of Perkinism, as well as those of Animal Magnetism, were ascribed by all *learned* physicians to the *imagination*. What a wonderful power this Imagination must be, to be the sole cause of so many extraordinary effects! Amongst its other virtues—not remarked, indeed, by the physicians—it seems to afford an admirable casemate to ignorance and indolence. But if the imagination really does possess such astonishing powers, why, in the name of common sense, do not the Doctors more frequently dose their patients with Imagination, instead of poisonous drugs? Is there greater quackery in curing diseases by means of the Imagination, than by Rhubarb, Magnesia, Opium, and Arsenic? But, according to St Real, *Qui dit Docteur, ne dit pas toujours un homme docte*. By-the-by, I can see no good reason why the effects produced by Rhubarb, Magnesia,

peated 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 then extended this magnetic power over all nature, formed theories upon this assumed fact, and, in so far as this alleged influence was manifested in the animal body, he gave it the name of *animal*, to distinguish it from the *mineral* magnetism.*

Opium, Arsenic, Foxglove, Mercury, &c. should not also be referred to the influence of the imagination. This would tend greatly to simplify the theory of Medicine. The universal *panacea* is at length discovered. The medical report of every case successfully treated might henceforth be drawn up in something like the following terms:

“ Visited A. B. whom I found confined to bed in a very weak state, and labouring under a severe attack of _____. Prescribed the following dose:

R

 ;

and, such was the effect of this treatment upon the *Imagination* of the patient, that he rapidly recovered, is now quite well, and able to go about his ordinary business.

* It has been thought proper to point out, thus particularly, the original mistake of Mesmer, because it is quite

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 thrown out by these earlier writers, and who, by patient and indefatigable investigation and experiment, succeeded in establishing, as demonstrated fact, that which, so far as we know, had previously been, at least in a great measure, theory and conjecture.

From the period of this curious discovery, however, in whatever manner it may have been suggested, 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

certain that a great deal of the argument, and almost the whole of the wit and ridicule, by which the magnetic treatment has, at any time, been assailed, have been suggested by the name; and many persons, otherwise ignorant of the subject, still seem to expect, like the first French Commissioners, to see the *magnetic fluid* sensibly exhibited. I formerly mentioned, that, for this and other reasons, many intelligent persons conceive the name of Animal Magnetism to be improper; but it would not be easy now to substitute one more appropriate.

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 the power of his volition, and thus eradicate the most complicated diseases, without explaining, in an intelligible and satisfactory manner—probably without perfectly comprehending—the nature of the method by which he performed his cures.

No person was able to penetrate this mysterious obscurity; but it was still commonly believed that 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, or, 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, induced Mesmer to leave Vienna, in the year 1777, and to look out for some new theatre for the exercise of his magnetic art. Some time elapsed before the public received any certain intelligence respecting his movements; 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 patronize his discovery. He was afterwards, however, fortunate enough to make a convert of Dr D'Eslon, who became a zealous partizan of the magnetic doctrine and treatment, 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

* See *Hist. de l'Acad. Royale des Sciences*, an 1775, p. 33, &c., and *Nouvelles Memoires de l'Academ. de Berlin*, an 1775.—*Hist.* p. 33.

† *Memoire sur la Decouverte du Magnetisme Animal.* Paris, 1779.

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 sort of *flux* and *reflux*. This flux and reflux 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, occasioned its denomination of Animal Magnetism. The action and the virtue of Animal Magnetism are capable of being communicated to other animated and in-

animate 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 also 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 reflux; of the mag-

net and of electricity. It will inform us, that the magnet and artificial electricity 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.*

* Since the great light which has been thrown upon this subject by the more widely extended practice of Animal Magnetism among persons of learning and intelligence, these early mystical theories of Mesmer and his partisans, which appear to have been borrowed from the writers of a previous age, have become rather curious than really interesting or instructive. In a work like the present, however, some notice of them could not,

This novel, extraordinary, and obscure theory found no favourable reception among men of science in France; on the contrary, it was, perhaps 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 subject, especially as one of its members, Dr D'Eslon, was not only a zealous partizan of Mesmer, but had actually published a work upon Animal Magnetism. But the measures at length resorted to, for the purpose of vindicating the honour and privileges of the body, were not, assuredly, very creditable to the state of science and liberality towards the conclusion of "the philosophical century." Instead of candidly investigating the whole 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 finally erased from the list of members; in short, that he should be excommunicated. An

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.

incipient 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.*

But although deprived of scientific and profes-

* 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 *learned* of those times drove him thence by an accusation of practising the magical arts. The system of Copernicus was, for a considerable period, embraced by astronomers only : The learned in all other sciences viewed it with scorn and contempt. In the 17th century, Galileo was persecuted by the Roman Consistory, for maintaining the true theory of the planetary motions. The medical faculty have always been peculiarly unfortunate in their ludicrous crusades against heretical remedies. Whenever they have ventured to enter the lists, they have almost invariably been beaten off the field. In the year 1566, the Faculty of Medicine at Paris issued a mandate prohibiting the use of antimony, and this mandate was confirmed by the Parliament. Paumier of Caen, a great chemist and celebrated physician at Paris, having disregarded this mandate 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. 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 of Paris prohibited the practice of Animal Magnetism by any of its members, under the penalty of being deprived of the privileges of their profession.

sional 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 and the most beneficial discovery that had been made by human wisdom and ingenuity since the creation of the world.*

* It is a very great mistake to suppose that all learned and intelligent men were opposed to the doctrines of Mesmer: on the contrary, he had a considerable number of adherents among the most respectable and best educated classes of society. M. de Segur, the elder, formerly Ambassador from France at the Court of St Peterburgh, in his amusing publication, entitled, *Memoires, Souvenirs et Anecdotes* (vol. ii.), informs us, that he himself was one of the most zealous disciples of Mesmer, as were also MM. de Gebelin, Olavides, d'Espremenil, de Jaucourt, de Chastellux, de Choiseul-Gouffier, de Lafayette, and many

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

others, all enlightened and talented men. M. de Segur never abandoned his conviction of the reality of the phenomena of Animal Magnetism, and he very judiciously appeals to his own experience in justification of this conviction. "I have no desire," says he, "to enter into any controversy on the subject; it is sufficient for me to affirm that, having been present at a great number of experiments, I have witnessed impressions and effects very real, very extraordinary, but of which I have never had the cause explained." On the supposition that these impressions and effects may be the results of an exalted *imagination*, M. de Segur very pertinently asks, whether this word *imagination* can be considered as a sufficiently satisfactory refutation, and whether the learned and philosophical are not bound, at least, by the love of truth, to investigate the causes of this new and strange power of the imagination. Assuredly, says he, when such men as I have mentioned, and hundreds of other learned and intelligent individuals, in all parts of Europe, have expressed their conviction of the reality of certain facts, founded upon personal experience, it must require something more than a mere theoretical refutation to invalidate the evidence in favour of a particular doctrine. It is not sufficient to ascribe the effects in question to the influence of the imagination; the advocates of that theory are imperatively called upon to explain what they mean by imagination, and how the peculiar effects can be rationally attributed to the influence of that faculty.

ed 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.

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CHAPTER XI.

ALTHOUGH Mesmer had the unquestionable merit of being the first who experimentally discovered and demonstrated 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 greatly retarded the general acknowledgment of the reality and the value of his discovery, by the absurd affectation of much idle, unnecessary, and almost ludicrous solemnity, 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, and having no knowledge of the essential agent, were disposed to regard him mere-

ly as an imposing 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 he had made, however much he might attempt to disguise, disfigure, and obscure it by ridiculous ceremony and ostentation.

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 connexion with magnetized 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 last 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 the treatment, the apartment in which he per-

formed 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, which was only interrupted 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 actually 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, along 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 of the medical profession and the protection of government; 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. Indignant at such illiberal conduct, he at length 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 disease, and one remedy*; and he arrogated to himself the discovery of the grand *panacea*.

* See *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 full knowledge of the early history of the magnetic doctrines and practice, and of the violent struggle they had to maintain with prejudice and persecution.

tery in which it had been hitherto enveloped, and which had, at least, secured it from any flagrant 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 ludicrous misapplications ; circumstances which could not fail to bring the whole treatment into general discredit.

In the mean time, however, some of Mesmer's pupils 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.*

* These early publications on the phenomena of Animal Magnetism, are very numerous, and some of them exceedingly interesting. The following deserve especial notice :—

Détail des Cures opérées à Lyon par le Magn. Anim. selon les Principes de M. Mesmer, par M. Orelut ; précédé d'une Lettre à M. Mesmer. Lyon, 1784.—Rapport des Cures opérées à Bayonne par le Magn. Anim. par M. le Comte Max. de Puysegur ; avec des Notes de M. Duval d'Espreménil. Bayonne et Paris, 1784.—Détail des Cures Opérées à Burzancy par le Magnet. Anim. Soissons, 1784.—Nouvelles Cures opérées par

It is rather singular that the Medical Society of Paris paid so little attention to this alleged discovery, considering the great sensation it had excited among the public; and that they permitted Animal Magnetism to be practised for so long a period, without any investigation, interruption, or hindrance upon their part.

In the year 1778, indeed, at the solicitation of a friend of Mesmer's, they appointed a committee to

le Magnet. Anim. Paris, 1784.—Recueil d'Observations et de Faits relatifs au Magnet. Anim. Publié par la Société de Guienne à Bordeaux. 1785.—Appergu de la Maniere d'administrer les Remedes indiqués par le Magnet. Anim. à l'Usage des Magnetiseurs qui ne sont Medecins. 1784.—Exposé des differentes Cures operees depuis le 15 d'Aout 1780; Jusqu' au 12 de Juin 1786, par les Membres de la Société Harmon. de Strasburg. 1786.—Suite des Cures faites par differens Magnetiseurs de la Société Harmon. de Strasb. 1787.—Annales de la Soc. Harm. de Strasb., ou Cures que le Membres de cette Société ont operees par le Magnet. Anim. Strasb. 1789.—Extrait des Journaux d'un Magnetiseur (Comte de Lutzelbourg), attaché à la Soc. Harm. de Strasb. 1786.—Journal du Traitement Magnetique de la Dem. N. &c. par M. Tardy de Montravel. Lond. 1786.—Suite du Traitement, &c. By the same.—Journal du Traitement Magnet. de Madame Braun. By the same. Strasb. 1787.—Lettre à Mad. la Comtesse de L. contenant une Observation Magnetique, faite par une Somnambule sur un Enfant de Six Mois. 1787.—Nouveaux Extraits des Journaux d'un Magnetiseur, &c. Strasb. 1788.—Faits et Notions Magnetiques. Strasb. 1788.—Journal Magnetique du Traitement de Mademoiselle D. et de Madame N. par M. C. de Lyon. 1789. A great deal of curious information upon this subject will be found also in the periodical and other publications of those times, but much of it must be received with caution, as many false and prejudiced views of it were entertained.

enquire into this subject, consisting of the physicians, Daubenton, Desperrieres, Mauduyt, Andry, Tessier, and Vicq-d'Azyr; but Mesmer himself, although he had no objection to receive these gentlemen, or any other individuals, as witnesses of his treatment, would not agree to the proposed investigation, on the ground that it might give him too much 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 number, 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 Memoires sur le Magnetisme Medicinal*; in the *Histoire de la Société Royale de Médecine* for the year 1779. Paris, 1782.

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 mem-

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 toothache and ear-ache: "Quidam sunt, qui dentiscalpia, auriscalpiaque habent, quæ tactu solo dolores dentium, aurium et oculorum tollant." Klarich of Gottingen, occupied himself, about the year 1765, with experiments on the medicinal efficacy of Magnetism. (See the *Hanoverian 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. Leip. 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 zutmeinen Versuchen welche mit künstlichen Magneten in verschiedenen krankheiten angestellt worden. Leip. 1776.

Sammlung der neuesten gedruckten und geschriebenen Nachrichten von Magnetcuren. Leip. 1778.

Historia Trismitonici Quadraginta fere Septimanarum a Philiatro de Wocher curati. Freiburg, 1778.

bers 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—Poissonier, Desperrieres, Caille, Mauduyt, Andry, and Jussieu.

The result of the investigation by these commissioners is well known. They published reports, abounding with inconsistencies certainly, but drawn up with great art, and, upon the whole, altogether unfavourable to the pretensions of Animal Magnetism; and these reports seem to have satisfied most of the scientific men of that period, and have been appealed to ever since—more especially in this country, where great ignorance of the subject has always prevailed—as having set the question, respecting the merits of the magnetic treatment, completely at rest.*

* See *Rapport des Commissaires de la Société Royale de Médecine, nommés par le Roi, pour faire l'examen du Magnétisme Animal*. Paris, 1784.—*Rapport des Commissaires chargés par le Roi de l'examen du Magnétisme Animal* (by M. Bailly.) Paris, 1784.—*Exposé des expériences qui ont été faites sur le Magnétisme 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 Paris*: translated from the French, with an historical introduction. Lond. 1785.

The following extract from the Report of the Commissioners

The whole of this investigation, however, is alleged by the professors of Animal Magnetism, and upon good grounds, to have been conducted in a

will sufficiently shew 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 le sens.

2. Ce fluide echappant à tous les sens, son existence ne peut etre demonstré 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, parce-qu'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 société assemblés 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, attouchement, 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 they were charged to investigate, and that 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 the reality of these phenomena

very partial, superficial, and unsatisfactory manner. Franklin is said to have been indisposed at the time, and to have paid little attention to the

being once established, they 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.

But, in other respects, the method pursued by the Commissioners in their inquiries was sufficiently absurd. Every system of doctrine can be legitimately refuted only upon its own principles, viz. by disproving its facts, and invalidating the principles deduced from them. Now, how did the Commissioners proceed? It was asserted by the magnetisers, upon alleged experience, that the magnetic treatment was of great efficacy in the cure of diseases; but, so far as I am aware, they never pretended to say that the effects could be always produced instantaneously. But the Commissioners, with singular inconsistency, rejected altogether the proofs resulting from the treatment of diseases, for a reason which, if good at all, is equally applicable to every species of remedial treatment, and would establish the utter uncertainty of all medical science, viz. that "it could only furnish results always uncertain, and frequently fallacious;" and they restricted their investigation to an examination of the effects instantaneously produced, which formed no part of the magnetic doctrine.

The Commissioners, however, do not pretend to deny that some effects 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 comparatively a matter 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,

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 conveyed a much more favourable impression with regard to the pretensions of Mesmer and his disciples.*

and *attouchement*, is utterly untenable, if not manifestly absurd; and, in fact, it has been long since abandoned by all the intelligent opponents of Magnetism.

The dangers attending the empirical and unskilful administration of Animal Magnetism are allowed upon all hands—by the partizans 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, unless, indeed, it be to confirm them.

It must always be remembered, that the investigation by these Commissioners took place at a period when Animal Magnetism was yet in its infancy. The processes, as well as the effects, were totally different then from what they are now. An experienced magnetiser of the present day cannot but laugh when he finds Magnetism described in the Report of these Commissioners, as “the art of disposing sensible subjects to convulsive motions!”

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

I have been somewhere accused of misrepresenting the ten-

It is well known that these commissioners, in general, although men of undoubted learning and talents, proceeded to the investigation of Animal

dency of the report made by Jussieu. I have not at present that document at hand; but having perused it some years ago, I am satisfied of the general correctness of the account I have given of it, although the author expresses his sentiments with considerable reserve. On turning to Kluge and Deleuze, I find that both of these authors speak of it in the same terms. Deleuze says, *Les faits qu'il avoit examinés avec ses collègues lui avoient paru offrir des preuves certaines de l'action du magnétisme.* In the recent Report of the Committee of the Royal Academy of Medicine, Jussieu is alluded to as that "one conscientious and enlightened man who had published a report in contradiction to that of his colleagues." The integrity and manly courage displayed by Jussieu upon this occasion, will appear still more conspicuous, when it is known that great interest was employed, even by the government, to procure his signature to the general Report, and to prevent him from publishing his dissent.

Since the preceding part of this Note was written, I have had an opportunity of again seeing a copy of the Report of M. Jussieu, and I find that it completely bears out my original representation. I appeal to the Report itself, in which the learned author unequivocally admits the influence of the magnetic action on the human body. Referring to his own experiments, M. Jussieu says: "*Ces faits sont peu nombreux et peu variés, parce que je n'ai pu citer que ceux qui étaient bien vérifiés, et sur lesquels je n'avais aucun doute.* ILS SUFFIRENT POUR FAIR ADMETTRE LA POSSIBILITÉ OU EXISTENCE D'UN FLUIDE, OU AGENT, QUI SE PORTE DE L'HOMME À SON SEMBLABLE, ET EXERCE QUELQUEFOIS SUR CE DERNIER UNE ACTION SENSIBLE." And in enumerating those influences by which the human body may be affected, the author includes L'ACTION D'UN FLUIDE ÉMANÉ D'UN CORPS SEMBLABLE. If these expressions do not imply a belief of the magnetic action, as asserted by Mesmer and his disciples, I confess that I am utterly unable to comprehend their meaning.

Magnetism with minds strongly prepossessed against the subject of inquiry. 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. *

* The following circumstances will shew the spirit in which the French Academicians, and other wise men of that period, contemplated the subject of Animal Magnetism.

At the period, indeed, when these commissioners instituted their investigation, the principles of Animal Magnetism were but imperfectly known. They appear to have been almost entirely ignorant of the conditions of the treatment. They were not informed of the great influence of volition in determining and regulating the efficacy of 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 seem 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 nature of the

Soon after the Commissioners had made their report, M. Thouret published his book, entitled, *Recherches et doutes sur le Magnetisme Animal*, in which he proposed to investigate the subject, not with a view to ascertain the reality of the alleged facts, or the truth of the doctrine, but to point out—its *political and moral relations*! In the approbation given to the work of M. Thouret by the Royal Society of Medicine, they state that they had perceived with considerable anxiety the *vogue* which Animal Magnetism had acquired; that they were much displeased that its processes, good or bad, had been administered to patients, without having been previously submitted to them for their approval, conform to the orders of government; and that they considered it one of their duties to protest against such an abuse. From such prejudiced judges what could have been expected?

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 also several other professors of Animal Magnetism; among whom M. Bonnefoy distinguished himself by an ingenious analysis of these Reports, in which he shewed 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 Brieuve endeavoured to give a final blow to magneticscience, 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 numerous, too unambiguous, and too firmly established, to be overthrown even by the united force

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

† *Analyse Raisonnée des Rapports*, &c. par J. B. Bonnefoy. 1784.

‡ A list of the most important of these publications will be given in the Appendix.

of learning, prejudice, ingenuity, ridicule, invective, and persecution. 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 physi-

* 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, *Memoires pour servir à l'Histoire et à l'Etablissement du Magnetisme Animal*, 3d edit. Paris, 1820.—*Du Magnetisme Animal, considéré dans ses Rapports avec diverses branches de la Physique general*. 2d edit. Paris, 1809.—*Recherches, experiences, et observations Physiologiques*

cians, Bickers, Olbers, and Wienholt,* in Bremen; and, about the same time, Boeckmann and Gmelin received it directly from Strasburg. It was owing principally to the zeal, ability, and industry of those learned and most respectable physicians, that the magnetic treatment was revived in Germany, where it has continued to flourish ever since in the hands of many intelligent adherents, and 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

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 some valuable works upon the subject. The most useful is that entitled, *Heilkraft des Thierischen Magnetismus nach eigenen Beobachtungen*. Lemgo, 1802; 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 best elementary publications on Animal Magnetism are probably, *Kluge*, in German, and *Delouise* in French, from both of whom I have not hesitated to borrow liberally. The

in France and in Germany, entirely and exclusively devoted to the phenomena and the theory of Animal Magnetism; in which the cases falling under that system of treatment are regularly recorded, 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 is said to have 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 dis-

latest, and most comprehensive, systematic work in German on the subject, so far as I am aware, is Professor Kieser's *System des Tellurismus, oder Thierischen Magnetismus*. Leips. 1822. 2 vols. large 8vo.

* Among the most distinguished of these Journals may be reckoned the *Bibliothèque du Magnetisme Animal*, published at Paris since the year 1817, instead of the *Annales du Magnetisme Animal*, which it replaced; the *Archiv für den Thierischen Magnetismus*, edited by the Professors Eschenmayer, Kieser, Nasse, and Nees von Esenbeck, and published at Leipsic; and the *Jahrbücher für den Lebens-Magnetismus*, edited by Professor Wolfart of Berlin, and published also at Leipsic. I have not recently ascertained whether all or any of these are still in progress. They constitute a vast repertory of facts.

covered, 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. But the important and now generally recognised facts which he elicited by his practice, prove that he was no impostor. He appears to have been constitutionally disposed to mysticism ; he paraded his discovery in all the trappings of quackery ; and his natural vanity constantly led him not only to magnify his own merit, but to treat his opponents—nay, even his professional brethren in general—with a presumptuous contempt, which they could not fail to resent. Yet he seems 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 ex-

ceed 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.*

However probable it may be that Mesmer had perused the writings of those more ancient authors to whom I have referred in this work, and that from them he derived the idea of his theory of nature, there still remains to him, in the language of one of his most faithful and intelligent disciples, the unquestionable and enduring merit of one of the greatest and most beneficial discoveries; and it argues a mean and ungrateful spirit to attempt to diminish the honour to which he is so deservedly entitled. "Hé raised one corner of the curtain behind which Nature conceals her secrets. Envy perceives, acknowledges, and admires the wonders

* 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 recognised 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.* This is not the language of avarice. It is also said to have been in consequence of D'Eslon's breach of confidence that Mesmer was induced to sell his secret.

of somnambulism, which scepticism had previously denied and rejected as phantasms and chimeras. Incredulity can now no longer wrench the victory from truth, but it tears the palm of merit in pieces, because it has not fallen to its own share. In its meanness it cannot elevate itself to the greatness of the man; therefore it endeavours to draw him down beneath its own level, in order still to be above him. Mesmer expresses himself, upon this subject, with great truth and dignity: 'As long,' says he, 'as any discoveries were viewed as chimeras, the incredulity of certain learned men left me in undisturbed possession of them; but since they have been compelled to acknowledge their reality, they have laboured to place in opposition to me the works of antiquity, in which the words, *universal fluid*, *Magnetism*, *influences*, &c. are to be found. The question, however, is not about words, but about things, and the uses to which we apply them.' Who before Mesmer knew any thing of the peculiar method of operating upon others, which he discovered, and of the art of producing such remarkable phenomena as are manifested in somnambulism, which he taught us? Was not every thing that writing or tradition related of this subject as true, considered as fabulous or absurd? Do we not owe all that we now know of it, were it ever so little and unsatisfactory, to Mesmer? What

can those, who distinguish so sharply between Magnetism and Mesmerism, who give out, under new names (*Siderism* and *Tellurism*), the significant notions of this man as discoveries of their own, or really correct one or two trivial errors—what can they answer, when they are asked who it was that made them acquainted with all that they know of Magnetism, who rendered them so wise as to be capable of justly censuring its discoverer in one thing or another? The Pigmy stands upon the shoulders of the Giant, looks down upon him with contempt, and exclaims—*How tall am I!* Those ideas of the ancients may have given to his mind the first impulse, the direction,—may have conducted him, upon the untrodden path, to the end towards which he strove, and which he attained. But, admitting that Mesmer derived the first idea of his theory and art either in Maxwell, or in any other forgotten author, would that circumstance derogate from his fame? All great men who have lived, or who now live, have been indebted for their knowledge to teachers and to books; they increased that knowledge by their own experience and reflection. But can we justly deny them respect and merit, because the foundation was laid by others? No one would think of refusing to Boerhaave the honourable name of one of the greatest of physicians, because he derived his knowledge from the

writings of Galen and Hippocrates, or esteem the last mentioned as an insignificant empiric, because he copied the prescriptions in the temples of health, and is thus said to have become the father of public medicine. Who will deny to Newton the fame of having discovered the law of gravitation, because Gilbert had previously alluded to it, by viewing the heavenly bodies as immense magnets which attracted and repelled each other, and, by their reciprocal influence, were retained in their orbits? Who will venture the ridiculous assertion, that Columbus did not discover a new quarter of the globe, because America was previously known to its inhabitants; or that Aeronautics are no new invention, because Icarus had already flown over lands and seas on waxen wings?

“To Mesmer, therefore, there must ever remain the originality of his genius and of his invention. He collected and combined the scattered threads which, in the labyrinth of ages and events, conduct us to the spot where the knowledge of the sanative instinct in diseases, and the art of developing it by means of processes which are in themselves restorative, lay sunk and concealed under the ruins of the temples. He called it again into light, and to it we are indebted for an extended science, clearer prospects into the depths of Nature

and the obscurity of the past ; while we had previously been accustomed to deny as impossible, and therefore to reject as absurd, all that individuals had reported of it, because we were yet ignorant of the means and the conditions. A great deal of sound sense and moral courage are required to introduce ideas which will only be recognized as just after the elapse of many years. Nay, even to recognise their truth will require more understanding than falls to the share of most men. If there be any one to whom this assertion appears harsh or offensive, he is at liberty to avail himself of the right, competent to all, of considering himself as an exception.”*

Such are the claims of Mesmer to public respect and gratitude. Let us remember, that “ the most arduous scientific labours and the most important discoveries have been achieved by men who have looked forward to neglect, contempt, and persecution through life, and have triumphantly endured all, in the assurance that their fame, phoenix-like, would spring forth in full splendour from their humble ashes. It would seem that God has implanted in the noblest spirits of his human family a consciousness of immortality, a certainty that from their Elysian home they shall see justice

* Dr J. C. L. ZIERMANN ; *Geschichtliche Darstellung des Thierischen Magnetismus*, &c. pp. 225, &c.

awarded ; shall hear the voice of their praise ; shall be cheered by the gratitude and love of coming generations ; shall behold the ever-ripening harvest of their labours and their virtues. Posthumous fame is a meed which posterity ought diligently to award when deserved.”*

The time has surely now arrived, when well-merited, although tardy, justice ought to be done to the character and labours of the calumniated and persecuted discover of Animal Magnetism.

* *American Monthly Review.*

CHAPTER XII.

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 respective modes of treatment.

The original school of Mesmer, whose chief seat was at Paris, operated principally by physical means; by touching, rubbing, and pressure with the hand, or by the employment of metal conductors. His disciples made use of magnetic vessels (*baquets**) and trees, and magnetized baths; they recommended the drinking of magnetized water, and the carrying of magnetized 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

* 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.

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 for the purpose; apartments of which the walls and floors were covered with matrasses 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 mode of treatment totally different from the preceding.

The school of Barbarin operated in a purely psychical manner, admitting no other agents in the magnetic process than *faith* and *volition*. For this reason, its disciples were distinguished by the name of the *Spiritualists*. They practised no particular manipulations; any physical operations which they admitted being considered as merely accessory, or auxiliary, and by no means essential to the success of the treatment. They endeavoured, therefore, to produce all the phenomena of Animal Magnetism in their patients, by firm determination, and by the energy of the operator's volition, even at

considerable distances. Their motto was: *Veuillez le bien—allez et guerissez !*

The third school was established under the direction of the Marquis de Puysegur, at Strasburg, under the name of the *Société Harmonique des amis réunis*. It was distinguished not only by the admirable 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 excellent institution; and the whole magnetic treatment was conducted in a manner the best calculated to insure the repose and comfort of the patients.* The manipulations,

* 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 this matter in a quite different light, and, with Mesmer, consider the crises, when skilfully regulated, as highly salutary. Upon this subject, Ziermann makes the following judicious observations: "Nature cures many diseases only by means of 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 business 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 controlling—that activity which they cannot direct and re-

when employed, were extremely gentle; and the hands, instead of being brought into contact with

gulate. They are right, and act prudently, in not attempting to excite powers which they cannot govern. But the physician 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 indicated, he excites them with courage and caution. It is a peculiarity of the magnetic treatment, however, that it promotes those 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 aegrotat, auferendo, sanitatem reddit.* Idem et natura per se facere novit.

The foregoing views of Dr Ziermann might be confirmed by the authority of our own most learned and respectable physicians. I shall only make the following quotation from the late excellent work of Dr Abercrombie *On the Brain*: "A man mentioned by Dr Russell (*Lond. Med. Obs. and Eng.* vol. I.), after an apoplectic attack, with hemiplegia, recovered the use of his arm in six weeks, but the lower extremity remained perfectly paralytic. After twelve months, in which he made no improvement, he was one day astonished to find that he had some degree of motion of the leg, but it continued only a few minutes. [On the same evening he had headach, and in the night *he was seized with a sort of fit, in which the paralytic limb was strongly convulsed, and after this he had slight power of moving it. The fit returned next day, and again in the night, and then left him completely free from paralysis and in perfect health*: he had continued well for eight years

the patient, were frequently kept at some distance from him. In consequence of this mode of treatment, there ensued crises of a quite different kind from those which were known to Mesmer and his

at the time when the account was written. A case somewhat similar, though of shorter standing, occurred to a friend of mine. A middle-aged man was suddenly attacked with hemiplegia and loss of speech, while he was using violent exercise in walking quick or running; all the usual practice was employed without any improvement for a month; *the paralytic limbs then became one day suddenly convulsed, and when this subsided, the paralysis was gone.* In a woman mentioned by Dr Home (*Clinical Experiments*), *hemiplegia of considerable standing was removed by an attack of fever.* "A man mentioned by Mr Squire (*Philosophical Transactions*, vol. 45.), without any previous complaint, except a cold, suddenly lost his speech. He had no other paralytic symptom, and was otherwise in good health, but continued perfectly speechless for four years. He was in general a man of temperate habits, but having at this time been one evening much intoxicated, he fell from his horse three or four times on his return home, and was at last taken into a house near the road, and put to bed. He soon fell asleep, and had a frightful dream, during which, struggling with all his might to call out for help, he did call out, and from that time recovered his speech perfectly."

"Several cases still more remarkable are related by Diemerbroek (*Observat. et Curat. Medicæ*, Obs. x.) A woman, who had been paralytic from the age of six to forty-four, suddenly recovered the perfect use of her limbs, when she was very much terrified during a severe thunder-storm, and was making violent efforts to escape from a chamber in which she had been left alone. A man, who had been many years paralytic, recovered in the same manner, when his house was on fire; and another, who had been ill for six years, recovered suddenly, in a violent paroxysm of anger."—ABERCROMBIE *On the Brain*, 3d edit. pp. 293-294.

immediate disciples: the most agreeable feelings were experienced; the intellectual faculties appeared to be wonderfully 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 connexion (*en rapport*) with him.

This improved treatment, introduced by Puysegur, was subsequently adopted, in a great measure, by all the best magnetizers, and even, it has been said, by Mesmer himself. It is to the same most intelligent magnetizer, too, that we are principally 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 practice of the art is very generally diffused—many scientific and practical works upon the subject have been published—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 them.

After the preceding historical sketch of the discovery of Animal Magnetism, and of its general

introduction upon the Continent, it will appear necessary, for the benefit of those who may not hitherto have had an opportunity of studying the subject, or of obtaining any correct information respecting it, that I should make a few observations upon the magnetic power and susceptibility—the peculiar method of treatment—and the effects produced upon the organization of the patient. *

It is alleged by some that every individual does not possess the capability of operating magnetically upon others; and that even he who does possess the power in some degree, will not always operate beneficially. † Certain properties, partly physical

* It would swell out this publication to a most inconvenient bulk, were I to enter into any minute detail upon these particulars. All that I can afford is a general view of every branch of the subject, leaving it to the inquisitive reader to prosecute his researches, by consulting the authors I have referred to. To professional men this will be sufficient; and the less that unprofessional persons meddle with the practice of Animal Magnetism the better. Indeed, after the publication of the first edition of this work, had the Faculty taken up the investigation of the subject, as they ought to have done, I proposed to have confined my attention thenceforward entirely to a consideration of the philosophical views suggested by the phenomena. It is owing to the intellectual sloth of the profession that I became, and continue to be, an interloper.

† The following, however, is the opinion of a competent authority: “ Every healthy man has the power of communicating the *vital fluid*; the more healthy he is, the sounder his constitution, the more capable he is of communicating it. The opposite of these conditions produces contrary effects. This

and partly psychical, are said to be requisite in the practical magnetizer; 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, what might otherwise

fluid is transmitted by means of very simple processes, and even without their aid, by the sole act of the will. The act of the will is not necessary to receive it. It is transmitted the more easily, in proportion as the will of the operator is real, strong, and determined. It will, perhaps, be with difficulty believed, that the communication of the fluid is more or less complete, according to the degree in which the will of the operator is more or less developed; but daily experience has enabled us to perceive, that, in order to produce the desired effects, an adept has been obliged to learn to exert his will, as a child is obliged to learn to walk."—*Memoire sur le Fluide Vital*, &c. in the 2d volume of the *Bibliothèque du Magnetisme Animal*.

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

have appeared agreeable to analogy, that the magnetizer ought to possess a preponderance of energy over his patient. A few instances, indeed, have been observed, in which weak persons have magnetized 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 magnetizer ought to possess not merely a strong natural constitution, but also a sound state of bodily health. A magnetizer 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 magnetizer, too, is said to be a matter of considerable importance. The proper age is that in which the corporeal and mental powers have attained their utmost development, and before they have begun to decline; and the doctrinal writers have therefore fixed it within the period between the twenty-fifth and fiftieth years. To these physical qualifications must be added the psychological, 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 circumstance will be best understood 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 magnetizer 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 magnetizer can also operate without employing the hand—by breathing, or by fixing the eyes or the thoughts, or both, steadily and intensely upon the patient. When the magnetic connexion has been previously established, a single fixed look of the magnetizer, 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.*

* I have had several queries addressed to me, both by professional and by unprofessional persons, relative to these modes of manipulating; but the inquirers may easily satisfy themselves by consulting the works I have referred to. For my own part, I am not disposed to assign the preference to any particular method, especially, since all have been occasionally employed with success, and the effects have been frequently produced

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 semi-circle, turning the palms outwards, in order not to disturb the effects of the direct stroke. To magnetize in the contrary direction—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 slight 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

without any manipulation at all. The manipulations I should consider chiefly useful in fixing the attention, and strengthening the will.

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 magnetizer must perform this operation with the utmost energy, and must always have the desire of applying strong pressure to it.

The manipulation *in distans* is administered 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 magnetizer. It is, however, frequently employed in magnetizing very irritable patients, who cannot endure any stronger method.*

It would be tedious to enumerate and describe all the various kinds of manipulation, with regard to which the reader will receive ample information by consulting the elementary works upon this subject. All of these, however, may be combined together in the magnetic treatment, or employed

* 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, 119.) Kluge observed the same thing in one of his patients, but could not discover the reason of it. (Kluge ; p. 397, note c.)

separately, according to circumstances. Much, of course, must depend upon the skill and judgment of the magnetizer, 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 the magnetizer 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, 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. It is not necessary that the patient should be completely undressed, only no silk covering should be allowed to intervene.

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

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 magnetizer 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 magnetizer 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 connexion or affinity* (*mettre en rapport, en harmonie*); denoting that they were employed for the purpose of establishing such a sympathy between the nervous systems of the magnetizer and the patient, as should render the subsequent operations more certain and effectual.

Some magnetizers, and amongst others Wienholt, it is said, 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 manipulations, which, without

such preparation, it is alleged, 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 of the patient. 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 for 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 other fingers to rest upon the back of his 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, unless he has complied with the requisite conditions, or without having previously prepared himself by an attentive study of the best works which have been written on the subject by practi-

cal authors, such as those of Tardy du Montravel, Puysegur, Gmelin, Heinecken, 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.

CHAPTER XIII.

THE effects produced upon the organism of the patient, by the operations described in the preceding chapter, are truly wonderful; and, considering the apparent inadequacy of the means employed, 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 indicate 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 systems. Persons who could not be strengthened by corroborant medicines of any kind, have been restored to health, from a state of great 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 relish 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 constitutional complaints which are peculiar to the female sex, it is said to be the most certain, the most powerful, and most efficacious remedy hitherto discovered. The treatment seems to operate principally upon the great concatenation of sympathetic nerves (the *plexus solaris*), situated in the *abdomen*, and, by means of

their various ramifications, 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, or irritation, 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 debilitated 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 morbid action of the nervous system.

The particular effects of Animal Magnetism,

which are not the necessary consequences of its application, but 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 particular patient, but also of the operating magnetizer.

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 in this way, without even exhibiting any of the ordinary phenomena of the magnetic treatment. Wienholt, in a passage formerly quoted, informs us, that similar cases occurred in the course of his practice. 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 processes, that it appears almost impossible to arrange 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 presently 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 very 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 magnetizers, 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 re-

turns. 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 relation towards the external world, which will be explained by examples in the sequel. This fourth degree has been distinguished in the writings of the animal magnetists 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 faculty of internal inspection with regard to other persons who have been placed in magnetic connexion (*en rapport*) with him. This state, also, I shall afterwards have occasion to illustrate by examples. 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, becomes

wonderfully increased, and extends to all objects, near and at a distance, in space and in time : hence it has been called the degree of *universal lucidity*. This exalted state of the faculties, as may easily be supposed, is comparatively of very rare occurrence ; but some examples of it, likewise, will be adduced hereafter.

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 stages in so rapid a manner as rendered it difficult, if not 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, depending probably upon the predisposition of the subject, and other inducing causes. *

* It is a very great mistake of the ignorant to suppose that the higher states of magnetism can be produced in all individuals, and at all times, at pleasure. Even simple somnambulism, as a consequence of the magnetic treatment, is comparatively rare, and the more exalted state of *Clairvoyance* still more so. It appears to me, likewise, to be a great abuse of the practice (I suspect too prevalent in France), to aim continually at

I have thus attempted to describe, as concisely as possible, the processes employed in Animal Magnetism, and to point out briefly the most remarkable characteristic symptoms produced by the treatment. I am quite aware that what I have said upon this branch of the subject will be considered unsatisfactory by the inquisitive student. But, for reasons already adduced, it would have been very inconvenient for me to have entered into any farther details. I have still a great deal of curious information to lay before the public, which, as it must be new to many, and will, I have no doubt, appear very extraordinary to all, I am anxious to state at some length; the more especially, because many of the facts, the existence of which I propose to demonstrate by evidence, have been roundly and confidently denied by very eminent scientific men; and besides, I consider these facts as not only of great importance in themselves, but as well suited for inductive investigation.

But before I proceed to this branch of my subject, it may be proper for me to make a few observations upon the theory put forth by the first French Commissioners, in order to account for the


the production of Somnambulism, and the development of its higher phenomena. The primary object, in every magnetic treatment, ought to be the cure of disease, to which every thing else should be held subordinate. Experiments of mere curiosity should be as much as possible avoided.

phenomena of Animal Magnetism, which appears to have been framed with such consummate art, skill, and plausibility, as to have imposed upon all those learned and scientific men who were ignorant of this peculiar subject, and, in a great degree, to have checked, for a season, all serious investigation into the matter.

This theory ascribed the whole of the magnetic phenomena to *imagination*, *imitation*, and *attouchement*.

The last element of this theory is at once overthrown by the single decisive fact, that all the magnetic phenomena are frequently produced without touching the patient at all.

The influence of the imagination, and of the imitative principle, seem at first sight—and at first sight only—much more capable of affording an adequate explanation of the facts; but the activity of these principles is rejected as absurd by every practical magnetizer, as well as by every intelligent opponent of the system;—in short, by every person who knows any thing of the matter; and besides, a great many, if not all of the phenomena, will be found, upon due consideration, to be of such a nature, that they cannot be rationally accounted for upon any such theory. Sleep, for example, is a very common effect of the magnetic treatment; and I should like to be informed whe-



ther sleep, in any instance, can be produced by exciting the imagination, or by imitation, where, as in the case of the solitary treatment, there is nothing to imitate. Even Dr Stieglitz, an opponent, whose work appeared so long ago as the year 1814, ridicules the idea of attempting to trace 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 apathetic repose from being rudely disturbed, by

adopting shallow hypotheses, which are totally inapplicable to the subject;—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

* “In the times of ignorance, superstition laid hold of all phenomena, and without searching for their real causes, every thing 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 manner this spiritual faculty produces the physical results.

“Science, however, teaches us nothing, when it endows the imagination with supernatural powers; 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 are explained.

“Imaginary hypotheses can never hold the place of truth, nor dispense with the necessity of investigation.”—CHARDEL, *Essai de Psychologie physiologique*. Paris, 1831.

It is rather remarkable that Dr Stieglitz, although he opposes the general introduction of Animal Magnetism into medicine, strongly recommends its application in all desperate cases.

Sprenzel observes, in his *Institutions of Medicine*, 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 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," says he, "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

* Ea autem methodus quosnam effectus producat, dictu est mirabile. Plerique jucundas habent sensationes blandi caloris aut etiam auræ quasi descendentes 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 phaenomena nascentur, exploratum habeo; quod confirmatum ab Eberhardo Gmelino lego, qui magnetismo eo imbutos refert sæpe convulsivos aliorum adfectus conspexisse sine ulla noxa.—Sprenzel; *Institut. Medicina*, tom. ii. p. 300, sect. 396.

usual effects will not be produced, whilst others of a totally different nature will be manifested.*

A great deal has been occasionally said with regard to the dangers that may arise from the prac-

* 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.—Sprengel; *Institut. Medicinæ*, tom. ii. p. 305, sect. 398.

Among the numerous doctrinal writers and practical magnetizers, the only one whom I have found, in recent times, adhering to the 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. Bertrand seems to know nothing of the magnetic treatment as a sanative process; he appears to consider it merely as a means of producing somnambulism. *Quant à 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 exactly to comprehend what M. Bertrand really means; but so far as his opinions can be guessed at, they are directly at variance with those of every other individual who has a competent knowledge of 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 a sceptic in regard to Animal Magnetism, and wrote a small work against it, 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 upon the Continent. In Germany we know only a single disbeliever of the facts of magnetism, among several opponents of the practice. That disbeliever is Rudolphi. And what are his arguments?

tice of Animal Magnetism ; but these dangers are, in a great measure, chimerical ; they could only be apprehended from the ignorant and unskilful application of the treatment ; and nothing of the kind is to be dreaded from the present improved practice. 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 and imprudence 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 out of the hands of the unprofessional, 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 absurd and 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 in-

volved 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 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 shew 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 occa-

sioned 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?"*

* *Elements of the Philosophy of the Human Mind*; vol. iii. 4to. London, 1827. Pp. 221, 222.

It is, perhaps, not generally known, that besides the reports of which I have spoken, the Commissioners presented a secret report to the Minister of State, in which they represented Mesmerism in the worst possible colours, and as extremely dangerous in a moral point of view. The Commissioners did not publish this report themselves, but it afterwards found its way to the press. It is full of exaggeration; and, at all events, totally inapplicable to Animal Magnetism as now practised.

CHAPTER XIV.

IN the preceding chapters, I have given my readers an account of the early history of the magnetic opinions and practices—of the origin and progress of Animal Magnetism ; and I have also endeavoured to make them sufficiently acquainted with the nature of the processes, as well as of all those appearances which generally present themselves during the treatment adopted by Mesmer and his disciples. Of these last, as may have been observed, Sleep—although by no means an invariable consequence of the magnetic manipulations, nor essentially necessary to their sanative efficacy—is by far the most common ; and it usually manifests itself, after a longer or shorter period, according to the degree of energy possessed by the operator, or the greater or less susceptibility of the patient, or in consequence of a combination of both causes. It is proper to mention, however, that, in the opinion of all the experienced practical magnetizers, this artificial sleep is something very different from the natural ; and I conceive it is quite

impossible to witness, with attention and discrimination, one or more cases of the kind, without being satisfied of the reality of this distinction.* It

* Amongst a variety of other instances, the following case, reported by M. Deleuze, is quite decisive of the fact above stated, besides presenting some serious difficulties to those who are still disposed to adhere to the exploded imagination hypothesis.

"I was called in to magnetize a child of eleven years of age, who was very ill, and whom I had the good fortune to cure after a treatment of two months. At the third sitting, she became somnambulist; and two days afterwards, I produced somnambulism in an instant. As my other avocations did not permit me to visit my patient during the day, at the end of a week I agreed with her parents to see her every evening at nine o'clock, and to magnetize her during her sleep. When I arrived, the child, who had been in bed since between seven and eight o'clock, had fallen asleep, and her sleep was so sound that no noise could awaken her; she could even be shaken without interrupting her repose. After talking for some time with her parents, I approached the bed of the patient, stretched my hand over her, and in one minute she passed into somnambulism. She then answered my questions—she told me how I ought to magnetize her—she announced to me what symptoms she should experience next day, and pointed out what remedies I ought to give her. When the sitting had continued a quarter of an hour, she said, 'You must awaken me.' I answered, 'You were asleep when I came—go to sleep again.' 'That is impossible,' she replied; 'I cannot pass from the state in which I now am to the natural sleep; and this state, if too much prolonged, would do me harm.' I then awakened her with a single gesture. She wished us all good night, and turning her head on the pillow, fell asleep again. The same phenomenon was repeated every day for six weeks."—*Defense du Magnet. Anim.* p. 154.

M. Deleuze mentions several other instances in which the same thing occurred.

appears to be the result of an entirely peculiar state of the organism—an affection *sui generis*—and, if not identical with, at least to bear a close analogy to, that state of somnolency, which is frequently found to precede the somnambulistic or ecstatic crisis. Indeed, in a variety of instances, this artificial or magnetic sleep passes into actual Somnambulism—a state in which, as will be seen in the sequel, while the corporeal organs are apparently dormant, and insensible to external impressions, the patient still possesses the power of speech and of locomotion; there frequently occurs a vicarious transference of the functions of the faculties to different parts of the nervous system;* while both

* I am aware that this is one of the most extraordinary, and, to those unacquainted with the evidences, one of the most incredible facts of which I have undertaken to demonstrate the occasional occurrence. I am also aware that all our most eminent physiologists are of opinion that the thing is impossible. I quote the following passage from Dr Roget's *Bridgewater Treatise* (vol. ii. p. 375, note).

"The credulity of the public has sometimes been imposed upon by persons who pretended to see by means of their fingers; thus, at Liverpool, the celebrated Miss M'Avoy contrived for a long time to persuade a great number of persons that she really possessed this miraculous power. *Equally unworthy of credit are the stories of persons, under the influence of Animal Magnetism, hearing sounds addressed to the pit of the stomach, and reading the pages of a book applied to the skin over that organ.*"

Now, this is a mere *dictum*—an opinion opposed to a multitude of well observed facts; and however high my respect for Dr Roget's talents and acquirements, he must pardon me for say-

the senses and the intellectual faculties appear to be exercised with an extraordinary degree of delicacy, vigour, and acuteness. This state of Somnambulism is sometimes more, sometimes less, perfectly developed; a circumstance which probably

ing that there is an authority which I am disposed, in all questions of this kind, to estimate much higher than his—the authority of Nature. *Amicus Plato, &c.* Even did the possibility of this and other phenomena depend upon the authority of man's judgment, I could oppose to the opinion of Dr Roget, those of men whose names, without any disparagement even to that learned gentleman, may be placed at least upon a level with his—the names of La Place, Cuvier, Petetin, Puysegur, Deleuze, Wienholt, Hufeland, Olbers, Treviranus, Reil, Sprengel, Schelling, Eschenmayer, Kieser, Nasse, and a multitude of others, equally competent to observe the phenomena of nature, and equally incapable of misrepresenting the facts they witnessed.

I always thought the alleged detection of Miss M'Avoy's pretended imposture, to say the least of it, exceedingly doubtful; and I have occasion to know that many eminent professional men, who took no part in the discussion, were of the same opinion.

I would respectfully remind Dr Roget of the expressions made use of by himself, in a passage formerly quoted from his otherwise admirable, and truly philosophical *Bridgewater Treatise*.

“In place of the simple combinations of elements, and the simple properties of mineral bodies, all organic structures, even the most minute, present exceedingly complicated arrangements, and a prolonged succession of phenomena, so varied and so anomalous, as to be utterly irreducible to the known laws which govern inanimate matter.”

Finally, I would humbly request Dr Roget to examine the evidence I have adduced in this publication, and then to state whether and how far his *prima facie* opinion has been modified by a consideration of the facts; or whether he requires still farther evidence—and of what nature, and to what amount.

depends partly upon constitutional causes, and partly, as in the case of the magnetic sleep, upon the energy of the operator, and the susceptibility of the patient.

In order to enable my readers fully to comprehend, and duly to appreciate, the very extraordinary facts which I shall presently have occasion to bring under their notice, it is indispensably necessary that they should have paid great attention to the inferior and more ordinary phenomena of Animal Magnetism, and their several gradations ; and also that they should make themselves acquainted with those analogous cases, which occur in the general medical practice ; otherwise, their situation would resemble that of persons brought suddenly out of total or comparative darkness into a brilliantly illuminated picture-gallery, where their eyes might be dazzled and their judgment confounded ; but they would be, for some time, incapable of enduring the light, or of distinguishing the surrounding objects. Every doctrine of extensive application has its alphabet, its rudiments, its grammar ; and to attempt to introduce individuals at once, and without any previous preparation, to the phenomena manifested in the higher stages of Somnambulism, would be pretty much the same thing as if we were to request them to read some difficult pages of a particular volume, before they had

learnt the language in which it was written, or to require them to solve a complicated problem in the higher mathematical analysis, while they were still ignorant of the elementary rules of arithmetic. I am the more earnest in insisting upon the necessity of this preparatory study, because I have generally found that a great proportion of the unenlightened sceptics in regard to the reality of the facts of Animal Magnetism, however learned in other matters, have invariably been disposed to fasten upon some of the higher and more extraordinary phenomena of Somnambulism, which they at once, and in consummate ignorance of the subject, pronounce to be impossible and incredible; while they, at the same time, attempt to hold up all those who have carefully investigated the matter, examined the evidence, and ascertained the truth of the facts, to the contempt and derision of mankind. I trust that there is not one of my readers in the predicament I have just described. I would hope that, from serious attention to the preceding chapters of this publication, accompanied with private study and investigation, they are now fully prepared to follow me to the consideration of still more striking though recondite truths, which, without such initiation, they would probably have regarded with the utmost incredulity. But, in order to dispel any lurking remains of

suspicious scepticism, which may still weigh upon the minds of those to whom these pages are addressed, and to convince them that the phenomena to be hereafter submitted to their attention are not mere inventions of the professors of Animal Magnetism, I propose first to bring under their notice an analogous class of facts, many of which were observed long before the introduction of the magnetic treatment, and all of them without any reference to that discovery: I allude to the phenomena of the natural Somnambulism.

Somnambulism—as all who have inquired into the subject are probably aware—constitutes a very uncommon, and a very peculiar state of the human organism.* Fortunately, although of comparatively rare occurrence, many well authenticated and mi-

* Dr Bertrand, in his treatise *On Somnambulism*, distinguishes, I think correctly, four species of that extraordinary affection: 1st, The *essential* (idiopathic?) somnambulism, which occasionally takes place in some individuals, otherwise apparently healthy, during their ordinary sleep, in consequence of a particular predisposition of the nervous system (*Noctambulism*): 2dly, The *symptomatic*, which is sometimes observed to occur during the course of certain diseases, and is considered as a symptom or crisis of the complaint: 3dly, The *artificial*, which frequently occurs as a consequence of the magnetic treatment; and, 4thly, The *ecstatic*, which is produced by a high exaltation of the mind, and becomes infectious by imitation, in such persons as are predisposed and subjected to the same influences. Of this last species, the *devotional ecstasis* is perhaps the most frequent, and the most remarkable.

nutely observed instances of the natural somnambulism are upon record; and they present phenomena so remarkable, and so interesting in many important points of view, that, since my attention was first directed to this curious subject, I have frequently wondered how it could happen that they should have been so long overlooked, disregarded, or, at least, left without sufficient investigation, by physicians and physiologists. I can only account for this extraordinary neglect upon the principle, that these facts were little calculated to afford their support to the prevalent systems of a material and mechanical physiology;—systems which, I apprehend, must crumble in pieces, when, guided by the torch of truth, we shall have explored, with greater care and exactness, the more secret phenomena of Nature

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 delicate and difficult operations, whether intellectual or mechanical; and all this in the dark, and frequently with their eyes closed, as

* I use the words *somnambulism* and *somnambulist* as generic terms, to denote *sleep-talkers* as well as *sleep-walkers*. This, perhaps, is not strictly correct, but it is very convenient. The affections are of the same nature, and frequently found in combination.

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 had not previously studied, so as to remember them, or with which they had been but imperfectly acquainted. It is likewise a striking peculiarity of this state of existence, that, upon awaking, the individual who had thus insensibly performed all these operations, retains no recollection of anything 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 accomplishing every thing he attempts. So far as I am aware, there is no instance of a somnambulist awaking spontaneously in the midst of any operation 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 us to the conclusion, that the somnambulist is guided by other senses or instincts—

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, and depriving him of the protection of that instinct which governed his actions, causes him to perish.

In somnambulism, when the *crisis*, as it is sometimes called, is perfect, the functions of the corporeal sensitive organs seem to be entirely suspended, and the soul, or internal sense, is found to energise, if I may be allowed the expression, independently of the body. Such, at least, is the only adequate explanation we can give of the facts, until some philosopher shall find himself enabled to account for them satisfactorily upon some more material physiological principle. In this state, too, there occasionally occurs that most extraordinary, that apparently unaccountable phenomenon, already alluded to—the vicarious transference of the faculties from their appropriate organs to other parts of the nervous system;—a phenomenon, than which there is nothing more marvellous and incredible, yet nothing more clearly and conclusively demonstrated within the whole circle of the magnetic doctrines—I may say, within the entire

limits of science.* From all this, it seems clear, that the somnambulist is placed in a state of exist-

* I lately quoted a *dictum* of Dr Roget's upon this subject, upon which I took the liberty of making a few observations; and I must now use the same freedom in commenting upon some passages of Sir Charles Bell's *Bridgewater Treatise*, which, although in a more indirect manner, seem calculated to throw discredit upon the fact alluded to in the text.

Sir Charles lays down the proposition, "that one organ of sense can never become the substitute for another, so as to excite in the mind the same idea. When an individual is deprived of the organs of sight, no power of attention, or continued effort of the will, or exercise of the other senses, can make him enjoy the class of sensations which is lost. The sense of touch may be increased in an exquisite degree; but, were it true, as has been asserted, that individuals can discover colours by the touch, it could only be by feeling a change upon the surface of the stuff, and not by any perception of the colour. It has been my painful duty to attend on persons who have pretended blindness, and that they could see with their fingers. But I have ever found, that, by a deviation from truth in the first instance, they have been entangled in a tissue of deceit; and have at last been forced into admissions which demonstrated their folly and weak inventions." Again:—"Experiment proves, what is suggested by anatomy, that not only the organs of the senses are appropriated to particular classes of sensations, but that the nerves, intermediate between the brain and the outward organs, are respectively capable of receiving no other sensations but such as are adapted to their particular organs."

Now, I have neither inclination, ability, nor interest, to controvert these propositions of Sir Charles Bell; and I am bound to believe that he has fairly stated the results of his experience. But these propositions can have no effect in invalidating the fact I have stated, because the conditions are not the same. The observations of Sir Charles, I presume, apply to the *ordinary* state of existence. But the Animal Magnetists assert

ence completely different from the ordinary life, and the physiological principles, therefore, which are applicable to the one, are totally inapplicable to the other. In the one case, we see the soul and body acting in unison, although we may be incapable of perceiving the link that connects them; in the other, the corporeal functions disappear,

—and I have undertaken to demonstrate—that there is an *extraordinary* state of existence, called—properly or improperly—*Somnambulism*, in which the phenomenon in question, amongst others, is occasionally manifested. They do not allege that one organ of sense ever becomes the substitute for another; but that, in the state alluded to, the corporeal organs sometimes become totally insensible, and that their functions are exercised in some peculiar manner, being apparently transferred to other parts of the system. Should I be fortunate enough to convince Sir Charles Bell of the reality of this fact, we Animal Magnetists would be delighted to have his valuable assistance in enabling us to unravel the mystery, by endeavouring to explain the causes and conditions of these extraordinary phenomena.

Dr Bertrand, who, according to his own expression, regards Animal Magnetism as “a pure chimera,” tells us that he was for a long time sceptical with regard to this fact of the transference of the faculties, even after he had witnessed several examples of it; and the grounds of his scepticism were similar to those of Dr Roget, Sir Charles Bell, and all our eminent physiologists—because, without doing apparent violence to reason, the phenomena could only be explained upon the supposition of chance or deception. Upon a minute investigation of the evidence, however, the Doctor’s scepticism vanished, and no doubt of the reality of the fact remained in his mind.—See **BERTRAND**, p. 445, &c.

If our own physiologists would lay aside all prejudice, and condescend to a similar investigation, I am satisfied it would lead to a similar result.

and life assumes a character almost entirely spiritual. The one state may be denominated *organic*—the other—*instinctive* life. In the former state, our knowledge is acquired through the instrumentality of certain intermediate organs of sense; in the latter, it appears to be obtained by means of some species of more immediate intuition.*

In an Appendix to the first edition of this publication, I brought forward abundance of evidence with the view of demonstrating the extraordinary fact of the occasional transference of the faculties in certain states of the organism. While engaged

* In their state of *clairvoyance*, the magnetic patients may be said to *feel*, rather than to *see*. Fischer's somnambulist assured him that he saw his internal parts, but not as with the eyes; but he could not describe the manner in which he perceived them. Frederic Hufeland's patient said, only in the highest degree of lucidity, "*I see*;" at other times, she generally used the expression, "*I feel*" this or that part, this or that change, &c. Gmelin's patient, too, said she did not *see*, but *feel*, and with great delicacy, both internally and externally; and Scherb's patient declared, that, in the magnetic sleep, the sensations were rather those of *feeling* than of *sight*; and that the feeling, during that state, was much more acute and delicate than when awake.—See KLUGE, pp. 283, 284.

A corroboration of these views may also be derived from the following curious declaration of Dr Despine's cataleptic patient. "You think," said she to those who had placed themselves *en rapport* with her, "that I don't know what passes around me every evening; but you are mistaken. I see nothing, but I *feel* something which makes an impression upon me, but which I cannot explain."—See BERTRAND, p. 461, *Note*.

in collecting that evidence, I found no want, but rather a redundancy of materials. I found myself to be very much in the same situation with the ingenious Frenchman, who complained of the *embarras de richesses* ; and might, with some justice, have exclaimed, in the words of the poet, *Inopem me copia fecit* ; I am poor in the midst of abundance. For this reason, I conceived it sufficient to adduce only the most striking and best authenticated instances ; omitting all such as did not bear so directly upon the point at issue, as had not been so carefully and so minutely observed, or did not rest upon equally good authority.

I have occasion to know, that the evidence then brought forward was considered pretty conclusive as to the fact, by many persons in every respect well qualified to appreciate its force ; although I am aware that the whole subject—like every thing else relating to Animal Magnetism—has been treated with levity and ridicule by many others, equally ignorant, incredulous, and incompetent. Some time subsequent to the publication alluded to, however, I remembered that, several years before, I had, for a totally different purpose, made a pretty ample collection of the most interesting and best authenticated instances of the natural Somnambulism ; and it occurred to me that it might be of use to search for and examine this collection, with

a view to discover whether it contained any thing that could confer additional strength upon the cogent evidence already adduced in support of the reality of the very curious facts of which I had endeavoured to demonstrate the occasional manifestation. Having succeeded in my search, I was a good deal surprised, though pleased, to find that, in almost every one of these cases, the facts of the insensibility of the corporeal organs, and of the transference of the faculties, had been more or less distinctly observed. I have since been enabled to add several very interesting recent cases of a perfectly uniform character, almost all of which have been reported with great accuracy by professional men. The discovery of the manifestation of the remarkable phenomena in question appears to have been almost always made by mere accident—they are seldom brought very prominently forward—and scarcely any attempt is made to account for them, excepting upon the strange and inadmissible hypothesis, that the organ of one sense supplies the place and performs the functions of others. Such an hypothesis, indeed,—if otherwise admissible—even did it meet the facts, which it evidently does not, is quite as mysterious and incomprehensible as that of the actual transference of the faculties to different parts of the nervous system, besides being

incapable, like the latter, of affording an adequate explanation of the phenomena.

I am, therefore, about to draw my readers aside from Animal Magnetism for a short while, for the purpose of laying before them a variety of instances of the natural Somnambulism; from which, I think, it will fully appear, that the phenomena which have excited so much incredulity, and even ridicule, are by no means peculiar to the magnetic treatment, nor the mere inventions of individuals professing, and anxious to establish, a peculiar system of doctrines, but have been frequently known to occur spontaneously, in certain abnormal states of the organism.

CHAPTER XV.

SOMNAMBULISM appears to have been known to the ancients, and has been noticed by Hippocrates, Aristotle, Galen, and others. It is only in the works of modern authors, however, that we find minute and accurate descriptions of its phenomena.

Van Helmont tells us, that, when at college, he slept in the same room with one of his comrades, who was subject to somnambulism. He rose during the night, took the key of the garden, went and walked in places where he ran the risk of falling; then returned and replaced the key in a press, as he would have done when awake in broad daylight. One evening, Van Helmont got possession of the key, without being perceived by his comrade, and carefully concealed it; but as soon as the other became somnambulist, he went to seek it in the place where it had been hid, and took it without hesitation, as if he had placed it there himself.*

* Van Helmont, *De ortu Formarum*, sect. 52.

Horstius, in his well known work, relates, that a young nobleman in the citadel of Brenstein was observed by his brother, who occupied the same room, to rise in his sleep, put on his cloak, and having opened the casement, to mount, by the help of a pulley, to the roof of the building. There he was seen to tear in pieces a magpie's nest, and wrap the young birds in his cloak. He returned to his apartment, and went to bed, having placed his cloak by him with the birds in it. In the morning he awoke, and related the adventure as having occurred in a dream, and was greatly surprised when he was led to the roof of the tower and shewn the remains of the nest, as well as the magpies concealed in his cloak. This individual would appear to have been in a state of imperfect somnambulism, otherwise he would have recollected nothing of the circumstances when he awoke.

Henricus ab Heer mentions the case of a student at a German university, who, having been very intent on the composition of some verses, which he could not complete to his satisfaction, rose in his sleep, and opening his desk, sat down with great earnestness to renew his attempt. At length, having succeeded, he returned to bed, after reciting his composition aloud, and setting his papers in order as before.*

* The author recollects a circumstance somewhat similar,

Several interesting cases of somnambulism will be found in Muratori's work, *Della forza della Fantasia Humana*, some of them given on the authority of Gassendi. One of Gassendi's somnambulists used to rise and dress himself in his sleep, go down to the cellar and draw wine from a cask : *he appeared to see in the dark as well as in a clear day ; but when he awoke either in the street or cellar, he was obliged to grope and feel his way back to his bed. He always answered his wife as if awake, but in the morning recollected nothing of what had passed.* Another sleep-walker, a countryman of Gassendi's, passed on stilts over a swollen torrent in the night, but on awaking was afraid to return before daylight, or until the water had subsided.

The same author, on the authority of an eyewitness, Vigneul de Marville, gives the following account of the somnambulism of an Italian nobleman, Signor Augustin Forari :

"About midnight, Signor Augustin drew aside the bed-curtains with violence, arose, and put on

which occurred to himself when a boy at the Grammar School. At night, he had made many unsuccessful attempts to translate a difficult passage in Juvenal, and afterwards went to bed. On getting up in the morning, it occurred to him that he had received some light upon the subject during his sleep ; and, upon referring to the passage which had previously puzzled him, he found that he then understood it perfectly well. Upon other occasions, he had been known to get out of bed and walk in his sleep.

his clothes. *I went up to him, and held the light under his eyes. He took no notice of it, although his eyes were open and staring.* Before he put on his hat, he fastened on his sword-belt, which hung on the bed-post: the sword had been removed. Signor Augustin then went in and out of several rooms, approached the fire, warmed himself in an arm-chair, and went thence into a closet, where was his wardrobe. He sought something in it, put the things into disorder, and having set them right again, locked the door and put the key into his pocket. He went to the door of the chamber, opened it, and stepped out on the staircase. He appeared to be sensible to noises, and became frightened. He went into a large court and to the stable, stroked his horse, bridled it, and looked for the saddle to put on it. As he did not find it in the accustomed place, he appeared confused. He then mounted his horse, and galloped to the house-door. He found this shut; dismounted, and knocked with a stone, which he picked up, several times at the door. He afterwards remounted, and conducted his horse to the watering-place, let him drink, tied him to a post, and went quietly to the house. Upon hearing a noise which the servants made in the kitchen, he listened attentively, went to the door, and held his ear to the key-hole. After some time, he went to the other side, and into

a parlour in which was a billiard-table. He walked round it several times, and acted the motions of a player. He then went to a harpsichord on which he was accustomed to practise, and played a few irregular airs. After having moved about for two hours, he went to his room, and threw himself upon his bed, clothed as he was, and the next morning we found him in the same state ; for as often as his attack came on, he slept afterwards from eight to ten hours. The servants declared that they could only put an end to his paroxysms either by tickling him under the soles of his feet, or by blowing a trumpet in his ears."

Dr Prichard takes notice of a man who rose in his sleep, saddled his horse, and rode to a market-place, which he was accustomed to attend once a-week, *being all the time asleep*. Martinet speaks of a saddler who was accustomed to rise in his sleep, and work at his trade. The same author describes the case of a watchmaker's apprentice, who had an attack of somnambulism every fortnight. In this state, *although insensible to all external impressions*, he performed his work with his usual accuracy, and was always astonished, when he awoke, at the progress he had made since the commencement of the paroxysm. An American farmer mentioned by Professor Upham, rose in his sleep, went

to his barn, and threshed out, *in the dark*, five bushels of rye, separating the grain from the straw with the greatest correctness.

“ A young man named Johns, who works at Cardrew, near Redruth, being asleep in the sump-house of that mine, was observed by two boys to rise and walk to the door, against which he leaned ; shortly after, quitting that position, he walked to the engine-shaft, and safely descended to the depth of twenty fathoms, where he was found by his comrades soon after, with his back resting on the ladder. They called to him, to apprize him of the perilous situation in which he was, but he did not hear them, and they were obliged to shake him roughly till he awoke, when he appeared totally at a loss to account for his being so situated.”*

Dr Gall takes notice of a miller who was in the habit of getting up every night, and attending to his usual avocations at the mill, then returning to bed: *on awaking in the morning, he recollected nothing of what had passed during the night.* Dr Blacklock on one occasion rose from bed, to which he had retired at an early hour, came into the room where his family were assembled, conversed with them, and afterwards entertained them with a pleasant song, without any of them suspecting he was asleep, *and without his retaining*

* MACNISH, *Philosophy of Sleep*, 2d edit. p. 166.

*after he awoke the least recollection of what he had done.**

A very curious circumstance is related in the memoirs of that eminent philosopher Dr Franklin. "I went out," said the Doctor, "to bathe in Morton's salt-water hot-bath in Southampton, and, floating on my back, fell asleep, and slept nearly an hour by my watch, without sinking or turning—a thing I never did before, and should hardly have thought possible."

"A case still more extraordinary occurred some time ago in one of the towns on the coast of Ireland. About two o'clock in the morning, the watchmen on the Revenue Quay were much surprised at descrying a man disporting himself in the water, about a hundred yards from the shore. Intimation having been given to the Revenue boat's crew, they pushed off, and succeeded in picking him up; but, strange to say, he had no idea whatever of his perilous situation, and it was with the utmost difficulty they could persuade him he was not still in bed. But the most singular part of this novel adventure, and which was afterwards ascertained, was, that the man had left his house at twelve o'clock that night, and walked through a difficult, and, to him, dangerous road, a distance of nearly two miles, and had actually swam one

* MACHISE, p. 167.

mile and a half, when he was fortunately discovered and picked up.

“ Not very long ago, a boy was seen fishing off Brest, up to the middle in water. On coming up to him, he was found to be fast asleep.”*

The story of Lord Culpepper's brother is pretty well known. In 1686, he was indicted at the Old Bailey for shooting one of the Guards and his horse. He pleaded somnambulism, and was acquitted, on producing ample evidence of the extraordinary things he did in his sleep. There is a somewhat similar story of a French gentleman, who rose in his sleep, crossed the Seine, fought a duel, and killed his antagonist, without recollecting any of the circumstances when awake.

The following curious case occurred not long ago at the Town-Hall, Southwark:—“ Yesterday Mary Spencer, a well-looking young woman, was placed at the bar, before Mr Alderman Thorp, charged with possessing herself of a pair of trousers and a handkerchief, under the following most extraordinary circumstances:

“ John Green deposed, he was by trade a plasterer, and, on Saturday evening, after finishing his work, he went to see some friends at Pimlico, and returned from thence about ten o'clock, and in passing through the Borough, he was accosted

* MACNISH, pp. 167, 168.

by a female: he had at the time a bundle on his arm. He knew no more of what transpired until between one and two o'clock on Sunday morning.

“Alderman Thorp.—What! were you so drunk that you cannot tell what happened?

“Complainant (with great simplicity),—I was not drunk, your worship; I was fast asleep (*laugh-ter.*)

“Alderman Thorp.—You cannot be serious. I never heard of such a thing as a man walking through a crowded thoroughfare, like the Borough High Street, without being disturbed.

“Complainant.—What I have stated, your worship, is true; I am, unfortunately, too frequently affected with fits of somnambulism, and, for greater security from robbery, I always make what articles I carry fast to my arm, so that if any one attempt to snatch it from me it would awaken me.

“Alderman Thorp.—But how do you know the prisoner is the party who accosted you in the Borough? If you were asleep, you could not see her.

“Complainant.—Strange as it may appear, although I have not the power to arouse myself when in such a state of excessive lethargy, yet I can retain the sound of persons' voices in my mind, and, from the voice of the prisoner, I have not the least doubt she is the party.

“ Alderman Thorp.—How do you account for the lapse of hours from being accosted by the prisoner up to the time you discovered your loss?

“ Complainant.—I am in the habit of walking for hours in my sleep, and if an attempt had been made to forcibly take the bundle from my arm, it would have aroused me; my handkerchief was cut, and thus the bundle was easily taken away.

“ Alderman Thorp.—I never heard such a case before; was the bundle found?

“ Acting Inspector McCraw, division M. answered in the affirmative, and added, that what the complainant had stated about walking the streets and roads was true: he had made inquiries, and found it to be the fact; it was well known to the police.

“ Watts, police constable 163, division M. deposed, that the complainant came to the station-house between one and two o'clock on Sunday morning, and made precisely the same statement as he had made before the Alderman. The Inspector thought the tale savoured of the marvelous, and told witness to accompany him (complainant) in search of the property; and on arriving at a house in Kent Street, Borough, he said he thought the bundle was there. He knocked at the door, which was opened, and, by the door of a room wherein the prisoner was sleeping, the pro-

perty was found: the moment she spoke, he said the prisoner was the person who stopped him in the Borough. Witness took the prisoner to the station-house.

“ The prosecutor here pointed out the way in which the bundle must have been taken away, and showed the Alderman the rent handkerchief.

“ Mr Edmonds (for the prisoner) contended, that no jury would convict upon the evidence of a sleep-walker, in a prosecution against a street-walker (*a laugh.*) The prisoner laid no claim to the bundle; and as the complainant had sworn it was his property, the police would give it up to him.

“ Alderman Thorp said it was so strange a case, that he hardly knew how to act: he should, however, under the doubtful circumstances as to identity, give the prisoner the benefit of it, and discharge her. The bundle was given up to the complainant.

“ A gentleman, who was in attendance, said he had known the complainant many years, and it was not an uncommon thing for him to be seized with that unhappy affliction while at work on the scaffold, and yet he had never met with an accident, and, while in that state, would answer questions put to him as though he was awake.”

Mr Macnish, in his ingenious work already re-

ferred to, very correctly observes, that "to walk on the house top, to scale precipices, and descend to the bottom of frightful ravines, are common exploits with the somnambulist; and he performs them with a facility far beyond the power of any man who is completely awake."

Equally judicious are the following observations of the same learned writer: "It is not always safe to arouse a sleep-walker; and many cases of the fatal effects thence arising have been detailed by authors." "Among other examples, that of a young lady, who was addicted to this affection, may be mentioned. Knowing her failing, her friends made a point of locking the door, and securing the window of her chamber, in such a manner that she could not possibly get out. One night, these precautions were unfortunately overlooked, and, in a paroxysm of somnambulism, she walked into the garden behind the house. While there, she was recognised by some of the family, who were warned by the noise she made on opening the door, and they followed and awoke her; but such was the effect produced upon her nervous system, that she almost instantly expired."

A very affecting incident, of a similar description, occurred about twelve or eighteen months ago at Dresden. One evening, a young lady was observed walking upon the top of a house in one

of the streets of that city. The alarm was given, and a considerable concourse of persons assembled, intensely interested in the event of her perilous proceeding. Every possible precaution was taken to prevent her from receiving injury, in case of an anticipated fall ;—the street having been covered with beds, mattresses, &c. Meanwhile, the young lady, apparently unconscious of danger, came forward to the edge of the roof, smiling and bowing to the multitude below, and occasionally arranging her hair and her dress. After this scene had continued for some time, and the spectators were in the utmost anxiety for her safety, she at length proceeded towards the window of a room, from which she had made her exit. In their alarm, some of the family had placed a light in this room, which the somnambulist perceiving, suddenly awoke, fell to the ground, and was killed on the spot.

The preceding instances, I presume, sufficiently illustrate the more common phenomena of somnambulism—the expertness, confidence, and security with which somnambulists perform the most difficult and dangerous operations—the organic insensibility attending the affection, and the complete oblivion, when awake, of every thing that may have occurred during the paroxysm—and

the danger of arousing them out of their extraordinary sleep. In the following instances, similar phenomena will be found to occur, along with others of a still more remarkable character.

CHAPTER XVI.

THE following case of somnambulism is reported in the 38th volume of the French Encyclopædia, on the highly respectable authority of the Archbishop of Bourdeaux, and has been frequently copied into other subsequent publications.

It is the case of a young ecclesiastic, who was in the habit of getting up during the night, in a state of somnambulism, of going to his room, taking pen, ink, and paper, and composing and writing sermons. When he had finished one page of the paper on which he was writing, he would read over what he had written aloud, and correct it. Upon one occasion, he had made use of the expression : *Ce divin enfant*. In reading over the passage, he changed the word *divin* into *adorable*. Observing, however, that the pronoun *ce* could not stand before the word *adorable*, he added to it the letter *t*.

In order to ascertain whether the somnambulist made any use of his eyes, the Archbishop held a piece of pasteboard under his chin, to prevent him from seeing the paper upon which he was writing ;

but he continued to write on, without being, apparently, incommoded in the slightest degree. The paper upon which he was writing was taken away, and other paper laid before him; but the young ecclesiastic immediately perceived the change.

He wrote pieces of music while in this state, and in the same manner, *with his eyes closed*.* The words were placed under the music. It happened, upon one occasion, that the words were written in too large a character, and did not stand exactly under the corresponding notes. He soon perceived the error, blotted out the part, and wrote it over again with great exactness.

Now, in what manner, it may be asked, was the faculty of vision exercised by this somnambulist? He wrote, it will be observed, and corrected what he had written, with his eyes closed; and he experienced no inconvenience when an opaque body was interposed between them and the paper on which

* I request the particular attention of my readers to this remarkable phenomenon throughout all the instances of the natural somnambulism which I shall have occasion to adduce. I am aware that, in my views upon this subject, I am opposed by all the most eminent adherents of the prevailing systems of physiology; but I beg it may be noted that, while they deny the *possibility* of the phenomenon, *a priori*, upon mere theoretical grounds, I have undertaken to demonstrate its real *existence* by positive evidence of the most cogent and irresistible nature. The explanation of the fact is attended with more difficulty; but this circumstance affords no argument against its reality.

he was writing. Is it not evident here that the faculty in question must have been transferred from its appropriate organ to some other part of the nervous system?

In the following case, which appears to have been most minutely and most accurately observed, the phenomenon of the exercise of vision without the use of the eyes, and, consequently, of the transference of the faculty of sight, is still more conspicuous.

Some interesting particulars, concerning a natural somnambulist, having been communicated to the Philosophical Society of Lausanne, three of its members—Dr Levade, and Messrs Regnier and Van Berchem—were appointed a committee to make their observations and report upon the case. The somnambulist was a boy of the name of Devaud, thirteen years and six months old, residing in the house of M. Tardent, schoolmaster at Vevey.

The following are some of the facts observed and reported by the Committee upon this occasion. I have purposely left out of view the theoretical principles upon which these intelligent gentlemen attempted to account for the phenomena they observed; being anxious, at present, to confine myself, as much as possible, to the mere detail of facts.*

* I have quoted from a translation of the French Report,

"We can testify," say the Committee, "that he dressed himself in a room perfectly dark. His clothes lay on a great table; and when we jumbled them with other wearing apparel, he immediately discovered the trick, and complained grievously that his companions made sport of him. At last, by the help of a feeble ray, we saw him dress with great precision."

"Having snatched one of his books, *when his eyes were perfectly shut*, he said, without opening it, 'Tis a sorry dictionary,' as indeed it was."

With his eyes fast locked, he touched, in our presence, several objects, and yet distinguished perfectly well those he had, from those he had not seen before. Once, for example, we thrust into the drawer that contained his papers, a book which did not belong to him. He stumbled upon it by accident, and expressed great concern lest he should be suspected of theft."

"*He is sometimes apprised of the presence of objects, without being assisted by the sense of sight or of touch.*"

"Having prevailed on him to write a version, we saw him light a candle, take pen, ink and paper from his drawer, and then jot down what his master

published at Edinburgh, in 1792. An account of this case will be found also in the *Encyclopædia Britannica*. Art. SLEEP-WALKER.

dictated. *Though we put a thick piece of paper before his eyes, he continued to form each character with the same distinctness as before ; only he seemed to feel uneasy, probably from the paper being placed too near his nose, and so preventing a free respiration."*

At five o'clock, on the morning of the 21st December, our young sleep-walker rose from his bed, took his writing materials and version book, and put his pen to the top of the page, but observing some lines already traced, he brought it down to the blank part of the leaf. The lesson began with these words, *Fiant ignavi pigritia—Ils deviennent ignorans par la paresse*. What is very surprising, after writing several lines, he perceived that he had omitted an *s* in the word *ignorans*, and inserted two *rs* in *paresse* ; nor did he proceed further till he corrected both these mistakes."

" At another time, he wrote a copy, to please his master, as he said. It exhibited specimens of large and round text, and running hand, each done with its respective pen. He drew a castle in the corner of the paper, and erased a blot between two letters, without touching either of them. M. Levade, in short, has seen him cypher and calculate with great exactness. *In each of the above operations, the sleep-walker had his eyes almost always shut, but there was a light in the room."*

" We have often heard him come down stairs very hastily, when it was quite dark."

" We shewed him a book he had never seen before. He said he would examine it in day-light; and retiring, with this intention, into a very dark kitchen, opened the book," &c.

" He took from his press several of his own books, went to examine them in total darkness, cast up the title-pages, and named each, without making a single mistake, as we verified by bringing them into the light, as soon as he named them. *He has even told the title of a book, when there was a thick plank placed between it and his eyes.*"

" M. Tardent shewed us a specimen of his writing, which, he assured us, the sleep-walker had executed in the completest darkness."

In their observations upon this remarkable case, the Committee conclude, that *" since the sleep-walker can write with any thing placed before his eyes, we are not to be surprised that he should do so in the greatest obscurity. In darkness, it seems that his sense of touch supplies, in some measure, that of sight; that his hands, and even his face (for he has been seen to approach objects so near his face as to touch it), help him out with a just idea of the forms and qualities of objects."*

The reader is requested to compare this last observation with the phenomena described in the Ap-

pendix (No. II.), as occurring in the cases reported by the Doctors Despine and Delpit, and by Professor Kieser, which, I have been informed, have been the subject of a great deal of wit and ridicule. In these various instances of the observation of a very extraordinary fact, it is quite impossible that there could have been any thing like collusion between the parties; nor is there the slightest ground to suspect the competency, or the good faith, of the reporters. Had the appropriate experiments been made in this Lausanne case, the results, in all probability, would have been very similar to those observed and recorded by the learned Professor.

I may here remark, that the hypothesis of one sense supplying the want of another, as I formerly hinted, is utterly inadequate to explain the facts, and therefore quite inadmissible. In some of the cases to be afterwards adduced, it will be seen that *the whole of the senses* were in a state of temporary suspension; so that not one of them was left to perform the functions of the others, even if such an hypothesis were otherwise tenable. On the other hand, the supposition of the transference of the faculties, which apparently takes place during the apathy of the organs, combined with an increased sensibility and activity of certain portions of the nervous system, which has been observed to take

place in various instances, is much more consistent with the phenomena actually manifested, and renders the solution of all difficulties comparatively easy. At all events, explain it as we will, the fact itself is capable of being demonstrated by evidence.

The next instance of the natural somnambulism to which I shall refer, rests upon the most respectable authority of the Aulic Councillor and Professor Feder of Goettingen, a gentleman whose learning and philosophical talents were highly appreciated in his native country.

The subject of the Professor's observations was a student, who, during a severe nervous complaint, experienced several attacks of somnambulism. Upon these occasions, he would go from his bed-room to his parlour, and back, open and shut the doors, as also his closets, and take out of the latter whatever he wanted—pieces of music, pen, ink, and paper, &c.—*and all this with his eyes shut.* From among his music, he picked out a march from the Medea, laid the sheet in a proper situation before him, and having found the appropriate key, he played the whole piece, with his usual skill, upon the harpsichord. In the same manner, he also played one of Bach's sonatas, and gave the most expressive passages with surprising effect. One of the persons present turned the notes upside down: This he immediately perceived, and when he again

began to play, he replaced the sheet in its proper situation. While playing, he remarked a string out of tune, upon which he stopt, put it in order, and then proceeded. He wrote a letter to his brother; and what he wrote was not only perfectly rational, but straight and legible. While Professor Feder was upon a visit to him one afternoon, he observed that it was snowing, which was really the case. On the same day, he remarked, *notwithstanding his eyes were closed*, that the landlord of the opposite house was standing at the window, which was true; and that hats were hanging at the window of another room in the same house, which was also correct, &c. No particular experiments appear to have been made, in this case, with the view of ascertaining the precise state of the different faculties; but it was quite evident that this somnambulist saw distinctly without the use of his eyes.*

The following case of natural somnambulism is recorded in the Transactions of the Medical Society of Breslau.†

A rope-maker, twenty-three years of age, was frequently overtaken by sleep, even by day-light,

* I have mislaid my reference to the source whence I derived this case; but I believe it will be found in Moritz's *Psychological Magazine*.

† See *Acta Vratislav.* Class iv. art. 7.

and in the midst of his usual occupation, whether sitting, standing, or walking. *His eyes were firmly closed, and he lost the use of all his external senses.* While in this state, he sometimes recommenced doing all that he had been engaged in during the previous part of the day, from his morning devotions up to the commencement of the paroxysm. At other times, he would continue the work in which he happened to be engaged at the time, and finished his business with as great ease and success as when awake. When the fit overtook him in travelling, he did not stand still, but proceeded on his journey, with the same facility and almost faster than when awake, without missing the road, or stumbling over any thing. In this manner, he repeatedly went from Naumburgh to Weimar. Upon one of these occasions, he came into a narrow lane, across which there lay some timber: He passed over it regularly, as if awake, without injury. With equal care and dexterity, he avoided the horses and carriages which came in his way. At another time, he was overtaken by sleep, a short while before setting out for Weimar on horseback. He rode through the river Ilme, allowed his horse to drink, and drew up his legs to prevent them from getting wet; then passed through several streets, crossed the market-place, which was then

full of people, booths, and carts; and arrived in safety at the house where his business lay.

During the continuance of the paroxysm, he was quite insensible; though pricked, pinched, or struck, he felt nothing. He could not see when his eyes were forced open. He could not smell even the most volatile spirit; nor could he hear the report of a pistol, when fired close beside him.

It is scarcely necessary to observe, that the ordinary material principles of Physiology are quite incapable of explaining such a case as this. Here, it is at once obvious, there is no foundation for the hypothesis of one sense supplying the place of another; because *all* the external senses were ascertained to be completely dormant. The case, it is conceived, can only be accounted for by assuming, as warranted by the facts, a transference of the faculties; and that the internal sense—the soul—manifested its energies through other than the usual organs.

Dr Knoll gives a curious account of a somnambulist, whom he himself attentively and accurately observed during his nightly wanderings in winter; and his narrative is accompanied with many judicious and interesting remarks.* The subject of

* *Historische, theoretische und praktische Betrachtung eines kürzlich vorgefallenen Nachtwandels.* 1747.

these observations was a young man, a gardener, who became somnambulist, and, while in that state, performed many extraordinary operations, of which I shall notice only the following.

The lady of the house in which he resided, being apprehensive of some danger from his nocturnal excursions, ordered him to sleep in another apartment, where he was locked up and watched. When he became somnambulist, at the usual hour, he began to perform all sorts of operations upon his clothes and the furniture of the room. He climbed up to the window, and from thence to a stove, which was much higher, and at some distance from it, and rode upon the latter, as if upon horseback. The height of the stove, its distance from the window, and its small breadth, were such, that a person awake would scarcely have ventured to go through these operations. After descending from the stove, he knocked a large table about, hither and thither, and finding that it was likely to fall upon himself, he very dexterously contrived to evade it. He gathered all the clothes he could find in the room, mixed them together, then separated them carefully, and hung them up, each article in its proper place. The old stockings and shoes he endeavoured to arrange together in pairs, according to their shape and colour, as if he actually saw them. He laid hold of a needle, which he

had stuck into the wall some weeks before, put the thread through the eye, and sewed his small-clothes. Besides these, he performed a variety of other operations too tedious to enumerate; *all, however, requiring light and the use of the eyes, with which, it would appear, he was enabled to dispense.*

In this case, we have an example of the ease and confidence with which the somnambulist performs difficult and delicate operations, without any assistance from the sensitive organs. In some of the following instances, these and other remarkable phenomena will be still more conspicuously displayed.

CHAPTER XVII.

I AM now about to adduce two or three cases of somnambulism, in which the affection appears to have been occasioned by, or at least was concomitant with, an otherwise morbid state of the system. In these, it will be seen, the phenomena were, in all respects, analogous to those manifested in the preceding instances.

The following case is given upon the authority of M. Sauvages de la Croix.

A girl of twenty years of age was frequently attacked with cataleptic insensibility, during which she continued stiff and deprived of all sensation, whether standing, sitting, or lying, in the position she might happen to be in at the commencement of the attack, and she could be pushed forward, like a statue, when it was wished to remove her from one place to another. She was afterwards placed in a different state, which commenced with the same deprivation of sense and motion, but, at intervals, presented a wonderful kind of animation. She first became motionless, then, some minutes

afterwards, she began to yawn, sat up on the bed, and enacted the following scene, which she repeated at least fifty times. She spoke with an unusual liveliness and cheerfulness, and what she said was a continuation of what she had spoken in her previous fit, or a repetition of some part of the catechism, which she had heard read on the preceding evening. She frequently addressed her acquaintances in the house, and sometimes made ironical applications of moral apophthegms to them under feigned names, with open eyes, and such gestures as she had made the previous evening. *That during all this time she was not awake, is clear from various experiments. A hand was suddenly passed near her eyes, without producing any motion in the eye-lids, or any attempt to evade it, or interrupting her speech in the slightest degree. The same thing happened when a finger was suddenly approached close to her eye, or a burning taper held so near to it, that the hair of her eye-lids was actually burnt, and also when any one called loudly into her ear from behind, or threw a stone against the bedstead. Nay more, brandy and spirit of hartshorn were poured into her eyes and mouth ; Spanish snuff was blown into her nostrils ; she was pricked with needles ; her fingers were wrenched ; the ball of her eye was touched with a feather, and even with the finger : She ma-*

nifested not the slightest sensation. She always began to speak with more animation, and, soon afterwards, she sang and laughed aloud, attempted to get out of bed, and at length sprang out of it, and uttered a cry of joy. *She kept the middle way between the bedsteads as well as when awake, and never came against them—turned dexterously round between the bedsteads and a concealed closet, without ever groping her way, or touching the objects; and after turning round, she returned to her bed, covered herself with the clothes, and again became stiff as at the commencement.* She then awoke, as if from a profound sleep, and when she perceived, from the appearance of the bystanders, that she must have had her fits again, she wept the whole day for shame, and never knew what had happened to her during the paroxysm.

This case bears considerable analogy to that of Louisa Baerkmann, reported by Dr Joseph Frank, and noticed in the Appendix (No. II.) It tends, along with others, to demonstrate the total organic insensibility attending the affection, and the complete forgetfulness in the waking state of every thing that occurred during the paroxysm.

Lord Monboddo, in the 11th chapter of the Second book of his *Antient Metaphysics*, has recorded a very curious case of somnambulism, which, although I presume it is very generally known, I

shall take the liberty of again relating in his Lordship's own words.

“It was,” says his Lordship, “the case of a young girl, in the neighbourhood of my house in the country, who had a disease that is pretty well known in the country where I live, under the name of the *louping*, that is the *jumping* ague; and which is no other than a kind of frenzy which seizes the patients in their sleep, and makes them jump and run like persons possessed. The girl was attacked by this disease three years ago, in the spring, when she was about sixteen years of age, and it lasted something more than three months. The fit always seized her in the day-time, commonly about seven or eight o'clock in the morning, after she had been out of bed two or three hours. It began with a heaviness or drowsiness, which ended in sleep, at least what had the appearance of sleep, *for her eyes were close shut*. In this condition, she would leap up upon stools and tables with surprising agility; then she would get out of the cottage where she lived with her father, mother, and brother, and run with great violence, *and much faster than she could do when well*, but always with a certain destination to some one place in the neighbourhood; and to which place she often said, when she found the fit coming upon her, that she was to go; and after she had gone to the place of her

destination, if she did not there awake, she came back in the same direction, though she did not always keep the high road, but frequently went a nearer way across the fields; and though her road, for this reason, was often very rough, she never fell, notwithstanding the violence with which she ran. *But all the while she ran, her eyes were quite shut,* as her brother attests, who often ran with her to take care of her, and who, though he was much older, stronger, and cleverer than she, was hardly able to keep up with her. When she told, before the fit came on, to what place she was to run, she said she dreamt the night before that she was to run to that place; and, though they sometimes dissuaded her from going to a particular place, as to my house, for example, where they said the dogs would bite her, she said she would run that way, and no other. When she awaked, and came out of her delirium, she found herself extremely weak, but soon recovered her strength, and was nothing the worse for it, but, on the contrary, was much the worse for being restrained from running. *When she awaked, and came to herself, she had not the least remembrance of what had passed while she was asleep.* Sometimes she would run upon the top of the earthen fence which surrounded her father's little garden; and, though the fence was of an irregular figure, and very narrow at top, yet

she never fell from it, nor from the top of the house, upon which she would sometimes get, by the assistance of this fence, *though her eyes were then likewise shut*. Some time before her disorder left her, she dreamed, as she said, that the water of a well in the neighbourhood, called the *Dripping Well*, would cure her; and, accordingly, she drank of it very plentifully, both when she was well and when she was ill. Once, when she was ill, she expressed, by signs, a violent desire to drink of it (for she did not, while in the fit, speak so as to be intelligible), and they having brought her other water, she would not let it come near her, but rejected it with signs of great aversion; but when they brought her the water of this well, she drank it greedily, *her eyes being all the while shut*. Before her last fit came upon her, she said that she had just three leaps to make, and she would neither leap nor run more. And accordingly, having fallen asleep as usual, she leaped up upon the stone at the back of the chimney, and down again; and having done this three times, she kept her word, and never leaped nor run more. She is now in perfect health."

Having given these details of this very interesting case, his Lordship justly observes: "What I have said of this girl remembering nothing of what passed while she was in the fit, is the case of all

night-walkers. It is by this, chiefly, that night-walking is distinguished from dreaming; and it proves to me, that the mind is then more disengaged from the body than it is even in dreaming. For it is not only without the use of the senses, but without memory." So far his Lordship.

Here, then, is a case of natural somnambulism; in which we find several of the phenomena peculiar to the affection, and which have occurred in many other instances, very distinctly developed. With her eyes shut, this girl runs rapidly along the high-road, and through the fields, uninjured. She runs with greater rapidity than she was capable of doing in her ordinary state. She also runs securely upon the narrow and irregular top of an earthen-fence, and upon the top of the house, with her eyes still closed. In the same state, she distinguishes between the water of a particular well and other water. When awake, she remembers nothing of what occurred during her fits; and she predicts the period and the manner of her recovery.

The following account was communicated to Dr Wienholt by Dr Schultz of Hamburg, and it is also inserted in Meiner's collection, he having received it from the same source.

The patient was a girl of thirteen, belonging to a respectable family, who was sick of a severe ner-

vous complaint, accompanied with violent convulsive motions, insensibility and catalepsy. In some of her attacks, she conversed with much acuteness and pointed wit. While in a state of somnambulism, she distinguished, without difficulty, all colours presented to her, and recognised the numbers of cards, and the stripes upon the painted cards. She described the colour of the binding of books. She wrote as well as usual, and cut out figures in paper, as she was accustomed to do for amusement in her waking state. *During all this time, her eyes were fast closed; but in order to be certain, that, upon these occasions, she made no use of her eyes, they were bandaged upon the approach of the convulsions which preceded the somnambulism.*

I need make no remark upon this case, excepting that it confirms and corroborates some of the most remarkable phenomena described in the preceding instances.

One of the most extraordinary somnambulists upon record is a certain John Baptist Negretti of Vicenza, a servant in the family of the Marquis Louis Sale. Messrs Righlini and Pignatti particularly observed the phenomena he exhibited; and the latter, in the year 1745, drew up a Report upon the case, of which the substance will be found in the *Journal Encyclopedique* for the month of

July 1762, and also in the work of Muratori already referred to, page 96, and in the *Journal Etranger* for the year 1756.

I must refer the inquisitive reader to some one of the above-mentioned works for a full account of this very curious and amusing case; and shall only advert to one or two particulars, as illustrative of the state of this somnambulist's sensibility.

Upon one occasion, Negretti dressed a salad, having previously taken all that was necessary for this purpose out of the kitchen-press; and when it was ready, he sat down at a table to eat it. The plate was taken away from before him, and a dish of cabbage set down in its place, which he ate instead of the salad. While he was still eating, the cabbage was removed, and a tart placed before him, which he also devoured, without appearing to perceive any difference in the things he was eating; from which circumstance, the reporters observe, it may be inferred, that the usual organs of taste were inactive or insensible, and that the soul only was busy, without any co-operation of the body.

A similar inference may be drawn from the following occurrence:—At another time, he said that he wished to drink a little. Accordingly, he went to a tavern, called the landlord, and asked for half a pint of wine. Instead of wine, half a pint of water

was given him, which he drank off. Upon returning home to the chateau, he appeared very cheerful, said that he had been drinking in the tavern, and that his stomach was much the better of it.*

In Moritz's *Psychological Magazine* (vol. ii. No. 1, p. 69), there is a short account, by Ritter, of a boy of ten years of age, who became subject to fits of drowsiness, and frequently fell asleep suddenly, even in the day-time, whether sitting or standing. In this state, he would converse with the persons present; *and although his eyes were, to all appearance, completely closed, he was able to see and discriminate all objects presented to him.* When awakened, he recollected nothing of what had occurred during his sleep, but would talk of other matters. On his again falling asleep, the thread of discourse could be taken up where it had been previously interrupted, and continued. When he again awoke, he remembered nothing of the conversation that had occurred during his sleep, but recollected what had been last said to him when awake; and thus, says the reporter, it appeared as if he had two souls, one for the state of sleep, and the other for the period when he was awake.

In this and the following case, which presents a still more extraordinary instance of this *double*

* Similar phenomena are quite familiar to those acquainted with the magnetic somnambulism.

personality, we might perhaps find some corroboration of the ideas of Reil and others, respecting the two antagonist poles of sensibility in the human constitution—the *pneumatic* and the *somatic*—the cerebral and the ganglionic systems of vitality.

The case now to be referred to occurred in America. It is described by Major Elliot, Professor of Mathematics in the United States' Military Academy at West Point, and was communicated by Dr Mitchell to Dr Nott, in the *Medical Repository of America*, for January 1816.

The patient was an accomplished young lady, who, in a state of somnambulism, lost all recollection of her previous acquirements, and, like a child, was obliged to commence her education anew. When restored to her natural state, she again became possessed of her former knowledge, but remembered nothing of what had occurred in the interval. During four years, these two states alternated periodically; but she herself possessed as little consciousness of her double character, as two distinct persons of each other.

When treating of somnambulism, Dr Abercrombie observes, that “another very singular phenomenon presented by some instances of this affection, is what has been called, rather incorrectly, a state of *double consciousness*. It consists in the individual recollecting, during a paroxysm, circum-

stances which occurred in a former attack, though there was no remembrance of them during the interval. This, as well as various other phenomena connected with the affection, is strikingly illustrated in a case described by Dr Dyce of Aberdeen, in the *Edinburgh Philosophical Transactions*. The patient was a servant girl, and the affection began with fits of somnolency, which came upon her suddenly during the day, and from which she could at first be roused by shaking, or by being taken out into the open air. She soon began to talk a great deal during the attacks, regarding things which seemed to be passing before her as a dream; and she was not, at this time, sensible of any thing that was said to her.....In her subsequent paroxysms, she began to understand what was said to her, and to answer with a considerable degree of consistency," &c. "She also became capable of following her usual employments during the paroxysm; at one time she laid out the table correctly for breakfast, and repeatedly dressed herself and the children of the family, *her eyes remaining shut the whole time*. The remarkable circumstance was now discovered, that, during the paroxysm, she had a distinct recollection of what took place in former paroxysms, though she had no remembrance of it during the intervals. At one time, she was taken to church while under the attack, and there be-

haved with propriety, evidently attending to the preacher ; and she was at one time so much affected as to shed tears. In the interval, she had no recollection of having been at church ; but, in the next paroxysm, she gave a most distinct account of the sermon, and mentioned particularly the part of it by which she had been so much affected.”—“ During the attack, her eye-lids were generally half-shut ; her eyes sometimes resembled those of a person affected with amaurosis, that is, with a dilated and insensible state of the pupil ; but sometimes they were quite natural.”—“ At one time, during the attack, she read distinctly a portion of a book which was presented to her : and she often sung, both sacred and common pieces, incomparably better, Dr Dyce affirms, than she could do in the waking state.”*

Dr Abercrombie also relates the following analogous history.

“ A girl aged seven years, an orphan of the lowest rank, residing in the house of a farmer, by whom

* Abercrombie *On the Intellectual Powers*. Fourth Edition, pp. 294, &c.

It appears that this girl was afterwards abused, in one of her paroxysms, in the most brutal and treacherous manner. *On awaking, she had no consciousness whatever of the outrage ; but in a subsequent paroxysm, some days afterwards, it recurred to her recollection, and she then related to her mother all the revolting particulars.* This case presents a very striking instance of the phenomenon of *double personality*.

she was employed in tending cattle, was accustomed to sleep in an apartment separated by a very thin partition from one which was frequently occupied by an itinerant fiddler. This person was a musician of very considerable skill, and often spent a part of the night in performing pieces of a refined description ; but his performance was not taken notice of by the child except as a disagreeable noise. After a residence of six months in this family, she fell into bad health, and was removed to the house of a benevolent lady, where, on her recovery after a protracted illness, she was employed as a servant. Some years after she came to reside with this lady, the most beautiful music was often heard in the house during the night, which excited no small interest and wonder in the family; and many a waking hour was spent in endeavours to discover the invisible minstrel. At length, the sound was traced to the sleeping room of the girl, who was found fast asleep, but uttering from her lips a sound exactly resembling the sweetest sounds of a small violin. On farther observation it was found, that, after being about two hours in bed, she became restless and began to mutter to herself;—she then uttered sounds precisely resembling the tuning of a violin, and at length, after some prelude, dashed off into elaborate pieces of music, which she performed in a clear and accurate manner, and with a sound

exactly resembling the most delicate modulations of that instrument. During the performance she sometimes stopped, made the sound of re-tuning her instrument, and then began exactly where she had stopped in the most correct manner."

"After a year or two, her music was not confined to the imitation of the violin, but was often exchanged for that of a piano of a very old description, which she was accustomed to hear in the house where she now lived; and she then also began to sing, imitating exactly the voices of several ladies of the family. In another year from this time, she began to talk a great deal in her sleep, in which she seemed to fancy herself instructing a younger companion. She often descanted with the utmost fluency and correctness on a variety of topics, both political and religious, the news of the day, the historical parts of Scripture, public characters, and particularly the characters of members of the family and their visitors. In these discussions she shewed the most wonderful discrimination, often combined with sarcasm, and astonishing powers of mimicry. Her language through the whole was fluent and correct, and her illustrations often forcible and even eloquent. She was fond of illustrating her subjects by what she called a *fable*, and in these her imagery was both appropriate and elegant. She was by no means, says my infor-

mer, limited in her range,—Bonaparte, Wellington, Blucher, and all the kings of the earth, figured among the phantasmagoria of her brain; and all were animadverted upon with such freedom from restraint, as often made me think poor Nancy had been transported into Madame Genlis' Palace of Truth. The justness and truth of her remarks on all subjects, excited the utmost astonishment in those who were acquainted with her limited means of acquiring information. She has been known to conjugate correctly Latin verbs which she had probably heard in the school-room of the family; and she was once heard to speak several sentences very correctly in French,—at the same time stating that she heard them from a foreign gentleman, whom she had met accidentally in a shop. Being questioned on this subject when awake, she remembered having seen the gentleman, but could not repeat a word of what he said. During her paroxysms, it was almost impossible to awake her, *and when her eyelids were raised, and a candle brought near the eye, the pupil seemed insensible to the light.* For several years, she was, during the paroxysms, entirely unconscious of the presence of other persons; but, about the age of sixteen, she began to observe those who were in the apartment, and she could tell correctly their numbers, though the utmost care was taken to have the room darkened. She now also

became capable of answering questions that were put to her, and of noticing remarks made in her presence; and, with regard to both, she shewed astonishing acuteness. Her observations, indeed, were often of such a nature, and corresponded so accurately with characters and events, that by the country people she was believed to be endowed with supernatural powers.

“ During the whole period of this remarkable affection, which seems to have gone on for ten or eleven years, she was, when awake, a dull awkward girl, very slow in receiving any kind of instruction, though much care was bestowed upon her ; and, in point of intellect, she was much inferior to the other servants of the family. In particular, she shewed no kind of turn for music. She did not appear to have any recollection of what had passed during her sleep ; but, during her nocturnal ramblings, she was more than once heard to lament her infirmity of speaking in her sleep, adding, how fortunate it was that she did not sleep among the other servants, as they teased her enough about it as it was.”*

* Abercrombie, *ut sup.* pp. 296, &c.

CHAPTER XVIII.

IN some of the preceding cases, it must have been observed, the peculiar phenomena of somnambulism, although, upon the whole, of a pretty uniform character, are more distinctly manifested than in others. Sometimes, too, only one or two of these phenomena are developed, while the others do not appear at all, or are only slightly noticed. These peculiarities may arise from the degree in which the patient is affected, from the opportunities afforded for experiment and observation, and from the knowledge and tact of the observers. But from the circumstance that a particular phenomenon has not been noticed in any one case, we are not entitled to conclude that it might not have been developed, had proper means been employed to ascertain its existence. It is only of late that professional men have obtained any thing approaching to an adequate knowledge of the nature of this affection, and of the best means of investigating the

phenomena it presents. Previously, only such appearances were, in general, observed, as might happen to be accidentally manifested.

The readers of the former edition of this publication may remember that, in the Appendix (now No. II.), there was inserted, amongst others, a short account of a case of Catalepsy, which occurred in the hospital *Della Vita*, at Bologna. The following very remarkable case of spontaneous catalepsy and ecstasy combined, was also observed, at the same place, by MM. Carini and J. Visconti, and by M. Mazzacorati. I extract the interesting account given of this case in the LANCET for 1832-33 (vol. xxiii. pp. 668, &c.).

The patient was a female of twenty-five years of age. I shall omit the medical description given of the morbid symptoms, and proceed at once to notice the phenomena which were manifested.

The body was altogether insensible even to the most intense and painful physical impressions. *During the first twenty-one days, the eyes were completely shut. In the second period of the disease, she opened them, but she kept them motionless, turned towards the light, and insensible to all the impressions sought to be communicated to them. M. Mazzacorati soon perceived that some singular faculties were developed in the patient during this state, and, in concert with M. Carini, he tried a series of expe-*

riments, the marvellous results of which were the following.

Phenomena of Condition.—The patient heard no sound, however loud, which reached her by the ears; but if she was spoken to, even in the lowest whisper, directed on the hollow of the hand, or sole of the foot,—on the pit of the stomach, or along the traject of the sympathetic nerve, she heard perfectly the words addressed to her. It was the same, if, while speaking to her in a whisper, the speaker applied her hand to any of the places above mentioned. But, stranger still, she heard also when the person addressing her was only in distant mediate communication with the surface of the body. Amid a crowd of experiments, which leave no doubt of this fact, it will suffice to mention one in which the chain was of four persons, three of whom held each others' hands, and the fourth communicated with the third by the interposition of a very long wax-taper; the first of the chain, mean while, being the only person in contact with the patient. Under these circumstances, she heard perfectly the whispers of the fourth person pronounced at a considerable distance.

Phenomena of Speech.—The patient when left, to herself, kept constant silence; but, when interrogated in the manner above mentioned, she answered with perfect propriety, always making use of the

tone of voice of her questioner. If, during her answer, the immediate contact was broken, or the chain interrupted, she stopped suddenly, but the instant the communication was re-established, she finished her discourse, with this remarkable circumstance, that she took it up at the point where it would have arrived, had there been no interruption. It seems, then, that the answer was combined in her mind even while the external connexions were suspended, and that, during this suspension, the vocal organs became paralyzed.

Phenomena of Natural or Magnetic vision.—With her eyes closed, or even bandaged, she recognised things, and their colours, when placed on the regions where this special sensibility existed. She pointed out to the instant the hours and minutes on every watch. She often, but not always, succeeded in reading words written on paper. Later in the disease, this faculty became still more prodigiously developed. It sufficed to call her attention to any object placed in her room, or in the next room, or in the street, or out of the town, or even at enormous distances, to have it described by her as perfectly as if she saw it with her eyes. The following are some experiments sufficient to prove this assertion.—In presence of a celebrated professor of the University, it was agreed to ask her to describe a convent in the town, into which neither herself nor any of her

interrogators had ever entered. Next, to describe a cellar in a country house, equally unknown to the questioners. According to the descriptions she gave, plans were designed, and on the places being visited, they were found to correspond perfectly with the designs made by her dictation. She even pointed out the number and position of some barrels in the cellar. In the same sitting, the Professor questioned her respecting the arrangement of his study. Her answers were of the most perfect exactitude. The following questions and answers, for example, are extracted from the notes taken on the occasion :—"What is in such a corner?" "A table."—"And on the table?" "A book."—"And on the book?" "A skull."—"Of what?" "Of an animal."—"Of what animal?" "I don't know its name; but if you pronounce it among many others, I can tell you." In fact, on mentioning the names of many animals, she allowed several to pass, and instantly stopped at the panther, to which animal the skull actually belonged. It is remarkable, with respect to names of things and persons unknown to her, that she always pursued the same method, and thus obtained an almost intuitive knowledge thereof.

She described also, with the same facility, the healthy and diseased parts of her own person, and of other individuals. The Professor already mentioned

subjected her to an anatomical examination, sometimes in Latin (a language of which she was perfectly ignorant) and sometimes in Italian, but always using scientific nomenclature. He obtained in reply most exact descriptions, in Italian, of the heart and its appendages, the solar plexus, the pancreas, the first vertebra or atlas, the mastoid apophysis, &c. She also gave precise notions respecting the pathological state of a lady she did not know. After this, the reader will scarcely be astonished when we add, that she described, with equal facility, places pointed out to her in Rome, Paris, and Naples.

During the period in which her eyes remained open, and her pupils motionless and turned towards the light, the experimentalists believed that they observed that the optic axis had become electrometers of prodigious sensibility, since they turned constantly and immediately to the side where the smallest friction was exercised capable of producing electric tension. They thus perceived electric operations performing in an adjacent room. Finally, they followed, like a magnetic needle, the movements of a magnetic bar behind the patient's head, or even at the other side of a wall.

Phenomena of Smell and Taste.—Odorous substances were discovered by the patient with the same promptitude and precision. At the moment they were placed on the sensitive regions, she

named them, or, if she had no previous knowledge of the name of the substance applied, she recognised the name among many others pronounced before her. The touch presented analogous qualities. When a substance was placed on a sensitive region, she recognised it as perfectly as could be done by the most delicate hands.

The *Intellect*, sufficiently acute in its natural state, was much more so during the cataleptic access. Although she was acquainted only with the four rules of arithmetic, she succeeded, under the cataleptic influence, in extracting several roots of numbers; amongst others, that of the number 4965. However, this experiment was not invariably successful. She exposed with much lucidity several philosophical systems, and discussed others proposed to her. *She discovered and described the phases of her own disease.* At present, the patient is perfectly cured, having had recourse to no remedy whatever; but the cataleptic access can be now voluntarily reproduced and terminated. She has pointed out means by which analogous phenomena may be occasioned in other persons. The observers propose to make known all these discoveries in a work they are preparing on the subject.*

This is unquestionably a very extraordinary, although by no means a singular case. My readers

* I am not aware whether any such work has yet appeared.

may compare it with the numerous experiments made by Dr Petetin at Lyons, as detailed in the Appendix, with the case reported by Dr Joseph Frank, and with several others, in which the affection appears to have been developed in its highest degrees. Deception in these instances is totally out of the question, and there can be no doubt as to the competency of the observers.

I am happy to observe, that some of our own most respectable medical practitioners are now beginning to pay some degree of attention to the interesting phenomena of catalepsy and somnambulism, which hitherto they had, in general, either totally disregarded, or been accustomed to treat with contemptuous scepticism, as pretended miracles and impostures. In a recent clinical lecture on a case of catalepsy, which occurred in the Jervis Street Hospital, Dublin, by Mr Ellis, and published in the LANCET (Saturday, May 2. 1835), the ingenious lecturer, after describing the usual symptoms of the cataleptic affection, and alluding to the Bologna case, already reported, observes, that "this and similar statements are doubtless well calculated to put our credulity to the test; but when we call to mind the extraordinary phenomena which occur in cases of somnambulism, and what we have ourselves witnessed in the case of Mrs Finn, we are not, in my opinion, justified

in withholding our belief of the possibility of facts so well authenticated. Mr Ellis considers that Ecstasy (or Somnambulism) "bears a strong resemblance to Catalepsy." If the opinion of an unprofessional man who has paid much attention to this subject might be thought of any weight, I should be disposed to say, that somnambulism is sometimes simple, and sometimes the concomitant of some other morbid affection or functional derangement; while catalepsy occasionally presents a mixed or composite character, being accompanied with a more or less perfect somnambulism, and that it is in this last description of cases, in general, that the most remarkable phenomena are developed.

"When we come," says Mr Ellis, "to inquire into the causes of these strange diseases, we find that some of them arise spontaneously, and consequently, their origin will not admit of explanation. Others appear to be the result of functional derangement, or mental emotion; a third may be the effect of sympathetic imitation; whilst a fourth, it is alleged, may be produced by the mysterious agency of Animal Magnetism. The records of medicine furnish abundant examples of the two first. I will not, therefore, occupy your time in enumerating facts which are well known," &c. "but at once proceed

to direct your attention to a few cases, in order to prove the influence of sympathetic imitation, and of Animal Magnetism, in causing these diseases."

Mr Ellis then refers to the Bologna case, published in the *Gazette Medicale* of Paris, for November 1832, and which will be found, along with a variety of others, in the Appendix to this work (No. II.), and also to that of Mrs Finn, who became decidedly hysterical, in consequence of constantly sitting with an hysterical girl. Mr Ellis proceeds: "The advocates of Animal Magnetism allege that they can, by the exercise of certain manœuvres of the hand, conducted according to their system, produce ecstasy in such persons as may be subjected to its influence. Many cases in support of the truth of their doctrine have been published;" and the lecturer then refers to the case reported by M. Fillazzi in his inaugural thesis, which I shall give at length in a subsequent part of this work, when I come to canvass the opinions of M. Andral. Upon that most remarkable and most decisive case, Mr Ellis makes the following truly philosophical commentary. "However incredible or surprising this narrative may appear at the first blush, yet, when we bear in mind that it has been authenticated by a physician of character, who had been himself an unbeliever in the doctrines of Animal Magnetism, we should not, in my opinion, be

justified in doubting his veracity. Our knowledge of the laws of the animal economy is not yet sufficiently perfect to warrant our disbelief in the possibility of certain phenomena, *merely* on the grounds that we did not ourselves witness their occurrence, or because they cannot be satisfactorily explained according to our present notions of physiology and pathology. For my own part, I have made it a rule to receive all information on these abstruse but very interesting subjects, with feelings of impartiality, being uninfluenced by preconceived theories, and, I trust, not being hypercritically sceptical of the statements of others, and to wait patiently in all matters of doubt, with the hope that time, the growing intelligence of the age, and the advancement of science, will speedily dispel the obscurity."

Mr Ellis then proceeds to report the case of Mrs Finn, who was treated in the Jervis Street Hospital. It was a case of catalepsy, and presented many of the phenomena which we have seen occurring in other instances—such as insensibility to external *stimuli*, the transference of sensation, &c. "An *Æolian* was played close to her ear, but she seemed to be unconscious of what was doing; her head was then placed over a bucket, and some cold water was dashed upon her. She screamed violently, but did not become conscious. *She was*

spoken to on the epigastrium, the palms of the hands, and the soles of the feet. When she recovered from the fit, on being questioned as to whether she had heard the music, or any person speaking, or if she felt the water, she answered by *signs* in the negative." For a considerable period, she was deprived of the faculty of speech, but recovered it after vomiting. At a subsequent period, when her complaint appears to have become much modified, "she stated, that having been thinking over various matters which had occurred to her during the last two months, she recollected having heard a voice one day on the pit of the stomach while she was in a fit, and consequently otherwise insensible. On the occurrence of the first cataleptic attack after this communication, she was spoken to on the epigastrium as previously; and on the subsidence of the fit, she could repeat with accuracy every word addressed to her through this region. This experiment was often repeated, and always attended with similar results. She could hear the lowest whisper, or even the ticking of a watch. However, she was incapable of distinguishing between the voices of different persons who spoke to her. She stated, that the voice appeared to her as if it issued from a barrel, and that she could form no idea whatever of the state she was in."

It were exceedingly desirable that we possessed many such intelligent and philosophical practitioners as Mr Ellis;—men who would not disdain to interrogate Nature, and to listen to reason, instead of having their opinions constantly regulated, and their views cramped, by an obstinate adherence to preconceived notions.

CHAPTER XIX.

I SHALL adduce only one other instance of the natural somnambulism. The case is one of recent occurrence. It is so exceedingly interesting in itself, illustrates so many of the characteristic phenomena of the affection under discussion, and was so carefully observed by a competent and skilful physician, that I am induced to enter much more fully into its details, than I have done in the preceding instances. The following account is extracted from a long and minute report by Dr Belden, the medical attendant upon the patient, in the *American Journal of the Medical Sciences*, No. 28, for August 1834.

Jane C. Rider, in the seventeenth year of her age, subject to frequent headaches, was first attacked with the singular affection about to be described, on the night of the 24th of June. Dr Belden, who was called in, found her struggling to get out of bed, and complaining much of pain in the left side of her head. Her face was flushed, head hot, eyes closed, and her pulse much excited.

Attributing the attack to the presence of undigested food in the stomach, Dr Belden gave her an active purgative, which brought away a large quantity of green currants, after which she became more quiet, and soon fell into a natural sleep, from which she did not awake until morning; *when she was totally unconscious of every thing that had passed during the night, and could scarcely be persuaded that she had not slept quietly the whole time.* After the lapse of nearly a month, she was attacked with a second paroxysm, during which, after several attempts to keep her in bed, it was determined to suffer her to take her own course, and watch her movements. Released from constraint, she dressed herself, went down stairs, and proceeded to make preparations for breakfast.

She set the table, arranged the various articles with the utmost precision, went into a dark room, and to a closet at the most remote corner of it, from which she took the coffee cups, placed them on a waiter, turned it sideways to pass through the doors, avoided all intervening obstacles, and deposited the whole safely on the table. She then went into the pantry, the blinds of which were shut, and the door closed after her. She there skimmed the milk, poured the cream into one cup, and the milk into another, without spilling a drop.

She then cut the bread, placed it regularly on the plate, and divided the slices in the middle. In fine, she went through the whole operation of preparing breakfast, with as much precision as she could in open day; *and this with her eyes closed*, and without any light except that of one lamp, which was standing in the room, to enable the family to observe her operations. During the whole time, she seemed to take no notice of those around her, unless they purposely stood in her way, or placed chairs or other obstacles before her, when she avoided them, with an expression of impatience at being thus disturbed. She finally returned voluntarily to bed, *and on finding the table arranged for breakfast when she made her appearance in the morning, inquired why she had been suffered to sleep, while another had performed her duty. None of the transactions of the preceding night had left the slightest impression on her mind.*

After this, the paroxysms became more frequent. Sometimes she did not leave her room, but was occupied in looking over the contents of her trunk, and arranging the different articles of dress. *She occasionally placed things where she could not find them when awake, but some circumstances induced the belief that the knowledge of their situation was restored in a subsequent paroxysm.* In one instance, she disposed of her needle-book where she could

not afterwards discover it; but after some time had elapsed, she was found one night in her chamber, sewing a ring on the curtain with a needle which she must have procured from the lost book.

The entire paroxysm was sometimes passed in bed, where she sung, talked, and repeated passages of poetry. Once she imagined herself at Brattleborough, spoke of scenes and persons with which she was acquainted there, and described the characters of certain individuals with great accuracy and shrewdness, and imitated their actions so exactly as to produce a most comical effect.

Generally, her conceptions relative to place were, to a certain extent, correct—those relating to time were very commonly inaccurate. *She almost invariably supposed it was day*: hence her common reply, when reminded it was time for her to retire, was—"What! go to bed in the day-time?"—*Still her movements were always regulated by the senses, and not by her preconceived notions of things.* Her chamber was contiguous to a hall, at one extremity of which was the stair-case. At the head of the stair was a door, which was usually left open, but which was once closed after she was asleep, and fastened by placing the blade of a knife over the latch. *On getting up, she rushed impetuously from her room, and, without stopping, reached out her hand before*

she came to the door, seized the knife, and throwing it indignantly on the floor, exclaimed, "Why do you wish to fasten me in?"

Allusion has been made to her sewing in the dark, and circumstances render it almost certain that she must at that time have threaded her needle also. Some time after this occurrence, she conceived the plan, during a paroxysm, of making a bag, in which, as she said, to boil some squash. *She was then seen to thread a needle in a room in which there was barely light enough to enable others to perceive what she was about; and afterwards, the same night, she was seen to do it with her eyes closed. In this condition, she completed the bag, and, though a little puckered, as she observed, it still answered very well to boil the squash in. In one instance, she not only arranged the table for a meal, but actually prepared a dinner in the night, with her eyes closed. She first went into the cellar in the dark, procured the vegetables, washed each kind separately, brought in the wood and made a fire. While they were being boiled, she completed the arrangements of the table, and then proceeded to try the vegetables, to ascertain whether they were sufficiently cooked. After repeated trials, she observed the smallest of them were done—she took them up, and, after waiting a little, said the rest would do, and took them up also. They were actually*

very well cooked. She then remarked that S., a little girl in the family, ate milk, and procured a bowl for her—she also procured one for herself, and ate it. As the family did not set themselves at table, she became impatient, and complained that the men never were ready for their dinner. *While engaged in her preparations, she observed a lamp burning in the room, and extinguished it, saying, she did not know why people wished to keep a lamp burning in the day-time.* On being requested to go to bed, she objected, alleging that it was day. *In the morning, she appeared as usual, totally unconscious of the transactions of the preceding night.*

At the commencement of a paroxysm, she appeared to a spectator like a person going quietly to sleep. *Her eyes were closed, the respirations became long and deep, her attitude, and the motions of the head, resembled those of a person in a profound slumber.* Her manner differed exceedingly in different paroxysms. Sometimes she engaged in her usual occupations, and then her motions were remarkably quick and impetuous—*she moved with astonishing rapidity, and accomplished whatever she attempted with a celerity of which she was utterly incapable in her natural state.* She frequently sat in a rocking chair, at times nodding, and then moving her head from side to side, with a kind of nervous uneasiness, the hand and fingers being, at the same

time, affected with a sort of involuntary motion. In the intervals of reading and talking, and even when engaged in these very acts, her nods, the expressions of her countenance, and her apparent insensibility to surrounding objects, forced upon the mind the conviction that she was asleep. Pain in a circumscribed spot on the left side of the head was generally, if not always, an attendant on the paroxysm, and frequently occasioned a degree of suffering almost beyond endurance. To this spot she invariably pointed as the seat of her agony, when she repeated the expression, "It ought to be cut open—it ought to be cut open."*

Her eyes were generally closed, but at times they were widely open, and the pupil was then very considerably dilated. These different states of the eye seemed to occasion no difference in the power of seeing—she saw apparently as well when they were closed as she did when they were open.†

* Without intending to cast the slightest imputation upon the respectable medical attendant on this young lady, and at the risk of exposing myself, perhaps, to the ridicule of the whole profession, I have no hesitation in saying that, in my humble opinion, the wish of the patient ought to have been complied with, and an operation, if possible, performed. It is one of the many extraordinary circumstances attending somnambulism, that no medicine nor mode of treatment prescribed by a patient, in that state, has ever been known to operate injuriously; on the contrary, it generally does good; while the neglect of such prescriptions frequently produces bad consequences.

† In my original abstract of this case, I omitted a passage in

There is abundant evidence that she recollected, during a paroxysm, circumstances which occurred in a former attack, though there was no remembrance of them in the interval. A single illustration will suffice, though many more might be given. In a paroxysm, a lady who was present placed in her hand a bead-bag which she had never seen before. She

Dr Belden's Report which here follows, because it appeared to me to describe a solitary phenomenon, probably depending upon some peculiarity in this patient, from which no general conclusion could be legitimately deduced. I have since learnt, however, that the matter has been viewed by others in a different light; and I, therefore, insert the passage here, lest I should be thought to have suppressed any circumstance material to the explanation of the case.

In order to test the sensibility of the eye, the reporter took one evening a small concave mirror, and held it so that the rays proceeding from a lamp were reflected upon her closed eye-lid. When the light was so diffused that the outline of the illuminated space could scarcely be distinguished, it caused, the moment it fell on the eye-lid, a shock equal to that produced by an electric battery, followed by the exclamation: "Why do you wish to shoot me in the eyes?" This experiment was repeated several times, and was always attended with the same result. It was also tried when she was awake, and the effect, though less striking, was very perceptible. The same degree of light thrown on the reporter's eye-lids occasioned no pain.

Understanding that attempts had been made to construct some theory upon the above-mentioned facts, I think it right to put my readers in possession of the following observation of Professor Kluge:

"Most frequently the magnetic treatment produces an excited sensibility in the optic nerve, and a sensation of burning in the eyes, accompanied with flashes of light, or a convulsive twitching of the eye-lids."—KLUGE, p. 363.

examined it, named the colours, and compared them with those of a bag belonging to a lady in the family. The latter bag being presented to her in a subsequent paroxysm, the recollection of the former was restored—she told the colours of the beads, and made the same remarks respecting the comparative value of the two bags that she had done before. The reporter had taken measures to satisfy himself in the interval that she then remembered nothing of the first impression.

At the termination of a paroxysm, she sunk into a profound sleep. The frown disappeared from her brow, the respirations again became long and deep, and the attitude was that of a person in undisturbed slumber. She soon began to gape and rub her eyes, and these motions were repeated after short intervals of repose. In the course of fifteen or twenty minutes from the first appearance of these symptoms, she opened her eyes, when recollection was at once restored. *She then invariably reverted to the time and place at which the attack commenced, and in no instance, when under the care of the reporter, manifested any knowledge of the time that had elapsed, or the circumstances which transpired during the interval.*

The family in which Jane lived were early convinced, from the confidence with which she moved about, and the facility with which she always

avoided obstacles, that she saw both when her eyes were closed and in the dark; but no experiments were instituted to determine the fact until the evening of the 10th of November, when it was proposed to ascertain *whether she could read with her eyes closed.*

She was seated in a corner of the room, the lights were placed at a distance from her, and so screened as to leave her in almost entire darkness. In this situation, she read with ease a great number of cards which were presented to her, some of which were written with a pencil, and so obscurely, that in a faint light no trace could be discerned by common eyes. She told the reporter the date of coins, even when the figures were nearly obliterated. A visitor handed her a letter, with the request that she would read the motto on the seal, which she readily did, although several persons present had been unable to decypher it with the aid of a lamp. The whole of this time her eyes were, to all appearance, firmly closed.

Upon one occasion, she fell asleep while her physician (the reporter) was prescribing for her, and her case having now excited considerable interest, she was visited during that and the following day, by probably more than a hundred people. Upon this occasion she did not awake until forty-eight hours after the attack. *During this time, she read a great variety of cards written and presented to her*

by different individuals, told the time by watches, and wrote short sentences.

For greater security, a second handkerchief was sometimes placed below the one which she wore constantly over her eyes, but apparently without causing any obstruction to the vision. She also repeated, with great propriety and distinctness, several pieces of poetry, some of which she had learned in childhood, but had forgotten, and others which she had merely read several times since, without having ever committed them to memory. In addition to this, she sung several songs, such as "Auld Lang Syne," and "Bruce's Address to his army," with propriety and correctness. Yet she never learned to sing, and never had been known to sing a tune when awake.

On the 20th of November, the reporter took a large black silk handkerchief, placed between the folds two pieces of cotton batting, and applied it in such a way that the cotton came directly over the eyes, and completely filled the cavity on each side of the nose—the silk was distinctly seen to be in close contact with the skin. Various names were then written on cards, both of persons with whom she was acquainted, and of those who were unknown to her, which she read as soon as they were presented to her. This was done by most of the persons in the room. In reading, she always held the paper the right side up, and

brought it into the line of vision. The cards were generally placed in her hand, for the purpose of attracting her notice; but when her attention was excited, she read equally well that which was held before her by another.

Being desirous, if possible, to prove that the eye was actually closed, the reporter took two large wads of cotton, and placed them directly on the closed eye-lids, and then bound them on with the handkerchief before used. The cotton filled the cavity under the eye-brow, came down to the middle of the cheek, and was in close contact with the nose. The former experiments were then repeated, without any difference in the result. She also took a pencil, and while rocking in her chair, wrote her own name, each word separately, and dotted the *i*. Her father, who was present, asked her to write his name. "Shall I write Little Billy or Stiff Billy?" was her reply, imagining that the question was proposed by a little boy of the name of William, belonging to the family. She wrote *Stiff Billy*—the two words without connexion, and after writing them both, she went back and dotted the *i* in each. She then wrote *Springfield* under them, and after observing it a moment, smilingly remarked that she had left out a letter, and inserted the *l* in the proper place. At another time, a

gentleman present wrote his name in characters so small that no one else could distinguish it at the usual distance from the eye. As soon as the paper was put into her hand, she pronounced the name. *Although she was closely watched, no attempt to open the eyes was observed.*

During almost every paroxysm, she repeated poetry and song, and though there are some pieces which she must have repeated in this way scores of times, her knowledge of them when she is awake is not in the least improved by the practice. These experiments were performed in the presence of several of the most respectable and intelligent gentlemen in town, and they were all convinced there could be no deception.

While in a paroxysm, the lights were removed from her room, and the windows so secured that no object was discernible. Two books were then presented to her, which had been selected for the purpose; she immediately told the titles of both, though one of them was a book she had never seen before.

The room in the front part of the house she had never seen, except for a few moments several months before. The shutters were closed, and it was so dark that it was impossible for any one possessing only ordinary powers of vision to distinguish the colours on the carpet. She, however,

though her eyes were bandaged, noticed and commented upon the various articles of furniture, and pointed out the different colours in the hearth-rug. She also took up and read several cards which were lying on the table. Soon after, observing her with a skein of thread in her hand, Dr Belden offered to hold it for her to wind. She immediately placed it on his hands, and took hold of the end of the thread, in a manner which satisfied him that she saw it, and completed the operation as skillfully and readily as if she were awake. Having left the room a moment, the Doctor found her, on his return, with her needle threaded, and hemming a cambric handkerchief. Bryant's Poems were given to her; she opened the book, and turning to the *Thanatopsis*, read the whole (three pages), and the most of it with great propriety.

At dinner, she took her seat at the table, helped herself to bread when it was offered, presented her tumbler for water, and, throughout the whole time, did not, by her manner or actions, betray the least want of sight.

With a black silk handkerchief stuffed with cotton bound over her eyes, she wrote a part of the *Snow Storm*, one of the pieces she was in the habit of repeating when asleep. A person standing behind her very carefully interposed a piece of brown paper between her eyes and the paper on which she

was writing. Whenever this was done, she appeared disturbed, and exclaimed—"Don't, don't." During a paroxysm, she went into a dark room, and selected from among several letters, having different directions, the one bearing the name she was requested to find. She was heard to take up one letter after another, and examine it, till she came to the one for which she was in search, when she exclaimed, "Here it is," and brought it out. She also, with her eyes bandaged, wrote of her own accord two stanzas of poetry on a slate; the lines were straight and parallel.

She occasionally exhibited an extraordinary power of imitation. This extended not only to the manner, but to the language and sentiments of the persons whom she personified: and her performances in this way were so striking, and her conceptions of character so just, that nothing could be more comical. *This, like her other extraordinary powers, was confined to her somnambulist state—at other times, she did not exhibit the slightest trace of it.*

Like other somnambulists, she appeared fatigued, and her morbid symptoms were manifestly aggravated, by the constant trials of her powers.

In one of her paroxysms, she lost a book, which she could not afterwards find. Next day, immediately on the access of the paroxysm, she went to

the sofa, raised the cushion, took up the book, and commenced reading. Her eyes were covered with a white handkerchief, folded so as to make eight or ten thicknesses, and the spaces below the bandage filled with stripes of black velvet. She then took a book and read audibly, distinctly, and correctly, nearly a page. It was then proposed to her to play backgammon. She said she knew nothing of the game, but consented to learn it. She commenced playing, with the assistance of one acquainted with the moves, and acquired a knowledge of the game very rapidly. She handled the men and dice with facility, and counted off the points correctly. She had another paroxysm in the afternoon, in which she played a number of games of backgammon, and made such proficiency, that, without any assistance, she won the sixth game of Dr Butler, who is an experienced player. Knowing her to be a novice, he suggested several alterations in her moves—these alterations she declined making, and the result shewed the correctness of her judgment. The Doctor, a little mortified at being beaten by a sleeping girl, tried another game, in which she exerted all his skill. At its close, she had but three men left on the board, and these so situated that a single move would have cleared the whole. While she was engaged in this game, an apple was taken from a dish, in which there were several varieties,

and held before her, but higher than her eyes. On being asked its colour, she raised her head, like a person who wished to see an object a little elevated, and gave a correct answer to the question. In the lucid interval, half an hour after she awoke from the paroxysm, it was proposed to her to play backgammon. She observed she never saw it played, and was wholly ignorant of the game. On trial, it was found that she could not even set the men.

At another time, she opened her eyes, and declared that she could not see when they were shut. When reading, the Doctor placed his fingers on her eyes—she said immediately it was total darkness, and she could not read a word. At dinner, her eyes were open, and all the family supposed her awake; but she declared in the evening that she had not the least recollection of dining, of seeing some friends, or of witnessing a catastrophe in the gallery which disturbed the whole family, and in which she was much interested at the time. Soon after this, the Doctor observes that she evidently had lost her former acuteness of sight; from which circumstance it would appear that her somnambulism had gradually become less perfect; and this view is corroborated by a subsequent statement, that “lately her face had been less flushed, and her head less painful.”

In one of her paroxysms, she wrote a long and sensible letter to her aunt, describing her own situation. She afterwards remembered that she had written a letter, but could not recollect its contents.

The above is an abstract of the history of this very remarkable case—a case so minutely observed, and so ably reported—a case in which, the intelligent Reporter assures us, all idea of imposition or deception is precluded. I have purposely omitted all those particulars which could be interesting only to the medical student, and also many insulated circumstances and phenomena which appeared to me to be unimportant. I do not intend to enter into any investigation of the theory upon which the Reporter attempts to account for some of the phenomena, viz. an excited state of certain portions of the brain. It has hitherto been too much the practice, in treating of this subject, to build up a theory upon some one solitary fact, or, at least, upon the circumstances of some single case; whereas, it appears to me to be much more philosophical, and much more satisfactory in the end, first to form a sufficient collection of well-authenticated cases to constitute a legitimate basis of induction; and then to proceed to classify the phenomena which may be found to have been manifested in the whole, or in the greater number of instances.

In the preceding case, we meet with the following phenomena: organic insensibility—vision without the exercise of the usual organ—a great exaltation of the intellectual faculties, and an entire oblivion, when awake, of every thing that occurred during the paroxysm. The phenomenon of the *double personality* also appears pretty distinctly developed. To this I formerly alluded, and other instances of it will occur when I come to treat of the Magnetic Somnambulism.

CHAPTER XX.

WITH the preceding case I had originally intended to conclude my examples of the natural somnambulism, conceiving that, with the magnetic cases to be afterwards adduced, I should have laid a sufficient foundation for a generalization of the phenomena. I have been induced to alter this intention, however, for reasons which, I think, will immediately become apparent; and I am otherwise not displeased to have an opportunity of bringing under the notice of my readers an example of one peculiar species of that remarkable generic affection which has engaged our attention in the foregoing pages—the *devotional ecstasis*.

The following curious case is extracted from a review of M. Auguste de St Hilaire's *Travels in the Diamond District of Brazil*, in the 42d Number of the *Westminster Review*, October 1834. The Reviewer, like many other persons who write or speak in total ignorance of the subject, compares this case with what he is pleased to denominate

“the *speciosa miracula* operated by Animal Magnetism in France,” which, he confidently assures us, are “susceptible of an easy explanation ; *having been in fact nothing more than a voluptuous jugglery, set on foot and carried on for very intelligible purposes.*”

This is really a very beautiful specimen of the *slap-dash* style of criticism, so common amongst our review-writers, and so utterly ludicrous to every man of intelligence and candour. The Reviewer seems to be profoundly ignorant that the phenomena—the *speciosa miracula**—to which he alludes, have occurred, in thousands of instances, not only in France, but in Great Britain, in Germany, in Switzerland, in Italy, in Holland, in Russia, in Denmark, in Sweden, in India, in America—in all parts of Europe—in all quarters of the globe; that no *voluptuous jugglery* is attempted in the magnetic processes, and that the purpose in view is merely to heal the sick. But the critic evidently did not know what Animal Magnetism is, and wanting the ingenuous modesty which would have led him either to acknowledge his ignorance, or be silent on the subject, and probably

* It must never be forgotten that it is the unintelligent opponents and not the intelligent advocates of Animal Magnetism, who designate these phenomena as miracles. The magnetists consider them as natural occurrences, and endeavour to discover their causes.

unwilling to let slip so fair an opportunity of saying something vastly smart, he utters an oracle of flippant nonsense.

The following is the case referred to :—

On the Serra de Piedade, says the traveller, I saw a woman of whom I had heard much in the *Comarcas* of Sabará and Villa Rica. Sister Germaine, the woman in question, was attacked about 1808 by an hysterical affection, accompanied by violent convulsions. She was at first exorcised—remedies mal-adapted to her complaint were made use of—and her condition degenerated from bad to worse. At length, at the period of my visit, she had for a long time been reduced to so extreme a state of weakness, that she was no longer able to rise from her bed, and subsisted upon a regimen which could scarcely have supported the life of a new-born infant. Animal food, rich soups and gravies, her stomach was no longer in a condition to receive. Sweetmeats, cheese, a little bread or flour, constituted the whole of her food;—frequently she was unable to retain what she had taken;—and it was almost always necessary to use considerable persuasion to decide her to eat at all.

It was on all hands admitted, that the manners of Germaine had always been pure, her conduct irreproachable. During the progress of her disor-

der, her devotion had daily assumed a more enthusiastic character. Fridays and Saturdays she fasted entirely; at first, indeed, her mother opposed this practice; but when Germaine declared that, during these two days, it was utterly impossible for her to take any nourishment, she was allowed to have her own way, and accordingly, submitted, on those occasions, to total abstinence. In order to indulge her devotion for the Virgin, she caused herself to be transported to the Serra de Piedade, where there is a chapel erected under the auspices of Our Lady of Pity, and she obtained from her spiritual director permission to remain in this asylum. In this retreat, meditating one day on the mystery of the Passion, she fell into a kind of ecstasy: her arms grew stiff, and were extended in the form of a cross; her feet were disposed in the same attitude; and in this position she remained during forty-eight hours. This was four years ago; and ever afterwards the phenomenon was weekly repeated. She relapsed into her ecstatic attitude on Thursday or Friday night, and continued in a sort of trance until Saturday evening or Sunday, without receiving the slightest nourishment, without speech or movement.

The rumour of this phenomenon quickly spread through the neighbourhood; thousands of persons of all ranks crowded to behold it; it was declared

to be a miracle; Sister Germaine was regarded as a saint; and two surgeons of the province communicated an additional impulse to the veneration of the people, by declaring, in a written document, that her situation was supernatural. This declaration remained in manuscript, but was widely circulated, and numerous copies of it were taken. Dr Gomide, an able physician educated at Edinburgh, thought it necessary to refute the declaration of the two surgeons, and, in 1814, published at Rio de Janeiro (but without his name), a small pamphlet, replete with science and logic, in which he proves, by a multitude of authorities, that the ecstasies of Germaine were merely the effects of catalepsy.

The public was now divided in opinion; but crowds of people still continued to ascend the Serra, to admire the prodigy operated there. Nevertheless Father Cypriano da Santissima Trindade, the late Bishop of Marianna, a prudent, enlightened man, sensible of the inconveniences which might arise from the numerous assemblies collected by Sister Germaine upon the mountain, and desirous of discrediting the pretended miracle, from which there resulted at least as much scandal as edification, prohibited the celebration of mass at La Piedade, under pretence that permission had never been obtained from the king. Many per-

sons offered Germaine an asylum in their houses : but she gave the preference to her confessor, a grave middle-aged man, who resided in the vicinity of the mountain. The devotees were greatly afflicted at the prohibition of the Bishop of Marianna, but they did not sleep : they solicited from the king himself permission to celebrate mass in the Chapel of the Serra, and it was granted them. Germaine was now transported a second time to the summit of the mountain : her confessor occasionally ascended thither for the celebration of mass ; and the concourse of pilgrims and curious persons was weekly renewed.

A short time previous to my visit, continues M. de St Hilaire, a new prodigy began to manifest itself. Every Tuesday she experienced an ecstasy of several hours ; her arms quitted their natural position, and assumed the figure of a cross behind her back. In the course of my conversation with her confessor, he told me that, for some time, he was unable to explain this phenomenon, until he at length recollected that on this day it was customary to propose to the meditation of the faithful the suffering of Christ bound. The disinterestedness and charity of this priest had been described to me in glowing colours. I had a long conversation with him, and found him a person not altogether destitute of education. He spoke

of his penitent without enthusiasm ; professed to desire that enlightened men should study her condition ; and almost the only reproach he uttered against Dr Gomide was, that he had written his book without having seen the holy woman. *If what this priest related to me of the ascendancy he possessed over Germaine be not exaggerated, the partizans of Animal Magnetism would probably derive from it strong arguments in support of their system. He in fact assured me, that, in the midst of the most fearful convulsions, it was always sufficient for him to touch the patient to restore her to perfect tranquillity. During her periodical ecstasies, when her limbs were so stiff that it would have been easier to break than bend them, her confessor, according to his own account, had only to touch her arm, in order to give it whatever position he thought proper. However this may be, it is certain that, having commanded her to receive the sacrament, during one of these ecstatic trances, she rose with a convulsive movement from the bed on which she had been carried to the church, and kneeling down, with her arms crossed, received the consecrated wafer ; since which time she has always communicated during her ecstasies. At the same time, her confessor spoke with extreme simplicity of his empire over the pretended Saint ; attributed it wholly to her docility and veneration for the sacerdotal character ; and*

added, that any other priest would have been able to produce the same effects. With all that confidence which the magnetizers require in their adepts, he observed, that so complete is the obedience of the poor girl, that should I command her to abstain from food during a whole week, she would not hesitate to comply. He was also persuaded that she would have suffered no inconvenience from the experiment, but added, "I fear I should be tempting God by making it."

"I requested permission," continues the traveller, "to see Germaine, and was conducted into the small chamber where she constantly reclined. Her countenance was visible, though partly overshadowed by a large handkerchief which projected over her forehead; she appeared to be about thirty-four years of age.....Her physiognomy was mild and agreeable, but indicative of extreme emaciation and debility. I inquired respecting her health, and she replied, in an exceedingly feeble voice, that it was much better than she deserved. I felt her pulse, and was surprised to find it very rapid. On the following Friday, I again visited Germaine. She was in bed, stretched upon her back, with her head enveloped in a handkerchief, and her arms extended in the form of a cross; one of them was prevented by the wall from occupying its proper position, the other projected beyond the bed-side,

and was supported by a stool. Her hand felt extremely cold, the thumb and forefinger were extended, but the other fingers were bent, the knees drawn up, and the feet placed over each other. In this position she was perfectly immoveable; and her pulse being scarcely perceptible, she might have been taken for a corpse, if the rise and fall of the bosom in the act of respiration had not indicated the presence of life. I sometimes attempted to bend her arms, but without success; the rigidity of the muscles increased in proportion to my efforts, which could not have been more violent without inconvenience to the patient. Certainly, I more than once closed her hands; but on releasing the fingers they resumed their former position."

Such is the case related by M. de St Hilaire, which has called forth the sneers of the Westminster reviewer. As I have already stated, it constitutes one instance, among many, of a specific variety of that organic affection which I have been attempting to illustrate under the generic designation of Natural Somnambulism. It presents a specimen of catalepsy combined with devotional ecstasy, of which many other instances might be adduced, were I not afraid of trespassing too much upon the time and patience of my readers.

The reviewer observes, in conclusion, that "from

the circumstances attending this transaction, some insight may be obtained into the character of the Brazilians, whose ignorance, credulity, and superstition exceed belief." Now, credulity and superstition, in one form or another, are, probably, pretty equally diffused over the globe;—witness the followers of Joanna Southcote,* and the adepts in the unknown tongues, amongst ourselves; and the recent case of Robert Matthews, or Mathias, in America. But if in search of ignorance, the reviewer, assuredly, did not require to travel quite so far beyond the precincts of Westminster. If the pious Brazilians were mistaken in supposing that there was any thing miraculous in the case of Sister Germaine, the reviewer is still more unpardonably wrong in treating a natural occurrence with ridicule, and in describing Animal Magnetism as "a voluptuous jugglery." It is equally strange and lamentable, that any writer pretending to a compe-

* I find from Dr Iung-Stilling's *Theory of Pneumatology*, that parallel cases to that of Joanna Southcote have occurred in Germany. "A common servant girl in the north of Germany received, while in a trance, the commission that she should bring forth the prince who should bear rule under Christ in his approaching kingdom. A married clergyman, and in other respects a pious man, let himself be deceived by her; he believed her, and she really bore a son; but my readers," says the author, "may judge whether he will become that to which his mother had destined him. A similar event took place, a few years ago, in the south of Germany."

tent knowledge of the literature and science of the age, should not be aware that the case above described constitutes one of a pretty numerous class, the phenomena of which have occasionally attracted the attention of physicians and philosophers. It is part of the business of Animal Magnetism to collect and classify these cases, and, if possible, by means of generalization and induction, to explain their peculiarities, to point out the natural principles upon which they depend, and thus deprive them of their miraculous character. In this interesting philosophical investigation, it is quite provoking to be met at every corner by the silly sneers of ignorance, imbecility, and an irrational incredulity.

END OF VOL. I.

ISIS REVELATA:

An Inquiry

INTO

THE ORIGIN, PROGRESS, AND PRESENT STATE

OF

Animal Magnetism:

BY

J. C. COLQUHOUN, ESQ. ADVOCATE,

F. R. S. E.



SCULPTURE BY J. H. COOPER

VOL. II.

EDINBURGH, MACLACHLAN & STEWART
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Ingenii commenta delet dies ; naturæ judicia confirmat.—CICERO.

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

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15

Πολλὰ δ' ἐξ ὀλίγης ὀδύνης μέγα γίγνεται ἄλγος

Κοῦκ' ἂν τις λύσαιτ' ἤπια φάρμακα δούς·

Τὸν δὲ κακῶς νοῦσσι κακώμενοι ἀργαλίας τι

Ἀψάμενοι χειροῖν ἄνφα τίθησ' ὕγιᾶ.

SOLON, *apud Stobæum.*

Sæpe dolor tenuis morbos produxit acerbos,

Tollere quos nullis sit medicaminibus :

Sæpe diu sævo jactatum corporis æstu

Contactu sanum reddidit una manus.

GROTIUS.

232283

YHAEH! OHONATZ

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ANIMAL MAGNETISM.

CHAPTER XXI.

FROM all the cases of the natural somnambulism referred to in the preceding chapters, looking to the phenomena which are found to occur in all, or, at least, in the greater number of instances, I think we are fully entitled to deduce the following conclusions:—

In general, the Somnambulist, apparently without the use of any of the organs of external sensibility, sees and distinguishes objects as distinctly as when awake and in his ordinary state; he moves about, by day or night, with equal, if not with superior confidence and security, carefully avoiding all obstacles that may happen to stand in his way; he performs acts, while under the influence of this affection, of which he is totally incapable when

awake, and fearlessly exposes himself to dangers which he would otherwise shrink from with terror. He reads, writes, sings, plays, thinks, reflects, reasons, and performs a variety of the most delicate operations, whether intellectual or mechanical, not only as if he had the complete use of all his senses, but as if the power, acuteness, and delicacy of his faculties were actually increased, in consequence of being emancipated from their organic thralldom. In almost all of these cases, we are assured that the eyes of the somnambulists were either exactly closed, or open and staring, and destitute of sensibility;* and from the decisive experiments that were made in several instances, it appears to be clearly made out, that the faculty of sight neither was, nor could possibly have been, exercised through the medium of the usual organ of vision. All the other senses, too, are frequently found in a dormant

* "Somnambulists generally walk with their eyes open, but these organs are, nevertheless, frequently asleep, and do not exercise their functions. This fact was well known to Shakespeare, as is apparent in the fearful instance of Lady Macbeth :

Doctor.—You see her eyes are open.

Gentleman.—Ay, but their sense is shut."

Macnish, *Philos. of Sleep*, 2d. ed. p. 164.

The same author had previously observed, that "some animals, such as the hare, sleep with their eyes open; and I have known similar instances in the human subject. But the organ is dead to the ordinary stimulus of light, and sees no more than if completely shut."—*Ibid.* p. 25.

or suspended state, as appears in a variety of cases; and this fact would probably have been rendered still more prominent in these and other instances, had the proper experiments been made with a view to ascertain its existence. Somnambulists, it also appears, are capable of answering distinctly any questions that may be put to them, and, occasionally, of carrying on a rational conversation; indeed, their intellectual faculties, while in that state, seem to possess much more than their usual clearness and energy. It has been likewise observed, that individuals, while under this affection, occasionally manifest a superior knowledge of subjects and of languages, which they had not previously studied so as to remember, or with which they had been but imperfectly acquainted. One of the most remarkably characteristic circumstances attending this singular state of existence, and which is invariably found to accompany the perfect crisis, is, that, on awaking, the individual who had thus, as it were insensibly, performed all these operations, retains no recollection of any thing that occurred while he was under the influence of the paroxysm. The same individual, when awake and when somnambulist, appears like two entirely different persons.*

* In a Note at the 176th page of his *Histoire Critique du Magnetisme Animal*, M. Deleuze justly observes, that this is the most

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

distinguishing characteristic feature of somnambulism. There are, he says, somnambulists who have their eyes open, who hear very well with their ears, who are even *en rapport* with every body; there are some in whom a single faculty is augmented, and who, in other respects, have only confused sensations; there are some who speak with considerable difficulty, &c. But hitherto not a single instance has been observed in which the individual, when awake, recollected any thing that occurred in the state of somnambulism.

After noticing the very marked distinction between this state and that of ordinary sleep and dreaming, M. Deleuze proceeds to point out a very extraordinary psychological phenomenon, viz. that some somnambulists have spoken of themselves as of two different individuals in that and in the waking state. Of this phenomenon he adduces two examples.

Mademoiselle Adelaide de F. became somnambulist without having been magnetized. She had no idea of the personal identity of *Adelaide* and *Petite*—the latter being the name she received and gave herself during the paroxysm.

Madame N. who had received a distinguished education, having lost her fortune by a law-suit, determined, with the consent of her husband, to go upon the stage. Whilst occupied with this project, she fell ill and became somnambulist. As in her somnambulism she gave reasons against the step she was about to take, her magnetizer asked her to explain herself, and he received answers which surprised him. "Why, then, will you go upon the stage?" "*It is not I, but she.*" "But why, then do you not dissuade her?" "*What should I say to her—she is a fool.*"

somnambulist awaking spontaneously in the midst of any operation he has once undertaken ; nor of his perishing amidst the dangers which he frequently encounters. There are, it is true, several instances of somnambulists who have perished in consequence of having been suddenly awakened by the imprudent alarm and fatal precautions of the witnesses of those perils to which they were apparently exposed ; but the general experience of all times seems to lead directly to the conclusion, that the somnambulist is guided by other senses or instincts ; in short, that he is protected from injury by other and surer 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.

The circumstances above enumerated, as constituting the distinguishing characteristics of the state

The phenomenon of seeing or feeling one's self double is not unfrequently observed in dying persons, who, with full consciousness, die of chronic complaints or gangrene, *e. g.* consumptive or dropsical persons. They separate the suffering creature, as something external, and speak of him as of a third person. Brandis tells us that a well known physician, in the last stage of a dropsy, always talked to him as if he were the patient, and the latter the physician. This is a curious fact, but our medical men, it would appear, deprecate all investigation into such matters.

of somnambulism, ought, I think, to have been sufficient, if duly attended to, to make the physiologists aware, that the phenomena are quite incapable of being satisfactorily explained upon the received principles of their science. Here, there can be no question about the peculiar mechanism of the eye, of the ear, &c. or about the mode in which impressions are received and conveyed to the mind in the ordinary state of the organism. In order to elucidate this interesting subject, we must investigate more profoundly the phenomena of the spiritual nature of man, and endeavour to discover how his faculties can be exercised without the ordinary use of their appropriate organs.* In proceeding to this investigation, we ought to reflect seriously upon the following aphorism of Lord Bacon, which is so peculiarly applicable to the present state of Phy-

* In the words of an anonymous author, who is evidently no mystic, "it is certain that, in this state, the whole series of organs, which is formed for the use of the peculiar internal life of the spirit, appears to undergo a change, and thus also the soul does not communicate in the usual manner with the external world. The individuals hear, see, taste, feel, smell—the sensitive power is still present, as usual; but the eye-ball is motionless—they do not see with the eyes, nor do they hear with the ears; it is indifferent whether these are open or shut, the whole head, the whole brain, seems deprived of its vital energy, and all life appears to be concentrated in the epigastrium; another proof that the organ does not generate the power, but that the power forms the organ."—See *Das verschleierte Bild zu Seiz, oder die Wunder des Magnetismus*. Leips. 1830. P. 69, 70.

siology :—Frustra magnum expectatur augmentum in scientiis ex superinductione et insitione novorum super vetera ; sed instauratio facienda est ab imis fundamentis, nisi libeat perpetuo circumvolvi in orbem, cum exili et quasi contemnendo progressu.

Phenomena in some respects similar to those we have been considering, may be occasionally met with in some of the lower animals. I shall notice only one remarkable instance. Spallanzani observed that bats can fly with great certainty and confidence in rooms, however dark, without striking against the walls. He found, that, when their eyes were covered, they could fly with as much precision as before ; and even when their eyes were put out, no alteration in this respect was observed. From his experiments, Spallanzani was disposed to conclude, that the bat must possess a *sixth sense*. The appropriate organs of vision had been destroyed, and therefore it could not be by means of sight that they were enabled to avoid all obstacles. In many individuals, the ears were stopped, so that it could not be by hearing. In others, the nostrils were stopped, so that it could not be by smelling ; and taste is out of the question. In these circumstances, shall we adopt Spallanzani's idea of a *sixth sense*, or shall we presume that the internal sense or instinct of the animal was informed through other

*media than the usual organs of external communication? **

As matter of history, and with a view to assist us in our investigations into this very curious subject, I may here be permitted to advert to some of those theories which have been propounded by certain ingenious men, in order to account for the extraordinary phenomena of somnambulism.†

* Sir Charles Bell accounts for this phenomenon in a somewhat similar manner. Speaking of the wing of the bat, he observes, that "it is not a wing intended merely for flight, but one which, while it raises the animal, is capable of receiving a new sensation or sensations, in that exquisite degree so as almost to constitute a new sense. On the fine web of the bat's wing nerves are distributed, which enable it to avoid objects in its flight, during the obscurity of night, when both eyes and ears fail."—*Bridge-water Treatise*, p. 70.

Of the sufficiency of this explanation I shall say nothing; but it appears to me to stand rather in contradiction to certain other propositions laid down by Sir Charles, and formerly noticed in this work, viz. that the nerves are capable of exciting in the mind no other idea than that to which they are appropriate; that the organs of the senses are appropriated to particular classes of sensations, while the nerves intermediate between the brain and the organs are respectively capable of receiving no other sensations but such as are adapted to their particular organs; and that, when an individual is deprived of the organs of sight, no power of attention, or continued effort of the will, or exercise of the other senses, can make him enjoy the class of sensations which is lost.

† The very intelligent author of a *Memoir on the Vital Fluid* in the *Bibliothèque du Magnetisme Animal* (tom. ii. p. 26.), gives

I observed in a former chapter, that it is through the medium of the nerves that the vital principle

the following ingenious explanation of the means by which persons are enabled to see and hear during sleep.

"It has been observed," says he, "that, during sleep, the senses of sight and hearing, so alert in the waking state, are the most profoundly dormant; while, on the contrary, the organ of the skin (the cuticular organ), which, as we know, is the principal seat of the physical sensibility, is considerably more open to external impressions and influences, when asleep, than when awake. But what has not been suspected is, that this organ is the door by which we may communicate directly with the internal sense of man in the state of sleep, excite his intellectual faculties, and even direct his moral sense to the object we propose. Undoubtedly, this phenomenon appears a prodigy, but only to those who have not observed it, or who have reasoned ill on the subject. I can prove it. Is it not very common to make sleeping persons speak—to make them sometimes keep up pretty long conversations, and even tell their secrets? Certainly you then speak to them, and they answer; but in order that they may be able to answer you, it is necessary, I think, that they should hear you. Do they hear you by the ear, while, at that moment, the ear is asleep? If they heard by the ear, is it not clear that they could not be asleep? They cannot, then, hear you by the ear; and it is evident that they hear you by the only sense which is awake, that is, by the organ of the skin. In a state of sleep, man is not only capable of perceiving sounds by the organ of the skin: he is also capable of perceiving, in the same way, the rays of light; that is to say, he can see and distinguish objects through the medium of this same organ."

For proofs of the accuracy of this theory, the author refers us to the history of a somnambulist in the *Annales de Montpellier*, and to the works of M. de Puysegur.

The preceding theory seems to be corroborated by the following observations of Professor Kluge. He remarks, that the phenomena of the corporeal atmosphere in man are most con-

appears to be acted upon—that they are the sources of the animal affectability—that many eminent physicians and physiologists had found themselves compelled to assume the existence of a nervous fluid, as the vehicle of the influence in question—and that the existence of this fluid, if not actually demonstrated, had, at least, been rendered exceedingly probable by the researches of several celebrated experimental philosophers.

Now, the existence of this *nervous* or *vital* fluid lies at the bottom of almost all the theories of Animal Magnetism. Of Mesmer I have already spoken. The following are the fundamental opinions upon this subject of M. Tardy de Montravel, an early, practical, and most intelligent disciple of Magnetism.

There exists a fluid diffused throughout all nature, which is the principle of life and motion.

spicuously manifested during sleep, when the activity of the cerebral system is diminished, and that of the ganglionic system, on the contrary, is increased. “In confirmation of this fact,” says he, “I need not refer to the cases of sleep-walkers and magnetic somnambulists, but merely mention an experiment noticed by Wienholt, and several times repeated, and always with the same success, by myself. This experiment consists in approaching a sleeping person, and slowly moving the finger, a metal rod, or any other substance, repeatedly above the bare surface of the skin, at the distance of half an inch or an inch, without producing a current of air, when the sleeper will become restless, generally rub the affected part, and, if the experiment be longer continued, probably awake.”—KLUGE, p. 257.

This fluid, in traversing bodies, modifies them, and
* is modified by them in its turn. When it circulates from one body to another with the same motion, these two bodies are in harmony with each other. It is by means of this fluid that our nerves receive sensations. Besides the external organs of the senses, man possesses an internal sense, of which the entire nervous system is the organ, and the principal seat is in the *plexus solaris*. This sixth sense is the principle of what we call instinct in animals. If, by any cause whatever, the external senses are deadened, and the internal organ of sensibility acquires more irritability, the latter alone performs the functions of all the others: it carries to the soul the most delicate impressions, and these impressions affect us in a lively manner, because our attention is no longer distracted by other objects. This is what takes place in somnambulism. With regard to previsions,* they are entirely the result of the combinations of the intellect, which reasons according to the impressions it experiences, as a watchmaker foresees the instant when a pendulum will stop—as an astronomer foresees the various motions which will take place in the heavens. In animals, instinct is purely mechanical: in man it is augmented by all the moral

* See the following Chapters.

faculties; and it is for this reason that it sometimes becomes the expression of conscience.

The knowledge which the somnambulist possesses of distant objects, is owing to this fluid, which conveys to him the impression of them, traversing all bodies, as light traverses glass.*

A theory similar to the preceding is adopted by M. Deleuze in his *Histoire critique du Magnetisme Animal*. Indeed, it appears, in one form or another, in the works of almost all writers upon the subject. The fluid in question is supposed to be analogous to electricity and galvanism. Both are thought to depend upon the same principle, and to have one common origin; and a very ingenious recent author has ascribed all the important phenomena of nature to the various combinations of this universal fluid with matter.†

I am perfectly aware, that, in the present state of gross ignorance upon the subject, it would be equally foolish and futile to enlarge upon any such theory as that now briefly touched upon, in this country. The facts themselves which have given birth to this theory, must first be more generally

* See *Essai sur la Theorie du Somnambulisme Magnetique*, and the other writings of M. Tardy de Montravel.

† See *Essai de Psychologie Physiologique*, par M. Chardel. Paris, 1831. Also Appendix, No. III.

studied, appreciated, and admitted, as upon the Continent, before we can expect that any great attention will be paid to the principles upon which they are capable of being explained.

CHAPTER XXII.

THE phenomena manifested in the magnetic somnambulism are, in almost all respects, analogous to those which occur in the natural or spontaneous. In the former, however, when the patient is very susceptible, or the operator possesses great magnetic power, the crisis can generally be rendered more perfect by the artificial means employed; and much better opportunities are thus afforded for making experiments, and observing the results.

Indeed, it is one of the many benefits conferred upon physiological science by the magnetic treatment, that it has not only completely demonstrated the possibility of producing this remarkable state of the human organism artificially, but likewise afforded us the means of more carefully and more minutely investigating its various and most interesting phenomena. Many of the professors of Animal Magnetism, it is true, seem to be of opinion, that the magnetic treatment is not altogether the primary and efficient, but only the secondary

and occasional, cause of somnambulism ; that is to say, that it merely tends to develope that affection in such constitutions as are otherwise predisposed to it. It is certain, however, that it has been so produced in a great variety of instances, and thus given rise to many interesting speculations, both with regard to the agency of the magnetic principle upon the human constitution in general, and to the nature and extraordinary phenomena of that peculiar state of the organism ; speculations which, if divested of all mysticism, and conducted in the sober spirit of philosophical investigation, cannot ultimately fail to improve and extend our physiological and psychological knowledge.

The cases of the magnetic somnambulism have become exceedingly numerous, since the more general introduction of that mode of treatment upon the Continent ; so numerous, indeed, that it is quite unnecessary, and would be intolerably tedious, to give any full and particular detail of them. The character of the phenomena, too, is so similar in all of them, that, after enumerating a few of the most remarkable, little additional instruction could be derived, so far, at least, as the nature of the affection is concerned, from the very few specialties which may be found to occur in individual instances. I shall therefore merely advert to some of the more remarkable features of this very extra-

ordinary organic state, referring those who may feel desirous of obtaining more ample information upon the subject to the various publications enumerated in this work.

The phenomena I am now about to bring under the particular notice of the reader, may be arranged into four classes :

1. The faculty possessed by almost all Somnambulists of seeing through intervening opaque bodies ;

2. The faculty manifested by some somnambulist patients of seeing the interior of their own bodies and that of other persons, of pointing out the nature and seat of diseased structure, and of prescribing appropriate remedies. This has been called the faculty of *Intuition*.

3. The faculty of seeing objects at a distance ; and,

4. The faculty of foreseeing future events ; which last has been denominated the faculty of *Prevision*.

All of these phenomena, it will be observed, are comprehended under the fifth and sixth degrees into which, as Professor Kluge remarks, patients have been found to pass during the magnetic treatment.*

With regard to these phenomena, the Committee

* See page 281, &c. The evidence adduced in the Appendix to the former edition of this publication, relative to the transfer-

of the Royal Academy of Medicine at Paris observe, in their late Report : “ We have seen two somnambulists who distinguished, with their eyes closed, the objects which were placed before them ; they mentioned the colour and the value of cards, without touching them ; they read words traced with the hand, as also some lines of books opened at random. This phenomenon took place even when the eye-lids were kept exactly closed with the fingers.

“ In two somnambulists we recognized 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. The other announced the period of his cure. Their previsions were realized with remarkable exactness. They appeared to us to apply only to acts or injuries of their organism.

ence of sensation in certain cases of Catalepsy and Somnambulism, belongs to this branch of the subject ; and I have therefore caused the paper to be reprinted at the end of this work. (See Appendix, No. II.) To that evidence I have never heard any reasonable objection stated ; on the contrary, several persons, previously sceptics, have since expressed to me their conviction of the truth of the fact—a fact which is, moreover, confirmed by almost every case of the natural as well as of the magnetic somnambulism.

“ We found only a single somnambulist who pointed out the symptoms of the diseases of three persons with whom she was placed in magnetic connexion. We had, however, made experiments upon a considerable number.”*

At one time, I proposed to bring these different phenomena separately under the notice of my readers; but I soon found that this method would necessarily be attended with a great deal of labour and inconvenience, and with no little confusion. There is scarcely a single patient, in the higher magnetic state, who does not manifest several, if not all, of these phenomena, at different stages of the treatment. By taking them up singly, therefore, I should have exposed myself to much trouble in repeatedly going back to each individual case; besides diminishing the interest which might otherwise be felt by the reader in attending to an entire and unbroken narrative. For these reasons, I shall bring each case which I propose to adduce, with all its remarkable phenomena, fully under the notice of the reader, *seriatim*; beginning with the

* With praiseworthy candour and caution, these French Academicians notice only such phenomena as fell under their own observation, while engaged in the investigation entrusted to them. I trust, however, that I shall be able to demonstrate the reality of the other facts alluded to, by the testimony of equally competent and credible witnesses.

more simple, and advancing to the more complicated.

But before I proceed to the details of these very remarkable cases, I am anxious, in consequence of the little attention which has been recently paid to the subject, to shew that I am supported by common opinion, as well as by many competent general authorities and authenticated facts, independently of magnetism, in my views of the question under discussion. For this purpose, I might refer at some length to the writings of Plato, Hippocrates, Aretæus, Galen, &c. who held as true, or, at least, as probable, many of those phenomena which have been experimentally demonstrated by the modern magnetizers—thus verifying the adage, that “there is nothing new but what has been forgotten.” But my authorities are abundant and unambiguous; and I would avoid being thought pedantic and tedious.

Ammianus Marcellinus, in defending the sybils and others, thus answers the objections made to their predictions: “What signifies these murmurs of ignorant people? If there were any such thing, say they, as a knowledge of the future, why was this person ignorant that he should be overcome in war? Why did not that other person foresee that such and such an accident would happen to him? Excellent reasoning! As if, because a certain

grammarian had committed a solecism in language—a certain musician had produced a discord—a certain physician had been ignorant of a particular remedy; as if from these circumstances we were entitled to conclude that there are no such things as grammar, music, or medicine.”*

Athenagoras—who was first a Platonic philosopher, and afterwards embraced Christianity—in his apology for the Christians, considers the soul as capable of itself, and by its own powers, *of predicting future events, and of curing diseases*, and that these powers were improperly ascribed to demons. His words are :† *Et cum suapte vi ac ratione, anima, utpote immortalis, plerumque moveatur et agat in homine, ita ut futura prædicat, et rerum præsentium statum dirigat, aut amendet* (the Greek word is *θεραπεύει*

* Ammian. Marcell. p. 180, No. 5. (Lib. xxi.)

† Athenagoras, *Gesnero Interprete*.

Kluge observes, that this phenomenon manifested by somnambulists gave great offence to many physicians, who thought it an impertinent interference with their learning and dignity, that the patient should pretend to know more than the Doctor. The Professor, however, reminds these gentlemen, that the objection is founded upon a total mistake of their peculiar duties. The business of the physician never was any thing more than *curative (curare)*; the healing power (*mederi*) resided in Nature herself, whose servants and subordinates they ought always to be. In short, it is the sole duty of the physician to endeavour to place the diseased organism in such a state as to allow Nature to restore it to health.

—cures), *hujus sapientiæ laudem dæmones sibi lucrantur*.

St Justin, who lived nearly about the same time with Athenagoras, remarks, that the Sybils, in uttering their predictions, however true, did not themselves understand what they said, and that, as soon as the instinct which animated them was extinguished, *they lost all recollection of what they had predicted :—Sed in ipso afflatus tempore sortes illa suas explebat, et evanescente instinctu ipso, simul quoque dictorum memoria evanuit.** This is precisely what takes place in somnambulism.

The Druid priests were also physicians. Cicero says of them :—There are Druids in Gaul, among whom I knew Divitiacus of Autun, who pretended to have a knowledge of natural things, which the Greeks call *Physiology*, and who said that, partly by the science of augury, and partly by conjecture, they foresaw future events.† Pliny describes the Druids as “ that kind of prophets and physicians” —*hoc genus vatum medicorumque.‡*

Montanus the heretic prophesied. He appears to have been in a state of habitual crisis. He had two women along with him, Prisca and Maximilla, *who fell into ecstasies, and predicted future events ;*

* Justin, *Admonitorium ad Græcos*.

† *De Divinatione*, L. 1. § 41, No. 89.

‡ *Hist. Nat.* L. 30, c. 1.

*but, like all somnambulists, recollected nothing of what they had said when in their ordinary state.** Tertullian speaks of one of these prophetesses, who, in her crises, amongst other things, *prophesied, and prescribed remedies for diseases.*

Jamblichus, in his work *De Mysteriis*, speaks of the phenomena of the ecstatic crisis, which he appears to have perfectly well known. Those who are thus affected, he observes, neither make use of their senses, nor are so awake as those who have waking senses. The soul, he says, has a twofold life, the one along with the body, the other separable from every thing corporeal. When awake, we chiefly make use of the life which is common to the body; but in sleeping, the soul may be entirely released from its chains, and make use of the incorporeal life. In this state, he recognizes, amongst others, the phenomenon of prevision, or foreknowledge.†

Johnston, in his *Thaumaturgraphia naturalis*, when treating of hysterical diseases, observes, that those who are affected with them experience convulsions, palpitations, epileptic fits; they become deprived of sight, their voice utters an extraordinary sound;

* St Hieron. *Proëm. ad Isaiam.*

† See Jamblichus, *De Mysteriis*, in cap. De Somniis.—See also Rob. Fludd, *Hist. Microcosm.* Tract. i. sect. 2, part. i. l. 3. c. 1.

sometimes they avoid the light, and seek the obscurity of the tombs; at other times, *they speak unknown languages, and predict future events.* *

Many authors have noticed this last mentioned phenomenon of speaking a language unknown to the individual in his ordinary state; and it will very frequently be found coupled with the prophetic faculty, as arising out of the same or similar conditions. Among these authors, passing over the ancients, I may mention Pomponatius, Lemnius, Gainerius, Ficinus, Forestus, &c. Pomponatius, (*Lib. de Incant. c. 4.*) refers to the story of the wife of Francis Magresi, who, in an access of melancholy, spoke in various languages, and, when cured by medical treatment, lost all knowledge of these tongues. The author of the *Chiliads* (*in Declam. pro Laudibus Medic.*) mentions the case of an Italian, who, in a fit of mental aberration, (*novo ex verbis fu-*

* "Solet interdum in virginibus retentum semen putrescere in utero, deleteriam acquirere vim, et mirifica excitare symptomata. Vapor enim malignus suscitatus, intestina, ventriculum, hepar ad diaphragma comprimit, cordis palpitatio, cardialgia, vertigo et pallor oboritur. Alias subito mulier prosternitur, respiratione, loquela, visu privatur. Epilepsia, convulsione et deliriis interdum infestatur. Exaudiuntur interdum ex imis visceribus miræ voces. His positis, diversa et mirabilia in diversis etiam linguis proferri: Nocturnos discursus, et circa mortuorum sepulchra, latebras quæri."—J. JOHNSTON, *Thaum. nat.* Amst. 1633.

"Aliquando solent tales homines linguis peregrinis loqui, et futura prædicere."

roris genere correptus), spoke good German, a language previously unknown to him when in health, and which he again forgot when cured of his disease. Gainerius relates several instances of persons, male and female, who spoke languages which they had not previously known.*

Lemnius (Lib. ii. *De Occult. Naturæ Mirac.* c. 2.) observes, that, in acute fevers, persons have been known to discourse, copiously and fluently, in an elegant and elaborate dialect, which they were incapable of using when in health; and he ascribes this phenomenon, not, as was usual in his time, to demoniacal possession, but to the influence of the disease. The same thing is frequently found to occur in the ecstatic somnambulism.

Morhof (in his *Polyhist. Litter.* lib. iv. c. 4. § 2.), quotes from Fulgus the case of an Italian labouring under the plague, and thought to be at the point of death, who, suddenly rallying, sent for his master, and told him that he had really been in heaven, and had learned who and how many persons belonging to the house would die of the plague; and having named them, he affirmed that his master would survive. And in order that his words might obtain credit, he shewed that he understood all languages, spoke Greek with his master, and attempted other dialects with those who

* *Ex Gentile in Quæst. de Incantatione.*

knew them, although he had previously only learned Italian ; and having lived two days in this state, he died, and was followed by those he had named, his master surviving.

The same author also quotes from La Motte le Vayer the case of a Frenchman, Le Fevre, who, in his sleep, when interrogated in any language, could answer in the same, although, besides French, he had only an imperfect knowledge of Italian and Spanish. He predicted that a certain person should die a violent death, and the individual subsequently perished in a duel. When awake, he seemed to be asleep, for he had always something obtuse and stupid about him ; while, when asleep, he exhibited much more alacrity and vigilance. In his waking state, he recollected nothing of what had occurred during his sleep, except that, from intense headach, he judged that he had been much harassed with questions and answers. This case, which seems to have extremely puzzled the observers, was evidently one of the natural or spontaneous somnambulism ; and the symptoms appear to have been precisely analogous to those which have been found to occur in other instances of the same affection.

Many other curious instances of these phenomena, accompanied with learned and ingenious attempts to explain them, may be found in Valesius, Huarte,

Sennertus, &c. The facts themselves were pretty notorious, but the theoretical explanations, from the want of any adequate inductive investigation, were almost always unsatisfactory.

Charron, in his *Traité de la Sagesse* (L. i. ch. 15, No. 11), remarks, that melancholy, maniacal, frenetic persons, and those affected with certain diseases, which Hippocrates calls sacred (*morbussacer*), speak Latin without having learnt it, compose verses, converse sensibly and wisely, *discover hidden things, and predict future events* (which foolish and ignorant persons ascribe to the devil, or to a familiar spirit), although they were previously idiots and rustics, and again become so after their cure.

Valesius (*De Sacra Philosoph.* cap. 30), observes, that whatever renders the mind free from external cares, naturally disposes it for divine contemplation, and for prophecy; and that this disposition probably becomes more efficacious in certain diseases, or in consequence of a great prostration of bodily strength, as in dying persons. For it is certain, says he, that, in proportion as the strength of the body and the weight of the flesh are diminished, the powers of the mind become more energetic and more perfect.

Maupertuis not only believed in the possibility of a faculty of prevision, but he has even attempted

to explain it as something quite natural. In a passage of one of his works, there occur the following observations :—"It would appear that the perceptions of the past, the present, and the future, only differ in the degree of the soul's activity. Oppressed by the consequence of its perceptions, it perceives the past ; its ordinary state shews it the present ; a state more exalted would, perhaps, render it capable of discovering the future ; and this, perhaps, would not be so wonderful, as to find it representing to itself things that do not exist, never existed, and never will exist. We have need of all our experience to prevent us from giving credit to our dreams. If we examine philosophically the systems to which we must have recourse, in order to explain how we perceive objects, perhaps all that we have just said will no longer appear so strange, as it may have done at first. If there be no real relation between the objects and that spiritual essence which perceives them ; if our perceptions have their proper cause in the soul, and have no relation to the objects but by concomitance, or by a pre-established harmony ; or if the objects are only the occasional causes of that manifestation which God wished the soul to have of a substance where all the archetypes of it are to be found : the perception of the past, and that of the future, will be no more difficult to comprehend than that of the present."

Sir Henry Halford, in an interesting essay on the *Kavros*—brain fever—of Aretaeus, has the following remarkable passage in relation to this subject :

“ The author, Aretaeus, states that the first effect of the subsidence of the violent excitement is, *that the patient's mind becomes clear, that all his sensations are now exquisitely keen ; that he is the first person to discover that he is about to die, and announces this to his attendants ; that he seems to hold converse with the spirits of those who have departed before him, as if they stood in his presence ; and that his soul acquires a prophetic power.* The author, with all the appearance of being himself convinced that this power has really been acquired by the patient in the last hours of his life, remarks that the bye-standers fancy him to be rambling and talking nonsense, but that they are afterwards astounded at the coming to pass of the events which had been predicted. Indeed, he attempts to account for it by supposing that the soul, whilst ‘ shuffling off this mortal coil,’ whilst disengaging itself from the incumbrances of the body, becomes purer, more essential, entirely spiritual, as if it had already commenced its new existence.

“ To me, I own,” continues Sir Henry, “ it does not seem necessary to ascribe to persons under such circumstances a supernatural power. We have all observed the mind clear up in an extraordinary

manner in the last hours of life, when terminated even in the ordinary course of nature, but certainly still more remarkably when it has been cut short by disease, which had affected, for a time, the intellectual faculties. We have seen it become capable of exercising a subtle judgment, when the passions which had been accustomed to bias and embarrass its decisions whilst they existed, were extinguished at the approach of death ; when the inferences which wisdom had drawn from the former behaviour of men were now made available to a correct estimate of their future conduct, in the sense of Milton's lines :

' When old experience does attain
' To something like prophetic strain.'

" An illustration of this argument may be read in the beautiful valedictory address of the elder Cyrus to his two sons and his friends assembled round his death-bed to receive his last instructions. The speech, full of good sense, of truth, and of practical wisdom, is not less worthy of the favourite disciple of Socrates, who records it, than of the great king, who having been predicted by name, some centuries before he existed, as the instrument hereafter to accomplish the will of Providence, imparted these results of his experience at the close of his illustrious life.

" Nevertheless, that a prophetic power did at-

tend man's last hour generally was a notion entertained of old, and has been transmitted down to us from the earliest records of mankind. We read in the Pentateuch, that, "when Jacob had made an end of commanding his sons". (or, in other words, not less faithful to the original, nor to the version of the Septuagint, 'when Jacob had finished imparting his solemn injunctions to his sons'), he drew up his feet into the bed, and yielded up the ghost." Now, with these solemn injunctions were mixed up much prophetic matter, many predictions of their future fate and fortunes: as, for instance,—'the sceptre shall not depart from Judah, nor a lawgiver from between his feet, until Shiloh come, and to him shall the gathering of the people be.'

"And although the account here given by Moses is, as I believe it to be, in the language of inspiration, and must not therefore be humiliated by being compared even with this sublime account of an important disease, given by a physician for the information of his profession, and the good of mankind; yet we must allow it to be remarkable, that the Almighty should be pleased to choose the dying hour of the Patriarch in which to inspire him with a foreknowledge of his gracious purpose to send the Messiah into the world for the redemption of mankind; nor will it seem extravagant to sup-

pose that this most interesting prediction, at the close of Jacob's life, might be the very foundation on which the popular notion (that dying persons were gifted with the power of prophecy—a notion which prevailed through so many successive ages afterwards) was built. The pride of human nature easily disposes it to appropriate to itself extraordinary power; and that which was peculiarly vouchsafed to the sanctity of the Patriarch and Prophets of God may have been assumed to be the privilege of mankind universally in the hour of death.

“That the fame of the Patriarch's prophecy, and those of Isaiah at a much later period, was not confined to the limits of the country in which they were first promulgated, we are very sure; that they were extended, in process of time, by the venerated authority of the Sibylline leaves (which we have good reason to believe were a collection of prophecies), over the whole extent of the Roman empire, is probable, and that their fulfilment was expected the more intensely as the time of their accomplishment drew near, we may assume, as a fair inference, from the Pollio of Virgil, who makes use of the very same beautiful imagery in depicting the advantages to follow the expected birth of his august personage, as Isaiah had employed to describe the happy consequences of the advent of

the Messenger of mercy to mankind. What wonder, then, if the philosophers, both Grecian and Roman, if the poets (who may be considered as historians of popular notions) concurred in transmitting down this accredited opinion? Cicero, a most accomplished philosopher as well as orator, himself an augur too, and therefore probably well acquainted with the contents of the Sibylline leaves, (for they were committed to the safe custody of the College of Augurs), in his first book on Divination, gives a story of the prediction of the death of Alexander the Great, by an Indian about to die on the funeral-pile. His words are: ‘There are certainly some traces of presentiment and divination even among barbarous nations; as Calanus, the Indian, proceeding to death, when he ascended the burning pile, exclaimed: O excellent departure from life! when, as happened to Hercules, the soul shall ascend into light from the ashes of the mortal body. And when Alexander asked him whether he wished to say any thing more, he answered: It is well—*I shall see you soon*. In fact, in the course of a few days afterwards, Alexander died at Babylon.’*

* A somewhat analogous and very singular story is told by the late Mr M. G. Lewis, in his *Journal of a West India Proprietor*. The story relates to Plato—not the celebrated philosopher of that name, but—the runaway negro, and captain of a troop of banditti in Jamaica—a man of daring courage, and a

“As to the poets, Homer transmits this popular notion—Sophocles adopts it—Virgil copies Homer—and our own Shakspeare records it in various passages.”

professor of Obi, or the Indian magic. This man was, at length, apprehended and executed. “He died,” says Mr Lewis, “most heroically ; kept up the terror of his imposture to the last moment ; told the magistrates who condemned him, that his death would be revenged by a storm which would lay waste the whole island that year ; and when his negro jailor was binding him to the stake at which he was destined to suffer, he assured him that he should not live long to triumph in his death, for that he had taken good care to *Obeah* him before his quitting the prison. It certainly did happen,” continues Mr Lewis, “strangely enough, that before the year was over, the most violent storm took place ever known in Jamaica ; and as to the jailor, his imagination,” as Mr Lewis has it, “was so forcibly struck by the threats of the dying man, that, although every care was taken of him, the power of medicine exhausted, and even a voyage to America undertaken, in hopes that a change of scene might change the course of his ideas, still, from the moment of Plato’s death, he gradually pined and withered away, and finally expired before the completion of the twelvemonth.”

Urban Grandier predicted the death of one of his persecutors, Father Lactantius, within a month of his own, and the prediction was verified. A similar story is told of Molay, grand master of the order of Templars, in respect to King Philip of France and Pope Clement V.

CHAPTER XXIII.

At the conclusion of the preceding chapter, I took the liberty of making a pretty long quotation from an elegant treatise by Sir Henry Hallford, in order to make the reader fully aware of the universality of the belief, prevalent from the most remote times, in the exercise of prophetic powers under certain organic conditions ; a belief which, however occasionally associated with prejudice, superstition, and error, assuredly was not entirely destitute of a natural foundation. Sir Henry's own opinion on the subject is not very clearly or decidedly expressed ; but, perhaps, like many other learned and intelligent individuals, his attention had not been attracted to the evidence by which the belief in question is supported. I shall now proceed to adduce my other authorities for the fact.

The following passages, which are well worthy of attention, are extracted from a learned treatise written by the celebrated Dr Frederick Hoffmann,

physician to the king of Prussia—entitled, *De optima Philosophandi ratione*.

“ In what manner the soul confined by the chains of the body may be disturbed in its actions, has not hitherto been satisfactorily ascertained, but is still a moot point in philosophy. In my opinion, it appears very probable, that the intellect, originally pure, luminous, and inorganic, infused by the Almighty into a living body at its first creation, has a connexion and commerce with a *very subtle ethereal fluid*, which is separated from the blood and lymph in the minute fabric of the brain, and that the purer this fluid is, the functions of the mind are performed with so much the more alacrity ; whilst, on the contrary, the more impure it is, and the more it is imbued with sulphurous, vaporous, and terrestrial particles, men are found to be more dull and stupid.”*

“ From what has been said, too, we may find the

* Quomodo autem anima corporis vinculis inhaerens in actionibus suis turbari possit, nondum satis evictum, sed adhuc sub philosophis liq. est. Meam quod attinet sententiam, ea mihi videtur vero similis, quod intellectus insitus, purus, luminosus, originaliter inorganicus, a Deo in prima creatione corpori vivo infusus, cum subtilissimo aethereo fluido, quod in cerebri fabrica tenuissima a sanguine et lympa separatur, habeat vinculum et commercium, quod fluidum, quo purius est, eo alacrius functiones sunt animi, quo vero impurius, et quo magis multis particulis sulphureis, vaporosis, et terrestribus imbutum est, eo hebetiores et obtusi homines inveniuntur.

reason why those individuals who are weak in body, who take little food and drink, and rather indulge in fasting, have a much readier and purer power of intellect; which we have not unfrequently observed, especially in pious persons, upon the near approach of death. For they, returning to themselves during a period of quiet, speak of the wonderful joys they experience, and glory in the society of God and the angels; which joy and alacrity of the dying, Cicero (*De Consolat.*) ascribes to the gods, when he says that we ought not to despair of the benignity of the gods, since they soothe and lighten the minds of those departing from life. Undoubted signs of this are very frequently observed in the dying, when, as if roused from sleep, at the time they are in extremities, they appear so sprightly and joyful, that we might imagine they departed this life with the greatest pleasure.”*

* Ex his quoque adductis repetenda erit ratio, quod iis hominibus, quorum corpora infirma, parum cibis et potu onerantur, magisque jejuniis indulgent, longe promptior et purior intelligendi vis insit; quod etiam in morti proximis, præsertim piis, non raro observamus. Hi enim ad tempus quieti ad se redeuntes, mira enarrant gaudia, et de Dei angelorumque consortio gloriantur; quam morientium lætitiā et alacritatem Cicero (*De Consolat.*) diis ascribit: cum ait: non desperandum de deorum benignitate, quin eo tempore e vita properantem discedere foveant atque allevent. Cujus rei in morientibus signa sæpiissime minime dubia cernuntur, cum velut e somno excitī, quo tempore extremum spiritum edituri sunt, ita gaudentes et alacres adspiciunt, ut libentissime e vita iudices proficiasci.

“Daily experience teaches us that, during sleep, the body is at rest, and the mind is not distracted by external objects: hence, therefore, the latter can more readily and more successfully execute its operations. In dreaming, it not unfrequently happens that *many things become to us clear and exposed which were previously concealed, things long forgotten occur to the memory, and powers which nature often seemed to have denied to us, are developed during sleep, when the mind is re-instated in its rights.* Thus, it has frequently happened to myself, who possess no natural genius for poetry, to have composed and recited very elegant Latin verses, in proper order and series, of which I could still remember some when awake. *And who is so ignorant of sacred literature as not to know, that God has revealed the most important matters in dreams, for no other reason than that the mind, during sleep, is more attentive, and more capable of apprehending those things which are revealed.*

“SCHOLION.

“The most ancient Father of physicians, Hippocrates, already in his time diligently noted this in his book *De Insomniis*, where he says, near the commencement: When the body is awake, the thinking faculty of the mind is not in complete possession of its powers, but distributes some part of them to the different parts of the body, or the

senses—of hearing, sight, touch, muscular action—and to all the corporeal faculties. . *But when the body is at rest, the soul is in motion, and pervading every part of the body, governs its household, and, of itself, performs all the actions of the body. For the body, when asleep, perceives nothing ; while the soul, still awake, knows, sees, hears, moves about, touches, manifests joy or sorrow, &c. In fine, all the corporeal and intellectual offices are executed by the soul during sleep. And Cicero (De Divinat. lib. i.) says : When the mind is separated by sleep from the society and contagion of the body, it then remembers the past, perceives the present, and foresees the future. For the body of a sleeper lies like that of one dead, but the mind lives and is vigorous. How much more so after death, when it shall have altogether separated from the body ! For this reason, upon the approach of death, it becomes much more capable of divination.**

* Tandem experientia constat quotidiana, in somno corpus in quiete esse, neque animum ab objectis externis distrahi : hinc etiam operationes suas feliciter et promptius exsequi potest. In insomniis haud raro multa nobis clara fiunt et detecta, quæ antea nobis fuere abscondita, diu oblita in memoriam veniunt, et quicquid sæpe natura denegasse videtur, id anima in somno, sui juris reddita, præstat. Sic sæpe mihi, cui nullum unquam a natura datum est ingenium poeticum, aliquoties obtigit, ut elegantissimos latinos versus concinno ordine et serie conficerim et recitaverim, quorum aliquot vigilans de somno adhuc recensere potui. Et quis in sacris litteris tam hospes est qui nesciat, Deum in insomniis maxima revelasse : non aliam ob causam,

“And who has not observed that sick persons, especially hysterical females, of whom I have seen several, attacked with cataleptic and æsthetic affections, either during or after the paroxysm, have predicted future events, and have spoken in languages which they themselves had never learnt, although their parents knew them.”†

quam quia mens tunc sit attentior ad ea capienda, quæ revelantur.

SCHOLIUM.

Antiquissimus medicorum parens, HIPPOCRATES, id suo jam tempore observavit sollertissime in lib. *de Insomniis*, ubi inter initia scribit: Corpus cum vigilat, animæ cogitatio non sui juris est, sed partem aliquam singuli corporis partibus, sive sensibus, distribuit, auditui, visui, tactui, gressui, actioni ac omni corporis facultati. Cum autem corpus quiescit, anima in motu est, et corporis partes perreptans, domum suam gubernat, et omnes corporis actiones ipsa perficit. Nam corpus dormiens non sentit, ipsa vero vigilans cognoscit, ac visibilia videt, et audibilia audit, vadit, tangit, tristatur, animadvertit. In summa, quæcunque corporis aut animæ munia, ea omnia anima ipso in somno obit.—Et CICERO, *De Divinat.* lib. i. Cum somno sevocatus, ait, animus a societate et contagione corporis, tum meminit præteritorum, præsentia cernit, futura prævidet. Jacet enim corpus dormientis ut mortui, viget autem et vivit animus, quod multo magis faciet post mortem, cum omnino e corpore excesserit; itaque appropinquante morte multo est divinior.

†. Et quem fugit ægrotantes, imprimis mulieres hystericas, quas plures vidi, adfectione cataleptica, quam pro ecstasi habuerint, tentatas, præsentem paroxysmo aut finito, futura prædixisse, et linguis, quas ipse nunquam, parentes vero, didicerunt, locutas.

The celebrated Chevalier Folard, who, in his old age, became exceedingly devout, frequently fell into paroxysms of ecstasis. Upon these occasions, he suddenly fell down, and became mo-

The same distinguished physician farther observes, in the same treatise, that cachetic or phthysical patients, when their bodily strength is exhausted, often exhibit a much greater and truly wonderful alacrity in explaining divine things, than when in health ; and that in valetudinary and infirm persons of more advanced age, the corporeal powers—the memory and the imagination—decrease, while the vigour of the intellect and the judgment is augmented. This, it will be observed, is coincident with the opinion of Valesius, formerly quoted.

tionless ; afterwards he sung, then wept, and, at length, suddenly began to speak in monosyllables—a sort of jargon which some took to be Slavonic, but which nobody could understand. When his eyes were open he declared that he could see nothing, but was in total darkness ; when they were shut, he said he was surrounded by brilliant light, and in a most agreeable state. At these times he is also said to have prophesied.—See a curious work, entitled, *Histoire d'un Voyage Littéraire fait en 1733* ; also the *Biblioth. du Magnetisme Animal*, for December 1818.

The author of the foregoing narrative notices a parallel case, mentioned in Jurien's *Pastoral Letters*, of Isabella Vincent, a shepherdess, between sixteen and seventeen years of age, who fell into fits of ecstasis, which resembled a profound sleep, out of which it was impossible to awaken her. She was entirely deprived of sensibility. In her accessions, she spoke and said most extraordinary things, although she could neither read nor write. Her voice was clear and distinct ; and she had no violent or convulsive motions. She prophesied future events, and promised a speedy deliverance to the persecuted church. When the paroxysm was over, she recollected nothing of what had occurred, or what she had said.

The opinions of a philosophical physician of such eminence as Dr^r Frederick Hoffmann upon a subject of this nature, originating in a sound, discriminating judgment, and founded upon an extensive practical experience, I should be disposed to consider as of very great value. Nor do I attach less importance to those of another professional gentleman, well known and esteemed in the scientific world, whom I believe to have been, in his day, perhaps the most learned physician in Europe, and who, moreover, had the advantage of being intimately acquainted with the discoveries of Animal Magnetism : I allude to the late Dr Sprengel. This very learned individual published many excellent works upon medical and other scientific subjects ; amongst others, one in five volumes, entitled the *Institutions of Medicine* ; from the second volume of which I shall take the liberty of making one or two quotations, which are exceedingly applicable to the subject I am now discussing. The work is written in Latin ; but it is easily accessible ; and I shall translate those passages to which I wish to call the attention of the reader.

Speaking of the magnetic Somnambulist, Dr Sprengel observes (p. 303), “ Hence also that instinct revives, by means of which *the patient acquires a knowledge of his own state of health, and of*

that of any other person who is placed en rapport with him—and is also enabled to predict the duration of the crisis and its termination, and to prescribe the appropriate remedies. These remedies are generally vulgar and domestic, when recommended by the rustic ; or officinal preparations, when prescribed by the better educated man. They are frequently such as a physician would scarcely think of prescribing—such as culinary salt, a pepper-bath, &c.—but in most cases they do good, and Dr Wienholt does not recollect a single instance in which they were administered without beneficial effects.”

In another passage (p. 305), the learned Doctor admits that “*the Somnambulists predict the crisis of their complaints, and determine their duration and end.* I have myself,” says he, “seen a young man, a relation of my own, who had never been treated in this artificial manner,” viz. by Magnetism—who was therefore, I presume, a natural Somnambulist—“*who, in the very crises themselves, predicted, with the utmost certainty, the repetitions of the accesses, prescribed the appropriate remedies, and foretold the period when the disease should terminate.*”*

* Dr Descottes, in the year 1760, attended, at Argenton, two young hysterical women, who were much attached to each other, and who knew each other's situation, although living separately in distant houses ; and who, moreover, always predicted their own state of health, and that of the other, three or four days in advance. (See *Fr. Brossier de Sauvages, Nosologia Methodica*,

The volume from which I have quoted appears to have been published so long ago as the year 1810, since which period, the facts to which the learned Doctor alludes have been abundantly confirmed and elucidated by a variety of additional instances. I may add, however, that the testimony of Dr Sprengel in favour of the authenticity of these facts is so much the more valuable, because, like most other learned men, he was originally an opponent of Animal Magnetism, and wrote against

t. iii p. i. p. 398, &c.) Iung-Stilling mentions a similar case (*Theorie d. Geisterkunde*, p. 151); and Wienholt notices two cases of a like description (*Heilkr. d. Thierisch. Magnet.* vol. iii. *Abth.* 2, u. 3).

According to the Romish ritual, the speaking various strange and unknown languages, and giving proper answers in each language, is an undoubted mark of possession; as also, having an insight into what is transacted in distant countries, and a faculty of discovering secrets, without any means of information from without. These circumstances, then, must have been known to have occasionally occurred, however erroneous and absurd the cause to which they were ascribed.

To the opinions already noticed, in regard to the possibility of the occasional manifestation of a prophetic faculty, I may add that of the late Mr Coleridge. "It is impossible," says he, "to say whether an inner sense does not really exist in the mind, seldom developed, indeed, but which may have a power of presentiment. All the external senses have their correspondents in the mind; the eye can see an object before it is distinctly apprehended;—why may there not be a corresponding power in the soul? The power of prophecy might have been merely a spiritual excitation of this dormant faculty."—*Table-Talk*, vol. i. pp. 36, 37.

its doctrines and treatment;—until he appears, at length, to have satisfied himself of their truth and utility by investigation, observation, and experiment, when he manfully threw off his previous prejudices. But I am not aware that he ever was a professed practical magnetizer, or that he looked upon the subject in any other light than as a matter of science.

Dr Brandis, physician to the King of Denmark at Copenhagen, a gentleman of great professional eminence, and who, by those who are acquainted with him or his writings, will not be accused of an enthusiastic or undue bias towards the doctrine of Animal Magnetism, since he declares himself disposed to view, with the utmost suspicion and scepticism, every phenomenon which has not fallen under his own observation—Dr Brandis, I say, amply and unequivocally confirms this fact of the prevision of somnambulists. “The magnetised person,” says he, “predicts most exactly the progress of his disease, and especially the individual incidents—attacks of convulsions, syncope, evacuations, &c.—with all their concomitant circumstances; and, with the same precision, he points out the period of his cure. I confess,” continues the Doctor, “that the exactness with which all such predictions of four *clairvoyantes*, whom I myself have

hitherto had an opportunity of observing, were verified, greatly astonished me." *

The celebrated French physiologist Dr Georget has, upon various occasions, and in the most decided manner, recorded his perfect conviction, founded upon experience, of all the remarkable facts of Animal Magnetism. "During forty years," says he—now more than half a century—"magnetism has been studied, practised, propagated in France, and in a great part of Europe, by a multitude of enlightened and disinterested men, who proclaim its truth in defiance of all the ridicule with which it is vainly attempted to overwhelm them. It is a very astonishing thing, that Animal Magnetism is not even known by name among the ignorant classes: it is among the enlightened ranks that it finds support. It is men who have received some education who have taken its cause in hand: it is partly learned men, naturalists, physicians, philosophers, who have composed the numerous volumes in which the facts are accumulated which may now be adduced in its favour."

In another passage, the same enlightened physician pronounces the following peremptory opinion in regard to the utility of the magnetic practice: "I believe that no perfect medicine can exist but that of the somnambulists in every thing which

* BRANDIS, p. 102.

concerns themselves; and that it is possible to derive advantage from their admirable instinct in the case of other patients."

But it is not only in the works of the advocates of Animal Magnetism, or of the candid and independent inquirer, that we may look for an approval of its principal doctrines, and a confirmation of its more remarkable facts. Even the writings of its professed opponents supply us with abundant testimony in its favour; insomuch, that it is often exceedingly difficult to discover to what particular points their opposition is directed. Their controversial tactics resemble those eccentric operations in actual warfare, which are generally a great deal more showy than effective, and are never of any real advantage against an antagonist who cautiously keeps his forces concentrated, and stands firmly prepared to resist every assault. They may send up a few brilliant but harmless rockets into the air, amidst the obscurity previously produced by their own artificial contrivances; but when these have once exploded, and the atmosphere has again become clear, no actual injury is found to have been inflicted, and the relative situation of the combatants continues the same as before.*

* I am not in the habit of regularly perusing all the Reviews which are published in this country, and consequently, it is possible that the opinions which some of them may have been

In the following chapter, I shall produce some instances of the inconsistency of the opponents of Animal Magnetism, in attempting to deny the reality of facts which they either directly or indirectly, admit.—*Fas est ab hoste doceri.*

pleased to express on the subject of Animal Magnetism may have escaped my notice. This I can hardly regret, as those I have happened to see have appeared to me to be the pure offspring of ignorance and prejudice. I understand that a *critique* of the former edition of this work appeared some time ago in one of the numbers of the Foreign Quarterly Review. I have not myself seen the article, but the sample I have received of its logic has not tempted me to take the trouble of looking into it. The reviewer, I am informed by a friend, attempts to refute the truth of Animal Magnetism by means of the following *Sorites*: *What is believed in by quacks is quackery; Gall, Spurzheim, and Hahnemann are believers in Animal Magnetism; but Gall, Spurzheim, and Hahnemann are quacks; ergo Animal Magnetism is quackery.*

Now, without objecting that as neither I nor any other writer on the subject have ever alleged the authority of any of these gentlemen in favour of Animal Magnetism, it is surely incompetent to discredit that doctrine by an attempt to discredit a testimony on which it was never sought to be established; without objecting, also, that their quackery cannot be reasonably assumed upon the *ipse dixit* of an individual, who has not even evinced his title, either from privilege or from intellectual and moral capacity, to hold so decided an opinion on their merits;—admitting, I say, all this, what is the nature of the reasoning itself? Let us test it by another application. *What is believed in by quacks is quackery; G. S. and H. are believers in Christianity; but G. S. and H. are quacks; ergo Christianity is quackery.*

There are few, I think, who would give much weight to the opinion of any such logician as this Reviewer, upon any scientific subject.

CHAPTER XXIV.

IN a previous part of this work, I shewed that the first French Commissioners who were appointed to investigate the reality of the pretensions of Animal Magnetism, in the infancy of the discovery, with the very imperfect knowledge they possessed of the treatment, and with all their avowed scepticism and hostility to the system, nevertheless were forced to acknowledge that certain effects had been produced by the processes they employed, and that they even ventured to propound a theory of their own, in order to enable them to account for the phenomena. I have also shewn that Dr Stieglitz of Hanover, another opponent, has been compelled to admit the whole of the facts, and that he actually ridicules the theories by means of which these French Commissioners and others attempted to explain them. I am now about to take some more particular notice of another more recent and more formidable assailant, and to point out, from an examination of his own works, what are his real and unprejudiced opinions upon the subject.

The article *MAGNETISME ANIMAL*, in the *Dictionnaire des Sciences Medicales*, was written by M. Virey, a medical gentleman of considerable learning and talent. It was composed with great care and ability, and every possible objection to the system was urged with much force and ingenuity. In short, the article was all that the most violent and obstinate opponents could have desired; and it will probably be handed down to posterity, in the learned work of which it forms a part, as one of the most splendid monuments of perverted ingenuity and scientific prejudice. These opponents, however, were not long permitted to enjoy their imaginary triumph over the obnoxious doctrine. The article received a most elaborate and satisfactory answer from the venerable M. Deleuze, in which the whole of the objections urged by M. Virey were effectually met and obviated, with all that calmness, philosophy, dignity, and decision, which so eminently distinguish the veteran historian of Animal Magnetism.*

But I wish to have nothing to do, at present, with M. Virey's *refutation* of Animal Magnetism. My object, in the mean time, is to shew that, in his

* See *Defense du Magnetisme Animal contre les attaques dont il est l'objet dans le Dictionnaire des Sciences Medicales*. Par M. J. P. F. DELEUZE. Paris, 1819.

other writings, when free from the fetters of prejudice, and not engaged in performing the task of a professed advocate or special pleader, this ingenious gentleman has actually adopted all the most essential opinions of the philosophers whose dogmas he attempts to controvert—that he is, in fact, an Animal Magnetist in every thing but the name. If I am able to satisfy my readers upon this point, they cannot, I think, look upon the article in question in any other light than that of a clever *Jeu d'esprit*.*

M. Virey speaks of Animal Magnetism, as of an influence which may be felt at a distance. Now, in the article INFLUENCE of the *Dictionnaire des Sciences Medicales*, the author (M. Virey himself) endeavours to establish the principle that, when two beings are in sympathetic connexion with each other (*ont entre eux des rapports*), when their constitutions are in harmony, when two individuals have lived together, and are united by the most tender affection and by similar habits; *there then takes place between them a transmission of the vital principle, and one of them is capable of acting upon the other at a distance.*

“ As there is only, as it were, one *I* between these two beings, their souls will correspond; the

* For the following references I am indebted to the volume of M. Deleuze, mentioned in the last note.

ANIMAL MAGNETISM.

brother in France will have a presentiment, even in his dreams, of what his brother may be doing in America, in a given situation. What stronger proof can we require of the reality of sympathetic influences?*

“ If there existed between these individuals only a simple imitation, without any transmission of the vital influence from the one to the other, these bodies, thus assimilated, would resemble clocks which strike the same hours at the same moment,

* One of the most remarkable instances upon record, of the exercise of this faculty of sympathetic or magnetic presentiment or vision at a distance, is to be found in the *Memoires de Marguerite de Valois, Reine de Navarre*, a lady who has never been accused of superstition; and the narrative bears all the marks of authenticity. Moreover, from the period it took place and was recorded, it is obvious that it could have no reference to any of the modern doctrines of Animal Magnetism. I shall give the story in the original language.

La reine, ma mere, étoit à Metz, dangereusement malade de la fièvre. Elle revant, et étant assistée autour de son lit du Roi Charles, mon frere, et de ma soeur et mon frere de Lorraine, de plusieurs Messieurs du Conseil et de force dames et princesses, qui la tenant hors d'esperance ne l'abandonnoient point, s'ecria, continuant ses reveries, comme si elle eut vu donner la bataille de Jarnac: Voyés comme ils fuyent; mon fils a la victoire; he Mon. Dieu! relevés mon fils, il est par terre: Voyés vous dans cette haye le Prince de Conde mort? Tous ceux qui estoient la croyoient qu'elle revoit. Mais la nuit après M. de Lopez lui en ayant apporté la nouvelle: Je le savois bien, dit elle; ne l'avois je pas vu avant-hier. Lors on reconnut que ce n'étoit point reverie de fièvre, mais un avertissement que Dieu donne aux personnes illustres.—Many instances of the same phenomenon will be found in the various cases of the natural and magnetic somnambulism adduced in this work.

but there would be no union between them, neither would act upon its neighbour. Let us prove, on the contrary, that there evidently exists a kind of transfusion of the sensitive principle between living bodies."

After having adduced his proofs, the author announces the conclusion in the following terms: "There exists then, in all probability, an invisible and transmissible vital fluid; there are real influences in operation."

In the article *HOMME* in the same Dictionary, written also by M. Virey, the author pronounces the following severe censure against the philosophers and philosophy of the present times:

"It is scarcely to be imagined with what an unpardonable degree of presumption, and in what a peremptory and decided tone, the dogmatists establish their at least very problematical opinions, and contemptuously treat as absurd, as ridiculous, as impossible, or even as ignorance and folly, all that is opposed to their sentiments..... Now, is it not manifest, if we will only reflect, that man does not constitute the absolute measure of all things? that there may exist, and that there really do exist, powers or principles imperceptible by our senses, and whose existence is only revealed by certain indications? Take, for example, Magnetism—attraction at a distance. Our age, which

boasts so much of its superior lights, shews as much horror for spirits, as Nature formerly did, according to Aristotle, for a vacuum. We are indisposed to acknowledge any thing but *matter* and *no matter* ; we should deny the motion emanating from living forces, if a thousand proofs did not attest it every hour in man and other animals. We thus voluntarily deprive ourselves of the most wonderful facts, of the highest and most incomparable truths, in order to attach ourselves to the uncertain reports of the senses, to only the most brute and material consequences ; we do not even investigate upon what foundations the nature of man reposes, whose sense and reasoning are taken for supreme arbiters, as the universal rules."

In the article *INSTINCT* in the Dictionary above named, likewise by M. Virey, we are told that it is wrong to deny that man is endowed with instinct, like the other animals ; *and that this faculty, unexercised in our ordinary state, is developed in certain circumstances, and gives us more certain information than that which we can acquire by the senses and experience.*

" Nature, acting then alone, and without being opposed or deranged by the intellectual faculties or the will, manifests those astonishing acts of salutary conservation or direction for the cure of diseases."

" For the same reason, we frequently experience,

during sleep, the annunciation or indication of the state of the body, which is the manifest voice of the instinct."

M. Virey continues: "We will not be accused of giving credit to the illusions of the pretended Animal Magnetism; *but its disciples support their doctrine by well known cases, in which the instinct comes into play, in consequence of the inactivity of the external senses.* Let a delicate or nervous female abandon herself to that state of *half-sleep* called the *magnetic somnambulism*, let her shut up her senses, or the doors of external impressions, the internal impressions becoming predominant, *she will then feel in a more lively manner; she will see, according to her own language, all the interior of her economy.It is natural, and conformable to the laws of the organism, that she should spontaneously desire and demand those kinds of remedies which are most appropriate to her ailments."*

Now, although the facts here are not very fairly stated,* yet, taking M. Virey's own view of the

* "We do not know why one individual is more susceptible of somnambulism than another, why the same person is susceptible of somnambulism in one disease, and not in another, &c.; but we are certain that men of a robust temperament and an apathetic character fall into somnambulism as easily as delicate and nervous women. The best somnambulists are not those who, in their waking state, appear to have an irritable and delicate nervous system. Wienholt even became assured that magnetism produces very little effect in inveterate nervous

matter, what great difference does there exist between the opinion he has expressed and that which is held, upon experimental evidence, by the Animal Magnetists? Does not M. Virey acknowledge the reality and the utility of the magnetic somnambulism? He does not, indeed, appear to have a very accurate notion of the nature of the affection in question, which he improperly denominates a *half-sleep*; but he admits the essential phenomena. M. Virey, however, denies that a somnambulist can “contemplate the interior of the economy of another individual, prescribe remedies for him,” &c. But here the author seems to have forgotten what he had previously said in the article INFLUENCE, in which he acknowledged that such a sympathetic connexion might be established between two individuals, as that the one should feel all the complaints of the other.

It is rather remarkable, that M. Virey explains the phenomena of the Instinct upon the same principle to which Kluge and others attribute those of Somnambulism. According to his view, the difference that exists between the instinct and the intellect results from the distinction of the two ner-

diseases, especially when the patient has made use of stimulants; and I believe that the most of those who have practised magnetism have acknowledged the truth of this observation.”—DELEUZE, *Defense*, &c. p. 67.

vous systems : " The interior or ganglionic system," says he, " is the exclusive seat of the instinct. From thence emanate the spontaneous impulsions.It watches continually over the conservation of the individual, even during sleep, in delirium, in disease." M. Virey had previously said nearly the same things in the article *FORCES MEDICATRICES* : " When a sensible organization observes itself internally, the instinct speaks ; it inspires and instructs the individual on the subject of his peculiar complaints, and frequently in a more luminous manner than the most skilful physician is capable of doing. This internal voice is independent of the intellect : the most simple persons, idiots, individuals half-asleep, are even more capable of hearing it, because they are less distracted by external sensations."

Now, the phenomena described by M. Virey are precisely of the same class with those produced by Animal Magnetism. M. Virey, indeed, is continually protesting against the idea of his being thought to give any countenance to what he is pleased to call the " extravagances" of Animal Magnetism. But he fully admits that nature sometimes, and under certain conditions, produces extraordinary and most important changes on the animal organism ; and all the extravagance of the magnetizers consists in having discovered and de-

terminated one of the causes by which these changes may be developed, and in having given to this cause a particular name.

Independently of the articles inserted in the *Dictionnaire des Sciences Medicales*, M. Virey is the author of a metaphysical and physiological work, in two volumes, published in 1808, under the title of *L'Art de Perfectionner l'Homme*. At the period when this work was published, M. Virey was perhaps entirely ignorant of Animal Magnetism; at least he does not appear to have then had any idea that he should one day be engaged as the redoubted antagonist of that doctrine; for he makes not the slightest allusion to the subject. In this work, the author propounds opinions in all respects coincident with those already noticed; and of these I shall quote a few, for the purpose of shewing with what consistency he can attempt to controvert the doctrines which he undertook to refute.

M. Virey recognises in man "a soul—a peculiar force which animates him." (Vol. i. p. 2). "This force has particular faculties, independent of the organization of the body.....It is by means of this invisible agent that we acquire all our knowledge;.....it alone constitutes our true being." (*Ibid.* pp. 4, 5).

"Man is composed of three kinds of principles;
1. Of an immaterial or intellectual soul; 2. Of a

sensitive faculty, or life; and, 3. Of material elements.”—(P. 7). “In order to act upon the body, the soul makes use of a vital principle, or of a nervous fluid, which is capable of impressing motion and sensation upon our organs.”—(Ibid.)

“Although this principle is perhaps more subtile than light, it appears to be a material substance, capable of accumulating, and even of passing from one body to another.”—(P. 8.)

“If there exist in the intervals of the stars an exceedingly rare and subtile fluid, which has been called *ether*, it must possess the most penetrating qualities. It must even be capable of producing the most wonderful effects (as Newton and Euler imagined). This ethereal substance being able to insinuate itself into the most compact matters, must produce in them different effects, according to the nature of the bodies, the modifications of which it is susceptible,” &c.—(Pp. 15, 16.) *

“The soul may sometimes acquire a supernatural development, and receive from God an increase of knowledge and of energy.”—(P. 59.)

“Our soul perceives without reasoning, and by a secret action of its faculties, harmonious relations with other souls, such as sounds have amongst each other. We do not acquire this instinct by

* See Appendix, No. iii.

science, although it may be rendered more perfect by study.”—(P. 172.)

“The sensitive element is not of the same nature with thought: it is secreted in the brain; it descends into the nerves; it exhausts itself and is renewed. An animal is a fountain of life: it loses some part every day, and it extracts a fresh portion from the surrounding bodies. We never live more energetically than when effusing the vital principle outwards.”—(Pp. 317–320.)

The author then speaks of the sympathy that exists between all human beings by the mutual transmission of their vital heat, and quotes the dictum of Hippocrates: *Si quis animam animæ miscere non credit, ille decipit.*—(P. 321.)

“There may exist objects which transcend our senses, and if we perceive all that is necessary for us, we do not perceive all that exists. We only know the magnetic fluid by its effects upon iron, and its polarity. Electricity was for a long period unknown. We may suspect that there are in the world several subtile fluids, and certain concealed properties, of which we have yet no notion; and this is the reason why we find many phenomena inexplicable.”—(P. 352.)

“The presence, the touch, or the words of a very eminent man, have a very singular influence on inferior minds, and are capable of curing bodily dis-

ease. Hence fascinations, enchantments," &c.—
(Vol. ii. p. 22.)

"If, even in delirium, the soul preserves clear and lively ideas; if it perceives what is suitable to the malady, and discovers the appropriate remedies; if it foresees the accesses of the crises, the cure, or death—it is a proof that it is not changed in its essence. This delirium, in fact, only changes the state of the body, the pure spirit being an incorruptible principle."—
(P. 209.)

"Our soul is susceptible of three principal states:
1. That of ordinary life, which employs the soul and the body; 2. That of dreaming or delirium, which chiefly occupies the sensitive faculties of the body; 3. The state of ecstatic meditation, in which the soul acts almost alone."—(P. 212.) In a subsequent passage, the author observes, that, in this last state, "*the soul can contemplate events from a higher point of view, and its dreams have something of a prophetic character*; for being prodigiously separated from the body by meditation, it seems to have diffused itself throughout universal nature, where it can remark many effects in their source."—
(P. 237.)

"The habit of directing his nervous energies, gives to him who contracts it a marked superiority over other men.....Experience proves that the will sends the vital spirits into the nerves."—(P. 267.)

“ Our soul has spontaneous motions. It acts alone, without the concurrence of the body : it directs the vital spirits to where they are required to go. It organises the fœtus In diseases, it constitutes that *natura mediatrica*, which, taking care to direct the humours in a salutary manner, *points out to the physician what he ought to do.* It is not an acquired science, but an innate faculty. Instructed by the Author of all being Himself, the soul has no need of acquired knowledge, which is only relative to external objects.”
—(Pp. 324, 225.)

“ *When the equilibrium of health has been disturbed, the motion of the soul mechanically aspires to restore it. Every disease frequently discovers its remedy, if we will only listen to its determinations. Medicine is in ourselves ; we do not create, we develope it, when, consulting in silence the impulse of nature, we favour its direction, according to the axiom of Hippocrates : Quo natura vergit eo ducendum est. Nature may produce in every being the desire of an unknown object, and cause an individual to divine a remedy, of which, perhaps, all the science of the physician would never have dreamt.*”—(Pp. 340, 341.)

“ Without doubt, we owe to a certain ability of mind those predictions which result from experience and prudence ; but nature replaces this ad-

vantage, in animals, and the most simple of mankind, by very delicate instincts. Our souls have naturally a *tact* which gives them a presentiment of seasons, and sometimes of events. The more the mind is occupied with science, the less is it moved by internal impressions. Ignorance, too, by leaving the soul in its natural condition, is more susceptible of instinctive impressions, than the logical and limited march of the reasoning power.”
—(Pp. 346-348.)

“ Amongst doubtful events, when we cannot form a conjecture as to what may be the issue, if we take them so much to heart as to become heated, the soul is enlightened, and sometimes penetrates into the future:.....A prophet does not know the cause of his prophecy: he feels himself moved by a power which exceeds his natural energies; he does not divine all things, but only that which comes into his thoughts.”—(P. 352.)

“ This species of divination arises, and is lost naturally, and is with difficulty retained. *When the mind manifests it, all the senses are in a state of temporary suspension, and nothing external distracts them.*”—(P. 354.)

“ Our soul may be placed in such harmony with that of another, as to divine many accidents which may befall him, although the bodies may be distant from each other.”—(P. 359.)

Such are some of the deliberate and unprejudiced opinions of M. Virey. I do not feel myself called upon either to defend or to controvert them. But I cannot help expressing my astonishment that the individual professing them should affect to be so decidedly hostile to Animal Magnetism—a study which supplies the only experimental *data* by which they are capable of being supported.*

* M. Fournier, the author of the article *EFFLUVE* in the *Dictionnaire des Sciences Medicales*, mentions the following curious fact. “For ourselves, who have witnessed several effects of magnetism, but who are not yet sufficiently enlightened to have a fixed opinion upon its causes, its advantages, or even the extent of its power, and who in our observations are always guided by the spirit of philosophical scepticism, we attest that many persons have vainly attempted to make us experience magnetic effects; a single physician succeeds in producing upon us their manifestations. Scarcely have we subjected ourselves to his *attouchemens*, when we experience, without being able to prevent it, a somnolency, a numbness, more agreeable than painful, which chains down our will and our thought; and if in these circumstances we feel any spasmodic pain, an attack of megrim, it almost suddenly disappears. *The physician of whom we speak is one of the contributors to this Dictionary, and has distinguished himself as one of the most eloquent adversaries of magnetism.*”

Can the physician here alluded to be M. Virey.

CHAPTER XXV.

HAVING noticed the almost universally prevalent belief in the occasional development of some most extraordinary powers and faculties in certain states of the human organism ; having produced various instances in which the remarkable phenomena in question were conspicuously manifested in the natural somnambulism ; having quoted the opinions of many ingenious and impartial physicians and philosophers, who have borne distinct and ample testimony not only to the possibility but to the actual occurrence of the facts, and having, moreover, shewn, that the most celebrated antagonists of Animal Magnetism fully admit the essential *data* upon which that doctrine is founded ; I trust that my intelligent readers are now prepared to follow me to the consideration of certain cases, which, without such preparation, they would unquestionably have been disposed to regard with the utmost scepticism, notwithstanding the undoubted competency and respectability of the reporters. The phenomena I

am now about to illustrate by a few examples, are those which have been found to occur in the Magnetic Somnambulism ; and I think these examples will sufficiently shew that the opinions I recently referred to have been abundantly confirmed by direct experiment.

I shall pass over the works of the Marquis de Puységur, and those of M. Tardy de Montravel,—whose cases, although of the highest importance to the study of this interesting subject, are generally too minutely reported for convenient abridgment,—and commence with a case of which the details will be found in the works of one of the earliest patrons of the magnetic treatment after Mesmer, and one of the most sober, honest, and intelligent writers upon the doctrines and practice of Animal Magnetism—Dr Wienholt. The case itself is otherwise interesting, as having first given occasion to the introduction of this branch of medical practice into Bremen.*

In consequence of a complete failure of all the ordinary means of cure, in the case of one of his female patients, Dr Wienholt resolved to resort to Magnetism. This resolution was approved of by his colleague, Dr Olbers—the celebrated astronomer,—who, however, had, at that time, little confi-

* WIENHOLT, *Heilkr. d. Thierisch. Magnet.* vol. i.

dence in the efficacy of the treatment. The lady was magnetized, for the first time, on the 6th of July; and for some weeks there was little perceptible change in her state, excepting that her complaints gradually became less frequent and less violent. After about three weeks, the Doctor perceived that, when he manipulated her during a cataleptic attack, especially towards the pit of the stomach, she occasionally became more restless, her limbs appeared less rigid, and the fit more nearly resembled a natural sleep. I need not follow the progress of this successful treatment farther than just to point out the remarkable phenomena which occurred. Upon the 4th of September, the lady appears to have become somnambulist for the first time, and the doctor now heard her speak in her sleep. She told several stories in a cheerful tone, mingled with some strokes of good-natured satire—her expressions were dignified and appropriate, and perfectly coherent—her voice was more melodious than usual, and she spoke in a superior dialect. At this time she answered no questions, but proceeded with the narrative in which she happened to be engaged. When the doctor visited her in the evening of the same day, she immediately began to speak, and mentioned, amongst other things, that a certain physician, otherwise a stranger to her, wished her to take rhubarb. The doctor

then asked her whether she would not take rhubarb, as it might perhaps do her good. She answered, "No ! it is impossible for me to take it." She was then asked whether an emetic would be of service to her. She answered, "No." "Whether she would drink some Pyrmont water?" "Not yet," was the answer. To other questions she gave no answer at all. After having been again magnetized for some time, the doctor began to ask questions, and received precise answers. She was asked if she would eat a particular kind of soup? She answered, "No."—"Why?"—"Because I am sick."—"Oh ! you are not sick—you look so cheerful and pleased—get up and walk about."—"How can I do so?—my limbs wont carry me."—"When will your sickness terminate?"—"I do not know."—"Will you resume your bathing?"—No answer.—"Will you drink Pyrmont water?"—"No."—"Why?"—"Because it would be of no use to me at present." On a sudden, she turned round and began to question the doctor. "Did not you tell your wife that you conversed with me during my sleep?" The doctor denied this. "Now," said she, "you are not telling the truth." Here, Dr Wienholt observes that neither he nor his wife were upon any footing of friendly intercourse with this lady or her relations, and, therefore, she had no means of knowing any confidential communica-

tion he might have made to his wife. "Yes," said the doctor, "I confess I told her so."

Upon another occasion, the doctor again asked her whether she would not resume her bathing. She answered in the affirmative. "Should the bath be cold, as formerly?"—"No, rather warmer."—"Will you be able to bear it now?"—"I believe I shall."—"Do you think that steel would be of use to you?" This question was also answered in the affirmative. "Shall I give it you in drops or in powders?"—"In drops."—"Would not some glasses of Pyrmont water, taken early in the morning, be of advantage to you?"—"O, yea." When asked whether Magnetism ought to be continued in the same way as hitherto, she answered in the affirmative, and added that it would be sufficient to administer it once a-day. This lady repeatedly answered many similar questions in her sleep, and also pointed out the particular treatment which would be of most benefit to her.

At another time, Dr Wienholt happened to ask her whether she had lately received any letters from her brother in Riga. She answered, "No—he has been sick, very sick."—"How do you know this?"—No answer.—"Who told you so?"—"Nobody."—"Have you dreamt it then?"—A serious and uneasy look, but no answer. The doctor again asked her how she had come to entertain such

thoughts. She answered that certainly nobody had told her, but, nevertheless, she knew that he had been extremely ill. Her mother knew nothing of this illness, and so little did she herself suspect it in her waking state, that she expressed great surprise when accounts arrived, some days afterwards, that her brother had been seriously indisposed, but was getting better.

Upon one occasion, Dr Olbers came into the house, and the patient, without being told of it, knew that he was in the ante-chamber. Next morning, the mother said that she had spoken to her daughter, when awake, upon this subject, and that she recollected nothing of the circumstance. The Doctor asked the patient, when asleep, how she came to know yesterday that Dr Olbers was in the ante-chamber. She answered, because she had seen him; and being again asked how she could possibly see him when her eyes were shut, and the wall and the door were between them—she could give no satisfactory explanation of the phenomenon.

At another time, this patient, during her magnetic sleep, predicted two fainting-fits which were to take place the next day, and which took place accordingly.

This case presents a variety of other instances of the magnetic *clairvoyance*, which are related

with great minuteness by Dr Wienholt himself, in his principal work on Animal Magnetism ; but I am unwilling to enter any farther into the detail of these particulars, and must therefore refer the reader to the work itself : being anxious to proceed to notice other cases, in which phenomena of a similar description were manifested.

In the first volume of the *Bibliothèque du Magnetisme Animal*, there is a short account of the magnetic treatment of a Madame G. by M. de Fallières. This lady was much contused and injured by an accident, and was magnetized by the gentleman above named. At the very first sitting, she became somnambulist, described her own complaints, prescribed the appropriate remedies, and predicted the period of her recovery, with great exactness.

In the same volume, the following case is reported by M. Lamy Senart :—A M. Baron was magnetized by this gentleman, and placed in a state of somnambulism. At the third sitting, the patient alluded, by signs and gestures, to a journey which the operator was obliged to make, and at which he expressed great concern. M. Senart assured him that he should return in the course of eight days. Upon this, the patient held up first his ten fingers, and then a single one, by which the operator understood him to intimate that he should be absent

eleven days. The question was put to him, and he answered, by a motion of his head, that such was his meaning. M. Senart renewed his promise of being back in eight days; but the patient persisted in holding up eleven fingers. M. Senart was a good deal struck by this prediction; but, in point of fact, although he persevered in his original intention, he met with an accident which detained him on the road, and he did not return till the eleventh day, thus verifying the prediction of M. Baron.

This patient also saw and described his own complaint, predicted a severe fit of convulsions, and, at the request of the operator, pointed out the means of averting it. He was likewise consulted upon the complaints of others, and, in the words of the reporter, such was his lucidity, that he was never once mistaken with regard to the diseases of the patients who consulted him, who all went away satisfied and astonished at the sagacity and accuracy of his decisions. M. Senart has appended an account of some of these consultations to his report of this case. I may add, that this patient predicted, with great accuracy, the period of his recovery.

One of the consultations alluded to is rather curious and amusing. A certain physician, having heard of the extraordinary faculties manifested by M. Baron, came from a distance of fifteen leagues,

for the purpose of seeing and examining him. M. Senart set the patient asleep by magnetism. His sleep appeared to the physician to be so natural, that he could not be persuaded that he was in a state of somnambulism. He was then placed *en rapport* with the patient, and requested to ask him some questions respecting his complaint. The physician, in his examination, made use of medical terms: the Somnambulist answered him correctly, but without employing the same phraseology. The inquisitive observer pressed the patient with questions, in hopes of leading him into some mistake. They conversed about half an hour, at the termination of which period the physician declared: "I can now make no objection to him—in fact, he knows more than I do myself."

But the experiments were not yet at an end. "Am I in bad health?" asked the physician. "No," answered the patient. "Have I been indisposed?" "No." "What is the reason of this?" "Thoughtless persons, like you, are seldom indisposed." The physician asked no more questions. His brother, M. Cambronne, merchant at Saint-Quentin, then said to him: "Well, brother! he never saw you before, but you must acknowledge that he knows you pretty well."

In an article upon the *Vital Fluid*, in the second volume of the same Journal, an extract is commu-

cated from a letter, dated from Cadenet, in the department of Vaucluse, in the month of October 1802, giving an account of two young Magnetizers—the one Anthony Tronchon, a lad of twenty-one years of age, and the other a girl of twenty, called Virginia. The following is the method in which Tronchon is described as proceeding to his consultations. He sits down in an arm-chair; his brother then magnetizes him, and he falls asleep speedily and profoundly. The patients are then brought near him, and, in his somnambulism, he describes with great exactness all their complaints, and the symptoms which preceded and which accompany them, without passing over even the most minute particular. The complaints once known, he prescribes the appropriate remedies, recommending only simples. He points out to the patients the mountains where they grow; and certainly, without having studied Linnæus, he describes them in such a manner, that they may be recognised at the first glance. The girl, Virginia, operates in a similar manner, and with equal success. I may here observe, that the cures alleged to have been performed of old in the Greek temples, are supposed to have been effected according to some method analogous to that now described;

and upon this supposition we might be enabled to explain many of the mysteries of the ancient priests, without having recourse to the agency of superstition and delusion. My limited space will not permit me to enlarge upon this subject at present ; but I am not the first who has had occasion to remark that such is often the fate of human knowledge. “ It is found and lost, and found again ; like one of those rivers which, after flowing visibly over a certain space, sink into the ground, and are lost for a time, but afterwards return to the surface of the earth, and again roll along in day-light.”*

In the same article from which I have extracted the preceding account of the two young Magnetizers, the author mentions that, at Landau, he once magnetized a lady of about thirty years of age, who had been fatuous from her birth. She belonged to an opulent and distinguished family, who had used every possible means to endeavour to restore her intellect, but without success. When placed in a state of somnambulism, she conversed upon various matters with great propriety ; she was no longer the same being ; a person who saw her then for the first time would never have suspected that she was deficient in mental energy. Her parents, who were present, were astonished, wept for joy, and

* *Edinburgh Annual Register*, for 1810, p. 520.

exclaimed: "Ah! why is she not always a Somnambulist?"*

In the same volume of the work referred to, there is a letter from a lady to M. Deleuze, the celebrated writer on Animal Magnetism, containing an account of a very curious case. The lady was afflicted with a very serious complaint, and, despairing of relief from the ordinary resources of medicine, she applied to a Magnetizer, who agreed to undertake her treatment. He accordingly did magnetize her during three or four months, when,

* The author of the article from which I have made the above extracts, makes the following observations upon this subject.

"I have often had occasion to remark, that persons affected with *mania*, or labouring under some mental irregularity which caused them to be taxed with slight insanity, are, in the state of somnambulism, generally more *clairvoyants* than others, and that, at such times, they exhibit no indication of the defects of mind with which they are charged. I have remarked the same thing in cases where the intellectual faculties were absent, or manifestly infirm.

"These phenomena are sufficiently explained by the observations of old and experienced physicians. They know that partial insanity, different kinds of *mania*, symptoms of an habitual aberration of mind, have most frequently their principal seat in some deeply affected *viscus* of the epigastrium; and, in that case, the irregularity of the cerebral functions is only sympathetic. Now, somnambulism, has the effect of insulating the latter, of rendering them, for the time, independent of their usual relations, of withdrawing the brain from its morbid affections; and it is by such means that this organ instantaneously acquires this freedom, this facility, this great latitude of operating, which it enjoys in this state."

visiting her one day, he said he was afraid that he should not be able to magnetize her, as he was himself very much indisposed. The lady then proposed to magnetize *him*—he consented—and in a quarter of an hour he became somnambulist. He requested that his eyes might be bandaged, as he thought he should then be able to see better. The lady then requested that he would examine himself, and endeavour to discover how his sufferings might be relieved. He answered : “ I have too little fortitude, and am easily affected. My complaint is trifling, and I shall be well to-morrow. It is you that I must examine. But how fortunate it is that you have made me somnambulist ! Henceforth, we shall always commence our magnetic treatment in this manner, and I assure you that you will be well attended to.”

From that period, the lady constantly set her magnetizer asleep every day, and in consequence of following his prescriptions, while in a state of somnambulism, her complaint (a *scirrhus*) was removed. While in this state, too, he predicted that she should be attacked, some time afterwards, by a complaint of a different nature. This prediction was fulfilled, and she was again cured in precisely the same manner as before. The veracity of this account is vouched by M. Deleuze himself, who knew the parties.

At the end of the same volume, there are Reports of the magnetic treatment of four females, amongst others, by M. Germon, Curate of Saint-Aubin-le-Cloux. All of these four became lucid somnambulists, and, in that state, prescribed the proper remedies for their different complaints. They were all cured but one, whose complaint, however, was much alleviated, and hopes were entertained of her complete recovery. These Reports are certified by the authorities of the place, and by other respectable persons.

In the fourth volume of the *Bibliothèque du Magnetisme Animal*, M. de Puysegur gives some account of a woman, Agnes Burguet, called La femme Maréchal de Buzancy, of whom he had made mention in some of his previous writings. This woman had for many years been subject to irregular and periodical fits of convulsions, accompanied with other symptoms, which, if left to themselves, would inevitably have terminated her existence. She had been treated magnetically by M. de Puysegur, whom she always apprised, in due time, of the day and the hour when a fit was to come on. When in a state of somnambulism, she not only saw her own complaints and prescribed for them, but also, after careful examination, saw and prescribed for the complaints of others with whom she was placed *en rapport*; of which remarkable faculty several

instances are given in the volume referred to. M. de Puysegur observes, that it was always necessary, upon these occasions, to submit implicitly to the dictates, and to execute punctually the directions, of the Somnambulist; and this observation is confirmed by the experience of every other practical magnetizer. The prescriptions of Somnambulists are invariably found to be efficacious—a deviation from them frequently proves dangerous.

In the same volume of the *Bibliothèque*, there is an extract of a letter written by the Countess de C. Her son, who had been under magnetic treatment fifteen years before, had predicted, in his last crisis of somnambulism, that he should enjoy good health for fourteen years, but that, at the termination of that period, he should again become seriously indisposed. This prediction was fulfilled, and the patient was again relieved by the same mode of treatment.

There is also, in the same volume, an account by M. Thiriat, Doctor of Medicine and Physician at the mineral waters of Plombières, of a patient who was sent to consult him and to drink the waters, on account of some complaints, originating, in a great measure, from previous injudicious treatment. This lady having been magnetized by M. Thiriat, she became somnambulist, and gradually more and more *clairvoyante*. In a short time, she

conversed with the Doctor about her situation with a precision which astonished him. She pointed out the cause of her complaints, and prescribed the treatment necessary to restore her to health. The thermal waters did her good by strengthening her; but the grand remedy, says Dr Thiriat, was the magnetic sleep, during which she pointed out the manipulations which ought to be used, and the other medical means which ought to be employed. "My knowledge of medicine," says the Doctor, "never placed me for an instant in contradiction with her indications. I may even assert, that she sometimes rectified my own ideas." This lady even discovered one day, by accident, that the Doctor himself was indisposed, and she pointed out the nature of his complaints, and the remedies he ought to employ. We have the Doctor's own assurance that the mode of treatment she prescribed was exceedingly appropriate and completely successful. He also consulted her in the case of some of his other patients, and was perfectly satisfied with the reflections she made upon them.

Madame Hugaut had a weakly child, upon whose case Dr Thiriat thought it advisable to consult some of his somnambulists. The husband of this lady was very incredulous, and although he had witnessed some very extraordinary magnetic phenomena, he could never be convinced of their rea-

lity, until this consultation about his own child. Madame Chevalier, another patient of the doctor's, was exceedingly *clairvoyante* in her somnambulism, and transported herself mentally to the house of this gentleman, whom she did not know, and of whose place of residence she was ignorant in her waking state. She there saw his son, a boy of twenty-seven months, described his situation and the nature of his complaints, and predicted some other symptoms which were to occur. Mademoiselle S., another somnambulist, was consulted next day upon the case of the same child, and repeated precisely the same things, only that she entered more into detail; but although in other respects quite as *clairvoyante* as Madame Chevalier, Mademoiselle S. could not transport herself mentally into a house she did not know: it was necessary that she should touch the persons about whom she was consulted.

The following case occurred at Paris, in the chambers of Dr Fouquier, in the year 1830, and was witnessed by a great many persons.

Petronilla Leclerc, aged twenty-six, was admitted into the *Hospital de la Charité*, afflicted with a cerebral, spasmodic, epileptiform affection. M. Sébire, who had charge of her, applied magnetism to her several times, when some very remarkable phenomena were manifested.

In the first sitting, the somnambulist gave several marks of lucidity. The person who had magnetized her, presented to her some objects, such as a bottle filled with vinegar, sugar, bread, &c. which she recognised perfectly well without seeing them. Besides, she had a bandage over her eyes. In order to answer questions which were put to her, she turned to the opposite side, and plunged her face into the pillow. Without being asked, she said to the person who was holding her hand, "You have got a headach." The fact was true; but to try her, M. Sebire answered that she was mistaken. "That is singular," she replied, "I touched some person who had a headach, for I felt it." She distinguished several persons who were present at the experiments by some peculiarities of their dress.

One of the most remarkable circumstances was the following. The magnetizer had retired, after promising to return at half-past five o'clock, in order to awaken her. He arrived before the time. The somnambulist made him observe that it was not yet half-past five. The latter answered that he had just received a letter which obliged him to return sooner. "O yes!" she immediately replied, "it is that letter which you have in your portfolio between a blue and yellow card." The fact was strictly true. M. Sebire, without saying any thing, placed a watch behind the occiput, and then asked

her what o'clock it was. She answered, "Six minutes past four;" and she was right.*

I conceive it quite unnecessary to bring forward any more instances, than those already adduced, of that phenomenon of *lucid vision*, which consists of the faculty of seeing through intervening obstacles, and of *intuition*, that is to say, that condition of the organism, in which, as formerly described, the patient obtains 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; as also to exercise the same power of internal inspection with regard to other persons who have been previously placed in magnetic connexion with him. M. Chardel, the ingenious author of an essay on *Physiological Psychology*, assures us—and I have no doubt of the fact—that he could adduce hundreds of examples of these phenomena, which occur in almost every magnetic treatment; but that it appears to him quite superfluous to be continually recurring to the reality of facts which have been already so amply established. I shall, therefore, now proceed, in the progress of my induction, to give a few instances of those phenomena which oc-

* *Gazette de Santé*, 1830, No. 26.

cur in Dr Kluge's sixth degree, and which have been thus described in a former part of this work :

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

CHAPTER XXVI.

THE first two or three instances of the phenomena in question, I shall extract from the work of M. Chardel, already referred to, who treats of Animal Magnetism incidentally, as connected with psychological science, and who, moreover, speaks from personal knowledge of the facts he relates.

M. Chardel had two sisters as his patients, who were both magnetic somnambulists, and in the most intimate *rapport* with each other. M. Chardel proposed to bleed the elder of these two sisters in the foot. In the mean time, the younger sister, after being magnetized, felt somewhat indisposed, and went to bed in another room. The father and mother remained to assist the operator. At the first attempt to insert the lancet, a piercing cry was heard to proceed from the bed-room of the younger sister, who, on entering it, was found to be in a swoon, in the position in which she had gone to sleep. M. Chardel recovered her, and enquired the cause of her fainting. She then related the details of all his movements in the projected

operation. She said that she had constantly followed him with her eyes, and that, at the moment he was going to insert the lancet, an emotion, which she could not control, had entirely deprived her of sense. In the case of ordinary life, this would have been impossible, considering the distance and the intervening walls.

The same author mentions the following anecdote, upon the authority of a gentleman of distinction and credit.

The wife of this gentleman had a *femme de chambre* in a very weak state of health. She magnetized her, and placed her in a state of somnambulism. The lady was assisted by her husband. One day, when the magnetic sitting was accompanied with some considerable pains, the patient asked for some old wine. The husband took a candle, and went down to the cellar in search of it. He descended the first flight of steps without any accident; but the cellar being situated pretty far under ground, the steps in the lower part were wet. He slipped upon the stair, and fell backwards, but without hurting himself, and even without extinguishing the light which he held in his hand. When he returned with the wine, he found that his wife was informed of his fall, and of all the particulars of his subterranean journey—the somnambulist having related them to her exactly as

they happened. M. Chardel says that he could adduce several other instances, within his personal knowledge, of a similar degree of *clairvoyance* having been manifested at much greater distances.

The same respectable author mentions that he knew the wife of a Colonel of a cavalry regiment, who was magnetized by her husband, and became somnambulist. Having himself become indisposed, he was obliged to call in to his assistance, for eight or ten days, an officer of the same regiment. At a magnetic sitting subsequent to this, the husband having placed his wife in a state of somnambulism, called her attention to this officer. "Ah! the wretched man!" she exclaimed, "I see him—he is at——, he is going to kill himself—he has a pistol in his hand—run, run!" The place was about a league distant—the husband mounted his horse, and made all the haste he could; but he arrived too late—the suicide had been already perpetrated.

My readers may perhaps recollect the case of Madame P., which is recorded by the late Committee of the French Royal Academy of Medicine, in their celebrated Report, a translation of which was formerly published, and which will now be found in the Appendix. It will probably be remembered that this lady was placed, by means of Magnetism, in a state of complete corporeal insensibility, and, while in this situation, had a serious

and painful operation performed upon her by M. Cloquet. M. Chardel has preserved several additional particulars relative to this case, which are well worthy of notice.

This lady, whose name was Madame Plantin, had a married daughter, Madame Lagandré, who resided in the country, and was unable to repair to Paris until some days after the operation had been performed upon her mother. Madame Lagandré, having been magnetized, became somnambulist, and manifested a very remarkable degree of lucidity. It was proposed to consult her upon the state of her mother, and for this purpose Dr Chapelain magnetized her on the 26th of April, and questioned her on the subject. She answered by giving a circumstantial and accurate description of her mother's complaints, and predicting her death in the course of two days, in spite of all that could be done for her. On the following day, Dr Chapelain, upon visiting his patient, Madame Plantin, found that the melancholy prediction of the Somnambulist was about to be verified. She was evidently much worse. M. Cloquet requested Dr Chapelain to place Madame Lagandré in a state of somnambulism, and put several questions to her relative to Madame Plantin. She answered that her mother had become very weak during the last few days—that her life was only artificially prolonged by

magnetism—and that, notwithstanding every effort, she should die next morning early, without pain. When asked what were the parts diseased, she gave, as will be afterwards seen, a correct description of them. M. Chapelain magnetized Madame Plantin several times, with great energy, during the course of the day, and could scarcely succeed in setting her asleep. When he returned next morning about seven o'clock, the patient had just expired.

The two Doctors were very naturally anxious to verify the declarations of the Somnambulist relative to the internal state of the body, and obtained the consent of the family to examine it. M. Moreau, secretary to the surgical section of the Academy, and Dr Dronsart, were requested to attend as witnesses, and it was resolved that the examination should take place next day in their presence. It was conducted by M. Cloquet and his assistant, M. Pailloux. Dr Chapelain was also present. The latter set Madame Lagandré asleep, a short time before the hour fixed upon for the operation. The medical gentlemen then requested to know, from her own mouth, what she had previously said she had seen in the interior of the body of Madame Plantin ; when the Somnambulist repeated, in a firm tone of voice, and without hesitation, what she had formerly announced to MM. Cloquet and

Chapelain. The latter then conducted her to the room adjoining that in which the operation was to be performed, and of which the door was exactly shut. Madame Lagandré was still in a state of somnambulism, and, in spite of the barriers which separated her from these gentlemen, she followed the bistoury in the hands of the operator, and said to the persons around her: "Why do they make the incision in the middle of the breast, seeing that the effusion is in the right side?"

The indications given by the somnambulist were found to be quite correct. The *procès-verbal* of the examination was drawn up by Dr Dronsart, attested and signed by all the persons present, and inserted at length in the work of M. Chardel.

In the German "Annals of Medicine" (*Jahrbücher der Medicin*), the celebrated philosopher Schelling, relates the following case, which occurred under his own observation.

"In a crisis of *clairvoyance*, Miss M. having previously been quite cheerful, began, all at once, to assume an appearance of anxiety and sorrow, and, at last, fell a-weeping. When I asked her what was the matter, she answered, that she had just then become aware that a death had recently taken place in the family, at the distance of more than one hundred and fifty leagues. I endeavoured to

dissuade her from entertaining such thoughts, but in vain; she insisted that she was quite certain of the fact, and continued to weep. Wishing to ascertain how she had come by this intelligence, she said she herself did not well know, but that she had at once become quite certain of it. I asked her whether she could name the person who had died: She said she could not at that time, but should be able to do so in a future crisis. She added, that the letter containing the intelligence was then upon its way. She conjured me to say nothing about this presentiment after the crisis, otherwise it would give her mortal anxiety.

"It is well known," says the Professor, "that somnambulists, when they awake out of the magnetic sleep, have not the slightest recollection of what may have taken place in it. When she awoke out of her sleep, Miss M. was as cheerful as ever, and had not the most distant idea of her vision. The expression of pain she exhibited during the crisis, which seemed to proceed so entirely from an internal conviction of the reality of the fact, and the obstinacy with which she adhered to her assertion of its truth, induced me to give her credit. I mentioned the case to Professor Schmidt, in order that he might be a witness to the fact. I awaited with great anxiety the hour when I could again set my somnambulist asleep, in

order to ascertain whether she would again have the same vision. For a considerable period during the crisis, nothing of the kind appeared. She was as usual quite cheerful, and spoke a great deal, until, all at once, marks of sorrow were exhibited in her countenance. She turned away her face, and hid it on her arm, which she had placed on the arm of her chair, and wept in silence. At length, I asked her what ailed her. 'The same as yesterday,' she answered; 'a death has taken place in our family—I know it for certain.' She thought it fortunate for her that she knew nothing of this when awake, because it would occasion her so much grief. I again asked her whether she did not also know the individual who was dead; and she repeated that she would be able to tell me in a future crisis, provided I put the question to her. In the following crisis, as soon as she was set asleep, she again began to weep. She requested me to use every means of diverting her attention from this circumstance during her sleep, and I endeavoured to do so by introducing other subjects of conversation; yet she frequently reverted to it. Had I foreseen the circumstances which subsequently made it impossible for me to place her more frequently in a state of crisis, I should, upon the last occasion, instead of diverting her thoughts from the subject in question, rather have endea-

voured to ascertain whether she could give any farther particulars of the event. But I neglected the opportunity, and reserved my questions for future crises, which could no longer take place. Four or five days after the last sitting, upon entering her apartment, I found Miss M. much downcast, with appearances on her countenance indicating that she had been weeping. On inquiring into the reason of this, she pointed to a letter which lay upon the table, and said it contained intelligence of the death of a near relative and particular friend. I asked her whether she had received any previous accounts of the indisposition of this individual. She answered, 'No—none at all; the intelligence came upon me quite unexpectedly.' Nor was she at all aware of any presentiment she had of the event."

Dr Arndt, an eminent German physician, relates, that being one day seated near the bed of one of his somnambulists, on a sudden she became agitated, uttered sighs, and, as if tormented by some vision, exclaimed, "O heavens! my father! he is dying!" A few moments afterwards, she awoke, seemed quite cheerful, and recollected nothing of the anxiety she had so recently manifested. She again relapsed twice into the same state of magnetic sleep, and each time she was tormented by the same vision. Being asked what had happened to her father, she answered, "He is bathed

in blood—he is dying.” Soon afterwards she awoke, became composed, and the scene finished. Some weeks afterwards, Dr Arndt found this lady pensive and sorrowful. She had just received from her father, who was at a distance of some hundred miles—an account of a serious accident which had befallen him. In ascending the stair of his cellar, the door had fallen upon his breast—a considerable hemorrhage ensued, and the physicians despaired of his life. Dr Arndt, who had marked the precise time of the preceding scene of the somnambulism of this lady, found that it was exactly on the day and at the hour when the accident happened to her father. “This,” observes the Doctor, “could not have been the mere effect of chance; and, assuredly, there was no concert nor deceit on the part of the observer.”

The next case I shall adduce is still more remarkable than any of the preceding.

Mademoiselle W., whose disease and its treatment have been minutely reported by Dr Klein, her physician, appears to have been one of the most extraordinary natural somnambulists and *clairvoyantes* upon record. The following facts concerning her, which Dr Klein has slightly alluded to from motives of delicacy towards the family, are related in the third volume of the *Bibliothèque du Magne-*

tisme Animal, by an eye-witness who is worthy of all credit.

After Mademoiselle W. had arrived at the house of M. St —, a respectable and opulent man, whose family is one of the most distinguished in the country, this gentleman, who had previously heard of the accidental somnambulism of this young lady, looked upon her as a very extraordinary person, and requested her to give him, as she had already done on several former occasions, some proofs of the accuracy and extent of her *magnetic telescope*, and to direct it towards his son, an officer in the army, at that time serving in Russia. From that moment, Mademoiselle W. directed her thoughts to this young man, and in all her paroxysms, although she had never seen him, she drew his portrait exactly as if she had him before her eyes. She said that he was constantly present to her mind—she accompanied him in all his military movements, and observed that, naturally brave, he exposed himself too inconsiderately to danger. She frequently asked the sister of this young officer, whether she did not see him in a corner of the room; and, one day, upon receiving a negative answer, she said, “Well, then! ask him any questions you please, and I shall return his answers.” The sister, having consented, asked all sorts of questions

relative to family matters, which were unknown to the somnambulist, who answered them all in a manner so precise and so accurate, that the interrogator afterwards declared that she felt herself seized with a cold perspiration, and was several times on the point of fainting with fright, during what she called the dialogue of the Spirits.

In another scene, the somnambulist declared to the father, that she saw his son at the hospital, with a piece of white linen wrapt round his chin—that he was wounded in the face—that he was unable to eat, but, at the same time, that he was in no danger. Some days later, she said that he was now able to eat, and that he was much better.

The family soon ceased to pay much attention to these visions, probably putting little faith in them, when, some weeks afterwards, a courier arrived from the army. M. St. immediately went to Count Th. to inquire what news he had received. The latter, at once, set his mind completely at ease, by informing him that his son's name was not in the list of the wounded, &c. Transported with joy, he returned home, and said to Mademoiselle W., who was, at that time, in her somnambulic sleep, that, for once, she had not divined accurately, and that, fortunately for his son and himself, she had been completely deceived. At these words—*divined, deceived*—the young lady felt much offended,

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and, in an angry and energetic tone, assured the father that she was quite certain of the truth of what she had said—that, at the very moment, she saw his son at the hospital with his chin wrapt in white linen, and that, in the state in which she then was, it was quite impossible she could be deceived. Soon afterwards, there came a note from Count Th.; which, after some expressions of politeness and condolence, contained the following intelligence. That a second list of the wounded had arrived, in which was the name of his son, who had been struck by a musket-ball on the chin, and was under medical treatment in the hospital, &c.

According to my information, the veracity of the persons, upon whose authority the preceding narrative has been given, lies under no suspicion.

With one other case I shall close this evidence with regard to the extraordinary phenomena of the magnetic somnambulism. It is a case which excited a great deal of sensation in Germany some years ago, and which is considered as one of the most remarkable and best authenticated of any that has occurred in the annals of Magnetism.

It is now well known that two patients, in the highest degree of somnambulism, predicted the death of an illustrious personage—the late King of Wirtemberg. The prediction of the first somnambulist, in which the year and the month were an-

nounced, took place four years before the event. The circumstance was, for obvious reasons, kept secret amongst a few friends, and, from the length of time that elapsed, had been nearly forgotten, when it was unexpectedly confirmed by a second somnambulist, who announced not only the year and month, but the precise day. From the period of the second prediction, the report became more widely circulated, and those in the knowledge of the circumstance were naturally exceedingly anxious to watch the result. Bets to a considerable amount were even offered upon the fulfilment of the prediction.

The first prediction was made by the same somnambulist, Mademoiselle W., of whose extraordinary *clairvoyance* some account has been given in the preceding case. It took place in the year 1812, in presence of Dr Klein, and several other respectable persons, and was to the following effect :—
“ His Majesty will die, in an unusual manner, between the 18th and 20th of April 1816.” When questioned, in some of her subsequent crises, respecting the accuracy of this announcement, she said that she was quite certain as to the year, but might be mistaken as to the particular month. At a subsequent period, she fixed upon the month of October, without specifying any particular day.

M. St., in whose house, probably, these scenes took place, had, from former experience, such confidence in the *clairvoyance* of this somnambulist, that he was induced to offer a large bet upon the event.

The second prediction was made by a somnambulist, Kr., a patient of Dr N., upon the 17th of April 1816, in presence of Dr Klein, Dr N., and Professor L.....t, and was to the following effect. "His Majesty will die this year in the month of October." When asked whether the event would take place in the beginning, the middle, or the end of the month, she answered, "The end." "Can you determine the precise day? Will it be the 26th?" "No." "The 28th?" "On that day he will be struck with apoplexy."

The King was actually struck with apoplexy on the day predicted, and died in the course of a day or two thereafter.

The Report from which I have extracted the preceding abridged account was drawn up by Professor Eschenmayer, and inserted in the first volume of the German *Archives of Animal Magnetism*. It is attested by the names of nine well known individuals—medical men, and other persons of respectability; and the Professor declares that, if necessary, he could adduce two hundred witnesses to prove the truth of the facts.

For numerous additional instances of the mag-

netic somnambulism, and its highly interesting phenomena, I must refer the rationally inquisitive reader to the works of the Marquis de Puységur, to those of M. Tardy de Montravel, to the *Bibliothèque du Magnetisme Animal*, to the German *Archives of Animal Magnetism*, edited by the Professors Eschenmayer, Kieser, Nasse, and Nees von Esenbeck—and to all the other publications I have noticed throughout this work.* I could not have

* The celebrated Dr Georget, a member of the Institute, who, from being an obstinate sceptic, afterwards became convinced of the reality of the phenomena of Animal Magnetism by numerous experiments, gives the following general result of his observations:—"My somnambulists are so totally deprived of the sense of hearing, that the loudest noise most unexpectedly produced does not cause in them the slightest alarm. Thus a pistol-shot, a noisy bell, do not produce the smallest motion, or prevent them from continuing without interruption a conversation already commenced. But the magnetizer is always heard." Georget also tells us, that his own conviction, as well as that of many other eminent physicians, was acquired from a number of experiments, guarded by the most rigorous precautions.

Dr Rostan, another distinguished physician, affirms that he has witnessed all that Dr Georget has published. He, too, was originally a sceptic, and during ten years spoke and wrote of Animal Magnetism as a system of jugglery and imposture, and of the magnetizers as a set of rogues and dupes. But he also became convinced by the unambiguous results of a number of cautious experiments.—See *Dictionnaire de Médecine*, Art. *Magnetisme Animal*.

M. Dupotet informs us, that, at his famous experiments, performed a few years ago, at the Hotel Dieu, more than fifty persons were present, chiefly physicians and students of medicine. M. Dupotet published an account of these experiments, which

gone more at large into the evidence in favour of these extraordinary facts at present, without great inconvenience. The cases on record would themselves fill many volumes.

passed through three editions ; and although this account has been several years in possession of the public, no objection has ever been made to any of its details. Yet these experiments confirm all the more remarkable phenomena of Animal Magnetism.

CHAPTER XXVII.

IN the two preceding chapters, I adduced several instances—*instantiæ ostensivæ*, according to Bacon—of the manifestation of some of the more remarkable phenomena which have been found to occur in the magnetic somnambulism—the exercise of the faculties without the use of their appropriate organs, corporeal insensibility, the exaltation of the intellectual powers, intuition, prevision, prophecy, &c.* These, it will be perceived, are

* All of these phenomena are fully admitted by an anonymous author, to whom I formerly referred, who, so far as I can see, does not appear to be a practical magnetizer, but who seems to have an intimate knowledge of the subject, treats it with much philosophical acumen, and loudly condemns the abuses and extravagances of the practice. "In somnambulism, the sensitive power, no longer attached to the usual organs, but appropriated by the soul itself, now operates certainly in a wonderful manner, according to other than the ordinary laws, has a clear view of objects through a series of untransparent bodies, and perceives things at a distance which no ordinary human power could penetrate. The somnambulist sometimes knows what is occurring at very distant places; nay, he not unfrequently possesses also the faculty of producing so powerful an effect upon distant persons, who are *en rapport* with him, that his image presents itself

exactly similar in kind to those which occur in the natural crisis; which latter originates spontaneously, probably in consequence of some constitutional idiosyncrasy; whereas, in the former, that peculiar state of the organism and the intellect is produced by artificial means.

Individuals have been known to manifest some symptoms of this constitutional affection in their conduct and behaviour during the whole course of their lives. Joan of Arc, the Maid of Orleans, is supposed to have been in a state of habitual crisis. Swedenborg appears to have been a natural *clair-voyant*, as is pretty evident from several passages of his life. Jacob Bechmen seems to have been in a somewhat similar state. It is not unfrequently engendered by religious enthusiasm, exaltation, mysticism, and an excessive devotion. Indeed, a

to their involuntary imagination. But not only is the sphere of their sensitive power so remarkably extended; their mental powers also frequently acquire an extraordinary augmentation, and to them it becomes mere child's play to solve questions, which they never could have answered when awake. But their power of operating at a distance is not merely confined to the unusual penetration of a large space—it even extends to the future. They not only know what is occurring at the moment in places from which they are often many miles distant; but they also know and predict what will happen to others or to themselves," &c.—See *Das Verschleierte Bild zu Saiz*, formerly referred to, p. 75, 76. The author also admits the other remarkable phenomena—intuition, the instinct of remedies, &c.

certain degree of this affection is probably more common than is generally imagined, and its manifestations may frequently be ascribed to eccentricity of character, or to partial or slight insanity.

The celebrated German poet Goethe tells us, in the first volume of his autobiography, that his grandfather possessed the gift of prophecy, especially in regard to matters relating to himself and his destiny, of which he gives some examples; and he mentions it as something still more remarkable, that persons, who had never upon any other occasion discovered any traces of this power, in the presence of his grandfather (*en rapport* with him) acquired that faculty for the moment, and had a presentiment of events which were, at the same time, occurring at a distance.

I have now brought under the view of my readers a variety of instances, both of the natural and of the magnetic somnambulism, for the purpose of demonstrating the reality of the more remarkable phenomena which are manifested in these extraordinary states of the organism. I request it may be considered, however, that all I have laid before them is but an inconsiderable fragment of the real evidence in the case, although sufficient, I should think, to give perfect credibility to the facts. To have adduced every case upon record—to have treated the subject in its fullest details, by dwelling

minutely upon the phenomena presented in each individual instance, would have spun out this work to a size which I never contemplated, and rendered it more tedious than instructive. Besides, a few well-authenticated cases are as good as a thousand to those capable of weighing evidence. It has been my object, in short, to present my readers with a general view of this interesting subject; and I trust I have done enough, if not to secure their complete conviction, at least to awaken their interest and their curiosity, to dispel their prejudices, and induce them to pause, and inquire, and reflect, before they proceed to form any unfavourable conclusion.* Let them not permit the extraordinary

* I regret that I am unable to give any better and more particular account of the following recent and very remarkable case, than what I have derived from a newspaper paragraph, evidently written by a person equally ignorant and incredulous. (See the *London Weekly Dispatch*, 15th March 1835.)

“The Belgian journals contain the account of a case of somnambulism or catalepsy, of a nature so extraordinary as to merit the attention of physiologists, and, if the assertions of those medical men who have seen her be true, must shake the scepticism of the most incredulous. The patient is Sophia Laroche, a peasant girl of Virieu, in the French department of the Isère, aged fourteen; and the most ridiculously romantic circumstances respecting her are offered to the gullibility of the public. Amongst others, Dr Eymard has published an account of his visit to her during the last month. This is not a place for entering into details; suffice it to say, that the girl in question, in a complete state of somnambulism, with her eyes bandaged, or in total darkness, can read, and distinguish by scent, voice and touch,

character of the facts to confound their judgment, or tempt them to reject them at once, without due investigation, and an attentive consideration of the evidence by which they are supported. Let them remember, that if many of those higher phenomena, to which I lately presumed to direct their attention, be extraordinary and apparently unaccount-

persons near or at a distance ; that whilst labouring under the access, which lasts several hours, and sometimes days, she makes the most extraordinary revelations, discovers hidden and lost objects, finds her way about the town, understands Greek, Latin, penetrates people's thoughts, and answers questions upon subjects which, during her natural state, she is wholly ignorant of. Her body, during some of these periods, appears to be endowed with a peculiar lightness and elasticity, so that she may be lifted up as though she only weighed a few ounces, or as if the mere approach of the hand served to render her buoyant. These, together with many other marvels, are recounted by hundreds of persons who have attentively watched her. It appears, however, that the accesses of catalepsy are gradually diminishing as she grows older, and that there is every prospect of their becoming totally extinct as her body gains strength. In the mean time, Sophie Laroche is the wonder and admiration of the whole department of the Isere, and has furnished fresh arguments for the speculations of the disciples of Animal Magnetism."

The above is all I know of the case in question. It will be seen that the phenomena described are precisely the same as those which have been found to occur in other instances, excepting the circumstance stated of the lightness, elasticity and buoyancy of the body, of which, however, I believe other examples may be found. If the fact were once demonstrated, it might serve, perhaps, to explain some of the extraordinary powers attributed to witches, such as flying in the air, &c. The subject, therefore, deserves attention.

The following case, mentioned by Dr Abercrombie, appears

able in themselves, the remarkable organic state out of which they arise, or in which they are manifested, is no less so. Somnambulism, as a fact, like that of the fall of meteoric stones, has been known and observed for ages, and many curious instances of its occurrence have been witnessed and recorded. Until lately, however, the nature of that peculiar affection appears to have been little understood, and its most remarkable characteristic features seem to have long escaped the attention of physicians and philosophers, although of immense interest to physiological science. It was generally considered as a diseased, or, at least, as an anomalous state of the system, from which no important general inferences could be deduced; and it is only of late—since the introduction of the magnetic practice, and the consequent discovery of the possibility of its artificial production, for which last we are principally indebted to the careful and meritorious experimental investigations of the enlightened Marquis de Puységur—that its peculiar character and conditions

to have some analogy to the present. "At times, the patient," says he, "after lying for a considerable time quiet, would, in an instant, throw her whole body into a kind of convulsive spring, by which she was thrown entirely out of bed; and in the same manner, while sitting or lying on the floor, she would throw herself into bed, or leap on the top of a wardrobe five feet high."

—*ABERCROMBIE On the Brain*, 3d edit. p. 407.

have been more correctly ascertained, and its various and interesting phenomena more accurately observed and more justly appreciated. It is a state, as my readers must now be aware, totally different from that of ordinary life—a state in which the animal sensibility undergoes an essential change—a state in which the ordinary activity of the corporeal faculties is suspended for a time, and the internal instinct—the immaterial principle—perhaps the soul itself—displays its unfettered energies, independently of the material organs ;*—a state of existence which has been almost prophetically, although unintentionally, described, in the following

* “ The phenomena of Animal Magnetism are facts, which can no more be doubted, than can the reality of those meteoric stones which occasionally fall from the heavens. If there be any bridge, any connexion, between this and the other world, any transition from the temporary life of the soul to the eternal life of the spirit, these phenomena must be capable of giving us some insight into the subject. They deserve, therefore, in despite of all danger of deception, our most serious attention ; as it would be equally foolish, in the face of such amply attested experience, to deliver ourselves over to an all-denying scepticism, as to resign ourselves to a blind faith, in the case of every alleged phenomenon.

“ Somnambulism affords us at least, in its already admitted facts, the incontestible proof that higher powers reside in man, which stretch beyond the narrow sphere of the rude sensual existence, and transcend the horizon of the human understanding entangled in its abstractions.”—C. J. EISENLOHR (Privy Councillor to the Grand Duke of Baden, &c.), *Irene*, &c. Carlruhe, 1831. Pp. 226–228.

beautiful lines of one of the most philosophical of our living poets ;—a state,

“ In which the burthen of the mystery
 In which the heavy and the weary weight
 Of all this unintelligible world
 Is lighten'd : that serene and blessed state
 In which the affections gently lead us on,—
 Until, *the breath of this corporeal frame,*
And even the motion of our human blood
Almost suspended, WE ARE LAID ASLEEP
IN BODY, AND BECOME A LIVING SOUL :
While with an eye made quiet by the power
Of harmony, and the deep power of joy,
*WE SEE INTO THE LIFE OF THINGS.”**

It cannot fail, I think, to be perceived, with what remarkable, what wonderfully minute accuracy, this poetical description tallies with the phenomena which actually occur in the magnetic somnambulism. In that state, we appear to forget all knowledge of our previous existence—

“ the burthen of the mystery,
 the heavy and the weary weight
 Of all this unintelligible world
 Is lightened ;”

the ordinary functions of the animal organization are suspended—

“ we are laid asleep
 In body ;”

the mind becomes divested of the ordinary cares

* WORDSWORTH ; *Lines on revisiting the Banks of the Wye* ; in my humble opinion one of the finest pieces of blank verse in the English language.

and anxieties of the world, and is unusually composed, serene and cheerful; while the intellectual faculties, free and unfettered, are exercised with an extraordinary degree of vigour and acuteness.

“ We become a living soul.”

At the same time, the eye of the mind, the internal power of vision, is wonderfully strengthened and enlarged, and seems unconfined within the narrow limits of space and time;—we do not see objects in a merely superficial manner—we penetrate beyond external nature—

“ We see into the *life* of things.” *

It must be quite evident, that the phenomena of such a state of existence as that described can-

* Dr Jung-Stilling, in his *Theory of Pneumatology*, discriminates and contrasts the natural and the magnetic states in the following manner :

“ The human soul is present in every part of its body: it is conscious of itself in every part, according as the organs of the body give occasion; it sees with the eyes, hears with the ears, smells with the nose, tastes with the tongue and palate, and feels with the whole skin, or the whole superficies of the body. All this it has in common with the animal soul; but there is something more superadded, which gives it a rank far different and more elevated than the brutes; it is an intelligent being,” &c.—“ The human soul is directed, in the natural state, by the nerves, wherever feeling, consciousness, and motion are necessary. It appears to have the principal seat in the brain; but, by magnetising, it is more or less detached from the brain and nerves, and consequently becomes, more or less, a free agent ;

not be explained by the laws and conditions of ordinary life—the physiological principles which are applicable in the one case, are totally inapplicable

for, as the clear-seeing somnambulist does not see with the eyes, but out of the region of the pit of the heart, and as this is always the case, without exception, it is clear from hence, that the human soul of itself can not only see without the aid of the body, but also so much clearer than in its fleshly prison, nor does it stand in need of our material light; for magnetic sleepers read what is laid on the pit of the heart, and the contents of closed letters. Nay, they can read at a distance, when the book or writing is separated from them by dense and opaque bodies, as soon as that which is to be read is held by a person with whom the somnambulist stands in psychical contact or connexion.”—“The human soul, in this state, not only sees but also feels every thing more acutely than in its natural waking state, without requiring for this purpose any one of the bodily senses; but it is very remarkable, that it is not susceptible of the smallest thing belonging to the visible world, except when brought into a psychical contact, connexion, or *rapport*,” &c.; “the somnambulist can then, particularly when he is in a very exalted and clear-sighted state, perceive every thing that the person thinks, suffers, feels, and enjoys, who stands in connexion with him.”

“The magnetic facts and experiments above stated prove, to a demonstration, the existence of this spiritual, luminous body; they further prove, that this human soul has need of its gross and animal body, solely with reference to its earthly life, in which man must necessarily stand in reciprocal operation with the sensible or material world; but that it is able without it to think and feel, and to act upon others, both near and at a distance, in a much more perfect manner, and is also more susceptible of suffering and enjoyment. This conclusion must unquestionably arise in the mind of the impartial observer, when he assembles all the various exhibitions which magnetism produces, and then calmly and rationally reflects upon them.”

in the other.* Yet every system of human physiology which declines to investigate these facts upon their own appropriate principles, must necessarily be imperfect. Indeed, an impartial and attentive study of the phenomena of somnambulism cannot fail to lead us to conclusions highly interesting to the philosophy of man. A good deal has been lately done for this psychological branch of physiology upon the Continent: in this country it is still little more than a blank—a sheet of white paper; and even the study of it is most unaccountably discouraged. The sun of Animal Magnetism, as an enlightened foreigner remarks, has not yet arisen in the British dominions. May his animating beams speedily dispel the darkness that envelopes those recondite but most important truths, to which our eyes have hitherto been blind, or which, at present, we only see dimly reflected by a remote mirror! †

* M. Deleuze has very justly observed, that the antagonists of Animal Magnetism wish to explain a peculiar class of phenomena by the same theory they employ to explain phenomena of a totally different class. By pursuing such a method they never can succeed.

† It is a rather remarkable but an indisputable fact, that, in modern times, and especially in this country, the term Science has become totally perverted from its original and genuine signification, and that it is now limited almost exclusively to Physics. All our Royal and Philosophical Academies and Societies are entirely occupied with objects of mathematical and physical research: Mental and moral philosophy are utterly neglected.

I formerly mentioned, that, whatever differences of opinion may exist in regard to theory, the reality

Were it proposed to read before any of the Societies alluded to a paper on Animal Magnetism, the proposition would probably be almost universally scouted, and the proposer laughed to scorn as an *ignoramus* or a visionary, although upon the Continent the most eminently learned bodies have not hesitated to encourage the investigation of the subject, without any loss of character, or feeling of degradation. With us, the apophthegm of the poet,—

“ Homo sum, nihil humani a me alienum puto,”

is quite out of fashion—our philosophers no longer admit that

“ The proper study of mankind is man”—

all research is directed towards external nature—and mind is considered altogether subordinate to matter. In an article in the *Edinburgh Review*, formerly noticed, “ *the follies of Animal Magnetism*” are actually placed in marked contrast with the principles of *science*—meaning Physics, I presume; and no term of contempt is sufficiently strong to designate the absurdity of all investigations into the phenomena of mind.

Now, there is no man more willing than myself to acknowledge the immense advantages which society has derived from the application of the principles and discoveries of physical science to the arts of life—to the physical wants of the species; but I cannot, I never will, admit that Physics constitute the whole of science, or that they are best calculated to promote the great ends of our being. I cannot consent to abandon mental physiology and philosophy—to relinquish the study of the spiritual and moral nature of man—to sacrifice mind to matter and mechanism. Nor can I allow that such pursuits are subordinate to those of the mathematician, the chemist, the astronomer, the botanist, or the geologist. I am quite aware that the study of Animal Magnetism is not calculated to assist us in discovering the longitude at sea, to enable us to apply and to regulate the action of steam, or to be of service to us in the building of bridges, or the construction of rail-

of the phenomena of Animal Magnetism is now universally admitted by all impartial, competent, and intelligent inquirers upon the Continent. *There*, indeed, there can hardly be said to be two opinions upon the subject amongst those enlightened men who have bestowed any attention upon it. Even those professional gentlemen who, from some vague notion of imaginary dangers, have manifested a spirit of hostility to the practice—as in the case of Dr Stieglitz and others—not only do not dispute, but, on the contrary, fully admit the facts. Indeed, it would be strange were they to attempt to deny the existence of things which they have almost a daily opportunity of witnessing. I have no doubt that the same will be the case in this country, as soon

roads. But if it be true that this doctrine involves the discovery of new therapeutic principles;—if it has developed agencies and susceptibilities in the human constitution hitherto unknown or disregarded;—if it has already opened up many new and interesting views of the physical and moral nature of man, their connexion and reciprocal action upon each other;—if it has given us a clearer insight into the motions of the immaterial principle which animates and actuates the material organism;—if it has already done all this, I say, and if it promises still farther to enlarge our knowledge, and to render us “wiser, happier, and better,” by what just right shall it be arbitrarily excluded from the circle of the sciences?

See some excellent observations on the study of physical and moral science, in Dr Hampden's second Lecture on the study of Moral Philosophy, recently published.

as the subject becomes better known and appreciated—as soon as our professional gentlemen and men of science shall have recovered from the surprise occasioned by the apparent novelty and the extraordinary character of the phenomena—as soon as they shall be induced to abandon their prepossessions, to examine the matter with philosophical impartiality, to look the phenomena boldly and honestly in the face, and submit to be taught the secrets of nature by patient investigation, careful experiment, and accurate observation.

CHAPTER XXVIII.

WHEN we have once obtained possession of a new and important series of facts, and become perfectly assured of their reality, it is an unquestionably useful task to endeavour to ascertain in what degree they may be considered as extending or modifying our previously acquired knowledge, by tracing the results to which they directly and legitimately conduct us. This proceeding, indeed, is absolutely necessary, in order to arrange and systematize our scientific acquirements.

Although hostile, as may have been observed, to all vague and premature theories upon scientific subjects—which more frequently tend to retard than to advance our progress in knowledge—and still more to all monopolising and exclusive systems of science; I would by no means be understood to dissuade the philosophical inquirer from attempting that cautious method of induction and generalization introduced and recommended by Lord Bacon, and since prosecuted with such re-

markable success in several of the departments of Natural Philosophy ;—that method which consists in collecting kindred facts, comparing them with each other, remarking their analogies, discriminating their differences, and grouping them together, with a view to discover the common *nexus* that exists between them, the principle upon which they jointly depend, or, at least, the general law or laws under which they may be all comprehended. On the contrary, I consider it exceedingly useful and praiseworthy to endeavour to extend and systematize our knowledge in this way ; for, as Burke long since observed, “ by looking into physical”—he might have added moral—“ causes, our minds are opened and enlarged ; and in this pursuit, whether we take or whether we lose the game, the chase is certainly of service.” This method I consider equally applicable to moral as to physical science ; not indeed to that metaphysical philosophy which delights in airy and empty visions, and spurns the support of facts ; but to those well-regulated intellectual speculations which are founded upon an accurate observation of the actual phenomena of nature. I am also of opinion, that the time has now arrived, when we may safely, and perhaps successfully, apply this method to the phenomena of Animal Magnetism—since the industry of the pioneers of that doctrine has already supplied us

with an abundant store of well-attested facts ; and I shall now take the liberty of pointing out to my readers the way in which, as it appears to me, the merely philosophical part of the investigation might be conducted with the best prospect of success.

I formerly alluded to a theory by which most of the ordinary phenomena of Animal Magnetism might be, in some measure, accounted for, upon the supposition of a certain transference of vital power from one subject to another, through the medium of the nervous system.* This theory, however, besides being founded upon an hypothesis which, however probable, may be considered as not yet satisfactorily demonstrated, appears quite incapable of explaining the higher magnetic phenomena. Indeed, it seems utterly impossible to assign any satisfactory reason why sleep and somnambulism should be, as they certainly are, produced by the processes employed. We only know

* It would constitute one of the most remarkable incidents in the whole history of science, should it be ultimately demonstrated and admitted, that an universal ethereal fluid pervades all nature, producing, in its different modifications, and in its various combinations with matter, the phenomena of Light, Heat, Motion, Magnetism, Electricity, &c. To this point, however, although there is yet no sufficient demonstration of the fact, recent physical investigation seems rapidly tending ; and it may ultimately realize one of the boldest and apparently most fanciful hypothesis of a certain class of philosophers, who have been perhaps too rashly condemned as mere visionaries and mystics.—See Appendix, No. III.

that, in many instances, the one has been found to follow the other, without the presence of any other perceptible cause; and this circumstance, however unaccountable it may be, is sufficient to justify us here, as in other sciences, in assuming that there must be some connexion between them; and this assumption, provided we are assured of the facts, cannot be invalidated by any argument whatever founded upon the alleged insufficiency of the cause to produce the effects.* As in this case, however, we are incapable of discovering and pointing out the precise operative principle, it only remains for us to classify the phenomena, by ascertaining the particulars in which they agree, and the analogy that exists between them and other constitutional affections, in order to enable us to comprehend the nature of these affections, and, if possible, the cause upon which these phenomena necessarily depend.

We have already seen that, independently of their sanative efficacy, the usual effects of the mag-

* I do not conceive that we are entitled to consider that, in these cases, the effects must be dependent solely upon the manipulations employed, or to reject, without adequate investigation, those other elements which are held by the Animal Magnetists to be operative in the magnetic processes. For example, it is maintained that the will has a powerful influence in determining the magnetic phenomena. This is an alleged fact which is capable of being demonstrated by experience; and my own is entirely coincident with the results noticed by others.

netic processes are the production of sleep and somnambulism, the latter state being obviously a more profound degree of the former. The phenomena invariably observed in somnambulism, when the crisis is perfect, are—insensibility of the corporeal organs, exaltation of the intellectual faculties, a transference of the sensitive powers to other than the usual parts of the nervous system, intuition, prevision, prediction, and the total oblivion, when restored to the natural state, of all that occurred during the continuance of the affection. Let us, then, endeavour to trace the analogy between these phenomena and those of another state, which is much more familiar to us.

The philosophy of Sleep and Dreams, which is calculated to throw considerable light upon this branch of inquiry, has, at various times, engaged a good deal of attention, and been the fruitful source of much ingenious speculation ; but I think it may be doubted whether any generally satisfactory theory has been hitherto propounded upon this subject, to guide us in our attempts to account for the phenomena upon intelligible and correct principles.* One reason, and indeed the principal

* “ Aristotle, who hath written a singular tract on sleep, hath not, methinks, thoroughly defined it ; nor yet Galen, though he seems to have corrected it ; for those noctambuloes and night-walkers, though in their sleep, do yet enjoy the action of their senses ; we must, therefore, say that there is something in us

one, for this failure, appears to me to be, that philosophers have not sufficiently generalized their views, but have founded their speculations upon far too limited an induction of facts, and then attempted to explain these facts upon the principles of some preconceived hypothesis. Some part of their errors, too, may probably be ascribed to that material tendency which, as I formerly observed, has long been conspicuous in all our philosophical

that is not in the jurisdiction of Morpheus ; and that those abstracted and ecstatic souls do walk about in their own bodies, as spirits with the bodies they assume, wherein they seem to hear, see, and feel, though indeed the organs are destitute of sense, and their natures of those faculties that should inform them. Thus, it is observed, that men sometimes upon the hour of their departure, do speak and reason above themselves. For then the soul being near freed from the ligaments of the body, begins to reason like herself, and to discourse in a strain above mortality."—Sir THOMAS BROWN, *Religio Medici*.

The latest English work I have seen upon this subject is the second edition of the "Philosophy of Sleep," by Mr Macnish, a most ingenious and entertaining volume, in the perusal of which it is impossible not to admire the industrious research and talent of the author. But I cannot agree with this learned gentleman in his attempt to account for the phenomena upon *phrenological* principles. Phrenology itself, after long attention to the speculations of its votaries, I never could view in any other light than as a mere hypothesis, founded upon postulates and assumptions, built up with fanciful observations, and terminating at length in a *petitio principii*. It always appeared to me to be entirely destitute of the support of any positive and unambiguous facts, and to owe its temporary reception to the introduction of a new and imposing nomenclature, and to the ingenious sophistry of its advocates. Every attempt to apply

systems. In the following few observations, I shall endeavour to avoid both of these errors, by adapting my explanations as strictly as possible to the character of the phenomena.

Sleep appears to be the natural state of repose of the corporeal organism. I say, of the *corporeal organism*, because it cannot be conceived that the soul itself—the immaterial principle—ever sleeps, otherwise, it were not sleep, but death. In *dreaming*, we occasionally perceive the soul—the immaterial and inorganic principle—struggling, as it were, to manifest its independent activity without the co-operation of the bodily organs. It is probable, if not certain, that all sleep is accompanied with dreaming, that is, with the exercise of spiritual energy ; but in the case of the soundest sleep, these dreams—the manifestations of this spiritual activity—are not remembered ; there has been no co-operation of the corporeal organs, and, therefore, no adequate impression has been made upon the material part of our constitution ; in like manner,

this *science* to the explanation of phenomena seems to consist merely of a translation of one language into another, leaving the enquirer just as wise as he was before. I am surprised that an individual so acute as Mr Macnish should not have perceived that, in resorting to Phrenology for elucidating the phenomena of Sleep and Dreams, he was only giving an example of the *obscurum per obscurius*.

as we have seen that the operations performed, and the conversations held, in the state of perfect somnambulism, when the sensibility of the corporeal organs is altogether suspended, are entirely forgotten when the individual awakes, and is restored to his natural state. In sleep, the corporeal organs are merely more or less profoundly dormant, but still sensible to external impressions, when sufficiently strong to affect them; in somnambulism, on the other hand, they are in general entirely deprived of their sensibility for a time; as has been seen in the case of the Breslau rope-maker, in that of Madame Plantin, and, indeed, in almost every case both of the natural and of the magnetic somnambulism. It appears to be only when the natural sleep is unsound, or disturbed, that the dreams are remembered, and that they recur to the recollection with more or less distinctness, in proportion to the degree in which the material organs have been affected. The sound sleeper declares that he never dreams; that is to say, he has no recollection of having dreamt, his sleep having been so profound. On the other hand, the unsound sleeper continually dreams, and he has also a distinct recollection of his nocturnal reveries when awake. This circumstance proves that the corporeal organs have only been in a state of partial or imperfect repose.

Upon this subject of the constant activity and restlessness of the soul, during the temporary repose of the corporeal sensibility, I find the following coincident observations in the works of that eminent divine, Bishop Hall. "I do not more wonder," says that distinguished prelate, "at any man's art, than at his who professes to think of nothing; and I do not a little marvel at that man who says he can sleep without a dream; for the mind of man is a restless thing; and though it give the body leave to repose itself, as knowing it is a mortal and earthly piece, yet itself being a spirit, and therefore active and indefatigable, is ever in motion. Give me a sea that moves not, a sun that shines not, an open eye that sees not, and I shall yield there may be a reasonable soul that works not. It is possible that through a natural or accidental stupidity, a man may not perceive his own thoughts (as sometimes the eye or ear may be distracted not to discern his own objects); but, in the mean time, he thinks *that* whereof he cannot give an account; like as we many times dream, when we cannot report our fancy. Since my mind," adds the Bishop, "will needs be ever working, it shall be my care that it may always be well employed."

Upon the same principles, too, we may explain the frequently fantastic, absurd, and incoherent

nature of our dreams. The union and harmony between the soul and the body, although not actually dissolved, is partially interrupted by sleep; the latter is no longer capable of co-operating effectually with the former. Hence, in imperfect sleep, when the sensibility is enfeebled but not annihilated, the soul is still encumbered by the partial wakefulness of the body, and, at the same time, and for the same reason, it is incapable of freely exerting its own independent energies. On the other hand, when the sleep is profound, when the corporeal sensibility is completely dormant, the energies of the soul are set at liberty and freely exercised, without any co-operation or control of the body, but of this exercise there can be no recollection in the waking state, because, as formerly observed, no adequate impression has been made upon any material organ.

Moreover, the magnetic sleep differs from the natural in this, that, in the former, the organic repose is generally more sound, the corporeal organs are in a state of greater inactivity. So far as I am aware, there is no instance of dreaming during the magnetic sleep; that is to say, there is no distinct recollection of any thoughts that may have occurred to the mind during its continuance. All that a patient, when awakened out of this state, can remember of having experienced, is a mere

vague feeling of certain pleasurable sensations. It appears, therefore, to constitute the transition-state from one mode of existence to another; and this transition is completed in somnambulism, by the total suspension or temporary annihilation of the corporeal sensibility—in a far greater degree than that which takes place in the ordinary sleep—the undisturbed activity of the soul, and consequently the manifestation of a life purely spiritual and inorganic.*

In following out this investigation and comparison of the phenomena of the natural and the magnetic sleep, and of sleep and somnambulism, I have little doubt that we should be enabled to trace, al-

* The subject of sleep and dreams, omens, sympathetic forebodings, second sight, &c. are intimately connected with the doctrines of Animal Magnetism; but my limits will not permit me to enter fully into it at present. There are various well-authenticated phenomena which prove the reality of these occurrences, and justify the assertion of the poet, that

“ Dreams full oft are found of real events

“ The forms and shadows.”

The same may be said of omens, presentiments, &c. It is difficult to reject the whole of the evidence upon this subject, and absolutely to deny that, upon some occasions, and in certain circumstances,

“ Coming events cast their shadows before.”

Animal Magnetism affords us the means of giving a natural explanation of these phenomena; and the whole subject deserves to be philosophically investigated, with a view to dispel superstition on the one hand, and scepticism on the other.

though in a more faint degree, in the former, as in the latter, the distinction between the material organism and the vital or spiritual principle which animates it; and thus succeed, at length, in withdrawing a portion, at least, of that veil, hitherto deemed impenetrable, which has so long enveloped some of the most important secrets of nature, and concealed from our view the noblest and most interesting element in the constitution of man.

CHAPTER XXIX.

AFTER the whole materials for this work had been collected and arranged, my attention was directed to a series of physiological lectures delivered in the University of Paris by M. Andral, in some of which the author discusses the subject of Animal Magnetism. The particular lectures to which I allude are the 13th, 14th, and 15th of the series, and they were translated and published in the *Lancet* for 1832-33, vol. iii. pp. 769, &c. The opinions of a professional gentleman of such eminence as M. Andral upon such a subject as this, when given with candour and sincerity after due investigation, would of themselves be very valuable; but I consider them as still more important when indicating the great change which has lately taken place in the sentiments of those medical men who had previously viewed the phenomena with deep suspicion and inveterate scepticism.

In his 13th lecture, M. Andral admits that the state of *ecstasy*, or somnambulism, may either be spontaneous, *or it may be produced in one individual,*

in consequence of an influence exercised on him by another. "In entering," he says, "on the consideration of this much-debated and, I must say, deeply-interesting topic, I have to recommend you to follow my example, in determining to separate *facts* from the *explanation* of facts, in endeavouring to ascertain, in the first place, what it is that is proved, and then seeking to unravel whatever mysteries that presents; and in remembering that a thing may not be the less true, because it is not included in the category of circumstances which the state of human science, or the extent of the limits of the human intellect, enables us to comprehend, and compels us to recognize."

"Many facts," he states, "are on record, which permit no one to entertain the least doubt as to the possibility of the spontaneous occurrence of this state" (ecstasy); and he relies exclusively upon the one instance which occurred at the Clinic of Bologna, published in the *Gazette Medicale* of Paris, of the 24th of November 1832;* "as it contains all the elements of authenticity, and has been observed by medical men of high skill and reputation."

M. Andral then asks, "Can the state thus described be produced in one individual by any influ-

* This case will be found, along with a variety of others, in the Appendix, No. II.

ence exercised by another ?” This question the author also answers in the affirmative, relying solely upon the following evidence. “ In the inaugural thesis of M. Fillazzi (Fillassier), defended before our Faculty of Medicine, there is the narrative of an occurrence bearing irresistible proofs of its authenticity, and which seems to me sufficient to decide the question. The facts are particularly curious. The author, then an *interne* at the Hotel Dieu, and totally sceptical regarding the powers ascribed to this mysterious essence, this asserted magnetic fluid, formed, for amusement, the plan, with a brother *interne* equally incredulous, of submitting this friend to the manœuvres of the magnetizers, in the manner M. Rostan describes. The *passes* were continued for about twenty minutes without any remarkable effect, but at the expiration of that time, the young man began to yawn, his eyelids grew heavy, and closed involuntarily ; he attempted to shake off the torpor in vain ; his respiration next became accelerated, his head fell on his shoulders, and he uttered a sardonic laugh of indescribable expression. ‘ We thought,’ says the narrator, ‘ that he was amusing himself at our expense ; but in a little, what was my horror when I saw his fingers turn blue, his head fall powerless forward, when I heard his respiration rattling like a dying man’s, and felt his skin as cold as death

itself ! I cannot find words to describe my sufferings. I knew not what to do. Meanwhile, all these horrid phenomena increased in intensity. I tremble at the recollection of what I saw ;—there lay my friend, my victim, devoid of the aspect of life, in a state of complete and terrible collapse. With his hand clasped in mine, in a state of agony no tongue could tell of, I laid him on a bed, and waited the result in a state of mind I can never forget. In a quarter of an hour he recovered, and, exclaiming that in the ecstasy he had experienced sensations of extreme delight, begged me to recommence the passes. I did so with less apprehension, and again the somnolency proceeded. The collapse, however, was less profound and terrific, and in some minutes he suddenly awoke with the exclamation : ‘ What happiness is this ! ’ ”

Upon the strength of these two solitary instances, M. Andral decides in favour of the spontaneous development of this ecstatic state, and of the possibility of its production by the influence exercised by one individual on another. “ As to their authenticity,” he remarks, “ it is beyond dispute. The statements are entitled to as much credence as any thing can be which we have not ourselves seen.” M. Andral then alludes to the theory of *touching*, *imitation*, and *imagination*, which he justly considers inadequate to explain the phenomena.

The last case, he confesses, is "an embarrassing one, at any rate, for the *imagination* hypothesis—both the operator and the patient being medical men, both sceptics, and both persuaded that nothing peculiar could happen."

"So far, then, as we have gone," continues M. Andral, "we find that the operation of known causes and influences is by no means adequate to explain the phenomena which are proved to have been induced in persons thus treated. We must, consequently, either not attempt this kind of explanation, or else we must admit the existence of a *force*, a power, which has been called *magnetic*. *The name is of no consequence whatever.*"

After alluding to the earlier history of the magnetic practices, M. Andral proceeds: "Again, however, I must press upon you, gentlemen, that there are numerous facts which prove that this subject deserves your serious attention. So strong are they, that many men of high information and discernment have not hesitated to profess their faith in the existence of the asserted principle. At Berlin, they have even established a *magnetic clinic*, for the purpose of investigating the matter experimentally, and applying it successfully to the treatment of disease. Now, is all this delusion?"

After arguing the matter for some time *pro* and *con*, M. Andral seems to think that the truth may

probably lie between the two extremes of plenary belief and absolute scepticism. But although M. Andral occasionally speaks of evidence, he is manifestly ignorant of almost the whole of the proofs by which the magnetic doctrines have been incontrovertibly established, and generally supports his belief of a particular fact upon one solitary instance, when additional and easy research might have supplied him with hundreds.

Some of his general observations upon the subject, however, are exceedingly just and apposite. "We are apt," says he, "for example, to start with the idea that a thing is impossible. This is wrong, it is irrational, it is unwise; it leads us to reject *proofs* of these facts, because these proofs do not agree with our own previous notions. We must not be so proud of our own powers as to fancy that analogy, that induction, are omnipotent in the discrimination of truth, neither must we measure possibility by the standard of our own restricted notions. How many are the things which we now readily admit, and which but fifty years since were denied? How many things do we see daily done which we but lately deemed impracticable?" The learned lecturer then cautions his pupils, on the other hand, against an excess of credulity. "Too great a facility in belief is as great an evil as too rigid a tendency to distrust. We must therefore

subject the asserted facts to a rigorous scrutiny," &c. But in proceeding to such a scrutiny, it is absolutely necessary that we have all, or, at least, a great part of the evidence before us, in order to enable us to arrive at a satisfactory conclusion; whereas M. Andral, with the utmost honesty of intention, no doubt, seems to be possessed of only one or two recent instances of certain magnetic phenomena, and these by no means the most important. Upon such a scanty and very partial view of the evidence, however, it is manifestly unjust to found any general conclusion. It is somewhat singular that M. Andral should not even once allude to the excellent work of his countryman M. Deleuze. Of the other numerous French and German writings upon this subject, by medical authors and others, he seems to be totally ignorant.

In considering the phenomena of Animal Magnetism, M. Andral admits, in the magnetic somnambulism, *1st*, The fact of "the abolition of all sensibility by the ordinary organs of perception;" and, *2dly*, "The obliteration from the memory of all circumstances occurring during the ecstasy;" while he considers the asserted connexion between the magnetizer and the magnetised as not proved. The admissions of M. Andral, however, are of great importance, as evincing his conviction of the influence of the treatment.

In his 14th Lecture, M. Andral proceeds with his strictures on the alleged phenomena of Animal Magnetism. He admits that one person is capable of producing certain symptoms upon another "by peculiar touches, passes, or manual manœuvres;" but he "sees no fact sufficiently decisive and authenticated, to establish the intermediate agency;" that is to say, the effects alleged to be produced through the intervention of other persons and things. Here, I am sorry to observe, M. Andral discovers a very imperfect knowledge of the nature of the magnetic processes, which do not consist altogether of "*peculiar touches, passes, or manual manœuvres.*" The advocates of that practice ascribe much efficacy to the will and intention of the operator, and of this M. Andral says nothing. Here, too, as elsewhere, the lecturer betrays great ignorance of the facts, as well as of the overpowering evidence by which their existence has been demonstrated; but the reality of the facts can only be established or refuted by a due consideration of the whole evidence, thoroughly sifted and weighed.

In treating of the alleged cure of various diseases by means of magnetism, M. Andral alludes to some curious facts. "Now, all this I think very probable. A vast number of diseases, especially those strictly nervous, disappear completely, when the mind is powerfully excited." In mag-

netism, however, as at present practised (whatever may have been the case in the days of Mesmer and his immediate followers), there is absolutely nothing that can be supposed capable of producing any such powerful mental excitement at all; and it is a great mistake to suppose that the treatment is peculiarly or exclusively adapted to nervous diseases. The best and most experienced practical magnetizers, indeed, hold an opinion precisely the reverse of this. M. Andral proceeds: "Intermittent fever even has thus been cured; and it is no less whimsical than true, that, at one time, the repetition of the uncouth and unmeaning word—*abracadabra*—accompanied with various gestures and imposing parade, was deemed a sovereign cure, and I believe it was so, for a great number of nervous disorders. Nay, it is certain, even that not a few diseases of the circulation, and of the organs of secretion and nutrition, were thus either perfectly cured, or at any rate materially modified." *

Now, the sceptical opponents of Animal Magnetism have always appeared anxious to bring forward cases of cures effected in the manner described above, as if these afforded any solid grounds

* The learned T. Bartholinus said, "Why shall I condemn the cures effected by gestures, characters, words, and other natural actions, without the aid of superstition, although our feeble reason comprehends not how these cures are produced, *for they are demonstrated by experience.*"

for invalidating the doctrine they opposed. But because diseases may have been cured by one mode of treatment, that circumstance, of itself, can afford no argument against the possibility of their being also cured by another mode of treatment; in either case, we must just be content to fall back upon the evidence. Besides, it is by no means clear, that the two methods are not analogous to each other, and may not depend upon the same principle. The advocates of the doctrine in question, indeed, have neither any desire nor any interest to deny the authenticity of such facts, when brought forward by their opponents; on the contrary, they rely upon these very facts as evidence in favour of the opinions they maintain. M. Andral fully admits that cures have been effected in the manner he describes; but is he quite certain that the cures to which he alludes were not produced in consequence of some more or less perfect modification of the magnetic treatment?

M. Andral continues: "But what seems special to this state"—that of the magnetic ecstasy or somnambulism—"is, that the magnetised person is asserted to be capable of maintaining a certain kind of connexion with the external world, while otherwise completely insensible. Thus, he has been known to hear and answer connectedly various questions and observations proposed to him

by one individual, while he remains insensible to the loudest noises, the most exciting remarks of all the other persons about him. It is difficult not to admit that this has happened in several cases. I have not seen the fact myself, but I have, in the course of reading, met with several instances of it so well authenticated, that I should not be justified in refusing to believe it." This admission does not seem very consistent with the author's previous denial or disbelief of the alleged connexion, or *rapport*, between the operator and the patient. After noticing some other remarkable features of the ecstatic crisis—such as the occasional exaltation of the sensibility, hallucinations, an extraordinary development of intelligence, increased muscular energy, &c. ; M. Andral proceeds to consider the *instinct of remedies*, with which the magnetic somnambulists and others are said to be endowed. Upon this subject, M. Andral is unusually decided and peremptory, but, unfortunately, his opinion is directly in the teeth of the evidence. "Now," says he, "in the whole of the statements on this point, I must confess that I can again see nothing but the *acme* of imposition, juggling, and quackery."

This, I am aware, is a point upon which medical gentlemen, who have not sufficiently studied the

subject, are peculiarly sensitive; yet here I do not hesitate to avow, that, although not a member of the profession, I am directly at issue with M. Andral; and as this is a fact which, like all others, must be ultimately decided by proof, I would refer this gentleman, and the public who are to judge between us, to the evidence adduced in this work.* Does M. Andral really mean to include the Doctors Hoffmann, Wienholt, Hufeland, Olbers, Brandis, Nasse, Sprengel, Cabanis, Georget, Virey, with a large proportion of the most eminent physicians in Paris, among his impostors, jugglers, and quacks? For my own part, I do not hesitate to declare, that, explain it as we may, I am acquainted with no fact in physics which has been more satisfactorily demonstrated than the one he thus questions.†

* Whatever may be said for or against it, the *instinct of remedies* is no longer mere matter of opinion, but a fact which rests upon the most ample and incontrovertible evidence. It is manifested more frequently in somnambulism, than in other states of the organism; and even Cabanis, with all his philosophical scepticism, bears his testimony, as an eye-witness, to the fact, that some patients have been known to point out, with wonderful sagacity, the remedies most appropriate to their respective complaints.

† “In general, almost all somnambulists possess, during their critical sleep, the faculty of recognizing their own complaints, and those of others, of determining their nature, their duration, and their accidents; of declaring whether they are curable or not; of predicting of what nature the crises shall be, the man-

At the conclusion of the 14th, and commencement of the 15th Lecture, M. Andral expresses his doubts with regard to the reality of other alleged phenomena of the magnetic somnambulism, especially that of vision, without the assistance of the eyes. Upon this point I need say nothing here, having already placed the evidence upon it so fully before the public, as to enable every intelligent individual to judge for himself.*

I regret to find, that, in his 15th Lecture, M. Andral has, I trust unintentionally, entirely misrepresented the interesting experiments made by Dr Petetin of Lyons. He alludes to only one case, of which, however, he admits that "the narrative in itself bears all the characters of good faith in the narrator, and truth in the details." But he afterwards remarks, that "Petetin's testimony is corroborated only by the evidence of the husband, sister, and sister-in-law, of the cataleptic female. No strangers were present, the observations were not repeated with sufficient frequency, and, above

ner in which they will take place, the precise moment of their appearance; of pointing out how they may be best promoted, seconded, sustained; finally, of prescribing all the means proper to be employed in order to effectuate a cure."—*Memoire sur le Fluide Vital*, &c. in the *Biblioth. du Magnetisme Animal*, t. ii. See also the opinions of Brandis and others, formerly quoted, and the numerous instances I have adduced.

* See Appendix No. II., and almost every case of somnambulism.

all, by different individuals." Now, in the paper referred to in the last Note, the reader will find that Petetin's experiments were made upon several patients, and that they were witnessed and repeated by all the professional and learned gentlemen in Lyons and the neighbourhood, who were perfectly satisfied of the reality and correctness of the results. Moreover, it will be seen that these results were confirmed, in all essential points, in a number of subsequent experiments.

M. Andral afterwards refers to some other cases, to which, as it appears to me, he makes some rather quibbling and evasive objections. These I shall pass over, as I consider the fact in question, viz. the transference of the faculties—to have been satisfactorily demonstrated by the most ample and unimpeachable evidence.* I must, however, take

* This, indeed (the transference of the faculties), is a phenomenon which is now considered by all who have investigated the subject as having been placed far beyond the reach of scepticism. Professor Biunde of Treves, in all other respects an opponent of Animal Magnetism, speaks of the phenomenon in question in the following terms :

" If we pay particular attention only to those narratives which may be considered most authentic, thus much only can with probability be deduced from them, that, in the state of magnetic sleep, the senses (the inferior spiritual nature in man), in the exercise of their functions, are not necessarily bound down to the mediation of those organs, which are necessary to them in the waking and normal state. Such a transference of sensation to other parts of the nervous system must always ap-

some notice of the two last cases referred to by M. Andral, as even he, with all his scepticism upon this point, appears to attach considerable importance to them, and they have not yet been laid before my readers. They are not at all necessary to my demonstration, but perhaps they may make a similar impression upon other sceptics as they appear to have done upon the ingenious lecturer.

"The sixth case," says M. Andral, "is the most serious of all. It is described by M. Rostan—a high authority—in his *Système Médicale*. M. Ferrus was present at the experiment. A watch was held behind the individual's head. 'I see,' said he, 'something that shines!' 'What is it?'—'A

pear very remarkable and extraordinary; but the extraordinary and remarkable may be perceived in many other phenomena. Thus, magnetized persons have read perfectly well folded letters placed on the pit of the stomach. In this, however, there is nothing wonderful. For the soul of man is a power which, in the normal state of health, can only exercise its functions through the medium of the sensitive organs, but manifestly only because it stands in as determined relations to the body as to its organs. Should this relation be changed in an abnormal state, which we must conceive to be possible; then, seeing, hearing, smelling, tasting, &c. as energies of the soul, may be manifested in other ways and by other means, in a manner with which we can never become sufficiently acquainted, because, in such states, the individual is incapable of reflecting upon them, and mere external experience cannot lead us sufficiently into the depth of the matter."—F. X. Biunde, *Versuch einer systemat. Behandl. der empirisch. Psychologie*, i. b. p. 436.

The author is a complete sceptic in regard to all the other extraordinary magnetic phenomena.

watch.' He was asked the hour, and replied exactly. Two different watches were tried. He was equally precise. The watches were taken out of the room, and the hands altered. He still told the hours and minutes expressed on the dials. . . . (*Marks of attention.*) Gentlemen, this is a remarkable fact. I wish I had seen it. (*A laugh.*) Had I seen it, I certainly would have believed it; but as it is, the experiment demands repetition."

"The last case I shall mention is recorded by M. Fillazzi, in the thesis I quoted in the first of the lectures on this subject. The subject of the experiment was a female. She told the hour on a watch held to the back of her head. Nay, more, the watch having been taken into a dark apartment, and the hands altered, she again described the time they indicated, with exact precision, and this experiment was repeated innumerable times, the operator himself not knowing the changes of the hands until the answer was given. (*Surprise.*) Gentlemen, with respect to this narrative, I am far from considering it very decisive. I want to know who took the watch from one apartment to the other. (*Some murmurs among the auditors.*) Gentlemen, this precision is very necessary. Remember, we are investigating a very serious subject, respecting which nothing must be admitted, if it be susceptible of rational doubt."

The above is all that I deem of importance in the lectures of M. Andral. The author, I understand, enjoys great, and, I have no doubt, deserved reputation in his profession; and I believe him to be a perfectly honest and honourable man. But, as I formerly observed, it is manifest that he is not acquainted with the greater part of the evidence on the subject he has undertaken to investigate, and that he cannot entirely divest himself of his professional prejudices. Indeed, a continual conflict appears to be going on in his mind, between those prejudices and the impression made upon him by the weight of even that small part of the evidence which he knows. A little more profound, more extensive, and more impartial enquiry would probably produce entire conviction of the truth. In the mean time, his admissions, forced, as it were, from him, are very valuable; and it is extremely gratifying to find, that even the adversaries of the system are now beginning to pay much more serious attention to a very interesting class of facts, and that the old and absurd theory of *attouchement*, *imagination*, and *imitation*, once deemed so satisfactory, is now abandoned by almost every intelligent opponent of the magnetic doctrine.

With regard to the theory of the *magnetic* or *vital fluid*,* and its transmissibility, I fully admit that

* A most intelligent medical correspondent, who is disposed

the *onus probandi* lies, if any where, upon the magnetizers ; and I am well aware of the difficulty of that proof. But our opponents must not require of us impossibilities. Where, I would ask, is the exact demonstration to be found of the actual existence of the ordinary magnetic, electric, and galvanic fluids? Have they not been in a great measure assumed from the necessity of explaining certain series of physical phenomena? In my humble opinion, the professors of Animal Magnetism have, at least, rendered it extremely probable that such a fluid does exist, that it may be communicated under the direction of the will, and that it is capable of producing very extraordinary phenomena ; although it would be in vain to expect a complete demonstration of this fact, at least until physiologists shall have more profoundly investigated the economy of the living animal frame, and the operations of the vital functions. In the mean time, we cannot do better than proceed with the collection and classification of authentic facts, for of these our adversaries cannot deprive us : *Factum infectum fieri nequit.*

It will probably be long, indeed, before the medical profession generally, especially in this coun-

to admit the existence of such a fluid, ingeniously suggests that, for the sake of distinction, it might be denominated the *electro-nervine* fluid. This suggestion deserves consideration.

try, are brought to acknowledge even the facts of Animal Magnetism, however irresistible the evidence by which they are supported. Their pride is compromised, the *esprit du corps* is tremblingly alive, and it is quite natural that they should endeavour to maintain a long and obstinate struggle against the humiliation of admitting the truth of doctrines which, hitherto, they have persecuted, ridiculed, or neglected. Some of these learned gentlemen, I am told, have magnanimously declared that they will neither investigate nor even listen to the subject. It is to the philosophical public, therefore, that the appeal must now be made; they are more likely to be impartial, and they are equally capable of pronouncing a satisfactory verdict in a matter depending upon evidence. The gentlemen of the profession will unquestionably be forced to give way, as soon as they are made to perceive the ludicrous nature of their position, in continuing to close their eyes to generally acknowledged truths, and attempting to oppose their wilful ignorance to the lights which every where surround them.

“ There are few things more disgusting to an enlightened mind, than to see a number of men—a mob—whether learned or illiterate, who have never scrutinized the foundation of their opinions,

assailing with contumely an individual who, after the labour of research and reflection, has adopted different sentiments from theirs, and pluming themselves on the notion of superior 'knowledge,' because their understandings have been tenacious of prejudice."* But "the true conquests, the only ones which do not cost a tear, are those which are gained over ignorance. The most honourable, as well as the most useful, occupation of man is—to contribute to the extension of ideas."†

Many even of the most sublime and most important truths have been left to work out their establishment through many long years of doubt and discredit; they have been rejected from prejudice, or obscured by theory and speculation, until forced, at length, upon unwilling minds by the irresistible strength of the evidence by which their reality was ultimately demonstrated.

In his *Defense du Magnetisme Animal* against the attacks of M. Virey, M. Deleuze mentions, that he had received a number of letters from various individuals, who had been previously hostile to Animal Magnetism, declaring their conviction of its reality; and that one of these was from one of the gentlemen who had subscribed the Report of the

* BAILEY.

† NAPOLEON BUONAPARTE.—See ALISON's *History of Europe during the French Revolution*, vol. iii. p. 379.

Academicians in 1784. The same author also states that many physicians are as much convinced as himself, although they *dare* not publicly avow their sentiments ; and that several of them, in this state of matters, have privately recommended experiments to their patients. Surely this is not as it ought to be. Why should we be ashamed of the truth ?

CHAPTER XXX.

I HAVE now concluded all the practical details which I originally proposed to submit to the public on the subject of Animal Magnetism. I have endeavoured to unveil the apparently miraculous features of its peculiar phenomena, and to exhibit them as merely the effects of natural agencies. It has been shewn to be exceedingly probable, that, if not exactly by name, at least in theory and in practice, the influences it developes were known, in a greater or less degree, in ancient times, and among various nations. I have pointed out many curious and coincident opinions, observations, and allusions, in the writings of ancient and of modern authors. I have noticed the analogous practices of several individuals, previous to the introduction of the more systematic treatment in recent times. I have dwelt at some length upon the modern discovery of Mesmer, and followed its progress and improvement among his disciples and successors in the magnetic art. Both the ordinary and the ex-

traordinary phenomena resulting from the treatment have, I think, been sufficiently brought into notice; and I have taken the liberty of drawing the particular attention of my readers to the very remarkable appearances manifested in the natural and in the magnetic somnambulism, to their analogy with each other, and to the additional light they seem capable of throwing on the subject of Sleep and Dreams, as well as on the manifestations of the spiritual principle in general. In the course of the work, I have likewise had occasion to consider and to obviate nearly all the objections, so far as I am aware, which have been urged against the system, both by ignorant and by learned individuals. To the former, I have ventured to recommend investigation. The hostility of the latter, I trust, I have shewn is less in reality than in name.

It only remains for me, in this concluding chapter, to make a few additional observations upon the theoretical views which have been taken of the subject, and to endeavour to dispel some serious misapprehensions, by pointing out more particularly the general tendency of the doctrine.

Limited as is my knowledge of the medical sciences, it may be thought highly presumptuous in me to propound any theory upon a subject so very obscure as this; yet, considering the extreme ignorance that prevails with respect to the nature

of the spiritual principle in man, and of the laws which regulate its manifestations, I may, perhaps, be permitted shortly to advert to certain hypotheses which have been framed by more learned and more competent persons, with the view of enabling us to account for some of the more extraordinary phenomena.

Although it has long been customary to ascribe the operations of sense, as well as of intellect, in the normal state, 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 condition 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 is supposed to take place with such energy, as to form an atmosphere, or sphere of activity, similar to that of electrical bodies. Of this theory I have given

* Even the Phrenologists—the greatest sticklers for the omnipotence of the cerebral organs—were at length compelled to modify their hypothesis, by the adoption of a peculiar theory of the temperaments, and by the convenient postulate of *arteris paribus*.

some account in a previous part of this work. Were we, then, to admit the existence of this nervous fluid, of its sensible atmosphere, and its analogy in other respects to electricity, it does not seem to be a very violent or unphilosophical hypothesis to presume, that, in certain circumstances, and under certain conditions, it may be capable of being directed outwards, by the volition of one individual, with such energy as to produce a peculiar effect upon the organization of another. This hypothesis, too, appears to be supported by the fact, that individuals possessing sound health, and great nervous energy, operate in general most effectually in the magnetic treatment; and that weak and diseased persons are most susceptible of the magnetic influence, and manifest the most extraordinary phenomena.

Almost all the practitioners of Animal Magnetism, indeed, seem to agree in this, that the magnetic treatment operates principally, if not entirely, upon the nervous system, and particularly upon those nerves which are situated in the abdominal region.* Now, in this region, we find the great

* The principal effect of the magnetic treatment upon the brain, appears to consist in the temporary suspension of the sensibility and activity of its organs. But, in proportion as the activity of the cerebral organs is depressed, that of the ganglionic system is exalted. Is not this analogous to polarization?

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 now 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 elder philosophers conceived it to be the seat of the sentient soul. In

* The ganglionic system does not spring, as was formerly believed, from the fifth and sixth cerebral pairs, but only communicates with them, as with many others, and with all the nerves of the spinal cord. It constitutes of itself a separate and independent whole. A series of ganglions, lying on both sides of the spinal cord, linked together by means of connecting branches, formed into a circle by the rump below and the brain above, constitutes the definite boundary of both systems. Within this boundary the ganglionic system expands, and communicates outwards with the brain by means of connecting branches. The ganglionic system contained within this elliptical boundary consists of a contexture of apparently irregular *plexus* of nerves, sometimes more loose, and, where the principal vessels lie, more closely pressed together, and occasionally provided with nervous knots. In this labyrinthic contexture, one particular group preponderates in respect to mass, separation, and influence, which, in consequence of its form, has been denominated the *plexus solaris*.

The nerves of the cerebral and ganglionic systems differ in respect to their internal structure; those of the cerebral system being more strongly oxidized, whiter, and harder; those of the ganglionic system softer, more jelly-like, and of a greyish-yellow colour. These and other differences in structure and appearance induced Scemmering and other physiologists to believe that the functions of the two systems are essentially different—the cerebral system being appropriated to the purposes of the animal life, and that of the ganglions to the vegetative.

diseased states of the organism, this ganglion appears to stand in very peculiar relations towards the cerebral system; and it has sometimes been, perhaps 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 general sensibility transferred from the brain to the region of this ganglion, or *cerebrum abdominale*.* Does not this circumstance suggest some distinction, hitherto not sufficiently investigated, between the *intellect* and the *sensibility*—between the *cerebral* and the *ganglionic* systems of nervous energy? †

There seems little reason to doubt, that this important ganglion, with its appendages, was designated by Paracelsus and Van Helmont, in what

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

† Although we have good reason to believe that the brain is the seat or centre of the operations of the intellect, we have equally good reason to hold that the ganglionic system—the nerves and plexus of the chest and abdomen—is the primary seat of the passions and affections of the mind. Love, hate, jealousy, joy, sorrow, anger, surprise, terror, &c. alter the functions, and even the structure of these last organs. Any effect produced by these passions and emotions upon the brain, appears to be merely secondary or sympathetic.

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, catalepsy, and somnambulism, the excited sensibility of the *Archeus* (or *plexus solaris*?) predominates over the cerebral energy, supplies its functions with increased activity, and, in the absence of the ordinary organic influence, 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 obscurity and mysticism, may be found not quite so extravagant and chimerical as has been hitherto supposed.

In consequence of his minute and most ingenious 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 development.”* 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 ganglionic systems, and could we conceive it possible, either by means of the manipulations, &c. employed in the magnetic treatment, or by any other accidental or undiscoverable means, 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*,† or distribute it throughout the ganglionic system ; should we not thus be enabled to account, in some degree, for many of the extraordinary phenomena

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

† In fact, this is just what appears to take place in the natural and in the magnetic somnambulism. The cerebral organs are rendered dormant, and the sensibility seems frequently to be transferred to the *epigastrium*.

of Animal Magnetism, occasioned, it would appear, by the suspension of activity in the cerebral organs, and the exalted sensibility of the abdominal ganglions? 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, or vital forces, or of some other causes hitherto undiscovered. Many physical analogies might be pointed out in the phenomena of Electro-Magnetism, shewing the influence of electric currents upon the magnetic needle. At Paris, a sensible variation of the needle is produced by *Aurora boreales* occurring in the northern regions, at a distance of thousands of miles. A stroke of lightning has been known to reverse the poles of the mariner's compass.*

* I am no great lover of theories, and feel little interest in defending them, a task which frequently generates a greater love of controversial display than of truth, which last ought always to be our ultimate end. Yet it is impossible for the reflecting mind to avoid being struck with the numerous analogies of Nature, and with the simplicity and uniformity of the means by which she accomplishes the greater part if not the whole of her most wonderful effects. But if little inclined to attach much value to theories, I would give still less weight, in the present state of physico-psychological science, to the mere authoritative *dicta* of philosophers, especially when I find men of such eminence as Dr Roget and Sir Charles Bell denying, upon speculative grounds, the possibility of phenomena which have been

Other ingenious inquirers have endeavoured to explain the magnetic phenomena upon similar principles, indeed, although upon a still more simple theory than the preceding. The brain they consider analogous to a galvanic battery, habitually charged with a neutral or natural fluid, having need of isolated fluids, positive and negative, sent to the animal and organic life by an act of the will, through the medium of the nerves, as conductors. Without going farther than the mere simple statement of this theory, which, I trust, will be sufficiently intelligible to my readers, I shall proceed to shew in what manner a late intelligent writer attempts to account for the peculiar phenomena of the artificial somnambulism upon its principles.

Every man, it is said, has the faculty of causing the magnetic fluid to radiate from his brain, by the sole act of his will. This fluid is in a neutral or natural state. Now, suppose this fluid directed by the magnetizer towards the brain of another individual, the consequence will be this: If the fluid of the magnetised person is equally natural, no effect will be produced, because two neutral fluids do not act upon each other; and this is what generally takes place when we attempt to magnetise

observed to occur in thousands of instances, and whose actual existence has been demonstrated by the most ample, the most unexceptionable, and irrefragable evidence — facts which are all but universally notorious.

a person in health. But if the fluids are isolated, as is usually the case in sick persons, each of these two fluids will tend to decompose the neutral fluid of the magnetizer, and to combine with its opposite.

It is a remarkable fact, that the combination of the fluids of one individual with those of another has the effect of producing sleep. This combination causes the brain to pass into a sort of *ecsthasis*, which, gradually increased by the continuation of the magnetic action, determines, in the brain of the magnetised person, a considerable disengagement of fluid. It is this excess of fluid whose subtilty, traversing the sides of the cranium, irradiates the surrounding objects, and occasions the wonderful phenomena of lucidity. In such circumstances, the brain is enabled to dispense with the instruments of the senses, and the individual can see without the eyes, and hear without the ears. In the ordinary state, the organs of the senses are a kind of conductors, which bring us the impressions of external objects; but in somnambulism, the fluid comes into immediate contact with these objects, so that the natural conductors of sensation become useless.

We have seen that, in somnambulism, the sensibility of the animal life is entirely abolished. This phenomenon, in our opinion, is susceptible of

a rigorous explanation. We feel nothing, because the brain, completely absorbed by the activity of this new order of perceptions, entirely abandoned to this ecstatic life, no longer perceives any other impressions. We may form some idea of this incapability of perceiving in the brain, from what daily takes place, when a strong sensation annihilates within us a weaker one. It is thus that an individual, profoundly pre-occupied with some great idea, or struck with the sight of a very interesting object, sees and hears nothing of what is going on around him. It is thus, too, that in a contest embittered by wrath or vengeance, the two adversaries scarcely feel the blows which they mutually inflict upon each other.

After a magnetic sleep, why does the somnambulist recollect nothing of what passed in this state? He remembers nothing, because every thing has taken place out of his brain, since we have seen that the fluid goes in search of the objects. We can conceive that dreams should leave some recollection behind; in fact, every thing then takes place in the brain, and although the impression may have been slight, yet it may be retained until awaking, and leave some trace in our memory.

Why is the magnetizer not always capable of acting effectively? Because his will, at the given moment, may be incapable of directing the fluid;

because he is distracted or indisposed, and his fluid no longer possesses the requisite conditions; because he acts upon a healthy person, and their neutral fluids are incapable of acting upon each other; because he operates upon a sick person, whose fluid, at the moment, is in a natural state; finally, because some third party exerts a contradictory action, with or without intention.

Why ought the magnetised person to have confidence in Magnetism? Because it is necessary that the brain should be in certain moral conditions, in order to produce certain moral effects.*

I repeat, that I have not presumed to bring forward any of the foregoing hypotheses, with the hope that any one of them will be found to afford a complete and satisfactory theory to account for the phenomena in question, but merely as hints or queries addressed 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 path of experimental research, and especially a more attentive observation and classification of the psychical manifestations, as

* See *MAGNETISME, son histoire, sa theorie, son application au traitement des maladies: Memoire envoyé à l'Academie de Berlin.* Par le Docteur LEONARD. Paris, 1834.

contra-distinguished from the mere acts of the sensitive organism, may ultimately lead to a successful solution of some, at least, of the many difficulties with which it is now beset. Nay, the fortunate evolution of some single, and perhaps simple, principle may at length dispel the darkness which now envelopes this most interesting physiological question; and a more enlightened posterity may even wonder that we should have been impeded, by apparently insuperable obstacles, in an investigation, in which every thing has to them become comparatively smooth and easy.*

But whatever speculative notions we may be pleased to entertain, in the mean time, upon this abstruse but fascinating subject, I should conceive that even a superficial consideration of the facts brought forward in this work, independently of all

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

It is, perhaps, unfortunate, that Physiology is almost exclusively cultivated by medical men, and for medical purposes, without any sufficient attention to its bearings upon the science of mind. Hence, probably, the material tendency of the views it presents. Could a physician and philosopher, like Dr Abercrombie of Edinburgh, be induced to devote a portion of his time and attention to a systematic work upon this interesting subject, I have no doubt it would be made to assume a very different aspect.

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contra-distinguished from the mere acts of the sensitive organism, may ultimately lead to a successful solution of some, at least, of the many difficulties with which it is now beset. Nay, the fortunate evolution of some single, and perhaps simple, principle may at length dispel the darkness which now envelopes this most interesting physiological question; and a more enlightened posterity may even wonder that we should have been impeded, by apparently insuperable obstacles, in an investigation, in which every thing has to them become comparatively smooth and easy.*

But whatever speculative notions we may be pleased to entertain, in the mean time, upon this abstruse but fascinating subject, I should conceive that even a superficial consideration of the facts brought forward in this work, independently of all

* 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.

It is, perhaps, unfortunate, that Physiology is almost exclusively cultivated by medical men, and for medical purposes, without any sufficient attention to its bearings upon the science of mind. Hence, probably, the material tendency of the views it presents. Could a physician and philosopher, like Dr Abercrombie of Edinburgh, be induced to devote a portion of his time and attention to a systematic work upon this interesting subject, I have no doubt it would be made to assume a very different aspect.

because he is distracted or indisposed, and his fluid no longer possesses the requisite conditions; because he acts upon a healthy person, and their neutral fluids are incapable of acting upon each other; because he operates upon a sick person, whose fluid, at the moment, is in a natural state; finally, because some third party exerts a contradictory action, with or without intention.

Why ought the magnetised person to have confidence in Magnetism? Because it is necessary that the brain should be in certain moral conditions, in order to produce certain moral effects.*

I repeat, that I have not presumed to bring forward any of the foregoing hypotheses, with the hope that any one of them will be found to afford a complete and satisfactory theory to account for the phenomena in question, but merely as hints or queries addressed 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 path of experimental research, and especially a more attentive observation and classification of the psychical manifestations, as

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theory, must be sufficient to enable my readers to perceive that the phenomena of Animal Magnetism come into direct collision with the opinions and doctrines of the mere physiological materialist—the advocate of the organic origin and nature of the mind, or spiritual principle—and expose, in all their nakedness and deformity, the scantiness, insufficiency, and utter absurdity of his creed. Indeed, the very material character of the predominant systems of philosophy, in this unphilosophical age and nation, has probably opposed the strongest barrier, in this country, to the general recognition of the facts adduced, and the doctrines maintained in this work.* But the more diligently, the more

* I had conceived that Materialism, in its more gross and offensive form, had been long since exploded ; but I was mistaken. I find that it has been recently re-introduced into Physiology, not by any philosopher, indeed, but by a physician. Dr Elliotson of London, in his work on Physiology, asserts that “ Mind is the functional power of the living brain,” and that “ the brain thinks, and feels, and wills, as clearly as the liver produces bile.” These assertions are probably results of the *science of Phrenology*, of which I have already ventured to give an opinion, and in which, I understand, Dr Elliotson is an adept. I might have been induced to make some remarks on the monstrous absurdity of all such opinions, had not this been already done to my hand by Mr Roberton of Manchester, in two admirable communications inserted in two recent numbers of the *London Medical Gazette*. What would Dr Elliotson think if I, who am no physiologist, should assert, in opposition to him who is, that *Mind—soul, spirit, the immaterial principle—produces, forms, creates the brain?* Yet I might perhaps be able to adduce

intimately, the more profoundly, we examine into the human constitution, and the more attentively we observe its most interesting phenomena, the more firmly must we be convinced that there are many important springs and operations, many remarkable actions and reactions in the vital economy, which never can be satisfactorily explained upon the pure principles of Materialism. The Materialists themselves, indeed, seem to be perfectly aware of the deficiencies of their own systems; and in order to supply a remedy, they are com-

as many and as good facts, arguments, and authorities, in favour of my assertion, as he could in support of his. But, in the words of a former quotation, *Medico, qua Medicus, ignota est anima*. The materialists, indeed, affect to consider this question, respecting the nature of the soul, as of little or no consequence. But here also I differ from them.

I beg leave to call the attention of my readers to an excellent work lately published, entitled *Natural Evidence of a Future Life*, by F. C. Bakewell; a truly philosophical production, containing one of the most beautiful and convincing specimens of analogical reasoning I ever happened to meet with. I wish I had seen it sooner.

Sir Kenelm Digby says it cannot be "expected that an excellent physician, whose fancy is always fraught with the material drugs that he prescribeth his apothecary to compound his medicines of, and whose hands are inured to the cutting up, and eyes to the inspection of anatomized bodies, should easily, and with success, flie his thoughts at so towering a game as a pure intellect, a separated and unembodied soul."—*Observations on Sir T. Brown's Religio Medici*. An anonymous commentator on the same work alludes to a common saying: *Ubi tres Medici, duo Athei*.

pelled to call in to their aid the auxiliary assistance of two foreign principles: With their matter they associate mechanism, which implies design, and must therefore be a product of mind or intelligence, and postulate motion, the nature of which is directly opposite to that of matter; and they afterwards resort to a variety of gratuitous hypotheses, in order to enable them to explain the reciprocal action of these elements, in a manner corresponding with the phenomena of the vital functions. They might truly exclaim with the sacred writer: *Ambulavimus vias difficiles, et erravimus a via veritatis*. For, after all their expenditure of labour and ingenuity, they find it wholly impossible to account for intellect and the moral manifestations upon their favourite principles; and, at last, they only exhibit to view a fanciful, fantastic, and frightful monster—like the Caliban-creature of the modern Prometheus—whose uncouth form and awkward movements are calculated to excite the disgust, or the risibility, of the rational philosopher.

The Animal Magnetist, on the other hand, takes a more simple, a more discriminating, and, at the same time, a more comprehensive view of nature. He distinguishes, as authorised by the facts presented to his notice, between the materiality and the motion of bodies, and the spiritual principle which animates and actuates organised beings; and

he considers the phenomena manifested by the latter as infinitely more important to the philosophy of man, than those of the former. He is not content to examine the fleshless skeleton, in order to acquire a knowledge of the principles of life and action; or to pore over the sapless trunk, with a view to discover the causes of the germination of the bud, or of the gradual growth and ultimate maturity of the fruit. His business does not lie among the tombs and the charnel-houses—the abodes of decay and corruption. In the true spirit of the inductive philosophy, he cautiously interrogates living nature, receives her answers with humility, and treasures them up with faith and confidence, as infinitely more edifying and useful than the most profuse ingenuity of perverse speculation; and he is so much the more assured of the reality and the solidity of the knowledge he has thus acquired, because it ultimately rests upon a firm and insubvertible foundation of facts presented by nature herself, and discards the feeble, precarious, and unsatisfactory support of unsubstantial and unstable hypotheses. He is thus enabled to give a simple and sufficient philosophical reason for the faith which is in him; while his whole doctrine is calculated to elevate humanity, and to dignify, by spiritualising, science.

In short,—in the phenomena manifested in the

higher degrees of Animal Magnetism, we may find a complete practical refutation of all the material theories of the human mind, a most distinct, cogent, and impressive proof of the independent existence of the soul of man, and, consequently, the strongest philosophical grounds for presuming its immortality; since it has now been demonstrated beyond the possibility of rational doubt, that, in its manifestations, it is not necessarily chained down to any particular part of the sensible and mortal body; but that it is capable of exercising its various functions, in peculiar circumstances, without the assistance or co-operation of any of those material organs, by means of which it usually maintains a correspondence with the external world.*

* In eo tamen Wienholto adsentior, et his phænomenis 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, to whom I have already referred, a young and most promising physician, and also a Member of the Institute or Royal Academy of Sciences at Paris, 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 might 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.

With the greatest deference to the opinions of those more competent than myself to such inquiries, it does appear to me, that the only possible method of explaining how this correspondence is carried on, in the circumstances alluded to, is by assuming the existence of a very subtile and attenuated ethereal fluid, probably secreted in the brain, or modified by that organ, acting under the command of the will, and conducted to all parts of the corporeal frame by means of the various ramifications of the nerves. This opinion was formerly entertained, as we have seen, by the celebrated Hoffman, and by many other learned men, long before the modern discovery of Animal Magnetism;* and

* In consequence of my ignorance of medical literature, I was not, until lately, aware, that similar opinions had been adopted, and maintained with great knowledge and acuteness, by those eminent practical enquirers, Mr Hunter and Mr Abernethy. The latter, in illustrating the theory of his predecessor, considers *Life*, or the vital principle, as a sort of connecting medium between mind and matter—each, however, being independent of the other; and that mind is added to life, as life has been added to organization. “I am visionary enough,” he observes, “to imagine, that if these opinions should become so established as to be generally admitted by philosophers, that if they once saw reason to believe that life was something of an invisible and active nature, superadded to organization, they would then see equal reason to believe that mind might be superadded to life, as life is to structure. They would then, indeed, still further perceive how mind and matter might reciprocally operate on each other by means of an intervening substance. Thus even would philosophical researches enforce the belief, which, I may say, is

there are various facts and observations, independently of the analogous phenomena of Magnetism, Electricity, and Electro-Magnetism, which almost seem to take this assumption out of the category of a mere hypothesis. Roullier observes, that, in Magnetism, the physical processes elicit a fluid, which reasoning and analogy would compel us, as it were, to admit, even if all somnambulists had not besides invariably attested its existence. The somnambulists see this fluid white as light, and

natural to man, that, in addition to his bodily frame, he possesses a sentient, intelligent, and independent mind ; an opinion which tends, in an eminent degree, to produce virtuous, useful and honourable actions." Mr Abernethy is also favourable to the hypothesis of an universal attenuated ethereal fluid or substance, pervading all nature, and constituting the life of the world ; and he thinks that a similar principle may pervade organized structures, and have like effects on them.—See ABERNETHY'S *Physiological Lectures*. I believe that these rational opinions of Mr Abernethy encountered virulent opposition from the materialistic tendency of the age.

The late Mr Coleridge thought that "it is a great error in physiology not to distinguish between what may be called the general or fundamental life—the *principium vite*, and the functional life—the life in the functions. Organization must presuppose life as anterior to it ; without life there could not be or remain any organization ; but then there is also a life in the organs, or functions, distinct from the other."—*Table-Talk*, vol. i. pp. 144–145.

I do not precisely see the necessity of Mr Coleridge's distinction between the fundamental and the functional life ; the latter may be considered as merely a portion of the former, destined, or directed, to a particular purpose. But I conceive that Coleridge is quite correct in saying that organization presupposes

sprinkled with brilliant sparks, when the magnetizer operates, with more or less energy, with the points of his fingers ; and among these somnambulists, there have been children, persons without any knowledge of physics, and even some who, in their natural state, had no confidence in Magnetism.* And Puysegur makes the following curious comparison between the magnetic processes and the action of the electric machine : “ The electric machine, set in motion by the handle, which causes the glass-plate to revolve between two cu-

life as anterior to it, and that without life there could be no organization. Life, embracing the *nîsus formativus* of Blumenbach, is, unquestionably, the secondary cause of all organization, as well as of all functional manifestations.

The following are some of the general conclusions deduced by Mr Bakewell, in his interesting work on the *Natural Evidence of a Future Life*.

The vegetative principle exists prior to the organization of the plant, unless we could suppose that the effect of vegetation is produced without any cause. In organized beings, the living principle must exist prior to, and is not consequent upon, animal organization. The sentient principle, and the intellectual powers, are distinct from material substance, and independent of the material agents by which they are developed. The brain is merely the apparatus for developing the powers of the mind ; and any deficiency in the proper development, occasioned by injury, or by the decay of the apparatus, is no more indicative of the decay of mental power, than any derangement in the machinery of the steam engine, which impedes its action, is to be considered indicative of the loss of the expansive power of heat, by which it was previously set in motion.

* See *Bibliothèque du Magnétisme Animal*, tom. iii.

shions, is the image of the human magnetizer. Let this motion stop, then all communications cease, all the sparks disappear, in short, all kinds of electrical manifestations are at an end. In the same manner, the manifestations of Animal Magnetism cease, from the moment that our will, the handle of our thought, no longer acts magnetically, with the intention of producing them.”*

But although we may find ourselves compelled, either by the necessity of the case, or by the result of experiment and observation, to admit that something of attenuated, invisible, and imponderable materiality, analogous to Electricity, exists in the living body ; in doing so, we in no degree infringe upon the important doctrine of the immateriality and indestructibility of the soul itself. The nervous, vital, or magnetic energy, or by whatever other name it may be called, may be considered as an actual fluid, supplied from the blood, elaborated by the brain and nerves, pervading the whole system, and forming an admirable gradation, a beautiful and most appropriate connecting link between the more gross material parts and the immaterial soul. Such a theory—viewing it merely as a theory—might elucidate many obscure points in physiology ; such as the evolution of animal heat, the operation of the senses, the separation of the

* See *Bibliothèque du Magnétisme Animal*, p. 211.

blood drawn during inflammatory diseases, irritability and contractility, the dependent action of the heart, lungs, and arteries, the reciprocal influence of the body and mind upon each other ; in short, many of the most wonderful, and apparently inexplicable, phenomena of the animal economy. Such a theory, too, seems far more analogically consistent with that beautiful regularity, that harmonious and almost imperceptible gradation, which is so admirably manifested in all the works of Divine Power and Wisdom, than to conceive the immaterial and immortal soul to be immediately united to the gross and perishable body. Moreover, this vital energy may be considered either as a peculiar fluid *sui generis*, or as a particular modification of an universal fluid, pervading all nature, as the vehicle or medium through which are produced all the most remarkable phenomena that occur in the physical and the moral world.*

The preceding views are powerfully corroborated by the speculations of some of the most eminent metaphysicians.

A certain class of philosophers, deeply impressed with the mysterious intimations and manifestations of our spiritual nature, in contradistinction to those of the mere sensible organization, have been

* See some speculations upon this subject in the Appendix, No. III.

led, independently of Revelation, to assume a two-fold world—a sensible and a supersensible, a two-fold life in man—the *phenomenal* and the *noumenal* ; the one adapted to our condition, and the circumstances by which we are surrounded, in the present state of our existence—the other manifesting within us a more spiritual character, and rendering us capable of anticipating and enjoying the prospect of a future. The poets, too, yielding to the impulse of these lofty aspirations, have frequently appealed, with rapt inspiration, to the higher principles of our being, in their glowing ideal representations of the dignity of that spiritual nature which was infused into man at the creation. The discoveries of Animal Magnetism have at length demonstrated that, in all this, there is something more than mere metaphysical hypothesis, or poetical rhapsody. They have experimentally proved that there is something more elevated in the nature of man, than appears to common observation in the ordinary state of our existence ; and, from the interesting and consolatory truths they have unfolded, there has been developed, as the flower from the bud, that delightful faith in the expansive and imperishable character of our spiritual being, which, while it exalts us beyond the narrow limits of time and space, and teaches us to aspire to a brighter, a purer, and a

loftier destiny, seems calculated ultimately to produce an eternal reconciliation and harmonious concord between Religion and Philosophy.*

* I have heard with concern that certain clerical personages—of what denomination I know not—were disposed to take violent offence at my former publication, conceiving it, I presume, to be hostile to some of their religious principles. I have not seen their animadversions, nor do I wish to see them; being naturally averse to all such controversy, and not particularly anxious to expose myself to the proverbial *odium theologicum*.

An anonymous annotator on Sir Thomas Brown's *Religio Medici* observes, that "the author's behaviour, and general method of reasoning as to matters of religion, was always inclining to moderation. Upon that account he easily foresaw, and perhaps had undergone the imputation of atheism from the narrow-minded bigots, who are so overswayed by a preposterous zeal, that they hate all moderation in discoursing of religion; they are the men, forsooth,—*qui solos credant habendos esse Deos quos ipsi colunt*." At one time, indeed, all those philosophers who applied themselves to the study of the operations of nature, were accounted irreligious; and there is scarcely any one science which has not, in its turn, been denounced as impious.

But I would just entreat the reverend gentlemen, to whom I have alluded, to consider, that the whole of *my* offence consists in having brought prominently forward some natural facts, hitherto overlooked or neglected. Now, I hold that, to use the language of Lord Bacon, "there is no enmity between God's word and his works." If these alleged facts be false, let them be disproved or invalidated. If they be true—How can truth injure religion? How can our knowledge of these things diminish our reverence for that Being who is the author of the one, and the object of the other? Nothing but gross ignorance, and an ill regulated devotion, indeed, could suggest any such views; and their prevalence would only prove that, in spite of the boasted intelligence of the present age, the day has not yet arrived, when, as anticipated by the great Kepler, "pious

I have thus humbly endeavoured to make my readers acquainted, not only with the interesting facts disclosed by the processes of Animal Magnetism, but also with the nature and tendency of the doctrines necessarily embraced by its advocates. If they believe, as firmly as I do, in the truth of the facts which have been submitted to their con-

simplicity will become ashamed of its blind superstition—when men will recognise truth in the book of nature, as well as in the Holy Scriptures, and rejoice in the two revelations.”

The doctrines of Animal Magnetism, I apprehend, are eminently calculated to promote the true interests of spiritual religion, by associating with it a spiritual philosophy. And where shall we find a more admirable demonstration of the Power, Wisdom, and Goodness of God, than is presented to us in the phenomena detailed in this work? Where a more sublime and ennobling subject of contemplation, than the manifestations of the immaterial soul of man, breathed into him by the Creator, independently of the material organism? When engaged in such contemplation, who would not feel disposed to exclaim with the poet :

“ How poor—how rich—how abject—how august—

“ How complicate—how wonderful is man !

“ How passing wonder He who made him such !

“ Who center'd in our make such strange extremes ;

“ *From different natures marvellously mix'd ;*

“ *Connexion exquisite of distant worlds !*”

I have always had considerable doubts whether any contemplation of the merely material universe can produce, in our minds, such lofty thoughts of the wisdom and goodness of God, or of the nature and destinies of man, as a just and comprehensive view of his spiritual, intellectual, and moral constitution. In contemplating the phenomena of the external world, the

sideration—and this, I presume, must depend upon the attention they have bestowed upon the evidence—they cannot fail, I think, to be convinced, that the discovery of the agency in question is of great value to medical science, and of almost infinite importance to philosophy. For my own part, I do

feelings naturally excited in the mind are those of admiration and awe; but I much doubt the propriety of any finite being presuming to sit in judgment over the works of infinite power and wisdom, and attempting to explain them according to his own narrow notions of fitness, adaptation and design; and I am therefore exceedingly sceptical with regard to the *spiritual* edification to be derived from a perusal of the late Bridgewater Treatises, excellent as they are in other respects. It appears to me, that, in the following truly sublime passage, the immortal Kant has justly discriminated between the feelings produced by the two species of contemplation alluded to:

“There are,” says he, “two things which fill the mind with ever new and increasing admiration and awe, the longer and the more frequently we reflect upon them. The starry heavens above, and the moral law within me. Neither of these may I consider as involved in obscurity, or as placed infinitely beyond my sphere of contemplation. I see them both before me, and connect them immediately with the consciousness of my existence. The first commences at the place I occupy in the external world of sense, and extends into the immeasurably great the connexion in which I stand towards worlds upon worlds, and systems upon systems, with their boundless periodical motions, their commencement and duration. The second commences with my invisible self, my personality, and represents itself as in a world of real infinitude, although comprehensible only by the understanding, and with which (as, at the same time, with all visible worlds), I find myself placed, not, as in the former case, in merely accidental, but in an universal and necessary connexion. The first aspect of an innumerable multitude of

not hesitate to avow my sincere and honest conviction, that the results to which this discovery has conducted us, are destined, sooner or later, to operate a most essential change upon the aspect and constitution of several of those sciences which have obviously been founded upon too narrow an induction, and which yet pretend to exclusiveness, although their professors are compelled to have recourse to empty speculation, in order to sup-

worlds annihilates, as it were, my importance, as an animal being, which must again restore to the planet it inhabits—a mere point in the universe—the matter out of which it was originally created, after it had been, for a short time, we know not how, endowed with vital energy. The second, on the other hand, infinitely exalts my value, by reason of my personality, in which the moral law reveals to me a life independent of the mere animal existence, and even of the whole sensible world, at least so far as we can judge from the appropriate destination of our being through this law, seeing that it is not restricted to the conditions and limits of this life, but reaches into eternity.”—*Crit. der Pract. Vern.*

The contemplation of the external universe is calculated to make the deepest impression upon the rude mind of the savage; that of the moral world, upon the more refined intellect of the civilized man.

I have already mentioned the case of Dr Georget; and I am informed that the study of the phenomena of Animal Magnetism has lately done wonders in France, by weaning many from the deadly errors of materialism and infidelity, and giving birth to a sound spiritual and religious faith.

Notwithstanding some recent phrenological manifestations, I trust that our Scottish clergy are not yet indissolubly attached to the principles of materialism, and prepared, like Priestley, to attempt to reconcile them with religion.

ply their acknowledged want of a solid basis of facts.*

If, unfortunately, I have been unsuccessful in my endeavours to impress upon the minds of my readers a complete conviction of the reality and

* "That which distinguishes this from all previous discoveries, is, that not only have the physical sciences become enriched by a fact until then unknown or misunderstood, but that metaphysics will inevitably derive from it lights favourable to the development and future progress of that science. This first cause, this eternal principle of things, this spirit which vivifies matter—the freedom of man, the incorporeal nature of thought, its immaterial origin, and the immeasurable sphere of its action—all these great questions, which metaphysics hitherto could only resolve by the help of speculation, seem now to be analytically and experimentally demonstrated by the magnetism of the will."—*Bibliothèque du Magnétisme Animal*, tom. ii. pp. 145, 146.

The following are some of the important inferences which Dr Jung-Stelling justly deduces from the phenomena of Animal Magnetism. My readers may compare them with the facts adduced in this work.

"In our present natural state, we cannot attain to any knowledge of created things, in any other way, than through the medium of our five organs of sense.

"If any change be made in our organs of sense, or their internal arrangement be altered, our ideas of things, and, with them, our knowledge becomes different; for instance, if our eye were otherwise formed, all colours, forms, figures, dimensions and distances would also be different, and the same is the case with all the five senses.

"Beings that are differently organized from ourselves, form an entirely different idea of our world, from what we do. Hence it follows, incontestibly, that the ideas we form of the creation, and all the science and knowledge resulting from them, depend upon our organization.

importance of the phenomena of Animal Magnetism—a circumstance which I should be disposed

“ God views every thing as it is in itself, and in reality, out of time and space,” &c.—“ No space exists out of us in Nature, but our ideas of it arise solely from our organization.”—“ Time is also a mode of thinking peculiar to finite capacities, and not any thing true or real.”

“ Animal Magnetism undeniably proves that we have an inward man, a soul,” &c.

“ Light, electric, magnetic, galvanic matter, and ether, appear to be all one and the same body, under different modifications. This light, or ether, is the element which connects soul and body and the spiritual and material world together.

“ When the inward man, the human soul, forsakes the inward sphere, where the senses operate, and merely continues the vital functions, the body falls into an entranced state, or a profound sleep, during which the soul acts much more freely and powerfully, all its faculties being elevated.

“ The more the soul is divested of the body, the more extensive, free and powerful is its inward sphere of operation. It has, therefore, no need whatever of the body, in order to live and exist: the latter is rather an hinderance to it,” &c.

“ The foregoing inferences are drawn from experiments in Animal Magnetism. These most important experiments undeniably shew, that the soul does not necessarily require the organs of sense in order to be able to see, hear, smell, taste, and feel, in a much more perfect state.”—“ The soul in this state has no perception whatever of the visible world; but if it be brought into reciprocal connexion (*rapport*) with some one who is in his natural state, and acts through the medium of his corporeal senses.....it becomes conscious of the visible world through him, and in him is sensible of it.”

“ Space is merely the operation of the material organs of sense; out of them it has no existence; therefore, as soon as the soul forsakes the latter, all proximity and distance cease. Hence, if it stand in *rapport* with a person who is many thousand miles distant from it, it can impart knowledge, by an in-

to ascribe to the inability or unskilfulness of the advocate, rather than to the weakness of the cause—I trust that I have, at least, been enabled to dispel many unjust prejudices which they had been previously induced, by ignorant or interested persons, to entertain in regard to its facts and its doctrines, and to stimulate their curiosity to become better acquainted with this highly interesting subject of investigation. Even in this view, I should not conceive my time and labour to have been unprofitably spent. Although myself unable to give an effective blow to the materialism and scepticism, the sensuality and libertinism of the age, I may yet have succeeded in giving a favourable *impetus* to public discussion, and furnished arms and arguments which may be wielded with greater force

ternal communication, and receive it from such an one, and all this as rapidly as thoughts follow each other.”—“ When the soul is separated from the body, it is wherever it thinks to be ; for as space is only its mode of thinking, but does not exist except in its idea, it is always at the place which it represents to itself, if it may be there.

“ Time being also, in fact, a mere mode of thinking, and not existing in reality, the departed soul may be susceptible of future things, &c.

“ By magnetism, nervous disorders, long continued efforts of the soul, and by other secret means, a person who has a natural predisposition for it, may, in the present life, detach his soul, in a greater or less degree, from its corporeal organization,” &c. See Dr Jung-Stilling's *Theory of Pneumatology*—a work containing many curious and important facts, and much ingenious reasoning, mixed up with some mysticism.

and effect by more powerful hands and mightier minds than my own.

With regard to the bygone fortunes of Animal Magnetism, the first report of the French Academicians in 1784 threw a degree of doubt and ridicule over the whole inquiry, which the subsequent efforts of many learned men, eager to refute, or to condemn, yet unwilling to investigate, naturally tended to augment, rather than to dispel. They would not grant the new doctrine even the privilege of a fair hearing. It has been observed by Lord Bacon, that "when a doubt is once received, men labour rather how to keep it a doubt still, and accordingly bend their wits."....."But," says his Lordship, "that use of wit and knowledge is to be allowed, which laboureth to make doubtful things certain, and not those which labour to make certain things doubtful."

More than half a century has now elapsed since the report in question was drawn up and presented to the public, and, during that period, many learned and eminent individuals have, by experimental investigation, fully demonstrated the reality of the disputed facts, and thrown much light on the principles upon which they probably depend. The truth of the doctrines of Animal Magnetism, therefore, must be determined, not by the points of view in which they presented themselves to the

French Commissioners in 1784, but according to the more matured form they have since been made to assume by the assiduous labours of subsequent inquirers. For my own part—a humble labourer in the vineyard of science—I should be happy to think that I had been, in any degree, instrumental in diffusing a knowledge of these important but neglected truths, or, at least in promoting and facilitating the investigation. I desire not a blind belief, but an impartial examination, and a rational conviction. In short, all that I now ask, or have ever asked, for Animal Magnetism, is, what I presume no person of intelligence and candour can refuse me—a *fair field, and no favour*. *Hoc unum gestit : ne ignorata damnetur.**

It may be, with truth asserted, that the merits of the controversy between the Animal Magnetists and their opponents of all descriptions, must be considered as having been long since determined in the eyes of all enlightened and rational men. On the one side, we have a vast number of curious and incontrovertible facts, abundantly attested by competent and credible witnesses, and supported by many natural analogies: On the other, we meet with nothing but ignorant ridicule, wilfully blind, perverse and invincible prejudices, or with ingenious but empty opinions, arguments and specula-

* TERTULLIAN, *Apologeticum*, c. 1.

tions, inconsistent with these facts and analogies. The contest lies entirely between fact and theory or preconception; and no rational mind can hesitate for a moment, after adequate inquiry, to determine on which side the truth is to be found. Indeed, it may happen here, as in other cases, that, in the words of Bacon, "the voice of Nature will consent, whether the voice of man do or not."

By those, indeed, who have thoroughly investigated the subject with attention, discrimination, and impartiality, the doctrine of Animal Magnetism is now considered as a real, an important, and an imperishable acquisition. There are few truths which have been ultimately evolved under more unfavourable circumstances. It has already withstood the severest trials—time, scientific opposition in an enlightened age, persecution, misrepresentation, sophistry, contempt, ridicule—even the desolating tempests of political revolution. If the victory has been at length achieved upon the Continent, we owe a debt of gratitude to those honest, those persevering and indefatigable men, who, having once been fortunate enough to seize upon the truth, held it fast for a time, until at last they were enabled to carry it triumphantly into the very camp of the scorner.*

* See the late Report of the French Royal Academy of Medicine, Appendix, No. I.

But, in order to render the ultimate triumph of truth fully available to humanity, it is necessary that philosophers and enlightened physicians should at length abandon that irrational state of opposition or indifference in which they have hitherto sought to entrench themselves—that they should restrain that supercilious scepticism with which they have long been accustomed to regard the phenomena—that they should condescend to investigate the facts carefully, rigorously, and impartially—that, when their researches have produced conviction, they should endeavour to wrest the magnetic treatment out of the hands of the unskilful empiric, take it into their own management, and exercise it for the benefit of mankind. Should medical men spurn this advice, I do not hesitate to maintain, that they wilfully neglect one of the most important duties of their profession, deprive themselves of a large sphere of usefulness, and render themselves guilty of no slight offence against the interests of society. Let them remember, as Lord Bacon has justly observed, that “the science of medicine, if it be destituted and forsaken by natural philosophy, is not much better than an empirical practice.”

To the philosopher, I would repeat the suggestion of the venerable M. Deleuze, in his admirable *Defense* of this doctrine against the attacks of M.

Virey. Animal Magnetism is a natural cause, which explains all the effects formerly attributed to magic and witchcraft, as electricity explains the thunder, as astronomy explains the appearance of comets, as a knowledge of the different laws of nature explains all those phenomena which, in times of ignorance, were ascribed to supernatural agents. The opinion that an emanation from one person, directed by his will, may act upon another individual—as an emanation from the brain acts upon the fingers—does not conduct us to the belief of the action of devils: on the contrary, it annihilates this superstition, by teaching us to see in ourselves the cause of many effects, which were formerly ascribed to strange and chimerical powers.*

To the Divine I would humbly submit, that the doctrine of Animal Magnetism does, in no degree, interfere with our belief in real *miracles*, because it does not prevent us from believing that the omnipotent Author of nature may, if and when he pleases, interrupt or suspend the ordinary laws of nature. But this doctrine does tend to prevent us from believing in false and pretended miracles, by

* In this view, Animal Magnetism might, perhaps, be not inaptly considered as the Philosophy of Superstition; its object being to investigate the natural causes of many of those phenomena which have hitherto been entirely disbelieved against positive evidence of their reality, or held to be the effects of supernatural agency.

demonstrating that the facts, which appeared miraculous before Magnetism became known, are only the effects of a faculty natural to man.* The real

* The Roman Catholics have a curious, and rather ingenious, method of accounting for the extraordinary phenomena of Animal Magnetism. When they are produced by a priest or saint of their own church, they are the work of God; when by a protestant, or a member of any other persuasion, they are the work of the devil.

I have now before me a work, entitled, *La Religion constatée universellement*, &c. by M. de la Marne, published at Paris in 1833. The author is a bigoted Roman Catholic. In the course of his work, he has occasion to investigate the subject of Animal Magnetism; and the most zealous disciple of Mesmer could not be more anxious, than he is, to establish the reality of the phenomena. But, then, he ascribes them all to the devil, or to diabolical agencies. Every Protestant writer—every writer who is not a blind devotee to the Romish church—he uniformly stigmatizes as an *ecrivain impie* or *irreligieux*; and I verily believe that if our own venerable and venerated Dr Chalmers should happen to come across the path of this zealot, even he would not escape the fiery anathema.

But this jesuitical author is not content with anathematizing Christian authors. He attacks the Bible itself, as in duty bound; and is not far from designating it as an *impious* book. The thing is scarcely credible, but it is really so. After telling us, in the text, that “there are no means more easy or more efficacious, for becoming acquainted with religion in all its plenitude, than to listen with respect to the instructions of the Church; he proceeds, in the following manner, in a note:—

“The Protestant sects”—but I must decline to translate such irreverent matter, and give it in the author's own language—*“Les sectes protestantes disent que la Bible, qu'elles appellent superstitieuse, est la parole de Dieu, est encore un meilleur moyen. Conjecture deraisonable! Car d'abord qui vous a dit que ce recueil d'écrits, rédigés tant bien que mal, était la parole de Dieu?”*

tendency of Animal Magnetism, therefore, is to give a powerful, although an indirect, support to

De qui tenez-vous cette étrange assertion ? Où sont vos preuves, vos garanties, vos raisons ? Hélas ! la superstition vous étourdit. Vous croyez puerilement sans ombre de preuve. Vous ne voyez pas même que votre crédulité attribuée à Dieu de grossières erreurs, une ignorance choquante, toutes les misères mentales des écrivains de la Judée. Et ensuite d'où savez-vous que toutes les doctrines sacrées se trouvent écrites dans la *Bible* ? Elle-même le dit-elle ? Nulle part. Jésus-Christ l'a-t-il révélé ? Jamais ; la *Bible* d'ailleurs n'était qu'à moitié faite de son temps. L'Eglise enseigne-t-elle ce point capital ? Loin de là, elle assure le contraire. Encore une fois donc, où avez-vous trouvé cette mystérieuse nouvelle ? *Sectes bibliolâtres* ! ici, vous le comprenez, il faut vous taire. Mais au moins regardez-la donc de près, cette *Bible* que vous divinisez. Remarquez-en les nombreux défauts. Considérez aussi combien elle est loin d'avoir la moindre apparence d'un recueil complet des vérités religieuses. Que sont en effet les livres qui la composent ? Des relations historiques, des discours sur quelques doctrines particulières, des allégories morales, des prédictions. et des lettres. Est-il un seul de ces écrits qui ait l'aspect d'un traité de la Religion ? En est-il un seul qui paraisse le moins du monde avoir été fait pour l'exposer toute entière ? Et l'ensemble ne repousse-t-il pas avec force cette vaine conjecture ?

After this, the reader will scarcely be surprised to find this worthy disciple of Ignatius, Loyola and Peter Dens exalting the Fathers of the Church above the Bible and its faithful expositors, and devoting the impious protestant *bibliolâtres* to the wrath and vengeance of God.

“ Mais viendra le jour des vengeances. Alors malheur à l'ingratitude ; malheur, malheur, à l'impiété ! Car l'Eternel compte les crimes des hommes, le glaive de sa justice est étendu sur leurs têtes, le feu des chatiments brûle déjà, nul coupable n'échappera. *Il l'a dit, le suprême Arbitre des existences ; et ses paroles ne passent point.* ”—See tom. ii. pp. 451, &c.

(This, by-the-by, is rather inconsistent. Where are these

true religion, by overthrowing one prevalent species of superstition : For, as St Cyprian has said, *superstitionibus falsis religio vera subvertitur*.

To the philosopher, the physician, and the divine, I would strongly recommend the study of the proofs, afforded by Animal Magnetism, of the immateriality, independence, and immortality of the human soul.

Before I conclude, I must beg leave to be permitted to add a few words of solemn warning. In attempting to produce the magnetic phenomena, I would earnestly caution individuals against all experiments of mere curiosity. Whatever ludicrous ideas many persons may have been hitherto in the habit of associating with this subject, I can seriously assure them that experience has proved Magnetism to be no trifling matter. Even the opponents of the system acknowledge, whilst its advocates admit, that the injudicious practice of it may

words of God to be found if not in the Bible ? But the author, as we have seen, does not admit that the Bible is the Word of God.)

The theology of this writer can impose upon no person of sense and education. The reason of his hostility to Animal Magnetism is also clear. The discoveries of the professors of that doctrine have revealed the secret of the pretended Roman Catholic miracles ; they have unveiled and exposed their diabolical exorcisms ; and thus threaten to deprive the priesthood of that church of one of the main pillars of their establishment, - of one of the most lucrative branches of their trade.

be attended with dangerous consequences. We must not recklessly attempt to handle the thunder-bolt, or to play with the lightning of heaven, lest we be consumed to ashes. Like every higher gift conferred upon us by the Creator, the magnetic faculty ought to be exerted with judgment, prudence, and discretion, and only for benevolent purposes. "We do not know," says the great Dr Hufeland (in his *Journal der Heilkunde*)—"we do not know either the essence or the limits of this astonishing power; but every thing proves that it penetrates the depths of the organism, and the internal life of the nervous system; that it may even affect the mind itself, and disturb its ordinary relations. Whoever, then, undertakes to govern and direct this mysterious power, attempts a very bold task. Let him consider well that he is probably penetrating, as far as is possible, into the most elevated laws of nature. Never let him enter this sanctuary without reverential fear, and without the most profound respect for the principle which he endeavours to set in operation. Above all, let him beware of magnetizing in sport. In medicine, the most indifferent remedy is injurious to persons in health; still more so an agent which is perhaps the most active and energetic of all remedies."

For these reasons, while the unquestionable phenomena of Animal Magnetism suggest to the phi-

philosopher the most interesting topics of scientific investigation, it has always been the wish of every intelligent Magnetist, that the remedial practice of the art should be consigned entirely into the hands of the professional physician. Upon the Continent, this object seems to have been already nearly accomplished. In this country, on the contrary, the profession, in general, appear to look upon the whole subject with the most profound apathetic indifference, out of which, it is probable, they will only be eventually aroused, in self defence, by the superior intelligence of the public.

In this work, I have merely touched upon some of the more important consequences which are likely to result from the magnetic discovery. There are many other subordinate topics, connected with the subject, which may probably suggest themselves to the mind of the philosophical inquirer; and these may afford matter for farther discussion, upon some future occasion.

APPENDIX.

1. The first part of the document is a list of names and titles.

No. I.

REPORT

ON THE

MAGNETIC EXPERIMENTS,

MADE BY A COMMITTEE OF THE ROYAL ACADEMY OF
MEDICINE, AT PARIS.

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 recognise 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 inquiry, M. Foissac. We do not hesitate to declare, that it is to his constant and persevering intervention, and to the active zeal of M. Dupotet, 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 pursued, 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 phenomenon 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 observations 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 magnetizers 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 piercing 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 magnetizers allege to be indispensable to the development 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 magnetizers. 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 development of phenomena so delicate, the attention of the magnetizer 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 magnetizer, 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 magnetizer, 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 magnetizer 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 magnetizers 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 recognised 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 magnetized, 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 development 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 magnetized 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 magnetized 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 magnetizer 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 magnetized 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 num-

ber 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 vaporization of ether, even when no manipulations were practised before him, and, finally, a decided disposition to sleep.

Anne Bourdin, aged twenty-five years, residing in the street Du Paon, No. 15, was magnetized 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 magnetized 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 magnetizer, — 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 magnetized 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 recognise the influence of the imagination; an influence by the force of which these individuals, believing that they were magnetized, experienced the same effects as if they really had been so. We shall adduce, in particular, the following observations.

Mademoiselle Lemaitre, twenty-five 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 magnetized 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, that after having been magnetized 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 magnetizer, 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 Balloir*, 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 contortion 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 magnetized 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 magnetizer merely directed his fingers opposite the middle part of her back; consequently, the back of the chair was interposed between the magnetizer 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 development 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 magnetizer. 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 magnetizer, 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, consequently, 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 ge-

neral 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 magnetizers assure us, that, in general, he only hears those persons who have been placed in magnetic connexion (*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 magnetic connexion (*en rapport*). During the whole duration of this singular state, he is, say they, subjected to the influence of his magnetizer, 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.

* "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 magnetizer, 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 magnetizer appears to be the depositary."

Upon a subject which might so easily be 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 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 development 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 bottleful 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 three or 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 basin thrown against the floor, and at the noise of a bag of crowns which was emptied from above into the same basin.

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 magnetizers. Our business here is with somnambulism, and it is this phenomenon which we endeavoured to observe in Mademoiselle Martineau. 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-in-

terrogated 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 Honoré*, No. 37, wrote to inform the Committee, on the 8th of July 1826, that he had at his disposal a somnambulist, Mademoiselle Conturier, 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 magnetizer, 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 magnetizer 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 magnetizer fell. She raised her hand, which remained immoveable, and

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 own 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 recognise.

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 teniam productionem brachio ejectionem 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 shewing 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 se-

veral 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 223), 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 magnetizer 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 magnetizer, directed towards the left wrist of the patient, impressed upon it a complete convulsive motion; and the magnetizer 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, indi-

cated that the magnetizer 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 magnetizer 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 211), 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, in-

dependently 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 magnetizer. 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 in-

ferior 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. Thillaye 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 experi-

ments 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 under 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 magnetizers 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

magnetized at the *Hotel-Dieu*. MM. Bricheteau 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 Cloquet. 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 sixty-four years, residing in the street of St Denis, No. 151, who consulted M. Cloquet, 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 magnetized 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. Cloquet 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 magnetized 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. Cloquet arriving at half-past ten in the morning, found the patient dressed 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 undressed 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 arm-pit

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 converse 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 magnetizer 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 incontestable evidence of that state of torpor and insensibility which is produced by Magnetism.*

* 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 distin-

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 magnetizer informed us that his somnambulist would recognise, 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 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 magnetized; 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;

guished persons, by Dr Lar..., and is reported in the Journal of Toulouse.—*Note by the Translator.*

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 recognise 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 with-

out 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 connaître les hommes.* The last words were printed in very small characters. A passport was placed under his eyes; he recognised it, and called it a *passé-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 recognise 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 shewn 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 exceedingly 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.

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 asleep, 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 attempts 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 *proces-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 lucidity (*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 these 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 endurance 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 a 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 *Hopital 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 ninth sitting that his sleep became profound; and at the tenth, 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 Baréges. Upon the 25th of September, your Committee repaired to the *Hopital 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 Baréges; 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 Baréges, 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 *Hopital 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 paralysed 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 *Hôpital 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 *Hopital 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 *Rue 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 paralysed 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 (*échelle 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 quit-
ted at the door, descended 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 paralysed 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 1st 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 Rue Mondovi, and went in search of M. Fouquier at the *Hopital de la Charité*, where he arrived at nine o'clock. He recognised 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 desi-

rous 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 canthary, 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. Laucase, 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 alternate-

ly 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 recognised 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 où 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

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

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

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, Rue 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 amies, 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 recognised, 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 Casot, 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 *Hopital 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, Casot being in a state of somnambulism, M. Fouquier suddenly thrust a pin of an inch in length between the fore-finger 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 *Hopital 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 ammoniac: his face coloured, his respiration increased, but he did not awake. M. Fouquier thrust into his fore-arm 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 fore-arm, 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 at-

task? 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 lock. 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. Fou-

quier, 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 questions 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 *Hopital 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 (*lâcheté*) 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 Casot. 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 antechamber, which was separated from the parlour by two closed doors, and at a distance of twelve feet, began to magnetise him. Three minutes after, Casot said : “ I believe M. Foissac is there, for I feel myself stupefied (*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 Casot resided, and followed his employment. We learnt from this M. Georges, that Casot 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 Casot, 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 *Hopital 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, Gueneau, 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 eyelids, which allowed him to look upon the bystanders with an air of astonishment, and he told us that he was lamed (*courbature*), 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 communications 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 communication 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 *Hopital des Enfants* for his epileptic

attacks, asked him if he recognised 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 examin-

ing 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 characterise a fit of epilepsy, and in all respects similar to those which we have 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 characterised 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 insane, 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 choroïdes*, 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 *Hopital 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 recognise the approach of a fit by certain precursory symptoms, such as head-ach, 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 Arétæus 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, inasmuch 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 connexion, 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 recognised 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 *Rue 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 scrutinising 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 proper.* 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

* 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.

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——, 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 connexion 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 ascer-

tained, 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 connexion. 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 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 development 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 are called *Passes*, are the means employed to place ourselves in magnetic connexion, or, in other words, to transmit the magnetic influence to the patient.—(Pp. 203, 204.)

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. 260, &c., 263, 266.)

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. 205.)

6. Neither does it act upon all sick persons.—
(P. 206.)

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. 209), and some other nervous phenomena, which can be explained without the intervention of a particular agent (p. 210),—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. 212), 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. 212–215.)

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. 216–218, 249, &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. 209), fugitive fibrillary convulsive motions, resembling electric shocks

(pp. 217–231), a numbness in a greater or less degree (p. 216), heaviness, somnolency (*ibid.*), and in a small number of cases, that which the magnetizers call somnambulism.

10. The existence of an uniform character, to enable us to recognise, in every case, the reality of the state of somnambulism, has not been established.—(Pp. 228, 232–233.)

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. 241–246, 255–258); *intuition* (p. 249); internal *prevision* (pp. 251, 259, 260); or when it produces great changes in the physical economy, such as insensibility (pp. 222, 223, 235–239, 251); a sudden and considerable increase of strength (pp. 253, 260); and when these effects cannot be referred to any other cause.—(Pp. 235, 236, 237, 238.)

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. 225, 226, 227.)

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. 249.)

14. We hold it as demonstrated that it has been produced in circumstances, in which the persons magnetised could not see or were ignorant of the means employed to occasion it.—(Pp. 216, 263.)

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. 260.) 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. 262–264.)

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 con-

versation, hear only the voice of their magnetizer ; 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 connexion ; 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 briskly near them, the fall of a piece of furniture, &c.—(P. 236.)

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.—(P. 242.)

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. 222.) 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. 261.) 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. 237–238.)

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. 263.)

18. The action at a distance does not appear capable 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.—(P. 249.)

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 pa-

tients 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. 246.) 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. 252, 253, 255, 260.)

24. We have seen two somnambulists who distinguished, with their eyes closed, the objects which were placed before them (p. 243); they mentioned the co-

lour and the value of cards, without touching them (p. 256); they read words traced with the hand (pp. 256-257), 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, the minute of the access, and of the return of epileptic fits.—(Pp. 260-261, 267.) The other announced the period of his cure.—(P. 254.) Their previsions were realized 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 connexion. We had, however, made experiments upon a considerable number.—(P. 276, &c.)

27. In order to establish, with any degree of exactness, the connexion 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. 217); 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. 248; &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 magnetizers had announced as existing 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 Magne-

tism, 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 with 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, HUSSON,
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.

No. II.

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 CA-
TALEPSY AND SOMNAMBULISM.

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

Νοῦς ἰσχύει καὶ νοῦς ἀκούει πολλά καὶ τυφλὰ.

Epicharmi.

Cernit animus, animus audit ; reliqua surda et cæca sunt.

Grotii.

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 regula-

tions, 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 these 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 supported—to reflect attentively upon their connexion 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 experiments 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

* "Quicquid oritur, quaecunque 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 nullam reperies, illud tamen exploratum habeto, nihil fieri potuisse sine causa, eumque terrorem, quem tibi rei novitas attulerit, ratione naturæ depellito."—CICERO, *De Divinatione*.

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.*

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.†

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

† I am doubtful whether I ought to include under this description, that species of ecstatic delirium produced by the respiration of the ni-

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

trous 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 connexion 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 theorized; 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 recollect 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. London, 1800.

gastric 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

* *Vide* Memoire sur la decouverte des phenomenes que presentent la catalepie et le somaambulisme, &c. Par M. Petetin, &c. 1787.

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 somnambule 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 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, unsuspicious and incontrovertible evidences of credible individuals, well qualified, in every respect, for conducting the investigation. Fortunately, in the present case, we have not only the advan-

* *Vide* M. Corvisart's *Journal de Medecine*, vol. 18th, for October 1809.

tage 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 development 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.*

* 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

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 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."

white or a black ox?" The oracle returned the note unopened, with the answer, "black."—PLUTARCH, *On the Cessation of Oracles*.

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 his death, and contain a variety of other singular facts, which he still continued to explain upon his favourite hypotheses of *animal electricity*, although he found rea-

* 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 prouvée par la découverte des phénomènes physiques et moraux de la catalepsie hystérique, et de ses variétés, &c.* par M. Petetin, &c. 1808.

son 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, Dolomieu, 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, minuted, 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 shewn 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 guerison d'un jeune personne par le magnetisme animal produit par la Nature elle-meme. Par un temoin oculaire.

† Du magnetisme animal en France, par M. Bertrand. Paris, 1826.

"L'exorciste Surin, parlant des religieuses de Loudun, dit qu'il peut jurer devant Dieu et sur son eglise, que plus de deux cents fois elles lui ont decouvert des choses tres secretes cachees en sa pensee ou en sa personne. Ainsi dans l'affaire de Marie Bucaille, cette meme faculte 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 était 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 pendent une autre extase, ayant mis un autre billet entré 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 *Præcos 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. Some time 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 be-

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

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

came delirious, and afterwards exhibited some cataleptic symptoms. The patient, worn to a skeleton, 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 with 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 repeat-

edly 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 desired 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.*

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

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 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 strict-

est 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 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, p. 458, *et seq.*

† 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

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 mid-

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, became 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 experienced minds. But if we multiply our observations of this kind,—if we scrupulously verify the most minute circumstance of each case, we shall be forced to recognise 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. 436, &c.

dle 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.

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 penknife 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, every thing 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 controversy 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 cha-

* 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.

racter, and likely to have taken due precautions 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 recognise 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 inquire, 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 recognised the hour upon a watch, which was pressed close to the pit of his stomach. This species of perception 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 somnam-

* *Traitement Magnet. de la Dem. N.*, vol. i.

† *Material. für die Anthropol.*, vol. ii.

bulist, 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 recognised 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 respects; 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

* Tardy, *ut supra*.

† Gmelin, *ut supra*.

‡ See the *Biblioth. du Magnet. Animal*, vol. iii. p. 126.

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 medicine 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 recognise

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 recognised 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 recognised 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. This 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 professor, finding that the disease would not yield to the ordinary

* *Archiv. für den thierischen Magnetismus*, vol. iii. No. 2.

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 demon-

stration of this nature, too, *ce n'est que le premier pas qui coûte* ;—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, Heineken, 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 Medicine, 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 perused 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. M. 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.

“ M. 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 recognised 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 recognise 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 shewn 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 recognised 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, Rue 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 amies, 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 *reviver*. Finally, he recognised, 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 these 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 unsuccessful 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 Georget also affirmed, that he had observed a somnambulist who presented the most astonishing phenomena of prevision and *clairvoyance*; insomuch, he added, that in no work upon Magnetism, not even that of Petetin, had he ever met with any thing 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.*

* 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,

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 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 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. Indeed, in confirmation of this fact, I might

‘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.—*First Edition*.

I have heard nothing further of this case, and consequently, am not aware whether my recommendation has been attended to.—*Second Edition*.

refer to almost every case of the natural and of the magnetic somnambulism.

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 maintaining 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 antepondere* ; 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,

* *Biblioth. du Magnet. Animal.* vol. i.—Mémoire sur le fluide vital, par M. le Docteur Ch. Professeur.

the unprofessional inquirer, at least, might be permitted to take shelter under the principle, *Ubi experientia constat, ratio peti non debet*. At the same 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 work. 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 con-

* Barclay *On Life and Organization*, p. 370.

sider 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 impressions 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 interyention 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 satisfactorily decided in the affirmative. In the words of Epicharmus, quoted in the motto to this paper, "*The mind sees, and the mind hears; every thing else is deaf and blind.*" 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 paulatim minuant mirarier omnes.
Desine quapropter, novitate exterritus ipaa
Expuere ex animo rationem; sed magis acri
Judicio perpende: et, si tibi vera videntur,
Dede manus; aut, si falsum est, adcingere contra.

LUCRETIVS.

No. III.

ON THE COMMON CAUSE OF THE PHENOMENA OF LIGHT,
HEAT, MOTION, LIFE, ELASTICITY, SONOROUSNESS,
MAGNETISM, ELECTRICITY, GALVANISM, ELECTRO-
MAGNETISM, &c. BEING THE FOUNDATION OF A NEW
THEORY OF PHYSICS.

The great object of all philosophy is the intuition of unity in variety, and of variety in unity.

Plato.

Audendum est, et Veritas investiganda; quam etiamsi non assequamur, omnino tamen propius, quam nunc sumus, ad eam pervenimus.

Galen.

It sometimes happens that philosophers even of the most profound and penetrating genius, when on the very verge of the most important discoveries, are accidentally diverted from the straight-forward path of legitimate investigation, and unaccountably permit themselves to be seduced into some of the by-ways of conjecture and hypothesis. Of this truth we have, I think, a very striking example in the case of the illustrious Sir Isaac Newton. To many persons, no doubt, it will appear to be the very *ne plus ultra* of arrogance and presumption to attempt to impeach the accuracy of any

of the speculations or conclusions of this prince of Natural Philosophers. But he who sets out honestly in search of truth, must not allow himself to be appalled by the splendour of names and authorities, however great and imposing: The paramount interests of science demand that we should boldly endeavour to beat down all those barriers by which her progress might otherwise be impeded. Besides, it will be observed that, upon the present occasion, no attempt, equally absurd and impotent, is contemplated to deprive Sir Isaac of his just, and fair, and honourable fame; the object is not to impeach what he has done, but to point out what he has left undone—to shew that this truly great man was actually upon the very verge of one of the most brilliant and most interesting discoveries that ever rewarded the investigations of science; but that, instead of trusting to his own natural sagacity, and steadily fixing his eye upon the simplicity of nature, he suddenly stopt short, and permitted himself to be drawn aside into the unfruitful regions of doubt and conjecture.

The preceding observations apply to Newton's inquiries into the nature of Light and Heat. Admitting, in its fullest extent, the vast merit to which posterity have justly found him entitled on account of his profound and accurate investigations into the properties and the phenomena of these elements, we may, nevertheless, be permitted to express some astonishment that the same acute and penetrating genius, which dis-

covered and demonstrated the principle of gravitation and the laws of material motion, should not have made an equally successful inquiry into *their* nature and source; and that it should have been reserved for far inferior philosophical talent, in an after age, to accomplish the development of principles which appear to have been almost within his mighty grasp, and thus to perform a task which would have added no small accession of splendour to that which already encircles his illustrious name.

In a supplementary letter to the 11th chapter of the 2d part of Voltaire's *Elements of the Philosophy of Newton*, there occurs a passage relative to this subject which merits some attention, as it appears to indicate the point at which this great philosopher was induced to stop short in his inquiries, and assigns the most probable reasons for this termination of his interesting investigations. "You say," observes Voltaire, in answer to a correspondent, "you say it is to be regretted that he (Newton) did not more clearly explain himself concerning the reason which often occasions the attractive force to become repulsive, and concerning the force by which the rays of light are darted forth with such a prodigious velocity; to which I may venture to add, that it is to be regretted that he could not know the cause of these phenomena. Newton, the first of men, was nevertheless but a man; and the first springs which nature employs are not within our reach, when

they cannot be subjected to calculation. It is easy to compute the force of the muscles, but all the mathematics are insufficient to inform us why they act at the command of the will. All the knowledge we have of the planets can never inform us why they turn from west to east, rather than in the contrary direction. Newton, though he anatomised the light, has not discovered its intimate nature. He knew well that the elementary fire is endued with properties which the other elements have not.

“ It passes through an hundred and thirty millions of leagues in a quarter of an hour. It does not appear to tend towards a centre, like body ; but expands itself uniformly and equally in every direction, contrary to the other elements. Its attraction towards the body it touches, and from whose body it rebounds, has no common *ratio* with the universal gravity of matter.

“ It is not even proved that the rays of elementary fire do not penetrate each other. Newton, therefore, struck with all these singularities, seems always to doubt whether light be a body or not. For my part, if I durst risk my doubts, I must confess to you that I do not think it impossible that *the elementary fire may be a being apart, which animates nature, and possesses the intermediate step between body and some other being we are unacquainted with ;* in the same manner as certain organized plants serve as a passage or gradation between the vegetable and animal kingdoms.”

In the foregoing passage there are three things remarkable. In the first place, the idea thrown out by the author, or at least implied in his observations, that no element of nature is ascertainable, unless it is capable of being subjected to mathematical calculation—an idea which seems to have misled almost all natural philosophers since the days of Newton; secondly, the doubts which Newton himself appears to have always entertained respecting the peculiar nature of light; and, thirdly, the suggestion of the author that the elementary fire may be a substance *sui generis*, which animates nature, and possesses the intermediate step between body and some other unknown being—a suggestion which, it is hoped, will be confirmed and elucidated in the sequel of this paper.

Originally, Sir Isaac appears to have been disposed to adopt the principle of solar emanations or emissions as the primary cause of light; but he afterwards wavered in his opinion, probably in consequence of the difficulty or impossibility of subjecting these emissions to mathematical calculation, and also, perhaps, influenced by a similar objection to that which subsequently occurred to Euler, viz. that the sun must necessarily become exhausted by this continual loss of a portion of its substance. Thereafter, following the example of Huygens and some other natural philosophers, Newton, abandoning his wonted caution, ultimately advanced a

very bold physical hypothesis, from which he endeavoured to deduce the nature of light and heat, and the explanation of all the phenomena of combination or motion which appear to result from certain intangible and imponderable principles. For this purpose, he assumed the existence of a highly elastic fluid (ethereal medium or ether) imperceptible to our senses, which extends every where in space, and penetrates all bodies with different degrees of density. The disturbance or agitation of this ether, by any cause whatever, producing a vibratory motion, he thought would occasion undulations, which must transmit this vibratory motion through all the rest of the medium, in the same way that sound is transmitted through air, but much more rapidly, by reason of the greater elasticity of the fluid. Newton, however, held that light itself consists of a peculiar substance different from this ether, and that their particles were independent, but that they mutually acted and reacted upon each other ; so that this hypothetical apparatus of ether, vibrations, and undulations, was only created for the purpose of facilitating the explanation of the transmission of the substance of light, without attempting to trace the source whence the substance itself is derived. This hypothesis, indeed, is entirely gratuitous, unsatisfactory, and unnecessary ; and its illustrious author himself never appears to have placed any confidence in it.

Since the days of Newton, " two different hypotheses

have been proposed respecting the nature of heat. In the first, it is regarded as a material substance *sui generis*, which pervades all nature, and is capable of combination with other bodies." "In the other, heat is regarded not as a material substance, but as a quality of matter." A body is said to manifest heat when "its constituent molecules, or the molecules of some subtle fluid which pervades it, are put into a state of vibration." This vibratory theory seems just a modification of the hypothesis of Newton, and affords no adequate solution of the question.

Two similar theories—the corpuscular and the undulatory—have been proposed with a view to explain the phenomena of light. Both have been supported by great authorities, and the question regarding their superior merit still continues unsettled. It can be shown that they are equally gratuitous, unsatisfactory, and unfounded.

The great progress which has been made in the experimental sciences during the last half century, and the many important discoveries which have rewarded the industry and the ingenuity of their votaries, appear to have now brought the question respecting the nature and causes of light and heat much nearer to a satisfactory solution. Indeed, even previous to the period alluded to, the unity of the cause of these and other elements was strongly suspected from the analogy of their phenomena.

The celebrated German metaphysician, Kant, in one of those early treatises in which he displayed the same penetrating sagacity and subtlety of genius in the physical as he subsequently manifested in the moral sciences, has expressed himself, upon this subject, in the following terms of prophetic anticipation. "In general, the magnetic powers, Electricity and Heat, appear to be manifested through one and the same medium. They can all be produced by friction, and I suspect that the difference of polarity, and the opposition of the positive and negative influence, might, by means of suitable experiments, be as clearly observed in the phenomena of heat. The inclined plane of *Galileo*, the perpendicular of *Huygens*, the quicksilver tubes of *Torricelli*, the air-pump of *Otto Guericke*, and the glass prism of *Newton*, have given us the key to great natural secrets. The positive and negative influence of substances, especially in the case of electricity, to all appearance still conceals important scientific results; and a more fortunate posterity, whose happy days we may anticipate in prospect, will, it is hoped, recognise the general laws of those phenomena which, at present, we perceive only in an ambiguous connexion."*

* See *Versuch den Begriff der negativen Grössen in die Weltweisheit einzuführen*, originally published in 1763, and inserted in Tieftrunk's Collection of Kant's miscellaneous writings. Considering the state of the physical sciences at the period when this treatise was written,—the science of Electricity was yet in its infancy,—the phenomena of Galvanism had not yet been brought to light,—Electro-Magnet-

I believe it is now the general opinion of the most eminent natural philosophers that light and heat are, in substance, identical—that they manifest similar properties—that they are probably derived from the same source, and, in all likelihood, depend upon the same principle. Radiation, for example, is well known to be a common property of light and of heat. Dr Lardner observes that “a hot body, such as a ball of iron, raised to the temperature of 400° , placed in the middle of a chamber, will transmit heat in every direction around it. Now, this heat may easily be proved not to be transmitted merely by means of the surrounding air; for in that case the effect would be an upward current of hot air, which would ascend by reason of its comparative lightness. On the other hand, the heat which proceeds from the ball is found to be transmitted downwards, horizontally, and obliquely, and in every possible direction. It is likewise transmitted almost instantaneously, at least the time of its transmission is utterly inappreciable. A delicate thermometer, placed at any distance below the ball, will be immediately affected by it; and the proof that this is true radiation, is found in the fact that the rays may be intercepted by a screen composed

ism was unknown,—the above anticipation, so consistent with the results of subsequent investigation, appears truly wonderful, and worthy of that genius which led the same eminent philosopher, from a profound consideration of the harmonious laws of the universe, to predict the existence of the planet Herschel many years before its actual discovery.

of a material not pervious to heat. The rays may be proved to be transmitted in straight lines in exactly the same manner, and by the same reasoning, as is applied to rays of light.

“ But the radiation of heat, independently of any power of transmission which may reside in the air, is put beyond dispute by the fact, that a thermometer suspended in the receiver of an air-pump, when it is exhausted, is affected by the solar rays directed upon it.” The same philosopher afterwards remarks, that “ the calorific property which constantly accompanies the solar rays, as well as the rays proceeding from flame, would indicate that heat is a necessary concomitant or property of light.” Moreover, “ if rays of heat be received on a concave reflector, they will be reflected to a focus in exactly the same manner as rays of light; and in a word, all the phenomena explained in optics concerning the reflection of light by surfaces, whether plane or curved, are found to accompany the reflection of the non-luminous calorific rays.” Finally, this identity is farther confirmed by the experiments of Berard, and others, on the polarization of light and heat.

In his treatise upon Electricity, in the valuable collection published by the Society for the Diffusion of Useful Knowledge, Dr Roget observes, that, “ besides the well-known mechanical forces which belong to ordinary ponderable matter, the phenomena of nature exhibit to our view another class of powers, the presence

of which, although sufficiently characterised by certain effects, is not attended with any appreciable change in the weight of the bodies with which they are connected. To this class belong *heat, light, electricity, and magnetism*: each of which, respectively, produces certain changes on material bodies, either of a mechanical or a chemical nature, which it is natural to regard as the effects of motion communicated by the impulse of material agents, of so subtile and attenuated a kind, as to elude all detection when we apply to them the tests of gravity or *inertia*. If we admit heat and light to be material, analogy will lead us to ascribe the same character to electricity and to magnetism, notwithstanding their being imponderable." And in the preface and postscript to these treatises on the phenomena of electricity and magnetism, the same distinguished author farther observes, that those phenomena which were formerly regarded as the effects of two perfectly distinct agents, are now discovered to have an intimate relation to one another, and, in all probability, to be dependent on one and the same principle."

It will be observed, that Dr Roget considers it natural to regard the changes produced on material bodies by the action of heat, light, electricity, and magnetism, as the effects of communicated *motion*. Now, Sir Humphrey Davy argues, that the immediate cause of heat is *motion*; and "that the laws of its communication are precisely the same as the laws of *motion*." This opi-

nion of Sir Humphrey is entirely coincident with that to be maintained in this paper ; and if we are entitled to assume, as warranted by correct induction from experiment and observation, that light, heat, electricity, and magnetism are all dependent upon one common principle, and are, in fact, the results of communicated motion ; the question then comes to be, *Whence is motion itself derived ?* And if we are able to discover the ultimate natural cause of any one or more of these classes of phenomena, it is highly probable that the same principle will afford an adequate explanation of the whole. It is the object of this paper to demonstrate, that motion and heat are both the product of one common cause ; and that electricity and galvanism are referable to the same source, and are, in fact, produced by the agency of the former principles. This demonstration, it is hoped, will conduct us to the source of the elementary motion.*

* I have lately obtained possession of a small pamphlet, entitled, " Outlines of a Course of Lectures on Chemical Philosophy : or of a Theory which considers Attraction, Repulsion, Electricity, Caloric, Light, &c. as the diversified phenomena and effects of one Power. By Matthew Allen, Lecturer, &c." Published at London in 1819.— This small publication, I presume, is no rarity. The author considers all the phenomena of Nature to be dependent upon one sole principle or power, which he denominates the Grand Agent. He very ingeniously refers to the various phenomena of Attraction, Repulsion, Light, Heat, Electricity, Galvanism, Magnetism, &c. and shews that they are the different products of one cause, the undoubted effects of the Grand Agent of Nature, in some of its diversified combinations. But, however ingenious and sublime this synthetic view of Nature may

With regard to light and heat, it seems strange that any doubt should ever have been entertained respecting the source whence they are derived. Nature, at once, and without the necessity of any philosophical hypothesis, compels us to refer the effects of light and heat to the influence of the solar rays; and as we can ascend no higher in our search after a natural cause of these phenomena, and we know that motion is necessary to their production, we are warranted in concluding that the sun is the source of the elementary motion. Light, heat, and motion, then, being all centered in the day-star, a little reflection will probably convince us that the same influence is active in producing the analogous phenomena of electricity and magnetism. It is well known, that, when the electrical equilibrium of two bodies has been destroyed, its sudden restoration is attended with an exhibition of light, and an intense heat; and a similar effect is observed to take place in the Voltaic electricity. The reason of this phenomenon will be explained in the sequel.

The influence of the sun, as an important secondary cause or agent in the economy of the universe, has been more than suspected by many ingenious philosophical writers. Sir Charles Bell, in the Introductory Chap-

be, the author does not pretend to point out what this Grand Agent is in itself, although, in other respects, his theory seems to coincide entirely with that which I have undertaken to elucidate in this paper.

ter to his Bridgewater Treatise, observes, that " we perhaps presume too much, when we say that *light* has been created for the purpose of vision. We are hardly entitled to pass over its properties as a chemical agent ; —its influence on the gases, and, in all probability, on the atmosphere ; —its importance to vegetation, to the formation of the aromatic and volatile principles, and to fructification ; —its influence on the animal surface, by invigorating the circulation, and imparting health," &c.....

" It seems more rational to consider light as second only to attraction, in respect to its importance in Nature, and as a link connecting systems of infinite remoteness."

The theory which maintains the identity of the cause of the phenomena of light, heat, motion, electricity, magnetism, &c. and refers the whole to a single and simple principle—the ever-active influence of the rays of the sun — is, at once, so natural and satisfactory, and so fertile in its explanations of Nature, that it appears almost wonderful how it should so long have escaped the perspicacity of philosophical inquiry. The well-known German philosopher Oken propounded a theory, in which he deduced the phenomenon of light from the action and re-action of the solar and planetary systems upon each other. According to this hypothesis, the sun alone is incapable of producing light, which is only generated by the conflict between the sun and the pla-

nets. Light, therefore, is produced by the activity of the sun, modified by the re-action of the planets. This theory, originally, I believe, suggested by Oken, has been systematically expounded and applied to the explanation of other phenomena, by another ingenious philosopher, Dr Runge, in an essay entitled, “*Die Genesis des menschlichen Magnetismus*, in Professor Kieser’s *Archiv für den thierischen Magnetismus*, vols. 8. and 10.

A similar theory has been lately brought forward by a very intelligent French author, in an *Essai de Psychologie physiologique*, and he has explained and illustrated it with a copiousness, a clearness, and a cogency well calculated to rivet the attention, at least, if not to ensure a general conviction of its truth. I shall therefore take the liberty of entering at some length into the demonstration of this theory, as given by M. Char-del.

Hitherto, according to this author, philosophers have generally proceeded to the investigation of Nature by the methods of analysis and decomposition — they have attempted to advance from the compound to the simple — they have carefully examined effects, and, after immense labour, have declared that first principles are undiscoverable, and that we ought to abandon the search after causes. They observed the elasticity of solids and fluids, the formation of undulations, the phenomena of sound, and its mode of propagation, and arrived at last at the examination of those of light, which, guided by

a supposed analogy, they attributed to the elasticity of a fluid diffused throughout space, thus terminating their inquiries by the assumption of a gratuitous hypothesis.

A question, however, may still arise, whether this elasticity, which plays so great a part in physics, be really a cause, or merely an effect. By investigating Nature according to a method more analogous to that which she follows in her operations, might we not be led to recognise the properties of the solar rays as producing, in the formation of compounds, the sonorous quality of the gases, the elasticity of fluids, and that of solids? This method is simple, easy to follow, and conducts us to none of those brilliant hypotheses, the very errors of which shed a lustre on the genius of their authors. By pursuing it, we shall find it unnecessary to invent any subsidiary hypotheses. We have only to observe Nature, and endeavour to ascertain the distinctive properties of her elements. A single principle being once demonstrated, all the consequences immediately flow from it in an easy and natural order.

The cause of motion and of life appears to be the same with that of light, heat, and elasticity. The system we are about to expound, recognises two physical elements—the *terrestrial* and the *solar*—matter and motion. Matter is that which constitutes the consistence of bodies. The rays of the sun unite with

matter, and are the sole and ever-active principle of motion. It is they which constitute the life of beings ; for life is the cause of organic motion in vegetables and animals. It will be easily perceived how fruitful this discovery must prove in its application to the sciences. Hitherto, the science of Physics has been unable to find the element of motion, and abandons the research. Physiology is ignorant of what life is, and yet pretends to explain its phenomena ; and Psychology, not knowing in what manner the spiritual faculties are united to the organization, is compelled to investigate the operations of the intellect, as if they were performed independently of the body ; whereas, they are only manifested through the intermediate agency of the corporeal organs, and Nature nowhere exhibits to us a soul acting without a body.

Several philosophers have deservedly obtained great reputation in consequence of the discoveries they have made in the domain of experimental science, and a number of most important facts have been elicited by their genius and industry. But it may be doubted how far it is advisable to restrict ourselves entirely to the investigation of effects, systematically to abandon the examination of causes, even when they obtrude themselves upon our notice, and to exhaust the genius of man in the accurate observation of the most minute insulated details, which can never lead us to a general and satisfactory theory.

All our knowledge ought to rest upon **Physics**, a science which embraces all Nature; but at present, our physical theories are merely ingenious methods, of no other utility than to facilitate the calculation of results. The science rests upon no solid foundation. It is divided into two compartments—the collecting of observations, and the explanation of phenomena.

The utility of the first compartment is unquestionable, and it has been conducted with admirable care and precision; but the second, consisting of systems produced by so much honourable labour, presents only hypotheses so unsatisfactory, that even those who make use of them in their demonstrations seem to place little confidence in them.

The system about to be unfolded, besides its simplicity, has the additional advantage of explaining every thing upon a single principle, and of affording a foundation for the sciences of **Physics**, **Physiology**, and **Psychology**.

When for ages men of genius have exhausted themselves in fruitless efforts to ascertain the principles of things, it is probable, either that success was impossible, or that they had followed a wrong path. It is necessary, therefore, either to abandon all research, or to re-commence our investigations in another method.*

* This is quite in accordance with the opinion of Lord Bacon :

“ *Insanum quiddam esset, et in se contrarium, existimare, ea, quæ adhuc nunquam facta sunt, fieri posse, nisi per modos adhuc nunquam tentatos.*”—*Nov. Organ.* i. 6. Again : “ *Frustra magnum expecta-*

The latter is generally viewed by philosophers with displeasure and disgust; for it is painful, after a career of imagined glory, to be forced back to the point from which we set out.

The study of Nature commenced with the examination of bodies, because they were easily apprehended; and first were observed their consistence, their weight, and their form. These bodies, however, are composed of different materials, and it was soon perceived that several of them had a common basis: it was thought possible, by decomposing them, to arrive at first principles. Nature forms aggregations, by means of elementary substances, and attempts were made by philosophers to discover these elements, by undoing her work. She begins at the beginning—they began at the end, proceeding from the compound to the simple.

Such was the direction given to the first labours of philosophers: their object was to discover the secret of Nature in the decomposition of bodies. This method, which has been constantly followed since, has led to the verification of a great number of effects in Physics; but it has rendered the discovery of causes almost impossible, and given occasion to the substitution of hypotheses necessarily chimerical. To convince us

tur augmentum in scientiis ex superinductione et insitione novorum super vetera; sed instauratio facienda est ab imis fundamentis, nisi libeat perpetuo circumvolvi in orbem, cum exili et quasi contemnendo progressu."—*Ibid.* 31.

of this, it will be sufficient to give a brief outline of the progress of science.

The first Natural Philosophers called *matter* the substance upon which nature impresses all forms ; they supposed that it was homogeneous, and designated by the same word the paste or mould common to the generality of things. They gave no name to the moving principle, although it is still more universal, because it was intangible, and their investigations were limited to that which fell under their hands. Experience demonstrated that bodies resist impulse in a ratio corresponding to their mass ; and from thence were deduced the *inertia* of matter, and the calculation of the laws of motion. These ideas of *inertia* and motion, then led the physical philosophers, who had decided that all was inert matter, to recognise in nature a principle of attraction and a principle of repulsion. At a subsequent period, they attempted to explain motion and rest by declaring that they were modes of being in bodies—as if these modes of being had not a cause. These contradictions were the consequence of that confusion of language which, under the name of matter, designated the union of two different elements, one of which remained unperceived. We owe the idea of rest to that substance which constitutes the consistence of things ; and if this material element is essentially immoveable, it is evident that some other principle must agitate nature, because every part of it is in motion.

Moreover, rest is the negation of motion, as darkness is the privation of light; and we may consider it as demonstrated that matter is essentially immoveable, since the difficulty of setting it in motion increases in the ratio of its mass. Originally, tangible substance was considered as the sole element in nature, and this was called matter. The word acquired a more extended signification in the progress of discovery, and, at present, it designates the unknown cause of all known effects. In order to give more precision and exactness to the expression, it is necessary to bring it back to its original meaning, and to give the name of matter only to that substance which constitutes the consistence of bodies.

Heat produces a particular sensation, and it was thought to have a special principle. Experience subsequently established the fact that caloric was the cause of the elasticity of fluids; but the same thing could not be said of the elasticity of solids, the vibrations of which were confounded with the sonorous quality, which, to speak properly, belongs only to the gaseous combinations.

The motion of liquid undulations served to explain the propagation of sound and of light. It was at first supposed that undulations were formed in the air, and there propagated sounds; but when arrived at light, it was found necessary to create a substance adapted to invest the undulating forms; for, in this respect, nature

presented nothing. It was imagined, therefore, that an imperceptible ether was diffused throughout space, which transmitted to us the vibrations supposed to exist in luminous bodies.

Such was the progress of science, advancing from the compound to the simple.

The human mind, in general, only makes new acquisitions in order to connect them with the old. Science, in undoing the works of nature, had at first only met with compound properties, and when arrived at the simplicity of light, it was attempted to explain the phenomena according to the analogies previously observed, that is to say, the unknown element which now presented itself was examined along with the known properties it had exhibited in combining with bodies.

This absurdity in Physics is one of the consequences of the method of investigation adopted. When from the compound we advance to the simple, the compound properties are necessarily investigated first; they become the basis of our subsequent knowledge, and when the elements afterwards present themselves, our systems are already completed, and, with their aid, we attempt to explain the inexplicable simplicity of first principles.

Philosophers, in advancing from elasticity to sonorousness, and from the latter to light, arrived, at length, at an elementary substance; and as elements cannot be explained, the explanation they attempted must neces-

sarily have been chimerical. I shall prove that it is so in reality, and that all elasticity is produced by the combinations of the solar rays with matter. I shall begin by examining what confidence is due to that ether, with which the natural philosophers attempt to account for the phenomena of light.

When an hypothesis takes place of an element of nature, it ought to be everywhere recognised. Thus the undulations of the ethereal fluid had this fate; to them were attributed the production of light, of colours, of heat, and of the chemical combinations. Their substance was declared to be homogeneous; but in order to produce so many different effects, they were supposed to be of various extent, and philosophers even went so far as to calculate the size of every undulation, yellow, green, or blue.

It would appear that, in creating the hypothesis of an ethereal fluid, the origin of the properties ascribed to it had been forgotten. In point of fact, we know that caloric is the productive cause of all fluidity; and it has been demonstrated to be the cause of the elasticity of fluids. If, then, the undulations of the ethereal fluid were the source of heat, we might ask—whence does this ether itself derive its fluidity and its elasticity. This question could only be answered by supposing it to possess an inherent fluidity and elasticity, which would be to make it an element; but, in that case, why create an ether, without any evidence of its existence,

when it were more natural and more simple to recognise immediately the same properties in the rays of the sun? Science would undoubtedly have adopted this idea, if it had not already investigated the elasticity of compounds, their fluidity and their undulations; the object was to connect the phenomena of light with those previously observed, and, thenceforward, there was imagined in space a peculiar elasticity, which may be supposed to exist in vibration.

Such is the origin of the ethereal fluid, and the question to be solved might be reduced to this, Is it the light which produces the elasticity, or the elasticity which produces the light?*

The answer would not long continue doubtful for him who should consult only his instinct, and nobody would ever have thought of creating an ether and undulations in place of the solar rays, if an erroneous direction had not been previously given to the study of nature.

The method of reversing the order of formation, by ascending from compounds to their elements, has led to materialism; for as soon as the human intellect had first laid hold of the *tangibility* of bodies, it was forced to make this the resting point of all certainty, and the basis of all future knowledge. If, on the con-

* The elasticity of bodies is a compound property which does not manifest itself spontaneously; an action is necessary to set it in play: therefore, in order to complete the explanation of light by means of an ether, it was necessary to create vibrations in luminous bodies.

trary, philosophers had commenced by ascertaining the properties of light, they would have become convinced that nature contains two principles, and they would then have investigated their different combinations.*

This method was simple, and in all probability it would have been followed had it presented itself first; but now it is opposed to that which has been adopted; and the prejudices over which reason triumphs with most difficulty, are always those of science; they have exerted the most troublesome influence in all departments. Physics owe to them their ignorance of first motions; Physiology, that of the vital principle; and Metaphysics, the impossibility of explaining the connexion between the will and the acts of the organism.

Moreover, the elasticity of the ethereal fluid was not sufficient for the explanations of the physical philosophers, and in order to set it in play, they imagined the vibrations of luminous bodies. Thus, there was a second hypothesis brought forward in support of the first. A third would have been required in order to explain the formation of the vibratory apparatus, and then a fourth, to inform us how they begin to vibrate in combustion; but philosophers had the prudence to stop. It is no less certain that the continuation of these explanations led to the necessity of creating first principles,

* The element of tangibility is also that of immobility, for that which constitutes the consistency of bodies also constitutes their repose; so that we may consider the universe as containing two general principles—that of rest, and that of motion.

which, without the aid of so many hypotheses, might have been recognised, at once, in the solar rays.

In truth, when we ask natural philosophers the cause of the solar vibrations, they abandon their suppositions, and answer that principles are not capable of explanation. But here there is no question about a principle, for the vibrations are accidents which science ought to account for.

We can conceive, that if light be an element of nature, it should escape from bodies which are destroyed by combustion ; but we cannot so easily conceive how philosophers have admitted into every combustible molecule an invisible vibratory apparatus formed in imitation of that which they suppose to exist in the sun.* Besides, the rays of the day-star change their direction, and become inflected in order to reach us. Light, then, is a substance ; for attraction would not exert any particular influence on the undulations of a fluid, which, in rest as in motion, always equally occupied space.

The rapidity of the vibratory propagations depends upon the power of aggregation in the bodies which receive them.† We know, for example, that they ad-

* We might add, that the combustion of bodies would destroy the vibratory apparatus by setting it in motion, while in the sun it would be indestructible and in perpetual activity.

† The mode of aggregation in the gases should be more intense than that in the ether, if we judge from the resistance which they present : how comes it, then, that the propagation of sound in the air is so slow when we compare it with that of light, which is attributed to the undulations of the ethereal fluid ?

vance more rapidly in certain solids than sounds in the air;* and we ask how it happens that they should be so rapid in an ether, of which the parts have no cohesion among themselves.

The necessity of explaining the diversity of colours has alone led to the supposition of the inequality of the luminous undulations, for the rings of the liquid undulations have always the same thickness; but this inequality should be destroyed in their rencounter, and produce new undulations necessarily uniform. Nevertheless, the experiment of the prism recalls all the colours, and makes them reappear.

Shall we suppose that the luminous undulations meet and mingle, and that each preserves its peculiar form? This is conceivable, if light be the elementary motion; for it may be composed of motions of several natures; but this phenomenon is impossible in the case of communicated motions.

Finally, the luminous rays seem to model themselves upon bodies, because they present us with their forms, **a fact which** Hl agrees with the determinate form of ethereal undulations.

These observations appear sufficient to demonstrate the non-existence of the ether and its undulations. All these hypotheses, we cannot too often repeat, owe their

* A blow has been struck upon pipes of cast-metal of the length of 900 metres, and we are assured that the vibrations are propagated more rapidly in the metal than sounds in the air.

origin to the method of decomposition, which, advancing from the compound to the simple, has given an erroneous direction to the investigation of nature.

The luminous emissions are a fact attested by our senses. Euler was the first to doubt them, because he thought they would exhaust the day-star. But Nature every where reproduces herself by recommencing the circle ; and it is probable that light is conducted back to its source by an unknown route,* as the rains restore to the ocean the waters it has lost by evaporation.

The direct testimony of the senses has lost its authority, and philosophers go in search of truth by more indirect methods, ever since Galileo discovered that they had deceived us in respect to the immobility of the

* The earth receives the greater number of solar rays—the elementary motion—between the tropics, and, after having made use of them, parts with them at the poles. This, perhaps, is the cause of the *aurora borealis*, and of the accumulation of electricity which is observed in these regions. This may also be the cause of the motion of the globe on its axis, for all the motions of the earth are produced by the rays of the sun. The impulse which they occasion gives it, and the internal agitation they produce may explain its diurnal rotation, and its annual revolution.

Attraction manifests in bodies an active power which matter, essentially inert, could not communicate to them. Attraction is perhaps produced by the elective affinity which is observed between motion and matter. This affinity acquires a material action in bodies ; consequently, it tends to re-unite them, and increases in a ratio composed of their mass and their distance. Moreover, we know that the magnet and the electric fluid attract iron and several other substances ; and magnetism, galvanism, and electricity, are only modifications of the motion of the earth, which has been already explained.

earth. In that case, however, reasoning was more to blame than they in leading us into error, by transferring to the relations of the heavenly bodies a proposition which was unquestionably true in reference to ourselves.

Science had discovered that light contains the colours. From this it was a necessary inference that it fixed itself in bodies, because they were coloured. This would have been simple as nature. On the contrary, it was supposed that the colour of bodies was only a phenomenon of reflection, of which an explanation was attempted by saying that they appeared white when they reflect equally the luminous undulations, and black when they extinguish them, and that the other colours are the result of intermediate effects. This ingenious hypothesis is by no means satisfactory, for by throwing red rays upon a yellow body, it is made to appear orange; that is to say, of its own colour compounded with that of the light thrown upon it: therefore, the colours exist simultaneously in the light and in bodies.

It is remarkable that the creation of false systems almost always requires a greater effort of ingenuity than the discovery of simple truth. By a fatality not easy to explain, men of science are generally disposed to keep at a distance from the easy route: it appears, that, in order to attract their attention, some reasoning

is necessary, sufficiently ingenious to be incomprehensible by the common sense of the unlearned. If, with less labour, philosophers had convinced themselves that the colouring of bodies depended upon the solar rays which became fixed in them, it would have followed that it was they which, in combustion, produced, in escaping, light and heat. *

This discovery led to that of elementary motions ;

* We should the more readily admit that combustion is nothing else than a disengagement of the solar rays, because this explanation presents, in the case of all artificial lights, an unity of cause and a simplicity of means entirely conformable to the march of Nature (*Ch.*) I take the liberty of adding the following passage from Dr Roget's Treatise on Electricity: " The particles of air electrified by a pointed conductor are repelled by that conductor, and repel it also ; and, moreover, repel one another : and the same effect takes place whether their electric state be of the positive or negative kind. Hence the stream of air which proceeds from any electrified point is very naturally accounted for. If the quantity of electricity which is transferred is considerable, it excites a more violent commotion among the particles which it influences in its passage. The intense energy of its repulsive action produces the most sudden and forcible expansion of that portion of the air which occupies this line ; this air, thus expanding, must be expelled laterally against the surrounding particles, and must occasion their sudden compression. *The evolution of heat and light*" —of the solar rays, according to M. Chardel—" *is the necessary consequence of this violent compression.*"

Atmospheric air, when suddenly condensed, produces such a considerable extrication of caloric, that cotton, and even heated charcoal, have been set on fire by it. Instances of this will be found in the air-gun, in compressing pumps for kindling tinder by means of violent compression from a single smart stroke of the piston, in percussion-locks for fowling-pieces, &c.

The cause of this phenomenon is easily explained upon the principles laid down by M. Chardel.—(*J. C. C.*)

for communicated motions cease as soon as they meet with adequate resistance ; while light, retained in compound bodies, preserves its intrinsic activity, and escapes from them with its original velocity.

The luminous emanations suffice for all explanations ; but they were examined after the impulsions, and the mind, pre-occupied with the calculation of material displacements, did not recognise motion in itself, because it is intangible. This was another consequence of the method of study. When the investigation of Nature has once commenced with the consistence of bodies, we endeavour to make every thing hinge upon it. Thus, as soon as there is a want of materiality, the field of hypotheses opens, and it is then that philosophers proceed to create an ethereal fluid, sonorous or luminous undulations, and vibratory apparatus, in order to set them in motion.*

All these fictions were difficult to invent, and required learning, and even genius ; while the mere observation of that which exists, would have been alone sufficient to enable us to recognise the truth. †

* The system of solar emissions adopted by Newton, is anterior to that of luminous undulations ; but it was found insufficient, because it was conceived after the observation of the material emissions, in advancing from the compound to the simple—a method from which science has never departed, and which must lead it astray from the nature of principles. The motion of light is not the result of an impulsion, but of the *motility* inherent in itself ; for it is the elementary motion, and all impulsions depend upon it more or less immediately.

† One might be tempted to apply to the present method of physical

The sun is the sole source of motion ; his rays animate nature by combining with it ; and combustion afterwards does nothing else than reproduce them to our eyes. They are the principle of vitality, and it is they which, absorbed by the earth, constitute the latent heat of Dr Black ; for heat is nothing more than a name given to the agitation they produce in matter. I shall by-and-by explain this phenomenon, but I must first say a word or two with regard to the sonorous undulations, and their progress.

The idea of hypothetical undulations is borrowed from liquids. They owe the property of forming them to the special mode of agglomeration which places them between solids and fluids, by giving to their parts too much union to permit them to separate without effort, and not enough to produce vibrations. It is not the same either with the gases or with solid bodies, which, consequently, can never produce real undulations. Philosophers, however, without being arrested by this difficulty, which they do not appear to have perceived, have determined that undulations are formed in the air, and that sonorousness is merely an application of the elasticity of bodies to a particular use. By this means, they confound vibrations and sounds, which it is necessary to distinguish, if these two phenomena of elasticity be produced, as I think they are, by combinations

investigation these words of the sacred writer, *Ambulavimus vias difficiles, et erravimus a via veritatis.*

in which motion acts in an opposite manner. It appears to me, in reality, that, in solids, matter absorbs motion and retains it in the bodies ; hence their consistency and the immobility of their forms ; whereas, in fluids, on the contrary, it is motion which holds matter in solution ; hence an internal circulation, and the continual expansion of the molecules, which does not permit them to stop at any determinate form.

The vibrations of solids are the result of accidental impulsions communicated at short distances following the continuity of their aggregations ;* whilst in fluids there exists no material aggregation—it is motion which in them is found in a state of continuity, and the vibratory accidents only impress upon it an agitation of a peculiar nature, which, in certain cases, produces sounds.†

It is astonishing that philosophers, who consider the propagation of sounds in the air as a phenomenon of elasticity, should have borrowed, in order to explain it, the idea of undulations in liquids ; for these last are

* Strike a beam at one extremity, the vibration is immediately communicated to the other ; but it ceases if you strike it transversely : thus it follows the direction of the fibres.

† The uniformity of the internal motion of the air explains much more simply the equality of the propagation of sounds, than all the hypotheses which have been so laboriously excogitated upon this subject. When the vibrations of the sonorous bodies bear principally upon the motion of the gaseous combinations, the sound produced is of great purity ; and, on the contrary, the more they act upon the material part, the more noise is the result.

nothing but air divested of the caloric which rendered it elastic.

In truth, the principle of heat is no better known than that of elasticity ; but let any one examine the nature of the solar rays, and he will be convinced that they are motion in themselves, and that heat is nothing else than the agitation they produce in bodies.

The solar rays, or, if you please, caloric communicates to fluid combinations an internal action which resists compression, being always at work to extend their material part ; this is called their elasticity.*

Solids present an opposite combination ; in them the tangible part predominates ; it exists in a state of continuity, and motion, confined within the forms, confers upon them the power of returning to themselves when opposed : Such is the cause of the phenomena of elasticity by flexion and by extension.

These explanations, which are believed to be as true as they are simple, may be applied to Physiology. In fact, muscular contractility and excitability are phenomena of elasticity produced by the vital element in animals, which form it by individualising motion. It is

* In the gaseous combinations, motion constantly labours to expand matter, which confers upon them an internal action to resist compression ; but if the latter is more powerful, it draws off the material part of the gas, and the light is disengaged : this is what takes place in the experiment of the *briquet pneumatique*, where the material part of the air being suddenly withdrawn, leaves the elementary motion at liberty, that is to say, the solar rays, which immediately escape.

always an internal power, generated by the union of the solar rays with matter; for life is nothing else than this; everywhere, by combining, they confer upon compound bodies their appropriate action. This is the secret of nature; and if the cause has remained so long concealed under its effects, it is because science has been confined to the observation of the latter.

It has been supposed that there exists in the universe an attractive and a repulsive principle; and the elasticity of solids has been ascribed to the former, and that of fluids to the latter. This error is another consequence of the method of investigation. When the examination of nature commences with compound bodies, opposite effects give rise to the supposition of contrary causes, although it is evident that the accidents of elasticity are all phenomena of motion.

From the period when Newton discovered that the elasticity of fluids was owing to the caloric lodged in the interstices of their molecules, it was experimentally demonstrated that that of solids had the same cause. In fact, it was enough to place water on the fire to be convinced that the gaseous elasticity was produced by the caloric which disengaged itself from the solid when in a state of combustion. The principle of elasticity, then, only makes solids pass into fluids by changing the mode of combination.*

* The operation of this principle may be exemplified by a very simple experiment. "Let a small quantity of water be placed in a glass-

Natural philosophy constantly speaks of fluids without properly defining what fluidity is. It is unquestionable, however, that liquefaction, vaporization, and electro-magnetism present a series of phenomena in

flask of considerable size, and then closed so as to prevent the escape of any vapour. Let this vessel be now placed over the flame of a spirit-lamp, so as to cause the water it contains to boil. For a considerable time the water will be observed to boil, and apparently to diminish in quantity, until at length all the water disappears, and the vessel is apparently empty. If the vessel be now removed from the lamp, and suspended in a cool atmosphere, the whole of the interior of its surface will presently appear to be covered with a dewy moisture; and at length a quantity of water will collect in the bottom of it, equal to that which had been in it at the commencement of the process. That no water has at any period of the experiment escaped from it, may be easily determined, by performing the experiment with the glass flask suspended from the arm of a balance counterpoised by a sufficient weight suspended from the other arm. The equilibrium will be preserved throughout, and the vessel will be found to have the same weight, when to all appearance it is empty, as when it contains the liquid water. It is evident, therefore, that the water exists in the vessel in every stage of the process, but that it becomes invisible when the process of boiling has continued for a certain length of time, and it may be shewn that it will continue to be invisible, provided the flask be exposed to a temperature considerably elevated. Thus, for example, if it be suspended in a vessel of boiling water, the water it contains will continue to be invisible; but the moment it is withdrawn from the boiling water, and exposed to the cold air, the water will again become visible, forming a dew on the inner surface, and finally collecting in the bottom, as in the commencement of the experiment.

"In fact, the liquid has, by the process of boiling, been converted into *vapour* or *steam*, which is a body similar in its leading properties to common air, and, like it, is invisible. *It likewise possesses the property of elasticity, and other mechanical qualities enjoyed by gases in general.*"—LARDNER, *On Heat*. (J. C. C.)

which motion goes on increasing until it attains to light, where it stops as at its source.*

It is of consequence, in investigating the formation of sonorousness, to examine the transition from the elasticity of solids to that of fluids. Liquids, placed in the intermediate state, show how the change is effected, and the proof of their small share of sonorousness results from the obstacle they oppose to the propagation of sounds.† We know, for instance, that a thick mist stops them at a short distance, and that the most sonorous bodies cease to produce sound when plunged into a liquid. Again, in the muteness of fishes we find a proof of the insonorous nature of water. The percussions of a bell placed under the exhausted receiver of an air-pump, prove that sound is extinguished in a vacuum, and that it revives upon the readmission of air; hence the conclusion that it (the air) was the only really sonorous body. It has been since believed that sonorousness is a property of all vibrations, because they create sound upon reaching our ears.‡ But these

* Heat liquefies, and ends by reducing to vapour the greater part of solids, and we have seen that caloric is only a name given to the solar rays combined in bodies. Moreover, it is well known that Electro-Magnetism abounds in luminous phenomena.

† The diminution of sound follows the progress of the solidification of the gases, and the contrary is observed in the vaporisation of solids. We may conclude from this, that sonorousness is a property peculiar to the nature of the gaseous elasticity.

‡ The sounds produced in the air contained in our ears do not prove

contain air, and notwithstanding the experiments to the contrary, it seems to be rigorously demonstrated that vibrations are not sounds, because deafness allows those to feel vibrations who are insensible to sounds. Besides, we have just seen that the former reach us in consequence of a series of material shocks, which are communicated at small distances, while the latter are transmitted to us by the internal motion of the air, which does not permit matter to conglomerate.*

In fact, it is to the continuity of the solid combinations that they owe the property of forming vibrations, whilst, on the contrary, it is the dissolution of matter in the motion of the gases which constitutes their sonorousness. Thus, in the transition of ice to the state of vapour, sonorousness is manifested after the *vibracity* has disappeared, and we may be assured that the contrary takes place in the opposite transition. Liquids, of which the consistence is intermediate, are remarkable for the struggle which their ephemeral and ambiguous state presents ; for in them motion labours to dissolve

that the vibrations which cause them are sounds, but that the continuity of the molecules transmits the vibrations.

* The touch inspires us with so much confidence, that attempts have been made to assimilate all our other sensations to those we derive from it. The sensation of touch, however, results from immediate material contact, and that of sight, on the contrary, is owing to the impressions we receive from something immaterial and intermediate : the one addresses itself principally to the materiality of the organs, the other to the life which animates them. The other senses all participate, in different proportions, in these two modes of being affected.

matter, which last, on the other hand, has a constant tendency to conglomerate; so that the sounds therein formed are immediately arrested, and the vibrations become changed into undulations.

Make water pass into the state of congelation—it becomes solid; its molecules conglomerate, and elasticity by flexibility is manifested. Expose it to heat—it becomes liquid, its motion is increased, its parts have almost no coherence, and the elasticity by flexibility disappears. Finally, reduce the water to steam—its volume then augments prodigiously, the continuity of motion takes place of that of matter, elasticity by compressibility is manifested, and sonorousness along with it.

Caloric predominates in the gases, whilst it is imprisoned in the forms of solid bodies; hence the sonorousness of the one, and the *vibracity* of the other.

What has been said of the diversity of size in the luminous undulations is, in all respects, applicable to the sonorous. It is asserted that the extent of the latter varies from the infinitely small to thirty-two feet; and to give some consistency to this supposition, it is sought to be supported by calculations which are inapplicable to it.

It is certain that, in the formation of sounds, the rapidity of the vibrations increases in the ratio of the shortening of the sonorous body, so that the diminution of length is exactly compensated by the increased rapidity. The pipe of an organ, for example, which be-

ing thirty-two feet long, vibrates thirty-two times in a second, would vibrate sixty-four times, if it were only sixteen feet long. This applies to all lengths, and to all degrees of velocity, when compared.* Proceeding from this observation, it has been supposed that analogous undulations propagated sounds in the air, and their size has been measured by establishing a proportion between the time employed and the space traversed; but the exactness of this calculation, which rests upon the examination of vibrations, proves nothing in regard to the supposed existence of gaseous undulations, and, in this respect, the question remains entire. It has been already demonstrated that the nature of the gaseous combinations does not permit the formation of undulations; and it can be shewn that all the accidents which affect the rapidity of the vibrations, such as shortening the size and tension of the sonorous body, partake of the nature of the solid aggregations, and are inapplicable to those of gases, so that nothing analogous can be produced.†

Philosophers do not clearly explain how sonorous un-

* The relation between the length of the sonorous body and the rapidity of its vibrations, upon which, it would appear, the size of the sonorous undulations is made to depend, is not applicable to stringed instruments; for tension increases the rapidity of their vibrations, without altering the length of the vibrating body.

† Fluids are not susceptible either of tension or of shortening. All these changes are accidents which affect the form of bodies, and fluids have none.

dulations are formed, and still less how, with an extent of thirty-two feet, they are enabled to advance unbroken. Besides, we know that sounds, when expiring in the air, produce the 12th and 17th sharp, and make their octaves resound; whence it would follow that a single undulation could produce others of every size.

The phenomena of sound have a great analogy to those of light, for the latter contains the colours nearly as the motion of the air contains sounds. An accident of refraction displays the one—an accident of vibration causes the others to be heard; and it is remarkable that the minor gamut presents the sounds in the same order as the colours are presented in the successive bands of the rainbow. Moreover, these phenomena have a common origin, for we are indebted for light to the free expansion of the solar rays, and for sound to the continual motion they maintain in the gaseous combinations.

Light, heat, and elasticity are produced by the elementary motion; we call light the cause of the impressions which our eyes receive from it; heat, the sensation which it makes us experience when it penetrates our organism; and elasticity, the action it communicates to compound bodies by combining with them.

The solar rays enlighten us so long as they continue to expand around us; but light ceases as soon as they are arrested in a combination. They warm the atmosphere by uniting with the vapours exhaled by the earth; and if we examine the processes of nature, we

may easily assure ourselves that they enter into the formation of all vegetables.

In fact, a tree, when growing, daily absorbs and confounds with its substance a certain quantity of solar rays; but they may be separated again by burning it, and then light is reproduced; for combustion disunites the elements which its vegetation had collected together.*

The solar rays agitate the molecules of bodies in penetrating them. This agitation is what we call heat; it is the operation which precedes the formation, or which accompanies the destruction of compound bodies; it places itself in equilibrium and communicates itself, for motion engaged in matter extends itself until it either becomes fixed or escapes.

All combustion disengages motion, and, consequently, produces heat; but the cause of the latter does not become luminous until it entirely abandons matter, and reproduces itself at liberty; until then, the effects of heat approximate those of light in proportion as its intensity increases.†

To the rays of the sun we are indebted for light and heat; but the one is the effect of the expansion of motion uncombined with matter, and the other is only a name given to the agitation which it carries into matter

* Friction produces heat, because it destroys the bodies, and replaces in expansion the motion which was combined in them.

† An intense heat traverses crystal nearly in the same way as light, whilst it obstructs a moderate heat.

upon entering it. Thence it happens that, in proportion as we recede from the earth, the light of day increases, while heat diminishes. It is certain that at a great elevation, even under the tropics, the snow never melts.

Thus, in order to separate the solar rays from the heat they produce, it is sufficient to insulate them from the terrestrial emanations; this effect is obtained artificially under the receiver of the air-pump, and the same thing occurs naturally beyond the atmospheric air.*

The sun and the earth are the sources of motion and of the consistence of bodies, and we are only surrounded by different combinations formed by their union.

These may be arranged in three principal classes, relatively to the decrease of motion—Fluids, Liquids, and Solids. The earth furnishes the basis of the consistence of bodies; it is this substance which we call matter. It is impossible, in the present state, to disengage it entirely from motion; but experience proves that the density and *fixity* of bodies diminish as motion increases, and augment, on the contrary, when it is withdrawn.

* Although the rays of the sun first reach the heights, before they descend into the valleys, nevertheless heat is always formed in the plains; and experience proves that combustion diffuses less heat in very elevated situations, as has been observed in Thibet. Moreover, we ill appreciate the heat of the sun when we judge of it by the effects which his rays produce upon the earth; for heat results from the mixture: The solar rays are the elementary motion, and heat is the agitation which they carry into matter when they penetrate it.

We know, for example, that the augmentation of heat converts water into steam, and that its subtraction makes it pass into the state of ice. In solids, matter predominates, giving us the idea of rest. Liquids, placed in an intermediate state, preserve a doubtful character; a little more motion converts them into steam, a little less renders them solid. With regard to fluids, and especially the electric fluid, they present us with motion almost without restraint; and it may be proper to say a word or two of this last, before proceeding to discuss the formation of individual life, with which it has the greatest analogy.

At present, we designate, under the name of Electro-Magnetism, the cause of the magnetic, galvanic, and electric phenomena. The electro-magnetic fluid is a mixt substance, in which the solar rays exist in superabundance. It is in some sort the life of the earth, for it is that portion of the elementary motion of which it forms its own particular motion.* Its rapidity has not yet been calculated, but it is far from being equal to that of light, because it only makes our planet traverse about 23,000 leagues in an hour.†

* This explains the influence of the sun upon the magnetic phenomena, its connexion with the variations of the magnetic needle, and the difference of the galvanic states in bodies, produced by change of temperature. It appears that we have succeeded, by insulating the violet rays of light, and causing them to fall upon steel needles, in rendering the latter magnetic; which presupposes a strong analogy, if not a complete identity, between them and the electric fluid.

† Light requires no more than eight minutes to travel about thirty-four millions of leagues, which separate us from the sun.

The union of the two elements in electricity gives to its action a character of violence which is capable of breaking in pieces the most solid bodies, whereas, light does not allow us to perceive the possibility of a collision. In the latter, all is motion—it agitates matter and can separate its molecules; but it never clashes with the consistency of substances.*

The phenomena of the electro-magnetic fluid have an analogy with those of the individual life; it is produced by the solar rays, of which the earth receives the greater part between the tropics, and exhales, probably, at the poles.† From this there results a circulation and an internal process, by means of which the atmospheric air escapes around our globe as a sort of transpiration.

Such is an abstract of the theory propounded by M. Chardel—a theory which appears to be completely borne out, and firmly supported by all the phenomena of Nature hitherto discovered and investigated, to confirm the anticipations of preceding philosophers, and to

* The electric fluid breaks bodies in pieces, because matter enters into its formation; that is to say, something of the constituent principle of the consistency of things.

† This is believed to be the cause of the *aurora borealis*, and of the accumulation of electricity which is found at the poles. The heat produced by the earth in forming its life, that is to say, its *vis motrix*, must be greater internally than externally, and this seems to be confirmed by observation; but it does not follow that the planets are extinct suns, for their nature, their functions, and the relations of the stars among themselves, place them in an order so different, that hypothesis ought never to have confounded them.

place, as it were, the keystone upon the arch of physical science. It sets out from the simple principle, that there are just two elements in Nature, *matter* and *motion*—the one having a terrestrial, the other a solar origin; and by the peculiar combinations of these two elements, which have an elective affinity towards each other, all physical phenomena are produced. Light, heat, magnetism, electricity, galvanism, electro-magnetism, &c. result from the combination of the elementary motion with matter. The solar rays are the source of the elementary motion, which, again, confers upon certain substances their elastic and sonorous qualities.

Should any persons be disposed to decline the investigation of this theory, on the ground that they do not find it surrounded by a sufficient number of experiments, it may be observed, that no new experiments were necessary, and that it relies for its support upon all those which have been already made. It is only requisite that we change the mode of investigation—that we descend from the elements to the compounds, instead of attempting, as has been hitherto done, to ascend from the compounds to the elements. It is not necessary that we should abandon the knowledge already acquired, but only that we should give a more rational direction to the method of investigation, and then we shall probably soon perceive, that the analogy which led philosophers to create an elastic fluid, in order to enable them to explain the phenomena of

light, is the most complete proof that light contains in itself the principle of elasticity. The question, then, comes to be, whether the solar rays are the effect or the cause; and, assuredly, the solution would not be long doubtful, if we only consulted common sense.

The present method of investigation is opposed to the order of Nature. To attempt, by destroying her works, to ascend from the compound to the simple, is to investigate in an erroneous direction: it is beginning at the end, and it were much better to begin at the beginning. In following the old method, the compound properties, by presenting themselves first to our notice, take the place of elements, and are employed to explain the latter when we examine them at a later period; and it is thus, that, in order to explain the phenomena of light, philosophers have ended by creating a chimerical elasticity in an imaginary fluid, whilst it would have been more natural and more easy to investigate first the properties of the solar rays.

After expounding the principles of his new physical theory, M. Chardel proceeds to explain their application to physiological and psychological science. But into this branch of his inquiries I do not propose to enter at present; because it appears to me that the principle themselves which constitute the foundation of the whole system, should first be recognised as true, before we attempt to extend them to other departments of philosophy.

I have already observed, that the theory here developed is remarkably distinguished for its extreme simplicity, as well as for the satisfactory manner in which it enables us to account for the most important phenomena of Nature upon one common principle, and without the necessity of having recourse to any subsidiary hypothesis. That the day-star is the great dispenser of light and heat throughout the whole solar system, is a fact obvious to our senses and common observation. We see our sun continually engaged in darting forth his brilliant emanations, communicating light, heat, motion, and animation to all objects within the sphere of their influence ; and the same constant *motility* is manifested in the incessant scintillations of the fixed stars, which apparently preside, as other suns, over other planetary systems. We find that, in proportion as this luminary recedes, and withdraws his enlivening beams from the earth, all nature droops, and languishes and dies, or, at least, becomes dormant, and is only resuscitated after a time, by the influence of his returning light and heat. We cannot wonder, therefore, that, in the infancy of the world, and among nations which had not been generally illuminated by the superior lights of Divine Revelation, this great second cause should have become the principal object of religious worship, and that the devotional gratitude of mankind should have prompted them to pay the highest adoration to that vast luminous body “ which looks from his

sole dominion like the god of this world." The rational devotee, indeed, was too enlightened to regard this luminary as the supreme object of his worship; he considered it only as the visible emblem of that invisible Sun—that Eternal Spirit—which is the sole author of all material existence, and the sole object of all intelligent adoration.

"Let us," says the Hindoo in the Gayatri, or holiest verse of the Vedas, "let us adore the supremacy of that Divine Sun (opposed to the visible luminary), the godhead who illuminates all, who recreates all, from whom all proceed, to whom all must return, whom we invoke to direct our understandings aright in our progress towards his holy seat. What the sun and light are to this visible world, that are the *supreme good and truth* to the intellectual and invisible universe; and, as our corporeal eyes have a distinct perception of objects enlightened by the sun, thus our souls acquire certain knowledge, by meditating on the light of truth which emanates from the Being of Beings."

We know that organic vigour, and redundancy of life, increase as the genial warmth augments, from the poles to the equator. In earthquakes and volcanoes, which appear to have one common origin, we may witness the tremendous efforts of the elementary motion which has been absorbed by the earth, to disengage itself from matter. In the thunder and lightning, we perceive several of the effects of the primary element

placed in awful activity—motion, light, heat, and sound. The same process of disengagement is observed to take place, in a less fearful degree, and less destructive form, in the *aurora borealis*, and the other electric phenomena which occur at the poles.

Philosophers seem now to be almost unanimously of opinion, that light, heat, magnetism, and electricity, are all the modified products of one common principle, and if they are right in their interpretation of Nature, it only remains for us to discover what that principle is. Now, with regard to light and heat, this principle can hardly admit of a serious question; and in respect to the others, if we are compelled to attribute them to the same cause, we cannot do otherwise than refer them to the influence of the solar rays, modified by their combination with matter. The whole of the phenomena to which I have alluded, may be produced, as Kant long ago observed, by friction. Light and heat escape without intermission from the sun, and are continually emanating from the earth. They are both evidently evolved by the compression of fluids, and by the destruction of the particles of solids.*

* Mr Lyell observes, that “the heat and cold which surround the globe are in a state of constant and universal flux and reflux. The heated and rarified air is always rising and flowing from the equator towards the poles in the higher regions of the atmosphere; and, in the lower, the colder air is flowing back to restore the equilibrium,”—*Geol.* vol. i. p. 174. Mr Lyell further remarks, that a corresponding interchange takes place in the seas. Does not a similar interchange

By concentrating the solar rays, and causing them to converge into a focus, we can produce intense heat, light, and combustion. By insulating the violet rays of the solar spectrum, and making them fall upon steel needles, the latter may be rendered magnetic, as has been demonstrated by the experiments of Morichini, Mr Christie, and Mrs Somerville. We know that the needle of the compass does not continue stable during the whole length of the day. In proportion as the sun becomes elevated in the horizon, the needle advances towards the west until towards one o'clock in the afternoon: it then approximates its primitive position until sunset; and when the sun has set, it continues at rest until next morning. The extent of these diurnal variations varies from day to day, and the variations are much greater in different latitudes; * and, which is still more

of electricity take place throughout the universe, for the purpose of maintaining the equilibrium?

The following singular fact was elicited during the examination of Captain Fitzroy of the *Beagle* surveying ship, upon a naval court-martial lately held at Portsmouth.—(Case of the ship *Challenger*, 1835.) He stated, that the late earthquakes on the western coast of South America have had the extraordinary effect of transforming what was once a current of two miles an hour to the northward, into a current of five miles an hour to the southward, and that the soundings along the whole coast have been materially changed.

* At Paris, in the month of June, the extent of the variations is fourteen minutes, and in the month of December, only nine. At St Helena and Sumatra, the diurnal variations are considerably less.

It had been at one time announced that the magnetic needle experienced no diurnal variations in Russia; but it seemed probable that

remarkable, the amount of these variations is greater in summer than in winter, and during the day than in the night.

The foregoing observations seem to place beyond all doubt the decided influence of the solar rays in determining the magnetic phenomena. With regard to electricity, Sir Humphrey Davy has observed, that "its silent and slow operation in the economy of Nature is much more important than its grand and impressive operation in lightning and thunder. It may be considered," he adds, "not only as directly producing an in-

this extraordinary and altogether inexplicable exception was entirely owing to the imperfection of the instruments employed by the Russian observers. This conjecture was fully verified by M. Kupffer, as appears from certain observations communicated to M. Arago in 1826.

M. Kupffer had carefully provided himself with very delicate instruments at Paris, and proceeding to Kasan, on the confines which separate Europe from Asia, he established experimentally that the diurnal variation is not less there than at Paris. The only difference was, that under this longitude, the declination being towards the east, whilst in our climates it is towards the west, the diurnal variations take place there in a contrary sense from those which are observed at Paris.

M. Kupffer not only established at Kasan the existence of the diurnal variations in the sense of declination, but thought he even remarked that the magnetic intensity of the earth varied according to the hours of the day, and also according to the seasons of the year. M. Arago thinks, that, in the present state of our knowledge, we cannot accord entire confidence to such results. We are still in a state of uncertainty relative to the diurnal variations which may take place in the inclination of the needle; and it is only when this last element shall have been demonstrated in a rigorous manner, that we shall be able to form a judgment on the question which M. Kupffer thought himself entitled to decide.

finite variety of changes, but as influencing almost all which take place: it would seem, indeed, that chemical attraction itself is only a peculiar form of the exhibition of electrical attraction."—*Consolat. in Travel*, p. 271.

Electricity has been considered as a source of volcanic heat. This is probably a mistake of the effect for the cause. According to the principles of the theory I am now illustrating, it would be more philosophical to consider electricity as the product of a peculiar combination of heat (the calorific rays of the sun) with matter.

It has now been demonstrated by the discoveries in Electro-Magnetism, that magnetism and electricity are always associated, and are probably only different conditions or modifications of the same power. Soon after the great discovery of Oersted, it was suggested by M. Ampere in France, and by Mr Fox in this country, that all the phenomena of the magnetic needle might be explained by supposing currents of electricity to circulate constantly in the shell of the globe, in directions parallel to the magnetic equator. Some philosophers were disposed to ascribe these currents to the chemical action going on in the superficial parts of the globe to which air and water have the readiest access; while others, with greater probability, referred them to thermo-electricity, excited by the action of the solar rays on the surface of the earth during its rotation. This

last hypothesis, indeed, seems to be corroborated by the facts I lately stated, relative to the correspondence of the diurnal variations of the magnet with the apparent motion of the sun ; and by the recent experiments of Professor Seebeck, proving that electric currents may be produced and maintained in circuits formed exclusively of solid conductors by the partial application of heat.

Professor Cumming remarks, that Magnetism, to a considerable extent, is excited by the unequal distribution of heat among metallic, and possibly amongst other, bodies. "Is it improbable," he asks, "that the diurnal variation of the needle, which follows the course of the sun, and therefore seems to depend upon heat, may result from the metals, and other substances which compose the surface of the earth, being unequally heated, and consequently suffering a change in their magnetic influence?" Dr Traill considers "that the disturbance of the equilibrium of temperature of our planet, by the continual action of the sun's rays on its intertropical regions, and of the polar ices, must convert the earth into a vast thermo-magnetic apparatus ;" and "that the disturbance of the equilibrium of temperature, even in stony strata, may elicit some degree of magnetism." Mr Christie found that, when different metals had their surfaces symmetrically united throughout, electric currents were still excited on the application of heat, the phenomena corresponding to magnetic

polarisation in a particular direction with reference to the place of greatest heat. Captain Foster's observations at Cape Horn, South Shetland, and the Cape of Good Hope, shew most decidedly that, in the *southern* hemisphere, the diurnal deviations of the *south* end of the needle correspond very precisely with those of the *north* in the *northern* hemisphere. Mr Christie concludes that, upon the whole, there can be "no doubt that the diurnal variation of the needle is due to electric currents excited by the heat of the sun."

In another passage, the same gentleman observes, that, "if electrical currents are excited in the earth in consequence of its rotation, we must look to some body exterior to the earth for the inducing cause. The magnetic influence attributed by Morichini and Mrs Somerville to the violet ray, and the effect which I found to be produced on a magnetised needle when vibrated in sunshine, and which appeared not to admit of explanation without attributing such influence to the sun's rays, might appear to point to the sun as the inducing body;" and he afterwards remarks, that even Mr Harris's results, which were different upon a repetition of the same experiments, may possibly be considered to indicate that the effects observed were due solely to currents of air excited by the sun's rays. Captain Foster, in perfect accordance with the conclusions previously drawn by Mr Christie from his experiments, considers that the times of the day when the diurnal changes of

magnetic influence are the greatest and least, point clearly to the sun as the primary agent in the production of them ; and that this agency is such as to produce a constant inflection of the pole towards the sun during the twenty-four hours.

“ Upon a review of all the phenomena of terrestrial magnetism, and considering the intimate relation which has been established between magnetism and electricity, by which it appears that, if not identical, they are only different modifications of the same principle, there can be little doubt that they are due to electric currents circulating round the earth ;” and we have every reason to presume that these currents are produced by the ever active influence of the solar rays. “ It has been said,” continues Mr Christie, “ that, if we refer the magnetism of the earth to another body, we only remove the difficulty, and gain little by the supposition. It, however, appears to me, that, if we could shew that the magnetism of the earth is due to the action of the sun, independent of its heat—which, however, I think the more probable cause—the problem would be reduced to the same class as that of accounting for the light of the sun, the heating and chemical properties of its rays : we only know the facts, and are not likely to know more.”*

* See Christie's *Report on the Magnetism of the Earth*, in *Report of the Third Meeting of the British Association for the Advancement of Science*. Lond. 1834.

This fact of the dependence of Magnetism and Electricity upon the

Lightning is decidedly an electrical phenomenon; and, as Dr Roget observes, it has been known, in numberless instances, to destroy, and sometimes to reverse, the polarity of the compass; and he adds, that many disastrous accidents happening to ships, in consequence of mistaking their course, may very probably have been owing to this cause. A ship, in latitude 48°, encountered a violent thunder-storm; the mast was struck by lightning, which also reversed the poles of all the compasses, in the ship. It is stated, that in one of the compasses, the end which had before pointed to the north now pointed to the west. In another instance, a stroke of lightning passed through a box containing knives and forks, melting some, and scattering the rest about the room. *All those not melted had been rendered strongly magnetic.* In this last instance, we may clearly perceive the connexion between motion, light, heat, electricity, and magnetism.

The appearance of the *Aurora borealis* is also considered as a phenomenon of electricity. Now, this meteoric phenomenon has been frequently observed to be accompanied by a disturbance in the position of the compass; and a delicately suspended magnetic needle has generally exhibited, upon these occasions, very fre-

influence of the solar rays, seems deducible not only from the researches of British philosophers, but also from the inquiries, experiments, and observations of our Continental neighbours, as is evident from the recent interesting labours of Alexander von Humboldt, Professor Gauss of Goettingen, &c.

quent oscillations.* The following singular instance of this influence is mentioned by M. Kupffer, whose observations on the diurnal variations of the magnetic needle have been already referred to. It appears that,

* " The magnetic property of the Aurora borealis—or its power of agitating the magnetic needle—had long been suspected by philosophers ; and, though still doubted by some, and not confirmed by the observations of Captains Parry and Foster, seems now sufficiently established by the observations of Captain Franklin, Lieut. Hood, and Dr Richardson. At present, however, little more than the fact seems to have been ascertained ; as great obscurity still hangs over the cause from which this effect proceeds, and the mode of its operation ; and it sometimes happens that one observation has a tendency to neutralise the conclusion to which another would lead. The *Aurora* sometimes approached the zenith without producing the usual effect on the position of the needle. It is generally most active where it seems to have emerged from behind a cloud ; and the oscillations appear only to take place when beams or fringes of the meteor are on the same plane with the dip of the needle. Captain Franklin was led to consider that the effect of the Aurora on the needle varied with its height above the earth. That it did not depend on the brilliancy of the meteor was manifest from the fact, that, in hazy, cloudy nights, the needle deviated considerably, though no *Aurora* was then visible ; and he felt unable to determine whether this proceeded from a concealed *Aurora* behind the clouds, or entirely from the state of the atmosphere. Clouds sometimes during the day assumed the forms of the *Aurora*, and he was inclined to connect with their appearance the deviation of the needle which was occasionally observed at such times."—*Penny Magazine*, 21st December 1833.

These observations are perfectly consistent with our hypothesis. Presuming that the phenomenon of the Aurora is occasioned by the exhalation of light from the earth in the polar regions, the electrical influence would not depend upon the apparent brilliancy of the meteor, but upon the combination of this light with the other terrestrial exhalations contained in the atmosphere ; and, consequently, this influence would be greater in the lower regions.

on the 13th of November 1825, the magnetic needle experienced at Kasan unusual and very sensible variations. The same phenomenon was observed at Paris on the same day, and at an hour which corresponded exactly with that in which it was observed by M. Kupffer, at the eastern extremity of the Russian empire. M. Arago had already noticed this fact in the *Annales de Chimie et de Physique*. Other observations attest the fact that, at the same time, an *Aurora borealis* was visible in the north of Scotland. Moreover, it is a very remarkable fact, that although at present no *Auroræ boreales* are seen at Paris, yet the magnetic needle there is nevertheless very sensibly deranged by all those which appear in the polar regions. The observation of M. Kupffer shews that the influence of the one which appeared on the 13th of November 1825, was equally felt at Kasan and at Paris.

From all the facts and observations now brought forward, it appears abundantly evident that the phenomena of light, heat, motion, electricity and magnetism are intimately connected with each other, and in all probability have a common origin. Nature compels us to consider the solar rays as the source of light and heat; and these must necessarily possess an original and inherent *motility*, in order to permit their elements to expand. The phenomena of electricity and magnetism, we have every reason to believe, are produced by the combination of these primary elements with terrestrial matter.

If there exist any serious objections to this hypothesis, I must confess that, at present, I am unable to perceive them. I think it unquestionably entitled, at least, to the candid attention of philosophers, because, whether we consider its extreme simplicity; its conformity to nature, or its capability of affording an adequate and satisfactory explanation of the most important phenomena of the universe upon one common principle, it must certainly be allowed that it possesses a decided superiority over any other of a more complicated structure, which is not only forced and insufficient, but can only maintain itself by the feeble, unsatisfactory, and ephemeral support of a variety of subsidiary and still more gratuitous assumptions. I trust, therefore, that the subject will be minutely and impartially examined by others more conversant with physical inquiries, and, consequently, more competent to the investigation; and who, at the same time, feel an equal interest in the discovery and dissemination of scientific truth.

No. IV.

LITERATURE.

IN addition to the opinions incidentally expressed by many learned and eminent men, in favour of the reality of the action and of the phenomena of Animal Magnetism—some of which have been noticed in this work—I subjoin a list, for the benefit of the student, of works written exclusively upon the subject.

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COURT DE GEBELIN, Lettre de l'auteur du Monde Primitif a MM. ses Souscripteurs. Paris, 1783.

CAULLET DE VEAUMOREL, Aphorismes de Mesmer. Paris, 1784.

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THOURET, Recherches et doutes sur le Magnetisme Animal. Paris, 1784.

Rapport des Commissaires de la Faculté de Medecine et de l'Academie des Sciences, &c. Par M. Bailly. Paris, 1784.

Rapport des Commissaires de la Societé Royale de Medecine, &c. Paris, 1784.

Rapport de l'un des Commissaires (M. de Jussieu). Paris, 1784.

Rapport secret sur le Mesmerisme, &c. This Report was not published by the Commissioners themselves, but it will be found in the *Conservateur*, vol. i.

Observations sur les deux rapports, &c. Par M. d'Eslon. 1784.

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Traité theorique et pratique du Magnetisme Animal. Par M. Doppet. 1784.

Extrait de la correspondance de la Societé Royale de Medecine relativement au Magnetisme Animal. Par M. Thouret. 1785.

Lettre à M. Thouret, pour servir de refutation, &c. Par M. de la Boissiere. 1785.

Examen du compte rendu par M. Thouret, &c. Par J. Bonnefoy. 1785.

Lettre de M. d'Eslon à Messieurs les auteurs du Journal de Paris, &c. 1785. This letter was refused insertion in the journal to which it was addressed.

Rapport au public de quelques abus en Medecine, &c. Par M. L. F. Thomas d'Onglée, &c. 1785.

Mémoire pour M. Charles-Louis Varnier, Docteur Regent de la Faculté de Medecine de Paris, et Membre de la Societé Royale de Medecine, &c. 1785. Varnier was one of those doctors who were expelled from the Faculty of Medicine, in consequence of his adherence to Animal Magnetism. He was a man of talent, and of a noble character. The Memoir, or Case, is exceedingly curious.

Examen serieux et impartial du Magnetisme Animal. Paris, 1784.

Essai sur les probabilités du Somnambulisme Magnetique, par M. Fournel. 1785.

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Système raisonné du Magnetisme universel, &c. Par la Société de l'Harmonie d'Ostende. 1786.

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Considerations sur l'origine, la cause et les effets de la fièvre, &c. Par M. Judel, Docteur en Medecine, &c. Paris, 1808.

De la Nature de l'Homme, &c. Par M. P. J. Bachelier d'Agès. Paris, an VIII.

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Du Magnetisme Animal et de ses partisans, par M. de Montegre, &c. Paris, 1812.

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DUPOTET, Experiences publiques faites à l'Hotel-Dieu en 1820.

M. P. FOISSAC, Rapports et Discussions de l'Academie Royale de Medecine sur le Magnetisme Animal, &c. Paris, 1833.

LEONARD (*Docteur*), Magnetisme ; son Histoire, sa Theorie, son Application au traitement des Maladies, &c. Paris, 1834.

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P. J. HENSLER, Ueber die verschiedenen Arten des Thierischen Magnetismus, &c. Würzburg, 1833.

J. F. SIEMERS, Erfahrungen über den Lebens-Magnetismus und Somnambulismus. Hamb. 1835.

The above are but a few of the numerous works which have been published on the Continent, on the subject of Animal Magnetism; and I request it may be noted, that they have all been written by gentlemen of edu-

cation and intelligence, and by far the greater part of them by respectable, learned, and eminent physicians. Besides the magnetic Journals referred to in this work, a vast variety of interesting articles upon the phenomena and doctrines in question will be found in the medical and philosophical periodicals of the times, as well as in other publications in which the subject is incidentally treated or alluded to.

FINIS.