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"Je prends le bien où je le trouve."

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PART I.—ORIGINAL COMMUNICATIONS.

ARTICLE I.

Notice of the Memoirs of M. de Halldat upon the Mechanism of Vision. By John M. B. Harden, M. D., of Liberty County, Georgia.

The object of the present communication is to bring before the readers of this journal the recent researches of M. De Halldat upon the Mechanism of Vision, with reference more particularly to the adaptive power of the eye. These researches, it appears, were originally embraced in three separate memoirs read at different times before the Academy of Nancy, and published among its transactions; but a complete analysis of them has been furnished by the author for the September number of the Annales de Chimie et de Physique, from which we have condensed the following account:

It is well known that, for the purposes of distinct vision, several nice adjustments in the structure of the eye are necessary in order to correct those aberrations which are dependent upon the laws of refraction and the properties of light. The modes of correction for spherical and chromatic aberrations, we believe, are universally agreed upon by philosophers: the former arising from the structure of the crystalline lens by which its density increases from the circumference to the centre—the latter from the "adjustment of the powers of the different refracting media of which the globe of the eye is composed, so as to give rise to what is called an achromatic combination." The correction for parallactic aberration, however, or the
adaptive power of the eye by which it maintains the same focal distance for rays from different directions, has given rise to much controversy and has been made the subject of long and laborious investigation by Olbers, Porterfield, Hunter, Home, Young, (1) and others.

The theory which seems to have received most support is that which refers it to muscular action; but there has been, and still continues to be, great want of unanimity in regard to the mode in which this action effects its object. Some have supposed that the contraction of the muscles compressed the whole globe, and thus increased the convexity of the cornea; while at the same time the axis was elongated and the retina removed farther from the lens:—others have referred it to a change in the convexity of the lens itself, or a motion effected in it by the action of the ciliary body, or ligamenta ciliaria, by which its distance from the retina was either increased or diminished. This last seems to have been the opinion of Dr. Young.

The chief arguments in support of these views have been—first, the vague and unsatisfactory one derived ex necessitate rei, and believed to be good and true, because sufficient to explain the phenomenon—the second, from the sensation of effort and fatigue of which we are conscious when we attempt to adapt the eye to the vision of near objects. To this last our author replies, that "it is by no means certain that this sensation of fatigue has its seat in the muscles, but should rather be ascribed to the state of the retina, fatigued by an abnormal impression!" To the idea of any change in the form of the cornea, he opposes—first, "the almost absolute incompressibility of the humors of the eye, and the extreme tenacity of the membranes which contain them—secondly, the difference of opinion among authors, some of whom attribute this power to the recti, others to the oblique, while a third class refers it to the combined action of all—thirdly, whether we admit the combined action of all these muscles, or the separate action of each set, it is necessary to prove that they can, by their contraction, change the form of the cornea; a power which cannot be admitted because of their unfavorable disposition, and particularly when we consider that the recti muscles, which are most powerful on account of their mode of insertion, cannot effect this change without exerting upon the posterior hemisphere a pressure which requires a point of support, (point d'appui,) or resistance which we cannot

(1) Although denied by Dr. Young, our author follows Euler in believing the eye to be perfectly achromatic.
find either in the flexibility of the optic nerve, or in the extreme softness of the fat which occupies the pyramidal interval which separates the recti muscles or which fills the base of the socket. As to the oblique muscles, which can only act in producing the rotation of the globe around the antero-posterior axis, we cannot see how they can effect the compression necessary to produce the result supposed."

But even supposing the muscular arrangement ever so favorable for the purpose, our author finds in the size of the muscles an insuperable objection to the admission of a power in them sufficient to change the convexity of the cornea. By an experiment made upon the eye of a sheep, he found that a power sufficient to produce the least change in this membrane must be equal in pressure to three kilogrammes,* whereas, judging of the strength of a muscle by its mass, a rule adopted by all physiologists, the power of the muscles of the eye cannot exceed 500 grammes.

Another strong argument against any change in the form of the cornea, is found in a fact accidentally observed by the author, viz: that when the globe of the eye is subjected to a pressure sufficient to effect a change in its form, the cornea becomes translucid, assuming a bluish gray tint, entirely incompatible with distinctness of vision.—"Hence," says he, "it is evident that the hypothesis of compensation by a change in this membrane cannot be sustained."

Not satisfied, however, by these indirect arguments, the author next proceeds to direct experiment upon the point, and, in the manner of Dr. Young, measures with great accuracy the curvature of the cornea, while the eye receives rays from different directions. For this purpose he uses a small micrometer telescope having a magnifying power of thirty diameters. The experiment may be conducted in two ways: In the first, the eye is examined in profile, and the visible part of the cornea is brought to the focus of the object so as to obtain a distinct image. The wires of the micrometer are then so applied as that one will be a tangent to its convexity, and the other will pass through the two extremities of the visible crescent, and thus its form can be satisfactorily determined while the person fixes his eye upon objects at different distances. In the second, the glass is directed obliquely towards the cornea, and receives the image of any external object reflected by it. This image being brought between the wires of the micrometer is accurately measured, while the

* Kilogramme, a 1000 grammes. A gramme, 20 grains.
person is directed to fix his eye intently upon an object by exerting all the force of the muscles. The constancy in form of the cornea was conclusively shown by the fact, that the reflected image always preserved the same dimensions, and thus the experiment, according to our author, "completely deprives the cornea of the claim to the function of a compensating instrument which has, for so long a time, been gratuitously ascribed to it."

Having satisfied himself upon this point, our author next seeks in the other structures of the eye the instrument of this compensation. The aqueous humor being as unalterable in its form as the cornea itself, cannot be supposed to have any agency in it. The iris, whose chief use seems to be to apportion the quantity of light to the wants of the organ, cannot be any better adapted to perform a part so important. The vitreous humor, when separated from the crystalline, forms no distinct image upon the retina, and therefore we are forced to ascribe it to this latter, which unites all the properties of artificial lenses by which images are formed in our instruments. But having determined this fact, the question recurs—what is the mechanism by which the eye adapts itself to objects at different distances? In determining this, the author again has recourse to the experimental method. The crystalline of an ox, fresh and sound in every part, was fixed by a suitable instrument in a camera obscura, and exposed to the rays of the sun, which were kept in a horizontal position by a heliostat—the image of the sun, formed at the focus, was received upon rough glass, and was of course produced by parallel rays—the direction of the rays was then changed by the interposition of convex and concave glasses, and yet the image constantly retained its integrity, although altered somewhat in extent and brilliancy, proving that the crystalline lens has the property in itself, within certain limits, of forming at the same focus constant images for rays from different directions.

The author has performed this experiment a great many times, both by himself and in the presence of those well acquainted with optics, and always with the same result. He has also varied the experiment by using the entire eye, with the exception of a small portion of the posterior hemisphere of a circular form, which he removes for the purpose of receiving the image which would have been formed upon the retina. This portion is replaced by a watch-glass, which is fitted into an instrument composed of a double hemispherical capsule, large enough, when united, to contain the globe of the eye of a sheep
Each capsule is perforated with a hole in the centre, one of which contains the watch-glass above mentioned, and is to be applied to the posterior part of the eye—the other to the cornea. They are brought together by means of a hinge, which unites the branches to which they are attached, and may be opened or shut at pleasure; when closed they leave an open belt or zone, surrounding the middle of the eye, where the globe may be compressed by the ends of the fingers.

From all the experiments performed by the author, he thinks himself warranted in drawing the following conclusions:—"1st. That all the possible changes in form which the cornea may undergo, do not give it that influence in the formation of the image which has been ascribed to it—since we may, by means of pressure upon the globe, swell it out, or diminish its natural tension, by removing a portion of the aqueous humor, or, what is still more remarkable, remove the whole cornea without destroying or even modifying the image. 2ndly. That we may replace the aqueous humor with atmospheric air, by means of a narrow oblique puncture; showing that the use of the fluid is simply to give to the cornea that peculiar form which is natural to it. 3rdly. That the crystalline is the instrument essential to the formation of the image—since its removal, all the other parts being sound, renders it impossible, and, on the contrary, it takes place when, the crystalline remaining, we remove the cornea and the aqueous humor, and even when isolated, the focus remaining constant for rays from different directions. 4thly. That the crystalline, nevertheless, cannot alone form the image upon the retina, without the aid of the vitreous humor, because the focal distance of the crystalline is too short, as is proven by a comparison of its focal distance with that of the focal distance of the two fluids combined."

The property of uniting into one focus rays from different directions, then, recognized in the crystalline, the only remaining question to be solved, is in regard to the cause of a phenomenon so remarkable and apparently so much at variance with the laws of optics. The author acknowledges the difficulty; but observes that, even supposing we cannot explain it, we must still admit the fact, as we are obliged to do in a great number of cases where phenomena are equally well known, whose causes are entirely hidden from our view. The conclusion at which our author arrives, however, is that it must result from the form and intimate structure of the lens, and is probably connected with that arrangement by which we know the aberration
of sphericity is corrected. There is one fact in relation to this structure brought to view by the author, which he seems to think may have an important bearing upon the point, which is, that the elementary lamina, of which the lens is composed, gradually change their lenticular or ellipsoidal form as they approach the centre, until at last they assume the globular form completely, so that the nucleus is a perfect sphere.

The theory of our author recommends itself, not only on account of the stable basis on which it seems to be founded, but because of its agreement with that simplicity in the operations of nature by which she accomplishes many objects by the action of one of her laws. Thus, as an illustration, by a modified motion of the earth, no less than four important phenomena are produced, all of which, at last, may be referred to the one law of universal gravitation—and other instances of the same kind might be adduced. Another argument, not noticed by the author, which appears to us strongly in favor of his view, is found in the structure of the eyes of some of the lower orders of animals, as for instance, the insect tribe, where the eye is so immovably fixed in the socket that the adaptive power which they possess must depend upon the physical structure of the refractory media alone, and not on any muscular power which they can have in modifying their forms.

Like every other theory, however, which may be advanced, it is by no means free from objections, two of which readily occur to our mind. The first is, that although the nearest distance, at which distinct vision is possible to the eye in a normal state, is about six inches, yet by looking through a pinhole made in paper, we may distinctly see an object at less than half that distance. Now, as the pinhole can act in no other way than by excluding light like the iris, it seems to indicate that the iris may have something to do with this property of the eye, as has been maintained by some writers. Again, it does not appear that the removal of the lens entirely destroys the adaptive power of the eye, although it certainly diminishes it to a very great extent. It was a practice pursued and recommend-ed by Sir William Adams, for what he calls “Conical Cornea,” to extract the lens entirely, and in the cases in which he performed the experiment, the result was, as he himself declares, “that although the patients were unable to see either near or distant objects, immediately after the operation, without glasses, yet after a time they acquire a power to a considerable degree of perfection, if they have
the patience to do without them;" and he gives us several cases illustrative of the fact, so that after all this faculty may be connected with more than one structure of the eye.

Our author has, it is true, adopted the inductive method in his researches upon this subject, but the truth or falsity of his deductions must rest upon the correctness of his premises. The inductive method is good for nothing, without good observers and good observations. Lord Verulam himself, in his Essay upon the Nature of Caloric, for the purpose of illustrating his own doctrine, associated together, as concordant examples, the solar rays and aromatic herbs; (1) and many a fine spun theory and logical argument have been based upon admissions equally groundless and untenable.

January 31st, 1845.

(1) No wonder he came to the conclusion that, "Calor est motus expansionis, cohibet us, et nitens per partes minores"—although really it is about as good a definition as our modern philosophers can give.—Nov. Organ. Lib. 2, p. 164.

ARTICLE II.

Mesmerism—A Lecture delivered in the Medical College of Georgia, (by request of the Students,) Feb. 18th, 1845. By Paul F. Eve, M. D., Prof. of Surgery.

The subject, Gentlemen, proposed for me to examine at this meeting, is Mesmerism, or Animal Magnetism. In the course of lectures on Surgery, which it has been my duty to deliver before you this winter, and which is now drawing near to a close, I took occasion to allude to it, incidently, once or twice. When recommending the means employed to prevent or relieve pain during the performance of surgical operations, you will recollect this supposed agent was not included among them. An operation having been performed by one of the professors of this college, upon a patient in the "mesmeric state," without evincing consciousness or pain, it was natural for
you to desire to know why I had excluded it from the therapeutical applications in Surgery.

In yielding to your solicitation, to give the reason of the faith that is in me, and to present the evidence upon which I rely for an opinion on this subject, I do it with some reluctance. It is known, that as a faculty, the professors do not agree, and probably it is well we should not, upon a topic such as this. As an associate, like them, I am an humble searcher after truth, and this generally is best discovered by mutual and amicable discussion. And though we may differ, still there is no apprehension of the well known harmony and good feelings which exist among us, being in the least disturbed by this investigation of an intricate and mysterious agency. In examining the subject, I hope to do so as a medical philosopher, to offend none who may not share my own opinions, to violate in no instance propriety or courtesy; and all I ask, is a fair hearing and an impartial judgment.

No one at the present day can enter upon the *terra incognita* of animal magnetism, without some hesitation. The man who would give a decided opinion upon this subject, must expect to encounter opposition, and should be prepared to fortify his position not only with good reasons and sound arguments, but by indisputable facts—a point however much desired, not yet attained. The vantage ground is evidently that of silence or non-commitment, but however difficult and arduous the duty, and whatever of reputation or character it may involve, I cannot now shrink from attempting to discharge it.

In discussing the subject, I propose to endeavor to establish the three following propositions, viz:

1st, That Mesmerism, or animal magnetism, was unanimously condemned by the commission appointed in 1784, by the king of France, to examine and report upon it; and that it has never received any favor or approbation from any scientific or learned society whatever.

2d, That Mesmerism is not a reality; but that the phenomena ascribed to it, are justly due to the imagination and excited feelings.

3d, That the non-expression of pain, is no proof of its non-existence, and that there are conditions of the body and mind, in which no suffering is evinced, and moreover that this state of the system is independent of Mesmerism.

First, then, I am to prove that the commission appointed in France in 1784, unanimously condemned Mesmerism; and that it has received no favor since from any scientific society. The first part of
this proposition, one would suppose, would require no exposition; but I have recently heard it denied, and this too by men of influence, that the French commissioners who examined Mesmerism near the close of the last century, did report unfavorably to it.

My second proposition, that Mesmerism is not a reality, and that the phenomena ascribed to it, are justly due to the imagination, is so intimately connected with the first, that they will be considered together and not under separate divisions.

It is said to be as difficult to define Mesmerism, or animal magnetism, as it is to believe the phenomena ascribed to it; and it has been observed by the same authority, that it differs from common magnetism as much as natural phenomena do from supernatural. It is not even decided whether it be a psychological or physiological subject, whether it belongs to the clerical or medical profession. And if doctors have differed respecting it, so have divines; for while, one* has published a sermon "on the Satanic agency of Mesmerism," another has recently, in England, issued a pamphlet entitled, "Mesmerism the Gift of God."

Some believers have pretended to trace the history of Mesmerism to the remotest antiquity. Indeed, the miracles of Moses and those performed by our Saviour, have all been explained by reference to this agent, by some of the followers ofMESMER, in France. The holding up of the hands of the patriarch, when Joshua contended against the Amalekites, and the imposition of the hands of Christ upon the sick on some occasions, say they, were acts of Mesmerism. But it is generally admitted, that animal magnetism took its origin about the middle of the last century, and somewhat after the following manner:—PARACELSUS, VAN HELMONT, and others, having investigated the singular properties of the magnet, it soon became famous as a curative means. A certain Jesuit, named HEL, after curing himself of rheumatism, as he supposed, by this agent, excited the ardent imagination ofMESMER, then residing in Vienna. MESMER took his degree in that city in 1776, and wrote a thesis on the influence of the planets on the human body. According to his theory, all the phenomena of life depend upon the movements of a magnetic fluid; and by publicly maintaining this opinion he incurred the contempt and ridicule of his own countrymen, which induced him,

*The celebrated Rev. Mr. Neill, of Liverpool.
with other considerations, to quit Vienna and come to Paris. Having created a great sensation in this latter capital and acquired an immense fortune, the king, Louis XVI. ordered in 1784, a commission from the Academy of Sciences, from the Faculty of Medicine, and the Royal Society of Medicine, to examine and report upon this new agent employed by Mesmer in curing diseases. From these three scientific bodies, fourteen persons were appointed, and among the number from the Academy, were Franklin, Bailly and Lavoisier, names inseparable from the annals of science. Mesmer refused to submit to this commission, and declined all propositions to have the subject investigated. They then had recourse to his acknowledged disciple, M. D'Eslo\n, who was a member of the Medical Faculty of Paris, and was one of the first converts to the new doctrine.

Every week, for two or three hours, these commissioners experimented with Eslo\n, or Deslo\n, as his name is anglicised, and by themselves. M. Virey, a believer in Mesmerism, as any one may see in the 29th vol. of the Dictionnaire des Sciences Mé\dicales, states, that they felt nothing of this secret agent—they could not recognize the slightest sensation. Children did not experience any thing singular when experimented upon. When they bandaged the eyes of a patient, and then persuaded him he had been magnetized, but without doing it, he exhibited the same impressions as those who had been subjected to it. As trees were also magnetized according to Mesmer and Deslo\n, they bandaged the eyes of a young man, and conducted him towards one non-magnetized; upon telling him it was magnetized, he was agitated by magnetic convulsions. All these effects then, ascribed to a secret pretended agent, they concluded were the result of the imagination; and the commission from these learned bodies reported that animal magnetism was a chimera, and that the magnetic cures were the effects of the imagination. This report was confirmed by every member of the commission, except one, M. Jussieu, who did admit that there were some facts which induced him to believe in the existence of a particular fluid, which he compared to electricity rather than to magnetism. He was however, but one, out of fourteen.

J. Bouillaud, a skeptic on the subject, and at present one of the Professors of Medicine in Paris, writes concerning this same report, that the commissioners acknowledged that those who pretended to Mesmerize patients had great control over them. But this com-
mission, of which the celebrated and unfortunate Bailly was the reporter, concluded, from the experiments which they witnessed and from those they made themselves—1st, that there existed no particular fluid which deserved the name of magnetic fluid—2d, that the facts obtained were the result of a bewildered (frappée) imagination; since from their experiments, they obtained these magnetic effects without magnetizing, provided the patients believed they had been magnetized, and that on the other hand, these effects did not occur when the patients were magnetized without their suspecting it—and 3d, that the crisis produced in the magnetic treatment might be dangerous and never useful.

In the article, somnambulism and animal magnetism, written by Dr. J. C. Prichard, of Edinburgh, in the 20th part of the Cyclopaedia of Practical Medicine, just published, will be found the following observations respecting this celebrated report of the learned societies of Paris: "The commissioners were men of the highest authority in science. ** They saw trees, bottles, glasses and cups magnetized. 'We cannot prevent ourselves,' say they 'from recognising in these constant effects a powerful agent, which acts upon patients, subdues them, and of which the person who magnetizes them seems to be the depositary.' The commissioners soon discovered that it was very difficult to ascertain to what point the results produced were the effects of the imagination, to the excitation of which so many circumstances were adapted, and how far to any peculiar agency. They resorted to private trials of the same manipulations. Some of the most interesting of these experiments were performed at Passy, at the residence of Dr. Franklin, who could not be present at Paris at the public exhibition. Here Deslon tried his art in vain upon the obdurate American, as well as upon the members of his family, who, notwithstanding that some of them were ladies in delicate health, were found quite insensible to the whole ceremonial of magnetism. Neither of the other commissioners could perceive any effect in his own person." Dr. P. then relates the experiment upon trees said to be magnetized, with a boy having his eyes bandaged. This youth was purposely selected by Deslon, as an individual susceptible of the magnetic influence. This gentleman stood in the garden, with his cane pointed to the magnetized tree to keep it so, while the boy approached four trees successively. Under the first, he perspired great drops, coughed, expectorated, and felt pain in his head—being then 27 feet from the magnetized tree. Under the se-
second he felt stupor, &c.; under the third, these symptoms greatly increased; the youth believing he was approaching the magnetized tree, though in reality distant 33 feet from it. Under the fourth, not magnetized, but 21 feet from the tree pointed at, he fell into a crisis. "He lost all consciousness, was carried to a neighbouring grass-plot, where Deslon soon reanimated him. The operator accounted for this untoward phenomenon by saying that the trees had probably become spontaneously magnetic. 'But, rejoined the commissioners, if trees are in the dangerous habit of assuming this state of their own accord, a susceptible person walking in a garden must incur the continual risk of falling into a crisis.'

"The commissioners," continues Dr. Prichard, "having repeated and varied the experiments in every way that seemed to afford an opportunity of arriving at the truth, at length came to the conclusion that the whole proceedings of the magnetizers were calculated in several ways to do injury; that they were devoid of any salutary or useful influence, and that the results were wholly to be attributed to the imagination and other feelings, which were excited by the performances. M. Jussieu, however, refused to coincide in the report, and returned one of his own, which, though by no means favorable to Mesmer, and explaining most of the results in the same manner as M. Bailly had done, yet admitted that in four particular experiments, he could not account for the results by attributing them to the imagination. He proposed an hypothesis of his own, viz. that animal heat, or, as he termed it, 'the electric fluid animalized,' directed and accumulated on certain parts, may be the cause of the effects produced."

It is proper to state, that in addition to this report, a private one was sent by these commissioners to the king, referring to the liability of abuse on the subject of Mesmerism. And indeed one would suppose something of the kind was necessary even thus early, as the following anecdote, known to all Paris at the time, will explain: "Un satyriasis survint subitement à un monsieur, à la vue d'une jeune demoiselle qui était avec sa mère; les choses allaient si loin, que la mère se leva pour y mettre ordre; mais M. d'Eslon s'écria; Laissez les faire ou ils mourront." To say nothing of this gross violation of decency and morality, we have here certainly a striking instance of sympathy on the part of the mesmeriser for the sensual acts of the mesmerised.

You have now, gentlemen, the conclusions of this famous report of
the Royal commission of France, made in 1784, and in the very words of three different persons under different circumstances, viz.: by Virey, a believer in Mesmerism; Bouilliaud, a skeptic; and Prichard, who may be considered neither the one nor the other. If what has been stated respecting the decisions made by the scientific Societies of Paris be true—and that it is correct no one will pretend to deny—we find, in the first place, that Mesmer acted the part of all quacks and impostors, by refusing to have his pretended magnetic fluid examined by those most competent to judge of its virtues, and therefore, if true, to give it character; and, secondly, that after a patient investigation of the subject of Mesmerism, varying and repeating experiments in every possible way which promised to arrive at truth, by fourteen individuals selected for the purpose from three of as learned bodies as then existed in the world, they pronounced animal magnetism a chimera. Not one made a report favorable to Mesmer, and only one, M. Jussieu, refused to admit that the operations of the imagination could explain all they had seen. He classed all the phenomena which he had observed under the four heads:—1st. those general facts of which physiology could indicate the true cause with precision; 2nd. negative or facts contrary to animal magnetism; 3rd. those attributed to the imagination; and, 4th. facts which induced him to admit the existence of a particular fluid. He then states the case of a blind woman who was agitated when a rod, leading from a tub, which could neither generate nor retain magnetism or electricity, was pointed at her stomach, and which ceased when said rod was turned aside. Virey remarks, that Jussieu did not say whether the blind person was prejudiced in favor of animal magnetism or not, for this idea is often every thing in these delicate observations. Several other facts, continues he, analogous to this one, (viz. the agitation of a blind woman when her stomach was pointed at with an iron rod,) induced Jussieu to presume that there really did escape from the human body, under certain circumstances, a fluid, which he compared to that of electricity, rather than to a magnetic fluid, not yet demonstrated.

From this slender pretext, the impression is made that one of the members of the French commission was in favor of Mesmerism; and, moreover, that he was one of some four or five commissioners appointed by the King of France; whereas, the truth is, not one believed that animal magnetism had been demonstrated, and there were not less than fourteen individuals who were associated in the
Mesmerism.

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investigation of the subject, and not from one, but from three different Societies. Notwithstanding these facts, strange as it may appear, some believers in Mesmerism are in the habit of referring to this very report, as authority for their faith; because, say they, the commissioners acknowledged constant and powerful effects upon patients, the agency of which seemed to be deposited with those who had magnetized them. I have detected, however, that the word seem, was very apt to be omitted; and the quotation itself not completed. The commissioners expressly state, that this agent acting upon these patients was none other than the imagination. They never thought of attributing these effects to Mesmerism. They declared, unanimously, they had never felt it—that it had not been demonstrated to them: they condemned Mesmer in toto.

Now what were these effects which this commission witnessed, and which they, with so much unanimity, attributed to the imagination and other feelings excited by the performance of the magnetizers? Precisely those that are credited at the present day. Besides coughing, pains, tremors, convulsions, involuntary movements, &c. &c.—they say that every thing depended upon the will of the magnetizer; were the patients in an apparently deep sleep, his voice, a look, a sign, drew them out of it. They also saw a young man, very impressionable by the magnetic influence, who not only coughed, expectorated, perspired great drops of sweat, felt pain in his head, had stupor, fell into a crisis, and lost all consciousness, and simply because he believed he was approaching a tree said to be magnetized. Having lost all consciousness, of course this youth was insensible to pain. A similar state, unconsciousness and insensibility to pain, is now produced by a look, or a few passes with the hands, for some seconds, or at most, a few minutes. In the former case, a Franklin, a Bailly, a LaVoisier, a Guillotin, a Jussieu, and others of the highest authority in Science, attributed it wholly to the imagination and other feelings excited: and as to the latter instance, Gentlemen, while others may differ, I really do not think we can do better, than follow their illustrious example—two effects, so similar, cannot be very remote in the cause producing them.

We now leave this report, of which so much of late has been said, and allow believers in Mesmerism to draw what consolation or encouragement they can from these undeniable and indisputable facts, for so far as its conclusions are concerned, I have, in all honesty and candor, given you the truth, the whole truth, and nothing but the truth.
In 1831, the subject of Mesmerism was agitated in the Royal Academy of Medicine in Paris, and M. Husson made a very favorable report respecting it—even admitting its extensive influence; but which was ably criticised by M. Durois, (D'Amiens). This, however, had nothing to do with the Academy of Sciences, or Faculty of Medicine, in that city: and even the report of M. Husson was not adopted by the Royal Academy of Medicine, but simply read to that body.

In 1841, appeared a work entitled the Academic History of Animal Magnetism, and written by Drs. Burhin and Durois, members of the Royal Academy of Medicine of Paris. "These authors," says Dr. James Johnson, the celebrated Reviewer, "endeavor to establish a connection between all the leading juggleries which from one age to another have made their appearance in the world. They carry the reader, without any forced transition, from the oracles of antiquity to the witchcraft of the middle ages, from the devotees of London to the tremblers of Cevennes, from the convulsionists of St. Medard to the exorcisms of Gassner, and lastly to Mesmerism, which the true believers point to us as the era of the doctrine of animal magnetism." They moreover declare that the report of M. Husson, already referred to, was neither discussed nor approved of by their learned Society.

The only other instance that I know of since 1784, in which animal magnetism was alluded to in the Academy of Sciences, the most learned body in the world, occurred the 24th of June, 1841. It was contained in a report read by the distinguished physiologist, M. Magendie, on a case of alleged cure of a deaf and dumb woman, made by M. Dupotet. As the exact condition of this patient, a female, was not ascertained before being subjected to this supposed agent, the commission could not vouch for the cure, even had it been complete—"but unfortunately for both patient and doctor, it was far from being so." They took three inmates of one of the deaf and dumb institutions of Paris, and proposed to M. Dupotet to test the efficacy of his treatment; to this he consented. He asked for only eight days; they gave him fifteen. At the end of the eighth day M. D. represented them as cured, but the regular physician of the Institution from which they were obtained, told the commissioners that the amendment was in no respect different from what might at any time be affected, by proper exercise, &c., of the organs of hearing, but which continues for a short time. They then proposed to M.
Dupotet to send the three patients three times a week to his own house, to complete the promised cure, but he declined giving any answer. The commission therefore concluded, the cure alleged to have been effected by animal magnetism on a deaf and dumb patient, is quite without foundation.

Dr. Johnson says that at a subsequent meeting of the Academy of Sciences, they resolved by a large majority to have nothing more to do with the subject of Mesmerism. M. Cloquet, and even M. Bouillaud, objecting to this summary dismissal of it, when M. Breschet stated that as that body had come to a resolution to proceed to the order of the day, whenever the question of the quadrature of the circle or perpetual motion was brought forward, the subject of animal magnetism should be dealt with by them in the same way. This I believe was the final action of that most distinguished Society on the subject of Mesmerism.

On Sunday, the 1st April, 1829, M. Jules Cloquet, one of the Professors of Surgery in Paris, removed a cancerous breast from a patient, in that city, while in what is called the mesmeric state. She was a pious lady, of excellent character. She evinced no pain during the operation—indeed the Hermès, a journal of animal magnetism, states that when the surgeon was washing the wound, the patient said merrily, “come, leave off—don’t tickle me.” She died a fortnight after the operation; and a report having reached England, that while dying she confessed the whole had been a cheat, Dr. Elliotson, who was ejected from a professorship in the London University, for his belief in animal magnetism, wrote to Cloquet on the subject, and who replied, (so says Dr. Elliotson’s student in Paris,) he “is quite certain she never made the confession alluded to.”

On the 22d November, 1843, the subject of Mesmerism was introduced into the Royal Medico-Chirurgical Society of London, by Counsellor Topham, relating the case of an amputation of the thigh of a laboring man, who was in the mesmeric condition. Lawyer T. was backed by Dr. Elliotson, and in the account published of it by the latter gentleman, it is stated that “soon after the second incision, a moaning was heard from the patient, which continued at intervals until the conclusion; giving to all present the impression of a disturbed dream. When the patient awoke, gradually and calmly,—at first, he uttered no exclamation; and for some moments seemed lost and bewildered, but after looking around, he exclaimed, ‘I bless the Lord, to find it’s all over.’ When questioned, he observ-
ed, he felt no pain, but once ‘felt as if he heard a kind of crunching.' As all in the mesmeric state are poetical, this last expression has been interpreted to mean, he heard the sawing of the bone. But the proof that this man knew what was going on at the time, the operator, a Mr. Ward, stated he designedly pinched the sciatic nerve with a pair of forceps; and had the patient been even decapitated, Dr. Marshall Hall says his opposite limb would have been agitated—a fact which you, Gentlemen, saw illustrated a few days ago, in the partial amputation of a foot.* Dr. Hall concludes from this circumstance, that the quiescence of the man during the operation was the effort of his mind to control his suffering. In the discussion which ensued on the presentation of this case to the Royal Medico-Chirurgical Society, we find that besides Dr. Elliotson, Drs. Arnot, Oliver and Symes, were the advocates of Mesmerism, and those who opposed it were James Johnson, Marshall Hall, Moore, Blake, George Burrows, Copland, Gregory, Evans, Merriman, Sir Benjamin Brodie, Alcock, Travers, Liston, Wakley, Editor of the Lancet, Caesar Hawkins, &c. It need scarce be added, that animal magnetism was peremptorily dismissed from the Society.

In the two patients operated upon in the Mesmeric state, the one recently in this city, and the other in Europe, we notice this difference. The one, when roused, and after collecting himself, said, ‘I bless the Lord to find that it is all over;’ but the other, after she awake, conversed concerning her amputated breast, ‘about a quarter of an hour,’ replied, when asked, that ‘it feels about as it has done for some time back,’ and this, too, notwithstanding the Mesmeriser’s passes over the seat of the operation, in order to lessen its sensibility, and yet ‘she expressed her incredulity—said the operator was jesting, as it was impossible that it could have been done without her knowing it at the time, or feeling any thing of it now. She became convinced only on carrying her hand to the part and finding that the breast was no longer there.’ This surely is the most astounding part of the whole operation. That she was insensible to the knife is certainly nothing compared to the fact, that after being aroused from the ‘Mesmeric state,’ and saying distinctly when

* I know Dr. E. has attempted to deny this reflexed action in the opposite limb; but the profession need only be reminded of the fact, that the uniform practice, until a few years ago, was to tie the opposite limb to a leg of the table, to prevent this very movement or agitation, during amputation.
questioned too, that the breast felt about as it had done for some time back, admitted she did not perceive any change in the ordinary sensation of the affected breast, conversed about it for fifteen minutes, and still did not know the operation had been performed. With me this is the greater wonder of the two, and is proof positive of the extent to which this patient was deceived by her own sensations. She declared she felt no Mesmeric influence in the breast, notwithstanding the passes had been applied, by a Mesmeriser; and then again while in possession of her natural feeling in the breast, did not know for about fifteen minutes it had been cut off, even after having been aroused from the Mesmeric state. If this be not proof of the effects of the imagination, or of the operations of the mind, in this instance, controlling the ordinary sensations, then I know not where we can find it. This lady was evidently in a trance, or reverie, brought on by the workings of her own feelings—just like the boy who lost all consciousness, from believing he was approaching a tree said to be Mesmerised. And yet this one case, has made hundreds of believers to Mesmerism.

Who does not recollect the incident of an actor on the stage of Liverpool, falling dead upon uttering the words, in the play of the Stranger, "There is another and a better world?" To what was this melancholy and unexpected event owing, but the yielding to the impulse and energy of his own feelings? How often have hysterics, syncope, &c., been brought on by patients themselves?

But not only by learned societies has Mesmerism been invariably rejected, it has almost universally met the same fate from distinguished men in every country. With a few exceptions, such as Cuvier, Rostan, Husson, Bertrand, &c., in France; Hufeland, in Prussia; Elliotson, in England, &c., animal magnetism has uniformly received but little favor from scientific persons.

Renaudin, says, "as to Mesmerism, animal magnetism, somnambulism, real or simulated, or Perkinism and other modern inventions of charlatanry and of bad faith, if in some cases, these means, equally disavowed by reason and experience, have appeared to give some favorable influence to pain, it is evidently in individuals who have a blind confidence or a credulity without limit, and disposed by prejudice to receive an alleviation desired with arder."

We have already given the names of several distinguished men of Great Britain, and no doubt the list could be greatly augmented. To it we add the name of Sir Astley Cooper. And if in the British
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...realm there be one man who stands, more deservedly higher in character, as a physician and a writer, it is Dr. James Johnson, of the Medico-Chirurgical Review, and who has on every suitable occasion been the uncompromising and unremitting opponent of Mesmerism.*

Brachet, a distinguished author in Paris, who has published largely on nervous affections, &c. writes, "from the magnetism of Mesmer has arisen that other jugglery, denominated animal magnetism. Twenty times beaten down by science, and reason and facts, every now and then it has again lifted up its head, more ridiculous and amusing, indeed, than dangerous. We do not, however, mean to deny the effects which may be induced in persons of highly nervous constitutions, by the passes and other grimaces that are usually practiced. In the magnetic stupor of the animal energies that is sometimes induced, the entire nervous system is compromised; and this influence may unquestionably appease pain and spasmodic contractions for a time, by acting powerfully on the imagination." He then states that although he has heard of such cases, he has not himself met with any well-authenticated examples. "These distant voyages," continues M. Brachet, "without moving from off one's chair, these divinations, these transpositions of the senses, &c., are only so many clever tricks, contrived to amuse the weak and entrap the foolish. It may happen that a poor silly hypochondriac, who is strongly prepossessed in favor of this culpable jugglery, appears for

*Take but his last blow at this subject, and which is the last article in the last No. (99) of the London Medico-Chirurgical Review. Ridicule I know is not argument, and neither are opinions, facts. I give this in proof of great men, in the medical profession, being opposed to Mesmerism. Let it pass for what it is worth.

"Mesmerism.—We do not know whether to congratulate, or condescend with, the talented Heroine of Political Economy on the strange dream that has come over her soul. It appears that Miss Martineau recovered her health and—we were nearly saying—lost her senses! But this is not the case—she has acquired an additional sense—Clairvoyance! Her maid, Betty, placed her hand on her mistress's ivory forehead, and, presto, a Steam-Tug that was passing, became metamorphosed into a ship of celestial glory, fringed with gold and silver, and fit to be 'a God-head's dwelling.'

It's all in my eye, Betty Martin—eau.

Betty, however, is no fool. She prescribed ale and brandy and water to her mistress, instead of opium eating; and the change resulted in the best effect. Harriet's Mesmerie dreams will prove a god-send to the animal magnetizers, and will command more attention among the old women of both sexes than her Political Economy and her 'Preventive Checks.' But it won't do!

"It will be the wonder of the day—perhaps of nine days—and then sink into oblivion with the exploits of Miss Okey."
a time to derive some benefit to his health; but then it is only from his becoming the dupe of his credulous fancy, and not from any direct or actual sanative influence bestowed."

In concluding the above translation from the French, Dr. Johnson says, that "we observe, in a recent number of the Medical Gazette, (a Journal of Paris,) a quotation to the same effect, of the opinions of the celebrated Muller, of Berlin, on the subject of animal magnetism. How long will any men of education allow themselves to be imposed upon by the juggling tricks of clever rogues, and paid for testimony of credulous women? Medical men, at all events, should know better: for they must have studied the history of the nervous system and its functions only indifferently well, not to be aware that many startling, and not easily explicable, phenomena are apt to occur during the progress of some of the neuroses."*

It is frequently asked, and with an air of triumph, by believers in Mesmerism, will you deny facts? No, Gentlemen, these are said to be stubborn things, and we do not wish to run counter to them. But what we do deny is, that all are not facts which are represented to be such, and this Mesmerists must admit themselves. Ask any one why he believes in animal magnetism, and he will tell you, because I have seen so many facts I cannot doubt its existence. Request of this same person an explanation of the phenomena he has witnessed on this subject, and he will reply, I have observed so few facts I can give none. That is, he has facts enough for his senses

*Benjamin Franklin's Estimate of Animal Magnetism.—Franklin writes thus, to M. De L'a Condamine:

"You desire my sentiments concerning the cures performed by Camus and Mesmer. I think, in general, maladies caused by obstructions, may be treated by electricity with advantage. As to the Animal Magnetism, so much talked of, I must doubt its existence till I can see or feel some effect of it. None of the cures said to be performed by it have fallen under my observation, and there being so many disorders which cure themselves, and such a disposition in mankind to deceive themselves and one another, on these occasions, and living long, has given me so frequent opportunities of seeing certain remedies cried up as curing every thing, and yet soon after laid aside as useless, I cannot but fear that the expectation of great advantage from this new method of treating diseases will prove a delusion. That delusion may, however, in some cases be of use while it lasts. There are in every great, rich city, a number of persons who are never in health, because they are fond of medicines, and always taking them, whereby they derange the natural functions, and hurt their constitution. If these people can be persuaded to forbear these doings, in expectation of being cured by only the physician's finger, or an iron rod pointing at them, they may possibly find good effects, though they mistake the cause."

B. FRANKLIN."

(Dublin Med. Press, July 21st, 1841.)
to admit a thing, but not enough for him to exercise his reason. Now, upon what sense can we rely? Is it not true that courts of justice are chiefly sustained by errors of sight and hearing, and that perverted sensation and imaginary diseases feed and clothe the medical profession? How often has even lithotomy been performed where no stone existed?

Another question often proposed by Mesmerists is, will you doubt your senses? If I receive an impression, by the exercise of one sense only, and this act be contradicted by reason and judgment, then I should not credit it, because I know how liable one sense is to deceive me. But if by the question so often asked, is meant the senses, then, I answer, no, I do not (in general) doubt them. And upon this very principle, I cannot believe in Mesmerism; for it has never been presented to my mind through the senses. Like the commissioners appointed by the King of France, I have never been able to perceive any effects in my own person or in that of another, which could not be otherwise explained. I have tried until satisfied that nothing unnatural could be produced. I have had professed magnetizers to labor by the hour on patients, and on some too very anxious to be put into the Mesmeric state, and still no relief or mitigation of pain whatever was induced before the knife was employed. Some indeed have gone to sleep, but a word or prick of a pin has sufficed to arouse them. And I know and have heard of patient after patient, where all the ceremonials of animal magnetism have been industriously employed, without producing the expected effects. Nor have the promise of my Mesmerising friends been at all realized. True, I witnessed on one occasion what produced extacies in some of them, until the Mesmerised boy by indication exhibited the organ of combativeness, from touching the tips of his shoulders. I have been asked several times since if I would like to witness the Mesmeric phenomena, and I have replied that I was a searcher after truth on the subject. I have heard, and that too very recently, of Mesmeric soirees or parties, at which I am told some of you were actors, as well as spectators, but as I was not invited, it is presumed the experiments were not satisfactory. Perhaps, indeed, my skepticism might have made me an unwelcome visitor. But this much is due to truth.

But still you may ask me, shall I not believe my senses? Certainly, my professional brother, you are the best judge of your own perceptions. And pray, let me ask, what have you experienced on this subject? Have you even recognized it by any four, or three,
aye, even two of the senses? If so, I beseech you relieve the world of the anxiety on the subject—settle the question at once of its existence, by telling what it is. But can animal magnetism abide this test? If not, and there are still difficulties in the way, mysteries and contradictory evidence, yet unexplained, it is the part of wisdom to scrutinize more closely and delay a decision favorable to its existence. In proportion to the improbability of a thing, should be our skepticism. The more extraordinary the phenomena, the more irreconcilable the fact, the greater the liability to error. Voltaire says, to believe a miracle, (and what is the conversion of water into wine compared to some of the so-called facts of Mesmerism,) it is not sufficient to have seen it, for we may be deceived. To be well established, it ought to be performed in the Academy of Sciences of Paris, or in the Royal Society of London. Now it has so happened that both these learned and scientific bodies, as we have already observed, did publicly and with great unanimity condemn Mesmerism.

In accounting for the facts ascribed to animal magnetism, and in presenting my views on this subject, I adopt the opinions of J. Bouillaud, and reduce all phenomena that we observed to two classes or orders; 1st, disturbed sleep, gaping, convulsive movements, deep sleep, somnambulism with insensibility more or less marked, shoutings, laughters, &c. These, says he, do not depend upon Mesmerism, since it is known that all these can be manifested by individuals who have not been subjected to that influence, and are the effects either of certain lesions of the nervous system, or simply the influence of certain impressions or moral feelings. The second order of phenomena, continues he, cannot be classed with facts admitted at the present day—they are entirely contradictory to physiological truths the most evident and clearly demonstrated—these are sight without the eyes, at the epigastrum, the end of the fingers, the occiput, the forehead; prophecy; divination; determining the seat and treatment of diseases by those, who have never studied medicine; the communication of thoughts without any kind of sign; the immediate communication of symptoms of patients to the magnetized with which they are in relation; &c., &c. As these violate and are at variance to known and long established principles of anatomy and physiology, and are opposed by reason and judgment, and since it is not agreed what exactly they are by those who admit them, and moreover as this evidence is so conflicting as to destroy itself, they should be rejected as having no scientific value. If then the facts of the first class are explained
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independent of Mesmerism, and those of the second are inexplicable by it, why, I ask, employ the term at all? Why presume the existence of a thing never demonstrated? Why declare the presence of a new agent, when those known to the profession can explain all the facts that are well established; and besides, to admit it, would necessarily involve the performance of miracles?

It may be said that all my arguments are chiefly directed against the name, and not to the denial of the existence of certain phenomena attributed to animal magnetism. I do admit that sleep, convulsive movements, insensibility, even mania itself, yea, death, may be produced, and have been produced, by one person operating on the feelings of another—but these, in my humble opinion, are not the effects of an occult mysterious agent, called Mesmerism, but the legitimate results of the imagination, &c. And I am particularly strengthened in this opinion, by M. Bertrand, one of the most zealous advocates of animal magnetism at the present day, in Paris; and also by Dr. Prichard, of Edinburgh, who has written the last article on the subject now before the profession in this country: and again, by Dr. J. K. Mitchell, one of the professors in the Jefferson Medical College in Philadelphia, whose views in its favor have been published, and so far as I know, he is the first and only one who has ventured in this country to do so.

Dr. Prichard defines a somnambulator to be a dreamer who is able to act his dreams. "To this property," says Dr. Mitchell, "of artificial dreaming, may be referred the alleged miracles of clairvoyance, intuition, and prevision. The subject dreams that he sees, and the questioner is deceived, by his confidence, his plausibility, and his ordinary character. He knows him to be honest, and he does not perceive that he is himself led astray by his uncorrected imagination.* * *

The rapport, relation, or communication, supposed to have an absolute existence, dependent on the Mesmeric fluid, seems to be entirely voluntary on the part of the patient, and rests on his knowledge of its supposed necessity. It is, therefore, a delusion, but one of the greatest convenience to the public exhibitors of Mesmeric wonders. * * *

Many of the feats of the clairvoyants are the result of the sharpened hearing, which enables them to detect objects by the sounds they make. They really believe they see them, and so does the exhibitor, although he aids them by handling audibly the various objects. (Certainly very flattering.) Thus he opens and shuts a pencil, a pen-knife, or a spectacle-case, and rubs a stick, or a sheet of
paste-board. He always makes as much noise as possible with every thing, and he generally asks the producer of a marked card to explain the words or device to him. As we cannot believe in Mesmeric rapport, so we are not able to credit the existence of any peculiar sympathy between the operator and subject. Untrained or ignorant patients never show sympathetic phenomena. I have been pinched, and hurt otherwise, a great many times, without observing any suffering on the part of my subjects, until they were taught to believe that such a relation existed; and then they honestly felt hurt, as people do in dreams—a kind of imaginary suffering. The phrenological phenomena of Mesmerism, when rigidly examined, are found to consist, as do most of the Mesmeric wonders, of 'such stuff as dreams are made of.' The excitement of the brain is general, the direction of that excitement is given by the Mesmerised person's knowledge of phrenology. * * Most of the phenomena of Mesmerism are a strange mixture of physical impulse and mental hallucination." These are the words and language of the most distinguished believer of Mesmerism in our own country.

With respect to the rapport, communication, or sympathy claimed to exist between the Mesmeriser and the Mesmerised, there is one remarkable circumstance, that has been overlooked. The person magnetized, it is said, experiences all the sensations, &c., with the one with whom he may be placed in relation; and he will feel pain, taste the same articles, imitate the act of swallowing, &c.; indeed, be in subjection even to the will of the Mesmeriser, and yet they never utter the same words. If this relationship be so intimate, this sympathy so close, why is it that they do not speak alike—if one does what even the other only wills, thus having in reality an identity of thought and actions, why don't they use the same language.

To prove too what can be endured by practice, the Boston Medical and Surgical Journal states, that within a year two boys voluntarily called to explain the tricks and impositions of Magnetizers—one had been several months the wonder and admiration of hundreds of believers. "Yet he positively declared that he had never been asleep in any instance, before an audience, nor was there ever a period when he was not thoroughly conscious in every respect, and obedient to command. By practice, he could bear to be pricked under the nails, tolerate the blaze of a candle within an inch of the eye without recoiling, allow heavy men to stand on his toes, &c., and in short, became by regular process of training, the best subject in New-England."
But further in proof of the effects ascribed to animal magnetism, being nothing more than the operations of the mind upon the body, all acknowledge its phenomena resembling very closely those of somnambulism—now it is certain, that the somnambulist sees only those objects which he seeks, or which are present to his imagination. A case of a female in this state is mentioned by Sauvages, where a lighted candle brought so near to the organ of vision as even to burn the hair of her eye-brows, a person unseen uttering suddenly a loud cry into her ear, brandy and a solution of ammoniacal salt placed under her eyes and introduced into her mouth, the feather of a pen, and afterwards the extremity of a finger applied on the cornea, Spanish snuff blown into the nostrils, prickling by pins, twisting her fingers; all these means were tried without producing the least sign of feeling or perception, and yet she perceived objects to which the current of her thoughts directed her.

We have the authority of the celebrated commissioners appointed in France in 1734, to report on the subject of Mesmerism—they unanimously agreed that almost every fact they witnessed, was the result of the imagination and other feelings, to the excitements of which so many circumstances were adapted. "Bertrand maintains that the effects, as well as all the results of magnetism, are to be attributed solely to the excited imagination; and he declares that the effects produced within his experience have always borne the most exact proportion to the conviction of the patient." He also supposes that the sense of weariness or numbness of the limbs, which persons experience when experimented upon, is occasioned by remaining long in one position.

The theory of animal magnetism adopted by Rostan, Husson and others, and practiced upon by all believers, is that there exists a peculiar fluid in the human system which can be set in operation by certain movements, or looks, or even by the will of the Mesmeriser. This, says Dr. Pritchard, soars so far above the region of observation and experiment, that it cannot be subjected to proof, and even were it conceded, or established, would not account for the phenomena of which the explanation is sought. "A much more probable opinion," says he, "is that of M. Bertrand, who, after surveying with calmness and discrimination the whole history of magnetism, and witnessing with his own eyes the proceedings of the operators in this art, and practicing them himself with considerable effect, comes at last to the conclusion that all the results of these operations
are brought about through the influence of the mind; not by the will of the magnetizer, radiating forth his own vital spirit, and operating through this material, or immaterial instrument, on the vital spirits of other men, who are the passive recipients, but by the energy with which the feeling and imagination of the latter act upon themselves.

Abbé Faria boasted that he had put more than 5000 persons into the Mesmeric state, simply by placing them in an arm-chair, and after telling them to shut their eyes and collect themselves, suddenly pronounced, in a strong voice and imperative tone, the word, "dormez," sleep. Bertrand says that though this may be an exaggeration, he very often succeeded by this method—even upon a considerable number of persons, removed from all suspicion of connivance. Here then is the imagination alone producing all the effects ascribed to animal magnetism, not in one case only, but in 5000 instances. What more can be required to prove my proposition—that Mesmerism is not a reality, but its effects are due to the imagination—than to cite you 5000 cases of the Mesmeric state, induced by placing these patients in an easy position, and crying out, sleep. "We have here a cause proved to be sufficient for the phenomena with which it is more philosophical to rest satisfied, than to resort to the visionary hypothesis of the magnetic fluid radiated forth by the will of the operator upon surrounding persons and objects, or to confess the strange doctrine, that the volition of a human body is capable of exerting an immediate influence on other minds and bodies than his own." The co-operation of the agency of the will on the part of the magnetizer is even denied by Bertrand, "who declares that in trials made by himself precisely the same results followed, whether he willed to produce them or not, provided that the patient was inwardly persuaded that the whole ritual was duly observed."

If animal magnetism be true, and Mesmerism a reality, where are the principles deduced from the facts observed even to the present day? The whole world has been engaged for 60 or 70 years collecting facts from any and every source, down to the present day, and yet not one established law—not one uniform rule exists, by which we may examine the subject, or by the exercise of which we can with any degree of certainty produce a given phenomenon. We have invariable principles for electricity, galvanism, magnetism itself—yes, for all other sciences, but not one for Mesmerism. In the selection too, of subjects upon whom to display its powers, animal magnetism invariably prefers the nervous female or delicate persons,
those especially in whom the imagination is most lively and active; while on the other hand, no man of science has yet been able to feel its influence. What the commissioners appointed by the King of France said more than 60 years ago, in reference to the fact, that not one of them could be made to experience the effects of Mesmerism, has descended to all other men of learning—none have yet been influenced or affected by it.

If the imagination have nothing to do with the production of the results ascribed to animal magnetism, we should have thought ere this to have witnessed these upon the inferior animals. Operations are occasionally performed on the horse, cow, dog, &c.; their organization is similar to ours, and we claim for them, the sympathizing benevolence of our Mesmerising friends. Give us a series of operations upon the inferior animals in the Mesmeric state, and our opinion is at once overthrown. Or if this be asking too much, then pray cite us the surgeon who has performed a series of operations even upon the human species while in this condition. But what is the fact on this point, a distinguished Professor of Surgery in Paris operates in one case, (Cloquet, 1819,) and for 16 years in succession, no second one is presented to him. Here we have an excellent, benevolent man, as all who know him will acknowledge, a believer in Mesmerism, or rather who was, who is in the daily habit of operating, both in private and in the hospital, possesses, as is supposed by some, the means of relieving pain, and yet for 16 years he has not found another instance in which it could be applied. And still Mesmerism, this non est inventus for years together, is dignified with the name of Science. Can any one, I candidly ask, believe that, under these circumstances, animal magnetism even has an existence, without admitting, it only displays its influence by exceptions to general laws; and so do catalepsy, somnambulism, mental hallucination. And yet in this very city, I have known an operation made conditional in reference to the induction of the Mesmeric state, and that too upon a patient laboring under a cancerous mamma. We have thus a new science attempted to be built up, upon exceptions to generally received and well established principles—for instance, that the knife gives pain in surgical operations. But with all the zeal and industry with which it is now cultivated and attempted to be applied in every case, with one or two exceptions only, can patients be thrown into the insensible state—they will violate the Mesmeric condition by flinching when stuck with a pin.
Lastly: If Mesmerism be true, apply to it the test by which we
have decided the existence of a specific virus in hydrophobia. Give
us instances of its effects upon infants in the cradle. Exhibit the
Mesmeric state in the child before it exercises its imagination. I
insist upon this test, and not in one, but in a series of cases.

I am persuaded that Mesmerism has been alone continued to the
present day, and believed to have an existence, from the circumstance
of its supposed connection with the nervous influence, which itself
has not been and cannot be defined. There are things in medicine,
as well as in other sciences, which have not been demonstrated, and
yet admitted to exist. Miasm or malaria is assigned as the cause of
a large class of diseases, and still it has not been discovered. The
effects, fever, &c., are however, uniform and almost invariable, so
that no one doubts the existence of a cause, although undefined.

But this cannot be said of animal magnetism. Its phenomena are
far from being certain, but on the contrary are exceedingly irregular
and undetermined, and are moreover explained even by believers
themselves, as well as by men of the highest scientific authority, to
be dependent upon another cause—viz., the imagination. Perkiness-
ism, i.e., the cure of diseases by metallic tractors, which was only a
branch of Mesmerism and founded upon its supposed existence, was
at once exploded by Dr. Haygarth employing wooden tractors
painted in imitation of metal, notwithstanding the wonders it was
accomplishing both in this country and in England. Its sole effect
was thus proven to be wholly attributable to the imagination. This,
no doubt, will be the result of any treatment or system based upon
the supposed existence of the agency under consideration. Mesmer-
ism can neither be demonstrated nor abide the test of experience.

My third and last proposition is, that the non-expression of pain is
no proof of its non-existence, and that there are conditions of the
body and mind, in which no suffering is evinced, and moreover that
this state of the system exists independent of Mesmerism. That
many capital operations have been performed without the patient's
complaining, we have abundant testimony in the record of our pro-
fession. We are convinced that there are few surgeons who have
not met with such instances. I have seen several.

Who need be reminded that a stoical philosophy once taught that
it was beneath the dignity of man to complain; that pain was not
an evil; that to cry was a shameful pusillanimity? Who requires
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to be told that savages, criminals and martyrs, have not only endured the greatest tortures without uttering a groan, but welcomed the horrors of death itself? Who does not know that at this moment there are religious fanatics in the East, whose bodies are voluntarily and cheerfully sacrificed to false gods—who have their persons suspended in the air by great hooks stuck in their backs, &c.

Although pain is designed by nature to protect and preserve life, still, a contented mind, the consolations of religion, a profound meditation, delirium, fanaticism, mania, &c., can suspend the action of our senses, and thus prevent the perception of pain. The mind at times has such control over the body, as even to extinguish life. At the siege of Bude, during the war of Ferdinand I. against the Turks, there was a young man who fought with such heroic valor, that he excited the admiration of both sides. At last he fell overpowered by numbers. He was sought out among the dead that he might be recognized; on removing his mask Raisciat de Souabe observed it was his son, he fixed his eyes intently upon him, and fell dead, without uttering a word. History furnishes us several such instances. The influence of the mind may be exerted only over a part of the body. Robert Boyle relates the case of a woman who, seated near a canal, saw her infant fall into the water and drown—from that moment she was attacked with paralysis of one of her arms, which attended her to the grave.

The savages on the West coast of North America had long pieces of a broken bottle stuck deep into the soles of their feet, without paying the least attention to the circumstance; and when spoken to on the subject by the European sailors, they immediately cut their bodies with the fragments of the glass.

Albucasis relates that on one occasion, he refused to amputate a hand from dread of hemorrhage, when the patient himself performed the operation. Count Mansfield submitted to amputation at the sound of the trumpets playing a charge. The daughter of Henry of Albert, for a splendid present promised by her father, gave birth to Henry the IV. of France, while singing a song. When Marshal de Muy was cut for stone, he uttered not a word or a groan.

Baron Percy states that he removed a cancerous breast from a patient, who smiled and spoke tranquilly to a cross she held in her hand. At another time he operated upon a young man for aneurism, which was complicated and very painful, who remained silent with an imperturbable calmness, as if the surgeon were operating upon another person. He assisted also in a case of lithotomy upon a pa-
tient of sixty, wherein the operation was long, and accompanied with hemorrhage, and although he was advised by his surgeon to cry out when he suffered, he replied by saying the thing was not worth the trouble—he appeared scarcely to suffer.

Surgeon Alcock says, "I recollect a sailor astonishing Sir A. Cooper by not uttering the faintest sound while his leg was taken off; * * *. No one will doubt the high courage of the Marquess of Anglesey. While his leg was amputated (at Waterloo) he uttered not a sound."

Mr. Travers relates the case of a man, whose mind was unimpaired, but whose hands up to the wrist, and feet half way up the leg, were perfectly insensible to any species of injury, or cutting, pinching, scratching or burning. He passed a large needle into the ball of the thumb, down to the bone. Not the least degree of pain, or even of sensation, was produced.

Mr. Liston describes a case in the Edinburgh Medical and Surgical Journal for April, 1826, of a gentleman, who lost his sense of touch over nearly the whole surface of the body, and when Mr. L. cut away one of the bones of his foot, he felt no pain whatever, and he added, "nor would I now, I am convinced, were you to dissect the whole foot."

Mr. Arnott says he has seen operations performed, without the knowledge of the patient, when insensible through opium or great loss of blood.

Dr. Copland states that he had taken off, or seen taken off, a leg from a man who gave no sign of pain.

Sir R. Dobson relates, that when the late Sir Thomas Thompson lost his leg in action, it is well known that he was singing during the time the operation was being performed. In the burial ground of Greenwich Hospital, continues he, is a monument to a seaman who was wounded at Trafalgar; the epitaph relates that, "while the amputation was performing, he was exultingly singing the patriotic song of Rule Britannia." Another seaman in this hospital, while loosing his leg, said to the surgeon, "avast a-bit while I take a pinch of snuff," coolly took the box out of his pocket, and after having offered a pinch to the assistant surgeon, took one himself, and the operation was finished without his having uttered a groan.

Several surgeons had attempted to remove a small tumour from the eye-brow of a lady in London, but the moment the scalpel touched the tumour, the patient would scream out with pain. Wardrop bled
her to fainting, and extracted the tumour, which she would not believe until a glass was presented her to see her face. She too was deceived.

The celebrated, but unfortunate, Gen. Moreau, when wounded near Dresden, hesitated at first to have his limbs amputated; but having made up his mind to submit, called for a segar, and while smoking, had both thighs cut off.

Mr. Clever cut himself for stone, a few years ago in Paris.

In November, 1832, Prof. Gibson, aided by Drs. Horner and Barton, of Philadelphia, removed a large tumour from the neck of a boy 17 years old. It was for a fungus haematodes. The first incision was seven inches long—one nerve had to be divided, the internal jugular tied; and another nerve, the par vagum dissected for five inches. "The operation lasted 34 minutes, and was most painful and difficult. He (the patient) remained during the whole operation motionless, and neither complained, sighed nor groaned." (See 6th Edition, Gibson's Surgery.)

It is even said the late Sir Thomas Hardy of the British navy, was altogether insensible to pain.

In the American Journal of Medical Sciences for April, 1844, I related the case of a gentleman operated upon in Charleston for stone in the bladder, by my friend Dr. Ogier of that city. It is there stated that "he refused to be tied, and insisted upon it, that he would be able to remain perfectly quiet during the operation. He was told of the danger to which the least motion would expose him. During the whole operation he remained as motionless as a dead subject. Dr. O. in a note at the bottom of the page says, he was not Mesmerised.

Curling gives the case of a youth who performed self-castration—"he said he was not conscious of any pain in the operation."

Two winters ago I operated upon an Irishman in our hospital, for a bloody tumour in the scrotum. At the first and only incision made, he called out, "cut away doctor, cut away."

In June, 1842, I trepanned a man for a spicula of bone irritating the brain. The operation was necessarily tedious, lasting near three quarters of an hour. Towards the close of it, I had to insist upon the patient checking his laughter, and to cease joking about the silver plate to be put over the hole made in the cranium.

But why multiply examples of this kind, to exhibit the effects of the mind over the body, so as to induce insensibility to surgical operations. These few, hastily collected, will suffice.

The work assigned me, Gentlemen, is now before you, and you have
my views of Mesmerism. To what extent they are correct, is for you to judge, and future days to decide. I may have done the subject injustice, as I know I have made a very feeble and imperfect defence of the opinions of those whose side I advocate; but I have acted conscientiously. And if by the explanations I have offered you, conflicting testimony can be reconciled, and you put into the right path to investigate this mysterious, all-absorbing topic of the day, your Lecturer has his reward. It will be perceived, I teach no new doctrine; but those do, who reject the opinion of the imagination being the source of the phenomena of animal magnetism.

I know not how this subject is viewed by you, but with me, the existence or non-existence of Mesmerism, is a vital, a fundamental question. If true, you and I may close our books and retire forever from these walls, for by it, and through it, omniscience is come. Would you be wise in medicine—be put in relation with Johnson and Velpeau, and your object is accomplished. Would you operate without inflicting pain; would you know what remedies are now employed in London, Paris, or China; would you inspect the actual condition of the internal organs; would you predict the return of disease; would you tell whether that lady is pregnant with a boy or a girl; or would you deliver this lady without pain—Mesmerism being true, study it. But, fellow-laborer in the science of medicine, these things are not so; and I tell you whom you should rather consult—the Author of all things. To the law and the testimony, what say they—intuition! in the sweat of thy brow shalt thou eat bread—divination! thou knowest not what a day may bring forth—no pain, no suffering! in sorrow shalt thou bring forth children.

That which was unanimously condemned by men of the highest scientific authority when it originated—that which is now classed with the quadrature of the circle and perpetual motion, by the Academy of Sciences in Paris—that which was abruptly dismissed from the Medico-Chirurgical Society of London—that which is ridiculed by every Medical Journal of the day—that which has never been demonstrated, but which is opposed by reason and judgment—that which has never received favor with but few exceptions from scientific men, of any age or country—that the belief of which cost Dr. Elliotson his professorship in the University of London—that which at best exists but in a dreamy state—that which is explained not in one, but in thousands of cases, to be due to the imagination alone, cannot be, is not true.
The January number of this valuable periodical contains its usual variety of interesting matter. The first article is the history of "a case of loss of Speech, &c.—by William Edward Steele, A. B., M. D., &c." The patient was a man aged about 25 years, and engaged in a laborious situation in a government office. The attack was preceded by apoplectic symptoms, and paralysis of the right limbs. Under appropriate treatment, "he soon improved in all respects save in his power of speech, which, with the exception of an occasional word or short sentence, was obliterated." Dr. S. relates many of the observations which were made during the progress of the case, for the purpose of determining the true nature of the mental disease. His conclusions we subjoin.

"These facts, I conceive, warrant us in making the following deductions: 1st. That there exists a faculty of the mind which presides over the expression of thought, by speech, writing, and gesture. 2ndly. That in the expression of our thoughts, by these several means, there exists a considerable difference in their perfection and complexity, as communicating media; this difference being in the order enumerated:—speech, writing, gesture. 3rdly. That admitting these conclusions, it is highly probable that the defects exhibited in these actions, as a result of disease, arise not from any fault of memory, considered in itself, especially as in other respects the memory is perfect; but that this may appear to be impaired by the destruction of one of the means it possesses, of manifesting its existence, in common with its other mental attributes, perception, retention, and association; these being thus placed in the same position as is the retina in cataract or opaque cornea,—the power of sight remaining, but the means, by which its existence is manifested, destroyed.

"As to the probable situation of the cerebral lesion, in cases of this description, our knowledge is imperfect. Dr. Osborne believes it to be the upper surface of the cerebrum. In Abercrombie, cases of brain disease are related, accompanied by loss of speech, in which the central parts of the brain were those chiefly affected. In this case, however, if it be true, as laid down by modern craniologists,
that the double organ of language be seated at the back of the orbits, both organs must have been involved in disease, in order that the almost total loss of the power of expression may be accounted for. But the attendant hemiplegia would indicate the lesion to be situated in one hemisphere only, leaving, at least, one-half of the double organ of language untouched; a conclusion which is manifestly inconsistent with the total absence of the powers of speech, which this case at one time exhibited.”

Mr. Donovan furnishes a long communication, “on the physical and medicinal qualities of the Cannabis Indica, or Indian Hemp; with observations on the best mode of administration, and cases illustrative of its powers.” The remarkable effects produced by the Indian Hemp, and its value in the treatment of certain affections of an almost hopeless character, were first brought to the notice of the profession in an essay by Prof. O’Shaughnessy, of Calcutta. Mr. Donovan, who appears to have devoted considerable attention to the subject, seems quite enthusiastic in his opinion of its value—“I indulge,” says he, “in the expectation that this powerful agent, when physicians have fully developed its properties, will rank in importance with Opium, Mercury, Antimony, and Bark.”

It has been a question whether the Cannabis Indica and the Cannabis Sativa, or the common hemp, were the same species. The experiments of Mr. Donovan shew pretty conclusively, that they are distinct, and that the domestic hemp is destitute of the principle which renders the Indian plant so desirable an excitant to the voluptuous people of the East.

The symptoms produced by the action of this agent, differ in many respects from those which follow the use of other narcotics. Among the remarkable effects noticed by Prof. O’Shaughnessy in some cases, was a well marked cataleptic state. In almost every case hunger seems to have been excited. Mr. Donovan made some experiments with this article upon himself, for the relief of a neuralgic affection. We extract his history of its effects:

“Having determined to try Indian hemp, I swallowed, during one of these attacks, five drachms of the same tincture of the herb which in a dose of three drachms, had formerly proved powerless. In twenty minutes, I was agreeably surprised to find myself without pain; although for the last four hours I had suffered severely. There was this peculiarity of the relief obtained, that I walked without much consciousness of the motion of my legs, or indeed of having legs at all: I felt as if they did not belong to me.”
"In some months after, while suffering under a severe attack of pain in the foot, I took nine grains of weak resinous extract of hemp, which had not the slightest effect. Next night, I took six drachms of the weak tincture of the herb, without the least benefit. The third night, being in exceedingly great torture, I took twelve grains of the same weak resinous extract: in twenty minutes I was nearly free from pain, went to bed, and slept soundly four hours. The pain then awoke me, but it was much less severe. In the morning, there was neither headache, nor any other inconvenience.

"Considerable pain having returned the fourth night, I took twelve grains of the same extract; soon fell asleep; and awoke, after two hours, free from pain. The fifth night, the pain being somewhat troublesome, and wishing, more for experiment than through necessity, to try the effect of a larger dose, I took fourteen grains of the same resinous extract. About five o'clock in the morning, I awoke to encounter a most extraordinary scene,—one, of which words can give but a faint description. I felt a rush of strange sensations through my head, accompanied with a crackling and singing noise, and a vibratory motion through my whole body. These gradually subsided; and while dozing off, I thought an explosion took place in my head, followed by the same rushing noise and vibration as before, and afterwards by a strange metallic sound. Various other noises succeeded. My sense of touch and feeling had become more and more obtuse, until at length I lost all feeling, unless I pinched myself severely. The effects were now at their height, and the consequences were surprising. I absolutely lost the consciousness of having a body, and my corporeal existence appeared to be comprised within my head, and a small portion of my chest, near the throat; in these spots, I felt as much alive as ever, but all other parts were without feeling, and to my perceptions annihilated. My intellect was not in the least disturbed; memory was as good as ever; I reasoned well enough; was conscious of external objects as in perfect health: but I had some notion that if I gave way to sleep, I should never awake in this world; yet, strange to say, I felt perfectly resigned to this sudden termination of existence.

"These singular affections gradually passed off: on attempting to get out of bed, I could scarcely walk for giddiness; my stomach became sick, but on returning to bed I soon recovered, ate an immense breakfast, and remained perfectly well, without having experienced any of these inconveniences which succeeded relief obtained from opium."

* * * * * * * * * *

"The effect on the sensorium, produced by the medicine, is generally alarming to the patient as well as to the by-standers, unless they were previously made aware of what was to be expected. Some patients evince great terror of death, but on recovering from the fit of narcotism, they laugh at their fears, and are generally ready for another trial."
"Rumphius says, that the kind of mental excitement produced by hemp depends on the temperament of the consumer. Professor O'Shaughnessy represents the inebriation to be of the most cheerful kind, causing the person to sing and dance; and adds, that in persons of a quarrelsome disposition it occasions an exasperation of their natural tendency. The aphrodisiac effects of hemp have been insisted on by all the oriental writers: Rumphius doubts that the herb possesses any such power; for my own part I believe, that although it may powerfully excite Eastern voluptuaries, it has little effect on the natives of our own country; that when it does exert this influence, it is only on the young, and on those of a sanguine temperament. In all the instances of its exhibitions to male patients, recorded in the foregoing pages, one only was thus affected, and I made minute inquiry. In no case that fell under my observation, has it produced those rapturous ideas and ecstatic dreams described by the oriental writers. I knew but two or three whose ideas, while under its influence, were even pleasing, and some were singularly depressed, and under apprehension of immediate death."

The Indian hemp has been employed in the treatment of various diseases, principally, however, of such as are of a painful character. It has been used in both the acute and chronic forms of Rheumatism. Prof. O'Shaughnessy, as quoted by Mr. Donovan, says, "In several cases of acute and chronic rheumatism, admitted about this time, half-grain doses of the resin were given, with closely analogous effects,—alleviation of pain in most, remarkable increase of appetite in all, unequivocal aphrodisia, and great mental cheerfulness. In no one case did these effects proceed to delirium, nor was there any tendency to quarrelling. The disposition developed was uniform in all, and in none was headache or sickness of stomach, a sequel of the excitement."

The powers of the article in tetanus are truly remarkable. Mr. Donovan refers to a number of cases of this fatal malady which were treated with the Indian hemp, and in almost every instance with success. He also gives several cases of sciatica and other neuralgic affections, which were cured by this remedy. He declares that he has not made a selection of the successful cases out of many, but has faithfully recorded all which came under his observation, of which the termination was distinctly known.

The resin of the Indian hemp is the form in which the article has been most frequently employed. The tincture of the resin, of all the preparations of the plant, is said by Mr. Donovan to be the only one on which reliance can be placed.
"I say the tincture, because the resin itself, being totally insoluble in watery liquids, is best administered in the state of solution: in the pillular form, it is likely to pass undissolved through the intestinal tube. Mr. Richard O'Shaughnessy found that a drachm of tincture which was only equal to three grains of the resin, had a much more decided effect than five grains of the latter. The strength which I employ, and of which I have made a large quantity, to guard against the variability of new samples, is two grains to one drachm of rectified spirit. The source of the variation of strength alluded to, would be a softer or harder consistence of the resin employed, giving rise to an enormous and dangerous difference of power: other sources are the collection of the herb at an improper season: the decay of the herb by long keeping; bad management of it in drying, &c.

"As to the modes of administration, I have tried many, and find the following to be the best:

\[ \text{& Tincturae resinae Cannabis Indicae minim quindecim.} \]
\[ \text{Spiritus Rectificati minima quadraginta et quinque.} \]
\[ \text{Miscæ; fiat haustus.} \]

"The patient should be directed either to swallow the whole of this directly from the bottle to avoid loss, or to pour it into a little water, and instantly swallow it off. If not instantly, the resin will be precipitated, will adhere to the vessel, and thus escape being swallowed."

The Indian hemp is doubtless a most potent medicine, and is destined to prove a valuable acquisition to the Materia Medica; but further observations are necessary, before we can arrive at any certainty touching its action and application to the treatment of disease. The interest which it has already excited will soon lead to ample experiment. In our Periscope, we publish the deductions of Dr. Laurie, drawn from his observations of its effects, and it will be seen that these are not so favorable as those of Mr. Donovan.

W. F. Montgomery, A. M., M. D., Professor of Midwifery, &c. to the King and Queen's College of Physicians, in Ireland, reports "a case of a large Cauliflower excrescence successfully removed, together with the portion of the Cervix Uteri, from which it grew."

This case presents nothing novel in its features, with the exception of its favorable termination, which circumstance we presume led to its publication. Such operations have heretofore so uniformly been followed by a reappearance of the disease, and a subsequent fatal termination, that medical men generally despair of affording any permanent relief, and therefore attempt little more than a palliation of the more distressing symptoms. Prof. Montgomery's case
may serve to encourage efforts to effect a radical cure in such cases.

The patient was a woman of forty-five years of age, and the mother of nine children, the youngest of which was nearly four years of age. She had been complaining of her present symptoms ever since she had weaned this last child. On examination, a firm, rough, lobulated tumor, was found, nearly filling the vagina—it appeared to spring from the os uteri, as well as from the contiguous parts of the vagina, but the mouth of the womb could not be felt.

The tumor bled readily on being touched.

"By the speculum, the tumour was readily brought into view, and after wiping off its surface, a layer of coagulated blood with which it was covered, it appeared of a dull, dirty, whitish, or light drab color; its surface uneven and studded with a number of small tubercles, like the head of a cauliflower. This patient had been previously operated on in November, 1842, when the tumour then existing was removed by ligature, in doing which, portions of it were broken off, which afforded Dr. Anderson the opportunity of making the microscopical investigation into the structure of this fungus growth, already alluded to; but it soon grew again, and in the intervening four months had acquired considerable size.

"Saturday, March 4. I included the whole of the tumour in a ligature, which I placed as high up as possible; its application gave no pain, and very little discharge occurred. After applying the ligature, I drew it up one inch, and ordered the patient an opiate.

"The ligature was tightened every day, and in doing so was followed by sharp abdominal pain, without any accompanying tenderness, or acceleration of the pulse; indeed pressure over the pubes gave her so much relief, that she constantly kept her hand firmly pressed over that part. Anodyne fomentations with draughts containing acetum opii, relieved her pain; the pulse never rose above 80, and she was quite free, throughout, from any constitutional disturbance.

"On Sunday the 12th, I found that I could not draw the ligature any further, it had evidently come home to the top of the canula, and yet, neither it nor remains of tumour would come away; and being unwilling to allow the latter to remain any longer, I introduced a curved scissors, and removed the greater part of it.

"Thursday 16th. I exposed the upper part of the vagina by the speculum, and seized the remaining portion of the root of the tumour with a dressing forceps, when it came away completely, leaving the surface behind it clean and healthy-looking; it sprung from a space about the diameter of a halfpenny, engaging the margins of the os uteri, and the vaginal mucous membrane, towards the left side.

"On examining carefully the substance now brought away, I found that I had removed, not only the morbid growth, which was now reduced to a mere bundle of ragged filaments, but also the parts from
which it sprung, namely, the os uteri, and a portion of the vagina:—the bloody and serous discharges, and the peculiar abdominal pain, now ceased altogether, and a discharge of healthy pus took place from the exposed surface; this, after a few days, threw up exuberant granulations, which I touched with nitrate of silver, and a clean and healthy cicatrization was completed in three weeks from the time of the removal of the parts. On the 7th April, she menstruated naturally, and on the 17th April I examined her with the finger and with the speculum, and found her free from any remains of the disease.

"I have since seen and examined this woman several times, the last occasion having been on this day (November 28th). She has menstruated regularly and fully during the whole interval of time, amounting now to nearly twenty-one months.

"Her general health is pretty good; she is improved in aspect, and increased in flesh: she complains of nothing except some pain in her back, especially at the time of menstruation, which still continues regular.

"There is no projection of the cervix uteri into the vagina, and the os uteri has entirely lost the defined margins which are natural to that part in general; it is very much closed, and gives to the finger the feel of a small puckered cicatrix; but all the parts are quite healthy and sound."

Dr. Montgomery prefers the ligature for the removal of such tumors, and he states that the operation is more likely to be successful when the tumor has acquired a considerable volume, than when it is of a smaller size, because, though there may be more difficulty in passing the ligature, it can be placed higher up, and will more certainly retain its position. Moreover, from its greater volume, it is probable that the portion of the cervix uteri from which it springs will have become elongated, and will thus be more readily and completely brought under the action of the ligature. After the extirpation of the tumour, Dr. M. recommends, "that the surface from which it has been removed should be freely touched with some active caustic, such as the strong nitric acid, fluid nitrate of mercury, nitrate of mercury, nitrate of copper, or perhaps with the actual cautery, which, Dr. Johnson informs me, proved eminently useful in a case lately under his care."

"Practical Observations on Phagedænic Ulceration, in connection with its primary and secondary forms," is the title of an interesting article by John C. Egan, M. D., Licentiate of the Royal College of Surgeons in Ireland, and one of the Surgeons of the Westmoreland Lock Hospital. The term Phagedæna, has been differently employed
by authors. Dr. Egan bestows this appellation on "sores caused either by the process of ulceration or sloughing." As this species of disease is acquired by impure sexual intercourse, it has generally made some progress before medical aid is sought.

"It rarely happens that we are consulted by a patient having recently contracted such a sore, and on this account are not always able to state what was the first indication of the disease. If we inquire he will tell us it commenced either in a small black spot, resembling a grain of shot, or that a "pimple" was the first intimation of its existence; that it rapidly increased in size, without causing much uneasiness:* and that his fears were first excited by a bleeding which took place from its substance. When we come to examine it, we find the surface of a dark-ashy colour, to which a bloody matter tenaciously adheres; it neither exhibits granulations nor surrounding induration; the edges are irregular and undermined; the parts bordering on the ulceration are of a reddish hue; the smell extremely foetid; and at this stage it is generally attended with considerable pain. In the male, the part principally engaged is the glans penis, from which it afterwards extends to the prepuce; in the female, the external labia pudendi, in the first instance, from which it spreads with extreme rapidity; and if not quickly checked, involves in its ravages the vagina, perineum, and anus, and sometimes even the bladder and uterus."

Dr. Egan's essay is principally devoted to the treatment of the disease. He deprecates strongly the employment of mercury, and in the condemnation of this medicine he is sustained by Lawrence, Carmichael, Ricord, and other distinguished surgeons. He admits, however, that there are a few cases in which mercury acts beneficially, but the indications for its use do not seem very plain.

"According to one author it may be prescribed where there is nothing but ulcerative absorption, without any trace of inflammation in the surrounding parts, and where no constitutional disturbance is present; according to another it should be used as a last resource, where every other remedy has failed to arrest the destructive process; and on the authority of a third, its use is only admissible when the ulcer assumes an indolent character. I need scarcely say, that definite as these directions may appear to the theorist, they will prove almost useless to the practical surgeon, in the treatment of the disease. Experience alone will solve the difficulty. As far as my ob-

* The pain and constitutional disturbance, however, often keep pace with the
servations extends, I may remark, that the cases benefited by mercury are "few and far between," and it is with fear and trembling I resort to it, even where other remedial agents have proved ineffectual."

The principal indications of cure are to subdue the accompanying fever—to allay irritation, and to check the sloughing process. To effect the first, Dr. Egan advises the use of the lancet, or of local abstractions of blood, and the employment of tartar emetic, when the condition of the patient will permit; but in broken down constitutions such active treatment cannot be borne. In such cases it is advised to give small and repeated doses of the antimonial in combination with opium. To allay the irritation the muriate of morphia is advised, to be given in pills at bed time.

"The grand object to be attained, to which the foregoing treatment is merely preliminary, and in comparison of which every other indication must be looked upon as subservient, is the arresting of the ulcerative or sloughing process. I will not stop here to recount the various remedies that have been had recourse to at different times, and by different practitioners, for this purpose, the task would prove as useless as it would be uninteresting, as many of them have long since sunk into deserved oblivion, but at once proceed to a plan of treatment, which is attended, for the most part, with beneficial results, and which I have now employed extensively in the wards of this hospital, with the most complete success. I allude to the application of the strong nitric acid, which is to be used freely to the sore, and repeated until a clean vascular surface comes into view. The first or second application is not attended with any considerable degree of pain, as the disorganized material tends to protect the more sentient parts, but in proportion as the more sloughy matter becomes detached, the pain is increased on each successive application. I am in the habit of enveloping the parts in a warm poultice, immediately after the employment of the escharotic, which is most grateful to the patient, and assists the separation of the disorganized mass. If the slough, as occasionally happens, should be reproduced, it will generally be to a partial extent, and at this period equal portions of balsam of Peru and castor oil will hasten its detachment; poultices subsequently encourage granulation, and promote cicatrization.

"At the same time that active topical measures are resorted to, constitutional remedies must not be neglected. The administration of dilute nitric acid, in combination with the compound decoction of sarsaparilla, acts favourably in the early stages of the disease, but at a more advanced period the preparations of iodine appear to exert a considerable control over this species of ulceration. With this intention I prescribe the hydriodate of potash, commencing with five-grain doses, three times a day, and gradually increasing it to ten,
which I seldom am obliged to exceed; if pushed farther, the super-
vention of colicky pains renders its discontinuance imperative.”

For the eruption which sometimes follows such ulcers, and which
is generally of the erysipelas form, Dr. Egan recommends, after the in-
flammatory symptoms are subdued, the use of the Hydriodate of
Potash in doses of five grains, three times a day.

“When I was first appointed to this hospital, I was in the habit of
treating these cases with alterative doses of mercury in the form of
Plummer’s pill; but although the apparent cure was in many instan-
ces expedited by that remedy, yet the relapses were so numerous, that
I determined to abandon it to a great extent, and seek some other
remedial agent; and none appeared to answer the desired object so
well as the hydriodate of potash. My reasons for giving it the pre-
ference are—First. It cures the eruptive and ulcerative disease. Se-
condly. It is useful in these articular pains, so often accompanying
it. Thirdly. It acts beneficially in the form of sore throat, which at
a more remote period attends upon the disease: and lastly, it is par-
ticularly applicable in the treatment of nodes, which not unfrequently
present themselves, especially after mercurial courses. As a local
application, I have found the Unguent. Hydrarg. Nit. Oxyd., diluted
with an equal proportion of lard, particularly useful, first, in tending
to soften the crusts, and subsequently as a stimulant in assisting to
heal the ulcers.”

There are several other articles, of lesser interest, which our limits
will not permit us to notice.

ARTICLE IV.

Gazette Médicale de Paris, No. 1 to 5—1845.  
Journal des Connaissances Médico-Chirurgicales.  
 Bulletin Général de Thérapeutique Médicale et Chirurgicale.

We have received several of the latest numbers of the Journals
above named, and propose to notice briefly some of the articles which
they contain.

1. The Medical Gazette of Paris is one of the most popular journals
of the French capital. It has now reached its 13th vol.; it is pub-
lished every Saturday, in newspaper form, in numbers containing 16
pages of double columns, and its chief editor is M. Jules Guérin, of
orthopedic notoriety. The price per annum is about $9.
The leading Article in the first and the three following Nos., is entitled the "Disease of the sternal and vertebral articulations of the ribs, with or without tubercular softening and necrosis of the bones of the spinal column." By A. Toulmouche, M. D. &c., of Rennes, France. Although this is an excellent production, from the paucity of affections of bones, even of the vertebrae, in this section of country, we shall pass over it with only a few extracts. Dr. T. commences by acknowledging the difficulties in relation to the diagnosis in the affection. "Nevertheless," says he, "the works of M. M. Nichet, Nélaton, Paris, &c., have greatly advanced science, and dissipated in part the indefiniteness which obtains in the writings left by Pott, Pouteau, Brasdor, and many other pathologists of the last century. But they have not removed the uncertainty and obscurity which still reigns in the symptomatology. Did the disease under consideration, begin by attacking the parts situated superficially, it would not be so difficult to recognize it; but unfortunately, the first lesion is in the bodies of the vertebrae deeply lodged in the thoracic or abdominal cavity, and gives rise to collection of pus or softened tuberculous matter, inaccessible to all means hitherto employed for its early recognition. It is only when progress has been made by this affection in the advanced stages, and when paraplegia or paralysis of the bladder, succeed to the pre-existence of pain in the spinal region, or the detection of deformity in one or many spinal processes of the vertebrae, that we are certain in our diagnosis." This memoir of M. T. comprehends three orders of facts—viz: 1st. those in which there is necrosis of the head of a rib in its articulation with the vertebral column, destruction of this part and symptomatic abscess; 2nd. those where the same lesion has taken place, but with tubercular softening, and necrosis of the neighboring vertebrae; and 3rd. those comprehending the same morbid affections limited to the spinal column. We object to the word necrosis employed in this article, it should have been caries.

There is an Article in Ophthalmology, and particularly directed to the three images reflected in the eye; by Dr. Magne, of Paris. This writer states that since he addressed a memoir to the Academy of Sciences, relative to a black cataract upon which he had operated by couching, several of his professional brethren had called upon him for explanations in reference to the images reflected in the eye, and which induced him to believe that the discovery of his preceptor, the late Prof. Sanson, was neither acknowledged nor appre.
ciated as it should be. He then states that, in 1836, Dr. S. commenced to observe, and in 1837, demonstrated in his clinic, that when a candle was placed before an eye whose pupil was dilated, three images were seen, and succeeding each other from before backwards. The first and anterior one, is the most evident, and is upright or straight—the second or middle one is less distinct than the anterior, and the reflected image is reversed, or upside down—and the posterior is the faintest of all, and is upright like the first. Sanson and his pupils arrived at the same results in their investigations on this subject; and the explanation of these phenomena is, that the first or anterior image is produced by the cornea; the middle or reversed image is the reflection from the posterior segment of the crystalline capsule; and the third or posterior straight, is due to the reflection of the light from the anterior segment of the capsule. An opacity of the cornea destroys all the images; opacity in the anterior capsule prevents the two posterior; and that of the posterior capsule, the reversed image. In other words, in cataract of the posterior capsule, the middle or reversed reflection of the candle is not seen; in that of the anterior capsule or capsulo-lenticular cataract, the anterior or first upright image is alone visible. In this catoptric examination of the eye, the two following circumstances must be remembered, viz: to have the pupil well dilated and the room darkened.

The Review of Journals contains a notice of the Surgical clinic of Fribourg, service of Prof. Stromeyer, from 1st November, 1842, to end of October, 1843, 414 patients were admitted, and 245 consultations were held. There were 8 amputations, 6 of the leg and 2 of the thigh, 2 of this number died, 3 excisions of cancerous inferior lips, all cured, 4 cases of Lithotomy, all successful. We notice in one Journal, the case of a girl, aged 14, who in 17 days past 898 lumbricoides. Except being pale-faced, she had enjoyed good health. Means employed to expel the worms, not indicated.

At the session of the Academy of Sciences, M. Baldacconi presented a specimen of petrified animal substance, produced by long immersion in a saturated solution of 12 parts of bi-chloride of mercury and 1 or 2 parts of hydrochlorate of ammonia.

M. Maisonneuve proposed a new mode of Catheterism—viz: first to introduce a very small bougie of gum-elastic into the bladder, and then slide upon it a catheter open at both ends. This latter instrument is rendered easy of introduction by a thread of silk or metal,
tied to the external extremity of the bougie, after passing it previously through the catheter. This is now to be pushed gently upon the conducting gum-elastic into the bladder.

Dr. Roesch, who writes upon the subject, says, Goitre is the companion and precursor of cretenism, wherever this disease is endemic; at least there is always augmentation or degeneration of the thyroid gland and of the surrounding cellular tissue, with a lymphatic temperament and a physical and moral apathy.

M. Lereboullet, professor at Strasbourg, communicated to the Academy a case of distinct inflammation, and of its usual effects, intense redness, exudation of plastic lymph, formation of false membranes, agglutination and purulent secretion in a cold-blooded animal, (a species shark.)

2. The Journal of Medico-Chirurgical Knowledge, is issued every month in loose sheets, containing 46 pages, and is accompanied each year with two Atlases containing six Plates of Anatomy of the natural size, engraved upon steel. Price $2 50.

The leading Article in the January No. is by M. Piorry, one of the Professors to the Faculty of Medicine in Paris, and is on the effects of Sulph. of Quinine upon the Spleen. Given in 20 gr. dose, in 40 seconds this organ, which was enlarged, (hypersplenotrophy,) began to diminish; and in five minutes the diminution was very considerable. Another similar dose on the next day reduced it to its natural size, and cured the patient.

In the sitting of the Academy, 2nd December, 1844, M. Maison-neuve proposed in cases of intestinal obstruction, to cut the intestine above, and secure it by sutures to another opening below.

M. Valenciennes was elected on the 9th December, in the section of Zoology of the Academy of Sciences, in the place vacated by the death of M. Geoffroy-Saint-Hilaire.

The Journal states that 800 Students had entered the School of Medicine in Paris, being 51 more than the preceding year.

The plates of the Atlas for January, 1845, are 2 for the external, 2 for the middle and 2 for the internal Ear. We need scarce add, they are most minute and splendidly executed.

3. The General Bulletin of Medical and Surgical Therapeutics, is edited by Dr. Miquel, and is issued once a month; each number contains 80 pages, and it is exclusively devoted to practice. Price $1 50.

Our limits will not, at present, permit us to notice the contents of this work, but we may have occasion to recur to it hereafter.
M. Devergie says he has employed the following recipe for an ointment for Chilblains for several years, and almost always with success:

R. Axungia, 5jss; Creosote, 10 drops; Liquor plumbi sub-acetatis, 10 drops; Thebaic Extract gr. 2. M. Make Ointment. Spread morning and evening a thin layer of this ointment upon the parts affected with chilblains, and maintain it by means of linen.

We learn from the Bulletin, that the number of physicians in Paris is 1430, a pretty large regiment. Total, in France, 18,803. This, we think, is about the number in our own Country.

Local Hysteria. By R. B. Todd, M. D., F. R. S., Physician to King's College Hospital, &c.

It is difficult to assign a cause for the fixation of the hysterical phenomena in particular localities. We have, indeed, very much the same difficulty here, as in explaining other examples of general or constitutional disease exhibiting local symptoms. It may be that, in many cases at least, the local symptoms should be regarded as reflected nervous phenomena, either of sensation or motion; some part of the great gastro-intestinal surface, or some internal viscus, being the seat of a primary disturbance, which creates an irritation of a portion of the nervous centre, and this affects some sentient or motor fibres connected with it, which propagate their irritation to some peripheral region. Or, again (and this perhaps is of rare occurrence), there may be some immediate irritation of a part of a nervous centre, not propagated from any sentient surface, but caused by some local disturbance of the circulation, and, consequently of nutrition. Or, lastly (and this is not unfrequent), the patient may have received a strain or hurt at some part, and her attention being strongly directed to that part, and her anxieties aroused respecting it, that part has become the seat of a fixed pain. And even if there has been no previous injury, there can be no doubt that a part may become irritable and painful, about which the patient's thoughts and anxieties have been occupied for a considerable time. I could quote to you many authentic instances of this power of the mind to create pain, as it were, or to perpetuate it, after it had been excited by some physical cause. But it must suffice for me, at present, to direct your attention to the fact as one of which it is most important that the practitioner should be cognizant. I do not profess to give an account of all the forms that local hysteria may assume, so many and so various are they. I shall, however, briefly refer to the principal varieties that are likely to be met with in practice.
Pain in the Side.—Among the most common forms of local hyste-
ria are those pains in the right or left side; of these I believe the
most frequent is that on the left side; the pain is referred to a spot
immediately beneath the left mamma, corresponding very nearly to
the situation of the apex of the heart. In most cases the pain is in-
creased on pressure: sometimes, however, firm and steady pressure
gives no relief. If you watch the out-patients of this hospital for a day or two, you will
find a large portion of the female applicants complaining of pain in
the left or right side. It is very frequently (that on the left side
especially) accompanied with leucorrhœa or some form of uterine
derangement, so much so, that now, after I have learned that a young
woman of hysterical appearance complains of this pain, my next
question invariably refers to the existence of leucorrhœa. In some
instances this pain is always increased on inspiration, and is attended
with a short but frequent cough, without expectoration. If there be
any emaciation, or if there has been phthisis in the family, the fears
of the patient’s friends become excited, lest this cough and pain should
be the forerunners of consumption. And it is not always easy to
assure oneself that the irritation of nascent tubercles may not have
some share in the production of the phenomena. Some time ago I
was consulted in the case of a young lady of good family, who, from
a long-continued pain in the left side and frequent cough, was con-
sidered to be phthisical, and, in consequence, was kept in a regulated
temperature for a considerable period. By several very careful ex-
aminations of the chest, I felt myself at liberty to pronounce her free
from tubercular disease, and prescribed an opposite mode of treat-
ment, good air, carriage exercise, and tonics, with great advantage;
and now I sometimes see this lady, who enjoys good health, but is
subject to the occasional recurrence of this pain in the side and cough,
whenever any anxiety occurs to excite her hysteria.

Irritable Spine.—The irritable spine is another form of local hys-
eria, which, if treated on erroneous principles, or if its real nature
be not detected, may lead to very serious consequences. This affec-
tion has been deemed of sufficient importance by some practitioners,
to merit its being designated by the special name of spinal irritation.
But this term is highly objectionable; for it implies that the essence
of the patient’s malady is to be found in the spinal irritation, and that
the treatment is chiefly to be directed to relieve the local suffering.
And many who have written upon this subject have striven, on very
insufficient evidence, to show that the spinal cord itself is at fault.
The truth, however, is that the spinal irritation is but a symptom of a
general state, a local malady depending on a constitutional cause.
These cases are often mistaken for actual disease of the vertebrae,
and patients have been confined to the recumbent posture for its cure,
a mode of treatment admirably calculated to perpetuate the real com-
Local Hysteria.

[April,

plaint. It often happens that the patient has difficulty in walking, and this is regarded as the consequence of the spinal affection. She at first finds herself easily fatigued; the pain in her back is increased by walking or standing; she gradually becomes disinclined to move, and gets accustomed to the horizontal position, and therefore readily yields to any suggestions in favor of quiet, or reluctantly obeys the advice which recommends an opposite plan. The most acute pain is felt over a particular spot on the back. Slight pressure will produce it, when the patient's attention is alive to it; and firm pressure will often fail to create it when her attention has been diverted from it. But there is always a good deal of tenderness in the whole course of the spine, and in other parts also. You will derive great assistance in your attempts to distinguish the real nature of this affection, by attending to the nature of the pain; it is always of that exaggerated kind which I alluded to in my last lecture, as being characteristic of hysterical pain. It is much more acute than the pain which attends diseased vertebrae; it is more superficial, so as often to appear, as I believe it is, seated in the skin that covers the spinous processes. We had one of these cases here not long ago, which very forcibly illustrated the importance of a right diagnosis.

A young woman, of highly hysterical constitution, was sent here for pain in the back and weakness of the lower limbs; she declared that she was quite unable to walk, although she could move her limbs very well as she lay in bed. There was great tenderness over two vertebrae in particular, but the whole spine was tender also. She had been treated for some time by rest, and her spine had been cauterised. We humoured her a little for a day or two, and then I thought it right to assure her that she could walk, and that she must walk a little every day. I had her taken up and supported between two women, and by making her move about the ward in this way a little every day, and increasing the walk each succeeding day, she soon began to find out that she had the use of her limbs, and ere long was enabled to walk to the shower-bath.

I may remind you of another case still in the hospital, in which this plan of treatment was pursued with very striking success. This is the case of the woman named Collier, in Augusta ward, who has been so long under treatment. She was sent here completely paraplegic, and stated that she had been bed-ridden for ten years. On examining her I found some tenderness of spine, but no unnatural condition of it. The power over the bladder and rectum was unimpaired. She is highly hysterical and rheumatic also. The lower extremities, from disease, were completely wasted; she could not stand, but as she lay could move about her limbs freely. I encouraged her to expect a cure, and told her that she must exert herself. She was supported by the nurses and made to walk a little every day, and after persevering a few weeks in this treatment, she was able to walk a little alone; by-and-by she got on with the help of a stick, and now she can walk up and down stairs without any assistance. Had
we treated this poor woman on the supposition of her having spinal
disease, she would have been bed-ridden all her life. And, indeed, I
attribute the slowness of her recovery (for she has been several
months under treatment) to the extreme atrophy of her muscles, and,
as we may fairly assume, of her nerves too, which was brought on by
the disuse of them for so long a time.

Pain in the region of the sacrum and in that of the coccyx are less
common forms of local hysteria. They may probably be connected
more directly with uterine irritation, and in some instances, perhaps,
with imperfect action of the rectum, and accumulation of flatus in it.

Local Pulsation.—We had lately a case in which this form of
local hysteria was very well marked; and it was accompanied with
another symptom not uncommon in hysterical persons. This was a
strong pulsation of the aorta in the epigastric region, simulating
aneurism. For some time the pulsation appeared so strong, and
was so circumscribed, that had I not known the decidedly hysterical
character of the patient's constitution, I should have felt considerable
apprehension on her account. However, as her strength improved,
and her catamenia became regular, these symptoms disappeared.

Hysterical Affections of Joints.—The profession is much indebted
to Sir Benjamin Brodie for having directed attention to the frequency
with which local hysteria manifests itself, especially among the higher
classes, in the form of affections of the large joints, simulating those
diseases with so much accuracy that practitioners have frequently
been misled by it. Sir Benjamin states the remarkable fact, which
no one is so well able to ascertain as a surgeon of his great experi-
ence, that four-fifths of the supposed cases of joint-disease which
occur among the higher classes are hysterical. This statement ought
to impress us strongly with the importance of being well acquainted
with the peculiar features of these hysterical affections of the joints.

You will, of course, expect to find in these cases indications of
the hysterical constitution; globus; perhaps occasional hysterical
paroxysms; general irritability; enfeebled nutrition; pain easily
excited on pressure at various parts of the body; irregular cata-
menia, or some uterine disturbance. The joints which are most
frequently affected are the hip and knee. The patient keeps the
painful joint quite at rest, being fearful of the least disturbance.
When the joint is moved, she will call out with much more expression
of pain than if there were actual ulceration of the cartilages.

"There is always exceeding tenderness," Sir Benjamin Brodie re-
marks, "connected with which, however, we may observe the re-
markable circumstance, that gently touching or pinching the integu-
ments in such a way as that the pressure cannot affect the deep-seated
parts, will often be productive of much more pain than the handling
of the limb in a more rude and careless way." As, however, in most
hysterical affections, if you can succeed in engaging your patient's
attention about some other object, and thus directing her thoughts
from her own sufferings, you will find that the joint can be moved
with comparatively little or with no pain. I need not, however, dwell upon this subject, for you will find it admirably discussed in Sir Benjamin Brodie's "Treatise on the Joints," and in a very interesting and practical little volume on "Local Nervous Affections," which I strongly recommend you to study.

Irritable Breast.—Another very serious form of painful hysterical affection is the irritable breast. It is not generally attended with swelling or enlargement. The irritability is excessive, and the patient shrinks quite as much from superficial as from deep-seated pressure, and even before she has been actually touched at all. These characters, along with the evidence of hysterical constitution, are sufficient to enable the attentive practitioner to distinguish the real nature of the affection.

Aphonia.—I have alluded to various forms of hysterical paralysis; you may have numbness in the course of particular nerves, or paralysis of motion, in some cases putting on the features of hemiplegia—in others of paraphlegia. Hysterical aphonia must be regarded as the same kind, the palsy or weakness affecting the muscles of the larynx. The patient is unable to speak, except in a whisper, and even then not without effort. It often begins and ends suddenly. Sometimes it remains after a severe hysterical paroxysm has passed away. This is a form of local hysteria of very common occurrence, and not likely to be mistaken for any laryngeal disease, for respiration remains quite unimpaired.

Paralysis of the Bladder.—Hysterical paralysis of the bladder is also common, and much mischief may arise from neglect of constitutional treatment, and too close attention to the local affection. Sir Benjamin Brodie lays down the rule, that in these cases the catheter should not be had recourse to; and the only exceptions to it are in those extreme cases in which actual paralysis has taken place, and the bladder is likely to become diseased, if not artificially relieved. A similar want of power over the rectum may occur in hysterical women. I have known women complain that they were unable to retain the contents of the rectum, although they were conscious of feces having passed into it. With respect to many of these cases of hysterical paralysis, there is much truth in Sir B. Brodie's remark, "that it is not that the muscles are incapable of obeying the act of volition, but that the function of volition is suspended."

Spasmodic Affections.—Among the various forms of local hysteria we may class some singular spasmodic affections which often prove exceedingly troublesome; for example—

Laryngeal Affections.—In the woman Collier, whose case I have had occasion to refer to as an instance of paraphlegia, we had an example of a spasmodic affection of the muscles of the larynx, very much resembling the spasmodic croup, or laryngismus stridulus, which occurs in children. This attack was always preceded by depression of spirits and hysterical crying; the breathing became difficult, and both inspiration and expiration were attended with a
stridulous noise; there was also a loud barking cough, which could be heard at a considerable distance. The attack passed off as the temporary excitement disappeared.

**Hysterical Sobbing.**—One of the most singular cases I ever saw was that of a girl named Howe, astat. 19, who was admitted in consequence of a peculiar spasmodic affection of the diaphragm, of a most severe kind, and which, while it lasted, was most troublesome and painful. This girl has been a long time in the hospital. At her admission, on the 28th of March, she stated that for the last three months she had been very subject to leucorrhœa. In other respects she was in good health. Her face has the aspect of hysteria; the full upper lip is very well marked. Four days before her admission, in taking down a bedstead, she fell and struck the right side of her abdomen. She suffered so much pain at the moment that she was obliged to rest for ten minutes; she then resumed her work and thought no more of the accident. In half an hour she was seized with a catching of her breath, and with pain in the right side of the abdomen. This continued for two or three hours, so as to interrupt her work, and then went off. Her bowels were open at the time, but she is of costive habit. In the evening the catching of her breath and the pain returned; it now continued some time, so that she scarcely lay down during the night. Next morning there was great epigastric tenderness, and she was unable to bear the pressure of her stays. The catching of the breath and pain in the side continued to recur in fits till the morning of the 26th, when they discontinued, but returned in the evening, and have continued at intervals ever since. At our first visit we found her affected with this catching of the breath. It exactly resembled a violent fit of sobbing, unattended with flow of tears. There is a jerking movement of the neck from side to side with each sob, but the limbs are motionless. Any excitement increases the sobbing. It was much increased by our visit, and subsided after we left. On the 29th, whenever she was visited by myself, or by the physician's assistant, the sobbing was brought on. The pressure of the stethoscope in exploring the chest was sufficient to bring it on. The upper extremities are now thrown into jerking movements, resembling those of chorea, shortly after the sobbing begins. The slightest touch on the epigastrium or tickling the soles of the feet brings on the paroxysm, even when her attention has been directed to some other object.

Her treatment consisted in free purging for the first few days, lest there should be any lodgment in the intestinal canal, and subsequently tonics. On the 31st her attacks ceased, and as she remained quite free up to the 5th of April, and her health was much improved, she was discharged. She was, however, readmitted on the 10th, with a recurrence of the paroxysms, without any apparent cause. They are accompanied with jerking movements of the upper limbs, and tremblings of the lower ones, which give her an unsteady gait in walking. Pressure excites or increases the sobbing, particularly
when applied on the right side; and if the pressure be continued, the sobbing becomes excessively violent, and the whole body is thrown into convulsive movements. The fits last for three or four hours, during which time the nurse is obliged to walk with her up and down the wards or passages; for she cannot remain still, during the whole time she is affected with jerking, chorea-like movements. It is extraordinary what a slight pressure will excite the sobbing. If she accidentally press the epigastrium herself, it will come on; the weight of the bed-clothes, the least pressure or even touch with the top of the finger, or even the near approach of the finger to the epigastrium, will excite it. She had followed a tonic treatment for a considerable time without any benefit to these paroxysms. I determined now to try a succession of blisters to the epigastrium. The first excited a very severe paroxysm; however, by perseverance in the use of them, she has not only become able to bear them, but the paroxysms have considerably diminished in frequency and severity, so that now she can bear a good deal of pressure without inducing the sobbing.

Sir B. Brodie has recorded a case very similar to this. A young married lady, who was liable to ordinary attacks of hysteria, complained of a tender spot on the anterior part of the abdomen, a little below the ensiform cartilage. The slightest pressure of the finger on it caused excessive pain, and was followed by violent agitation of the whole person, bearing a nearer resemblance to the convulsive motions of chorea than to any thing else, and continuing for several minutes.

**Hysterical Sneeze**ing.—Women are sometimes attacked with violent fits of sneezing, coming on at particular periods and lasting for a considerable time. Of my own knowledge I am aware of but one instance of this, in a newly married lady, in whom the fits of sneezing used to come on early in the morning. There was, I had reason to believe in this case, great disappointment that the signs of pregnancy did not appear about the usual time; and it was curious that these attacks should have come on chiefly when the morning sickness would have shown itself in the early stage of pregnancy. Women who are expecting pregnancy become very familiar with the ordinary symptoms of it. Sir B. Brodie relates two cases of this kind, in which the fits of sneezing were severe, and do not appear to have yielded readily to treatment. In the case to which I allude no relief had been obtained when I last heard of the patient.

*Lancet*, July 15, 1843.
PART III.—MONTHLY PERISCOPE.

Hooping Cough.—The popular and professional catalogue of remedies for hooping-cough is both lengthened and varied, proving the usually obstinate nature of the disease. It cannot, however, be doubted that particular combinations have at times been attended with more than ordinary success; and it is the part of sound wisdom to treasure up these evidences of remedial triumphs, since circumstances may arise in the practice of all, where we are baffled in the application of our general principles, and are glad to resort to more specific and empirical means. There is, no doubt, a tendency in most minds to place exaggerated reliance on particular remedies, and to attach to them results which are attributable to the natural progress of the disease; but, on the other hand, it is possible to under-estimate their value, and to adhere too obstinately to imaginary principles. Success is, after all, the best test of being right, though it is often very obscurely obtained; and in the practice of our art we are frequently compelled to be content with results apart from their explanations, and to submit to failure where our theory seems most complete.

Dr. Thompson considers prussic acid his sheet anchor, gradually increasing the dose, and combining carefully regulated temperature with a milk and vegetable diet. He says the disease seldom resists more than four to five weeks.

When the acute symptoms have subsided, the following extensively used formula of Dr. Beatty, of Dublin, recommended by Dr. Graves, has proved very useful:

2. Compound tincture of bark, five ounces; tincture of lytta, tincture of camphor, of each half an ounce. Mix. A tea spoonful three times a-day in linseed or barley tea.

Above five or six years of age the dose may be increased one third daily until half an ounce is taken.

The liquor arsenicalis, in decoction of bark, is favorably mentioned; and in the second volume of the “Provincial Transactions,” p. 412, a combination of the tincture of lytta with the tincture of lobelia is stated to have proved successful.

Belladonna, by liniment, plasters, and internally, is undoubtedly a valuable agent. Dr. Waldeck, of Berlin (Bul. Gen. de Ther. 1835), gave from one-tenth to one-twelfth of a grain for a dose, and speaks very positively in its favour. Dr. Lombard, of Geneva (French “Lancet,” 9th June, 1838), mentions as a sure symptom of the decline of the disease, the greater frequency of accesses during the day than night, and vice versa. He speaks highly of the sesquioxide of iron in diminishing the number and violence of the fits, giving twenty-four to thirty-six grains a-day in divided doses. Dr. Steymann (“Bul. Gen. de Ther.” March, 1838), brings forward similar evidence.
Dr. Crossley Hull's great remedy in all cases, was powdered alum, which he prescribed in a little water eight times a day, beginning with ten grains, to be increased two grains each dose till twenty are reached, which was then continued till the cough had ceased, which he states was the case generally in a week or less. The above doses are for young persons, about fourteen; adults may increase the dose to twenty-six grains. Infants are to begin with four or five grains, increasing two grains a dose to fifteen. No other medicine was given; milk to be avoided.

Dr. Reece strongly advises a warm irritating plaster to the chest, and the following medicine:

R. Tincture of assafoetida, one drachm; tincture of opium, ten minims; powder of ipecacuanha, ten grains; water, two ounces. Mix. A tea spoonful every three hours to a child two years old, increasing the dose ten minims for every year.

When this fails, the two following formulæ are (too) highly praised:

R. Powdered leaves of conium, one scruple; mint water, two ounces; syrup, two drachms. Mix. A tea spoonful three times a-day to a child of any age, adding ten minims to the dose, till nausea and giddiness are felt.

R. Di-acetate of lead, four grains; syrup of poppies, two drachms; fennel water, two ounces. Two tea spoonfuls to a child from two to ten years every five hours; half an ounce for an adult.

It is said to cure generally in three days (?). There is other confirmative evidence in favour of lead in this disease, and a formula in combination with conium is given in our report of the Reading Pathological Society for 1842.

Mr. C. H. Chavasse ("Lancet," May 30, 1840), speaks highly of the following formula:

R. Sulphate of copper, half a grain; syrup of poppies, half an ounce; anise water, an ounce and a half. Mix. A tea spoonful to be taken every second or fourth hour, according to age.

Sir William Watson's celebrated prescription was—

R. Tartar emetic, one grain; tincture of opium, twenty minims; distilled water, one ounce. Mix. A tea spoonful every, or every other night.

Mr. Pearson, after premising an emetic, relied much on—

R. Tincture of opium, one minim; ipecacuanha wine, five drops; carbonate of soda, two grains; water, half an ounce. Make a draught to be taken every four hours.

Dr. C. Wachtl, of Vienna (vide Provincial Journal, Jan 21, 1843), has found Cochineal very useful in rapidly checking the paroxysms.

R. Cochineal, ten grains; bitartrate of potash, one scruple; sugar, one ounce; water, six ounces. A tea spoonful every four or six hours.

It is an old and popular remedy.

The following is Roche's far-famed embrocation:

R. Olive oil, one ounce; oil of cloves, half an ounce; succinum oil, half an ounce. Mix.
Cases of Acute Diseases in the Throat and Larynx. By Dr. James Arthur Wilson, Physician to St. George's Hospital.

There can be no doubt that many lives are lost by the above inflammations for want of tracheotomy. In Nov., 1830, Dr. Wilson, with Dr. Nevenson and Mr. Keate, attended a gentleman who died of coryzal supervening on erysipelas. On examination, the epiglottis and posterior membrane of the tongue were found to be highly vascular and thickened, and pus was infiltrated in the cellular membrane of the fauces. The larynx below the cordae vocales, and the trachea, were free from disease or obstruction. Here was a case where tracheotomy would have saved life, almost to a certainty. The event made a deep impression on Dr. W.'s mind, and was of service thirteen years afterwards.

Case.—Mr. W. C., aged 27, full habit, got heated at a ball, and caught cold going home. He was unable to sleep, from general uneasiness and sense of choking on attempting to swallow. Leeches, calomel, and other measures, were employed; but the breathing was not relieved, even by the abstraction of twenty-four ounces of blood from the arm. In the evening of July 8, 1843, he was in extremis, and Mr. Keate exposed the trachea below the thyroid gland, and made an opening into it, inserting a canula in the aperture. Instantaneous relief was the consequence.

"On the first rush of air into the trachea, the patient appeared to feel instant relief, and his countenance began at once to resume its natural expression; but from this time not two minutes could have elapsed, when he was suddenly attacked by most violent spasms of his whole frame, with a struggle for breath, as if threatening immediate suffocation. All consciousness directly ceased, the eyelids closed, the face was livid, the features were distorted, the blood, still bubbling from the wound, became suddenly black as ink. The breath was drawn convulsively, and at long intervals. All movement, excepting that of the pulse, had ceased, and the patient appeared, literally, at his last gasp. During this awful crisis of the young man's fate, which lasted for perhaps a minute, (seemingly for a much longer time,) his head was held forcibly back,—the canula was withdrawn,—and the orifice in the trachea cleared from blood, and kept widely open. The breathing at length became more natural; the face, no longer ghastly, began to resume the character and tint of life. Not long after this most fearful convulsion, a large quantity of mucous, mixed in part with blood, was rejected, in long viscid ropes, from the mouth; and it was then found that the patient again breathed through the larynx. Upon this, the canula was finally withdrawn. A profuse perspiration now burst forth from the face, neck, and chest of the patient, who gradually recovered his consciousness, and expressed by writing that his 'breathing was quite easy.' He slept at intervals during the night, and was convalescent from this time."

Although, as Dr. Wilson remarks, the operation can hardly be too late, yet the chance of success is greatly lessened by delay, because the patient is being poisoned by his own blood. There is a good deal
of management necessary in preventing the blood from flowing down
the trachea into the lungs. The operation of tracheotomy has now
been so often performed with success, that no patient should be al-
lowed to be suffocated by obstruction about the throat, without open-
ing the wind-pipe. A gentleman of our acquaintance breathed more
than twenty years through a tube.—Medico-Chirurgical Review.

The Physiological and Therapeutical Effects of Indian Hemp.
By. Dr. Laure.—The following are the principal conclusions to
which his experiments lead:

1. It seems to belong to that class of narcotics which rapidly in-
duce excitement and intoxication, followed by sleep, neither sound
nor refreshing.

2. In a full dose it acts powerfully on the heart, causing palpi-
tations, and rapid, weak, intermittent pulse; and on the nervous system,
producing delirium, coma, convulsions, and dilated pupils.

3. Its effects are generally transitory. In one case, however, the
intoxication and dilatation of the pupils lasted nearly forty-eight hours.

4. It is a very uncertain agent, in some cases producing the most
violent and seemingly dangerous symptoms, in others being nearly
inert.

5. It very frequently causes vomiting, which, whether it occur
spontaneously or from emetics, very speedily relieves its unpleasant,
and perhaps dangerous effects.

6. Applied around the eye, it does not dilate the pupil.

7. It exerted little influence on the few patients to whom it was
given in the form of enema.

8. He does not think it is a valuable addition to our narcotic medi-
cines. In very few instances did it act as an agreeable soporific and
anodyne; in none did it succeed when opium had failed; and in one
case only was it preferred to opium.

9. So far from acting generally as an anodyne, its effects was so
disagreeable, that the majority of those who took it once, only did so
a second time on compulsion; and this is the more remarkable, as
the patients on whom he experimented belong to a class to whom
stimulants of all kinds are familiar, and who would greedily swallow
opium and spirits to an unlimited amount.

10. It caused an immediate craving for food, and, in a few, per-
manently increased the appetite.—Edinburgh Monthly Journal.

Nitrate of Silver in Chronic Diarrhœa.—Drs. Bertini and Belling-
giøre, in obstinate diarrhœa and dysentery, have found great advan-
tage from the use of enemata and of crystallized nitrate of silver.
These enemata are prepared by dissolving half a grain of nitrate of
silver in half a pint of water. The patient should retain the enema
for some hours. If necessary, the dose of nitrate of silver may be
increased to three grains for each enema.—Terza Statistica Nosolo-
gica, &c., 1843. p. 37, quoted in Annales de Thérapeutique, Nov.,
1843. American Journal of Medical Sciences.
The Use of Pure Tannin. By Robert Druitt, Esq.—In any case in which a vegetable astringent is indicated, Mr. Druitt believes that the tannin ought to have the preference. A simple solution of it, in distilled water, he says, is much more easily and quickly prepared, as well as much more elegant, than the ordinary decoctions or infusions of oak-bark, catechu, &c.; moreover, it may be prepared of uniform strength, and free from foreign inert matter, and is not liable to decompose quickly; in fact, it has all the advantage which the other simple vegetable principles have over crude preparations from the herbs or extracts in which they are contained.

The cases in which Mr. D. has employed it, are sore nipples, excoriations about the anus and scrotum, piles, leucorrhœa, atonic phagedenic sores, tooth-ache, aphthous sores in the mouth, severe salivation and relaxed sore throat.

For sore nipples especially, Mr. D. has found it "invaluable." Every accoucheur knows what a source of wretchedness and illness these are to the young mother, and how difficult it often is to find a decisive remedy; but Mr. D. has never been disappointed in the use of tannin, except once in a neglected case, with deep irritable cracks, for which it was necessary to use the lunar caustic. The form in which he employed it, is a solution of five grains in an ounce of distilled water; this is applied to the nipple on lint, covered with oil silk.

For the itching excoriations about the anus and scrotum, which so much infest old men, he has used it with benefit, but prefers lemon juice as a local application. For piles, with mucous discharge, he has also found it of use, but he cannot say much on this point from his own experience.

"In one or two cases of lingering atonic phagedena," says Mr. D., "I have found it of some service, sprinkled thickly on the sore; but more particularly so in those aphthous ulcers which sometimes occur in the mouths of adults, from acidity of the stomach, and congestion of the liver. I may say that I believe it the best possible remedy for severe salivation, and for all cases of relaxed sore-throat attended with superabundance of mucus. It coagulates the mucus and enables the patient to get rid of it easily. Of course I do not use it to the exclusion of constitutional remedies; but of all the local means of making the mouth comfortable, I believe it to be the best.

"But of all the cases for which it is adapted, that common troublesome complaint, tooth-ache, is that in which I believe it is most to be depended on. For this piece of useful knowledge, I am indebted to my friend Mr. Tomes, and I have tested it by ample personal experience. It will often be found, as Mr. Tomes told me, that the gum around a carious tooth is in a spongy, flabby condition; a little piece of it, perhaps, growing into the cavity. The ache, too, is often quite as much in the gum as in the tooth itself. But, be this as it may, when the tooth aches, let the patient wash out the mouth thoroughly with a solution of carbonate of soda in warm water; let the gum around the tooth, or between it and its neighbors, be scarified with a fine lancet; then let a little bit of cotton wool, imbued with a solution of a scruple of tannin, and five grains of mastick, in two drachms of water, be put into the cavity, and if the ache is to be cured at all, this plan will put an end to it in nine cases out of ten. I think that practitioners are to blame in not paying more attention to the cure of tooth-ache; I am convinced that, in most cases, it is as curable as a colic or a pleurisy; the chief points being to open the bowels, and put the secretions of the mouth in a healthy state, and to apply some gentle astringent and defensive to the diseased tooth, till it is capable of
being stopped by some metallic substance. I say emphatically a fine lancet, because the coarse, round, blunted tools that are generally sold under the name of gum-lancets, only bruise the gum, and cause horrible pain. The lancet which I use is sickle-shaped, cutting on both edges and finely ground; and it guarded with the middle finger of the right hand, it may be used in the case of the most unruly children, without any possible ill result."—*From Am. Jour. Med. Sciences.*

**A Test for Bile.**—M. Pettinkofer, a German student, has discovered a test for the presence of bile. It consists in adding to the fluid supposed to contain bile, concentrated sulphuric acid, until it becomes hot, and then dropping into it a solution of sugar (syrup,) the presence of bile is manifested by the mixture becoming of a deep pink or red colour, varying in intensity with the amount present.

**This seems to be a merely accidental discovery, the reaction being inexplicable upon any known relation or analogy between the substances.—London Lancet.**

**On the passage of Medicinal Substances through the human economy.**—MM. Millon and Laveran, after going through a series of researches, with a view to ascertain in what manner certain medical substances affect the urinary secretions, have arrived at the following interesting results:

The substances experimented on were, principally, the double tartrate of soda and potash, which was administered 268 times; the sulphate of soda was administered fifteen times; sulphur, four times; and salicine, ten times. The tartrate of soda and potash was chosen in order to ascertain whether the opinions generally entertained respecting the conversion of alkaline tartrates, citrates, and acetates, into carbonates, into the animal economy, are correct. So far from this being invariably the case, it was found that the transformation was very uncertain. Thus, of the two hundred and sixty-eight cases in which the double tartrate was administered, in one hundred and seventy-five the urine was alkaline; in eighty-seven, acid; and in six neutral. The mode of expulsion of the salt appears to depend nearly entirely on the mode of administration. If taken in large doses—ten or twelve drachms, for instance, in a limited period—its effect is generally concentrated on the intestinal canal, and its ingestion is followed by several liquid stools. Sometimes, however, no purgative effect is produced on the digestive tube, and then the urine is alkaline, the salt evidently being absorbed and expelled through the urinary organs. When the same quantity is administered in fractional doses, during a period of ten or twelve hours, the effect produced is different. The salt does not then give rise to purging, but is absorbed and eliminated as an alkaline carbonate by the urinary organs. In the first instance, indigestion follows its administration, and it may be looked upon as an aliment; in the second, there are absorption, assimilation, and secretion, and it is then a medicine. In order to ascertain whether, when the urine was acid or neuter, after the administration of the salt, the soda and potash might
not escape non-decomposed, combined with tartaric acid, or united to some organic acid, several experiments were instituted, by which it was ascertained that the proportion of alkali contained in the acid or neutral urine was identically the same as that contained in normal urine. It thus became evident that the double tartrate did not escape, as such, along with the urine.

Robust men, slightly unwell, shewed the greatest aptitude to digest the tartrates. They occasionally digest part of the salt, even when given at once in large doses. Sometimes, although administered in fractional doses, the urine remained acid. This was the case when the patient was attacked with diarrhoea, or was in an acutely febrile state. But even then, by persisting in its use, the urine, at first acid, gradually became alkaline. On the other hand, absorption was favoured by constipation.

The administration of the citrate, in absorbing doses, was tried in pneumonia and rheumatism. The blood of the patients thus treated was analyzed ten times. The fibrin was not found to have diminished in quantity, and the buffy coat was as great as before it had been given. Although the alkaline carbonate was formed in the urine, these diseases progressed as usual. The increase of the powers of oxidation, rendered evident by the excess of urea, led to its trial in cases in which the nutrition was languishing; and it was found useful in general debility, phthisis, albuminuria, &c.

The sulphate of soda gave the same results as the double tartrate. Sulphur was never found in the urine, under whatever shape it was administered.—Ibid.

Medical Memoranda.

Quinine in Ague.—Dr. Stratton thinks a single large dose in the interval, cures more rapidly than repeated small doses.

Treatment of Neuralgia.—Dr. Jacques, of Antwerp, recommends inoculation, by means of a vaccinating lancet, with a solution of sulphate of morphia.

M. Lafargue recommends inoculation in the same way, with a saturated solution of veratria; and M. Roelants, a Dutch physician, gives nux vomica, in doses of from three to ten grains in the twenty-four hours.

Succinate of Ammonia in Delirium Tremens.—M. Scharn has seen the most furious delirium overcome as by enchantment, and the disease removed in a few hours, by the use of this remedy alone.

Arsenic in Peritoneal Dropsy.—Dr. Dehavay has treated a case successfully. One-twentieth of a grain was given twice a day. The improvement was notable in six weeks, and in six months all symptoms had ceased, and the catamenia, which had been suppressed, were restored.

Mustard in the Convulsions of Children.—Dr. Tripler was led to the employment of this remedy as an emetic, and finding it arrest in
a few minutes an attack of convulsions that had lasted five hours, he has employed it in three other cases with complete success.

Prophylactic Remedy against Ptyalism.—Dr. Schoepf recommends the following tooth-powder during the administration of mercury, to prevent salivation. Dried alum, powdered, 5 j.; powder of cinchona, 5 j.; to be used by means of a soft brush, morning and evening.—Ibid.

We take the following Extracts from a notice in the last No. of the Medico-Chirurgical Review, of a work entitled "Facts and Observations in Medicine and Surgery. By John Grantham.:

Extensive Burn.—A case of a burn from gunpowder is related, in which nearly the whole of the trunk and a portion of the extremities were involved, "the whole measured above 600 superficial inches, or four feet, 24 inches, and averaged a quarter of an inch in depth. Also the subcutaneous structure was completely lost, so that the arteries and veins were seen, as if neatly dissected, lying on the surface of the muscles and fascia." The successful issue of the case reflects great credit upon the author, especially as more than one untoward occurrence intervened. Three principles especially guided him, the due supply of nutritive food, the regulation of the animal heat, and the external and internal use of antiseptic agents, such as the application of yeast, the evolution of oxymuriatic gas into the apartment, the administration of alkalis, &c. During the extensive suppuration which occurred, six pints of milk in the twenty-four hours served to support the youth's (at. 17) strength. A sphacelated wound over the sacrum, an attack of bronchitis, and an extensive re-opening of the wound by erysipelas, successively retarded the cure, and long rendered recovery apparently hopeless. It required several years to produce entire healing, during and subsequently to which there has been much tendency to congestion of the brain, requiring small depletions and aperients, and attributable to the imperfect re-establishment of the functions of the skin over so large a surface.

Galvanism.—We quite agree with Mr. Grantham, that the application of galvanism in paralysis, and other chronic affections of the nervous system, has been too much neglected. Indeed, its administration seems to be confined almost to empirics, who apply it in all cases indiscriminately, and consequently do more harm than good. Why a full and fair trial of its medicinal powers should not be made in some of the numerous chronic cases which encumber the hospitals, we cannot imagine. Mr. Grantham relates some cases in which he found this agent, carefully administered for a prolonged period, completely successful; and states the results of his experience in its employment in these conclusions.

"1. Galvanism is identical with the vital action of the nerves of organic life, and the nerves of volition. 2. Its action is determined by the healthy condition
of the brain and spinal marrow. 3. The skin must possess a normal sensation, as well as temperature, before the galvanic action can affect the muscular fibre. 4. The positive plate or wire should be applied over the region of the origin, and the negative to the region of the termination of the nerve. 5. The galvanic influence, when passed along the spine, will be most active in the paralyzed limb. 6. Galvanism is assisted by the alkalis and mercurial action. 7. It restores diminished temperature, decreased circulation, and lost muscular action, in the following order: 1st, temperature, 2d, circulation, and muscular action last. 8. It has no effect in disease that alters the structure of nerves. 9. It supercedes manual friction. 10. It is assisted by immersion of the affected limb in a warm bath, into which, the negative plate or wire is placed. In passing a current from the head through one half of the body, the foot should be immersed in warm water. 11. It is injurious when much pain is caused in the muscles by its application. 12. It may be carried to an undue extent, so as to produce congestion of the brain."

On Extermination of the Superior Cervical Ganglia of the Sympathetic Nerve.—M. Dupuy (the Alfort veterinary professor) stated, that in 1806, along with Dupuytren, he had extirpated the superior cervical ganglia of the sympathetic nerve in the horse. The result of the experiment was redness, with infiltration, and swelling of the ocular and palpebral conjunctiva, and diminution of the volume of the globe of the eye. The horse was killed four months afterwards, and the ends of the nerve were found rounded and swollen. The sympathetic nerve is evidently insensible. When the branches of the fifth pair are cut or lacerated, a horse shrieks with pain, whereas nothing of the kind occurs when the sympathetic is divided. M. Du-
puy repeated the experiment seven times, and each time with the same results.—London Lancet.

On the Use of the Thymus Gland.—Dr. Picci, after glancing at the theories of his predecessors, suggests that the use of this Gland is chiefly of a mechanical nature; viz. to occupy a certain space within the thoracic cavity, while the lungs remain unexpanded in the foetus; and thus to prevent the ribs and sternum from falling in too much upon these vital organs. The size of the Thymus is inversely as the volume of the lungs; and, when the latter become dilated after birth by the admission of air into their cells, the former immediately begins to shrink and become atrophied. In truth, it is only in the adult that the thoracic parietes are moulded completely upon the lungs; for, in infancy and youth, it is rather the Thymus gland that is, in their place, moulded upon the thorax.

The situation of this gland in the anterior mediastinum and along the median line, the very nature of its tissue, and the greater expansion and development of its inferior half, are adduced as arguments in favour of the opinion now adduced. Besides the well-known circumstance that, in those new-born children in whom the thorax is very largely developed, the Thymus continues to increase gradually even to the end of the second year, it deserves notice that all those animals, in which the lungs are similar to those in the human subject, are provided with this gland; whereas, we find it to be entirely want-
ing in those which breathe by Branchial or membranous lungs. In
hybernating animals, also, the Thymus exhibits alternations of en-
largement and decrease, according to the state of the respiratory
organs. In the Amphibia it attains its maximum of development.
The circumstance too of the gland being usually rather larger than
ordinary in phthisical patients may be mentioned as lending some
probability to the view we have proposed.—Annali Universali. Med.
Chirurg. Review.

Croton Oil Plaster.—M. Bouchardat recommends the following
method of preparing croton oil plaster. Melt eighty parts of gum
diaclylon plaster at a very gentle fire, and, when it is semi-liquid,
mix with it twenty parts of croton oil. The plaster which results is
to be spread thickly on muslin. It will produce considerable irrita-
tion of the skin, and may be employed in all cases where revulsives
are required. It does not cause such severe pain as many other
counter-irritants; and it may be applied over an extensive surface, so
that a derivative action may be established proportional to the irrita-
tion which is to be combated,—an indispensable condition in the
employment of these heroic remedies. M. Bouchardat is fully of
opinion that the croton oil plaster will be found available in the treat-
ment of many chronic diseases, both of the respiratory apparatus, and
of the abdominal viscera.—Annuaire de Thérapeutique. American
Journal Medical Sciences.

MEDICAL INTELLIGENCE.

Extract of a Letter from Professor Means, to the Editors:

Castor Oil, Manufactured in Georgia.—While the great staple of the South
has become a drug upon the markets of the world, and its extensive cultivation
is discouraged by the consequent reduction in price, the public mind has been
fortunately constrained to direct its attention to other ample and, hitherto, unap-
preciated facilities, completely within its reach—furnished by our bold and
effective water-falls, diversified soil, and delightful variety of climate, and pro-
posing equal usefulness, and a better remuneration for an equivalent outlay of
labor and expense.

Actuated, as we suppose, with these views, our worthy and enterprising friend
Mr. Joshua Willis, of Truop county, Ga., has abandoned the cultivation of
Colton, and most successfully commenced the growth of the Ricinus Communis,
or Palma Christi (the Castor Oil Plant.) During the past year, he manufac-
tured about 1500 gallons of oil, which were mostly (we believe) purchased by
the druggists and physicians of Columbus, and the circumjacent country.

We were favored with a specimen of the article referred to, and cannot but
regard it as a fair and beautiful oil—almost destitute of color, or smell, and
with as little of the unpleasant flavor, peculiar to the Castor Oil Bean, as is
consistent with an unadulterated preparation—Clear, bland, free from rancidity,
and without any foreign admixture, it constitutes an admirable article for do-
meric use, and in our hands, manifested mildly, but effectively, its cathartic
property. The East Indians have heretofore furnished probably seven-eighths of
all the oil consumed in England, but for the last several years, American Oil,
derived chiefly from the British Colonies and the Western States, has been ex-
ported to that country, to the amount of perhaps, from fifty to eighty thousand pounds annually. The latter article, though confessedly of fine quality, and possessing a flavor superior to the East India Oil, has yet been regarded as objectionable on account of the deposit (in cold weather) of a white, alkaline matter, which some have supposed to be Margaratine—a fatty salt, consisting of the two proximate constituents, Margaritic Acid and Glycerine. Others have supposed it to be the result of adulteration from Olive Oil, which is known, at low temperatures, to deposit what Pelouze and Soudet regard the Margarate and Oleate of Glyceril (the Hydrated Oxide of Glycerine)—an unlikely supposition however, in our estimation, as most of the latter oil is imported into this country from the south of Europe, and at too high a price to warrant the fraud of admixture with the Castor Oil designed for exportation.

We are rather inclined to the belief that such deposits, so frequently found in the American article, is from the liberal admixture of animal oil (Adeps Suillus) which does not sustain its fluidity under from 78° 5' to 87° 5'. This may, perhaps, account for the rancid and acid nature of some of the Castor Oil of Commerce, as the Oleine of the Lard, readily becomes rancid, i.e. acquires a disagreeable odor, and acid properties, by exposure to the Oxygen of the atmosphere. Indeed the deposit of Margaratine, from Castor Oil, if any, should be exceedingly small, as not more than .002 of the entire products of saponification, consist of Margaritic Acid.

The oil manufactured by Mr. Willis, we believe, fully sustains the truth of this latter remark, and as a specimen of Southern enterprise, alike honorable to his skill and industry, commends itself to public confidence and popular use. Mr. W. will be prepared to execute large orders this fall and winter, and assures us that "it shall not cost more to druggists or other purchasers, whom he may supply, than the best article does from any other quarter," and all he asks is, that, other things being equal, home manufacture may have the preference.

A. MEANS.

Medical College of Georgia.—The Annual Commencement of this Institution was held in the Masonic Hall, on Tuesday, the 4th day of March, when the degree of M. D. was conferred upon the following gentlemen:—

Milton Antony, of Georgia.—Thesis on Aneurism.

J. M. Bowers, " " Prolapsus Uteri.
Thos. Graves, " " Cynanche Trachealis.
J. S. Holliday, Geo. " Dysentery.
J. A. Harlow, " " Intermittent Fever.
Taliaferro Jones, Geo. " Pneumonia.
A. H. Jackson, " " Prolapsus Uteri.
J. T. Lamar, " " Rubœola.
Scarlatina.

Cloud

Fair.

Healthy Abortion.

Fair.

Congestive

Dysentery.

Importance of Scientific Accoucheurs.

Abortion.

Searlatina.

Uterine Hemorrhage.

Pathology of Fever.

Phthisis Pulmonalis.

Gastritis.

Signs of Pregnancy.

Congestive Fever.

Medical College of the State of South Carolina.—This Institution has conferred the degree of M. D. on seventy-four gentlemen: of whom, six were from Georgia—nine from Alabama—two from Mississippi—one from Florida—five from North Carolina—and the remaining fifty-one from South Carolina.

We are highly gratified to learn that Prof. CHARLES A. LEE has assumed the Editorial management of that valuable periodical, the New York Journal of Medicine. We know no one better calculated to occupy the post and become the successor of the indefatigable and lamented FORRY.

METEOROLOGICAL OBSERVATIONS, for February, 1845, at Augusta, Ga.

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Quantity of Rain 2 1-2 inches. 19 Fair days.