trician observes, with gratitude, the wonderful provisions of nature in overcoming the impending danger; thus an admirable precedent is afforded under such discouraging circumstances, in which it appears impracticable to turn the child, more particularly if the shoulder be forced up towards the anterior portion of pubis, that we ought to wait and allow nature to complete her work, unless the medical attendant is of opinion that his patient's strength is rapidly declining, and that the powers of the system are unequal to the task, together with a disproportion between the mother and child; then, and then only, is he justified in adopting those measures suitable to the case. Bury, Lancashire, June 23rd, 1844.

REMEDIES FOR NEURALGIA.

By R. H. ALLNATT, M.D., M.A., F.S.A., &c.

IN reference to a notice of mine, which appeared some time since in THE LANCET, of certain "Remedies for Neuralgia," Mr. Chippendale has courteously mentioned two cases, which he states to have been successfully treated by the application of the infusion of tobacco; and, he adds, "it appears to me that an extract might be prepared from tobacco, which, being mixed with simple cerate, would be a convenient form for frictions."

In the category of antagonist "unsuccessful remedies," recorded by me in my work on "Tic Douloureux," I find a mention of this extract; and I also find that tobacco, in all its forms and modes of preparation,—its cataplasms of dried leaves, tincture, infusion, extract,—have all been resorted to, at different periods, by the despairing practitioner.

The potassio-tartrate of antimony, also mentioned by Mr. Chippendale, has been often tried, and almost as frequently rejected as useless. Dr. Scott was the first, I believe, to propound this remedy,—upon what principle it would be difficult to conjecture; and Magri, following the wake of an empirical practice, applied compresses moistened with a strong solution of tartarised antimony, until redness, approaching to pustulation, had been produced. These two agents, Mr. Chippendale has cited as having been simultaneously employed; the example, I can assure him, is by no means an isolated one; and I cannot but congratulate him for repudiating the doctrine which would enforce the adoption of such heterogeneous, conflicting elements in combination.

In sober truth, tobacco was designed for a far less noble purpose than the cure of neuralgia, and Mr. Chippendale will, I am sure, pardon me for stating, that I rather doubt whether or not the cases to which he has alluded were, *ipso facto*, anything more than neuralgia *notha*, or a spurious kind of rheumatic tic. I can hardly persuade myself that the peripheral pangs of true ganglionic irritation can be appeased by any measure that falls short of at once striking at the root and origin of the evil.

Having now encountered a vast variety of these maladies, in all their phases, in their various complications, and in all stages of their manifestations, from the functional form of a few days' growth, to the hideous organic variety of thirty years; and having, as far as these opportunities have enabled me, searched diligently into matters connected with their history, past and present, and traced the rise and progress of the accompanying pathognomonic symptoms, I have little hesitation in expressing a decided conviction of the truth of the following propositions:—

1. That peripheral neuralgia never occurs as a primary idiopathic affection, but that (independent of organic disease), its invariable source may be ascribed to irritation of the ganglionic centres.
2. That this condition is transmitted by direct communication, irrespective of the laws of "sympathy."
3. That (functional) tic is an affection peculiarly amenable to constitutional treatment.
4. That local applications, whether sedative or stimulating, anodyne or destructive, are more frequently detrimental than sanative in their operation.

Whilst I am upon this subject, will you allow me one concluding observation?

Dr. Copland, in the last number of his "Dictionary of

Practica Medicine," a work which has been applauded by the unanimous voice of the whole profession, states that "Sir Charles Bell and Dr. Allnatt have praised the decided exhibition of croton oil as a *purgative*," in cases of neuralgia. A few words will suffice to explain upon what principle I have recommended the adoption of this agent.

I do not, in the majority of instances, employ croton oil uncombined, or with a view to obtain its purgative effects. In fact, so minute and subdivided are the doses requisite to ensure its remedial action, as to preclude altogether the idea that its salutary operation resides in the power it possesses of producing catharsis. Croton oil is a *specific* purgative; that is, its properties are equally manifested whether externally applied on an absorbing surface, laid over the abdomen in the form of a cataplasm, or exhibited internally. The active principle—the tigliene—is absorbed, and is carried by the circulating mass of the blood into direct contact with the disordered tissues. Its *modus operandi* is still a mystery. Colchicine is another agent whose powers we appreciate, but cannot explain; and each, though differing in action, is possessed of specific power.

At some future period, by the kind permission of the Editor of THE LANCET, I shall have much pleasure in discussing the merits of the propositions I have above advanced.

Parliament-street, Whitehall, May 21, 1844.

ON THE PRETENDED EXHIBITIONS IN MESMERISM.

By JOHN FORBES, M.D., F.R.S.

DR. FORBES presents his compliments to the Editor of THE LANCET, and will be obliged by his giving a place in his Journal to the accompanying paper. Old Burlington-street, July 27.

ALEXIS AND MARCILLET.

Hearing from all quarters of the wonderful feats of the youth Alexis in mesmeric divination, and especially of his facile and unlimited power of *clairvoyance*, I was naturally desirous, with others, of personally witnessing his performances, and of having my doubts settled on a matter of such extreme curiosity and importance. I felt happy in the opportunity thus afforded of being enabled to come to a satisfactory conclusion so readily and so easily; as it appeared from the accounts of him, promulgated through all the channels of communication, that Alexis had few or none of those difficulties in demonstrating his powers which are constantly interfering with the performances of other professors of the same school. He "came, saw, and conquered," and all else who came saw and were conquered. He held his daily and nightly *sittings*, in public and private, to the number of three or four each day, at the rate of five guineas per sitting. He was "the rage" in all the aristocratic circles,

"Where throngs of knights and barons bold,
In weeds of peace, high triumphs hold,
With store of ladies, whose bright eyes
Rain influence, and judge the prize."

He was, of course, the pet, pride, and glory of all professed mesmerists, and his triumphs even comprehended some sober men of science, who, like myself, were simply desirous of ascertaining the truth. With them, I considered all the alleged phenomena of mesmerism as, at least, deserving investigation; and, like them, I only wanted positive proofs of its truth to believe it. Regarding *clairvoyance* as the *major* marvel, including all *minor* marvels, I was prepared to admit other things without examination, if this, on examination, proved a true thing. But, of course, I required *evidence* before I admitted the truth of what was in itself so very wonderful; and I submit to the most zealous believers in mesmerism, whether there was anything in the proceedings, as detailed in the following notes, inconsistent with the plain and honest search after truth. The results, as will be seen, were

anything but satisfactory ; and while they proved nothing in favour of mesmerism, they proved, I fear, that these professors of it are not to be trusted as faithful promulgators of what ought to be scientific truths :

"There are no tricks in plain and simple faith."

At the same time, I think it necessary to repeat here what I have stated in the notes, that mesmerism may be true, while its professors are false ; that negative results must, of course, give way to positive ones ; and that I, for one, am still unconvinced that *clairvoyance* has not existed, and does not exist, merely because Alexis, on these occasions, failed to show it. I require no other proofs of its existence than are deemed essential in every other department of natural science ; but while these are denied me, it is no fault of mine that I remain a sceptic.

FIRST EXHIBITION.

The exhibition to which the following memoranda refer, took place at a small concert-room in Mortimer-street, on Thursday, July 11, 1844, from half-past twelve to two, p.m. There were from thirty to forty persons present. The performer (Alexis) was thrown into a state of so-called somnambulism, by his friend, M. Marcillet, merely looking steadfastly at him while seated in a chair. With the exception of the first experiment, during which Alexis seemed to be asleep, all the others were performed while he seemed to a common observer to be awake, with his eyes (when not bandaged) partially open. He appeared to see, hear, and know what was going on about him, just as any of the spectators. The only peculiarity that struck me was, that the eyelids were only partially open and occasionally quivering.

The following notes were written *immediately* after the meeting. If there be any inaccuracies in them, they certainly do not regard matters of any importance.

1. The left arm was extended in a state of rigidity, not opposing *very* great resistance to downward pressure. The pulse smaller in the rigid arm.—Any one could do this.

2. The legs extended in the same way. A gentleman *partially* stood on them, but not entirely.—Any one could do this with practice.

3. Playing at *ecarté* with the eyes bandaged. He seemed to play readily and well, winning the game. He also told the cards at times in the partner's hand ; but he also repeatedly failed, and made glaring mistakes in his guesses.

The whole of this experiment is vitiated by the doubt as to whether he could see under the bandage. From carefully and most closely watching him, I am of opinion that he saw or might see from under the bandage. I particularly remarked that while the bandages were being placed, he repeatedly touched and shifted them ; and before they were removed, I observed most distinctly that he pressed a knuckle forcibly over the bandage into the hollow of each eye, *as if to close the leather that might have been removed*. I also observed, that when examining some body presented to him, before the bandages were removed, he placed the body *to one side of him*, exactly as a person would do who was trying to see through a difficult passage.

At any rate, the evident (to me) *possibility* of sight being exercised in the ordinary way, totally vitiates this card-playing as an experiment.

4. The next experiment, after the bandages were removed, was reading in a book *through* a certain number of pages, *i.e.*, telling *what words* (two or three) would be found opposite a certain point indicated on the open page, some pages farther on. The experiment was performed on a French book produced from the pocket of a gentleman present, and was repeated three, four, or five times. Being close to Alexis the whole time, and watching him most carefully, and all his proceedings, I am bound to declare that the result was altogether inconclusive as to his possessing the power pretended.

a. In the first place, in no instance were the words named by him exactly under the point indicated on the open page. He hunted over many pages, and was satisfied (as were many of the spectators), if he found the word named *anywhere*, in any part of the page!

b. Secondly, I distinctly observed, *in every case*, that

before naming the word or words, he turned over the leaves (apparently carelessly and heedlessly, but with his eyes never removed from them) in such a manner, that it was the easiest thing in the world for a person of ordinary sight to see *sideways* into the pages, and thus to catch words. This fact, coupled with the other just stated (a), utterly vitiates this experiment. It is also obvious that only *the first* of the experiments *could* be valid, as in searching for the *first words* he had the opportunity of fixing in his mind as many words as he pleased for the subsequent trials. And I observed that he would only look at those parts of the book which he had turned over.

5. The next set of experiments referred to his power of reading words wrapped up in paper, boxes, &c., and of generally indicating the contents of certain bodies presented to him.

The following were some of the experiments and the results :—

a. A gentleman (I believe Colonel Gurwood) presented to him something very loosely wrapped in paper. He felt it, and said it was a box (*boîte*). He then himself removed the paper, and laid the apparent box (a small octagonal body with gilt top,) down on the table. He was then asked what it contained : he said, some characters in writing. While he was saying this (or previously, I do not now recollect which) he had *perfect opportunity*, as the object lay before him and was touched by him, and was constantly looked at by him,—I say he had a perfect opportunity of *opening the book* (for such it was), so that he *might* see the characters within it. I cannot say positively that he *did* open it, but anybody, not a juggler, *might* have done so unobserved. He then announced that it was some writing in characters he did not understand. The book proved to be a copy of the Koran in Arabic. This experiment was clearly a failure,—first, because *while covered* he declared the *book* to be a *box* ; and, second, when the paper was removed, there was, to say the least, no *impossibility* of seeing the contents in the natural way.

b. A slip of folded paper was given him. He examined it most closely, putting it to his chest, mouth, &c., and seemed to me cautiously looking for an opportunity of unfolding it, as he turned it over and over, and partially opened it, more than once. My eye was, however, so constantly fixed on his proceedings, that he could not open it unseen, and he did not open it. After an infinite deal of manœuvring, and asking many questions of the lady who gave it him, as if desirous of obtaining some help from her answers, he resigned it, and fairly said he could *not* read.

c. Another paper (or it might be the same) he proceeded with in the same way, now often stating, inquiringly, the number of letters (which constantly varied, he sometimes saying six, eight, four, and so on). At last he said it was very difficult, *because it was folded on itself* (*plié sur lui-même*). He returned it to the lady that it might be unfolded. I went and saw it opened by the lady ; *it was not in the least folded*. It was a boldly written word, either "*Londres*" or "*Angleterre*," I forget which.

d. One of these packets, while manipulating (I now recollect it was the one I saw opened by the lady), he pricked through with a pin, saying "*he pricked the dot of the i*," and then "*the i itself*." When opened, the word contained no *i*!

e. A lady (evidently a strong believer, and very friendly to Alexis) put herself in *rappor*t with him, and produced a large box, like an over-grown card-case, or a case for holding a small prayer-book (opening like a card-case in the middle). He took it in his hands and felt it, and turned it about. He was asked what it contained ; he said, after a brief pause, something *gilded* (*doré*), and then said, a watch (*montre*), and added, that "*what was curious, the glass was broken*." The lady was surprised at this, and said it was *not* broken when she gave it him. On opening the box by drawing off the top, sure enough there was a watch on one side, *with the glass next the outside*, and the glass was broken! Nothing could be clearer than that he *might* have broken the glass through the yielding case, or felt the broken glass, or heard or felt the watch tick (if it was going, which I cannot assert),

and thus come at once to know that it was a watch, and a watch with a broken glass! I believe this was the fact, but, at any rate, it must be admitted that such a clear-seeing as this *might* have been accomplished by anybody, and therefore the experiment goes for nothing.

f. I had taken half a dozen boxes, and folded papers and sealed envelopes, each containing a French word, so wrapped up as that it was *impossible* to see into them with ordinary eyes. These lay on the table all the time, and I had repeatedly pressed on M. Marcillet to let him try one of them. But some excuse was always made. Meantime, a gentleman came forward with his two hands closed, and requested to be informed what they contained. Alexis took the hands, turned them round, and *I saw him distinctly separate them a little*, so that he *might* have seen what they contained, at least the colour of it. He first said, it is a *small thing*. The gentleman said, of course, or it could not be contained within the hands, Alexis then said, it is *reddish* or *darkish* colour, "and, *if broken (cassé)*, *white inside*." After a long time, and trying very hard by leading questions, to find out something about it, he said it contained *writing* or *printing* (I forget which), said there was a large word with five letters in the centre, and some *arrangement of lines* which I now forget. After a long time the hands were opened, and were found to contain a small morocco pocket-book, which was certainly reddish outside, and had some white paper and some printed or engraved cards inside. At this time I forget what was on the cards, but I am certain that the "chief" word of five letters was *not* there, and the lines were *not* arranged as Alexis had said. This experiment I regard as also a failure in every respect, except that there *was* something *white* inside. The red colour outside might have been seen; the *white* was POSSIBLY a guess; at any rate, the other mistakes committed are sufficient to neutralise this small success, to say the least of it. I therefore maintain that this experiment *proves* nothing.

g. At length, after many attempts, I succeeded in getting a lady (a friend of Alexis, and favoured by him) to take one of my boxes, and put him to the test in my own way. She was put *en rapport* with him, but he would not attempt to read the word written within upon finding that *she* did not know what it was. She then went to one side of the room to examine the word, and I just arrived near her in time to see her take from the box the word, and look at it, *surrounded by many of the company*. This *was done openly*, and though I at once felt that this circumstance was sufficient to vitiate the experiment, as it was *quite possible*, and, indeed, *extremely probable*, that some of Alexis's friends might see it wholly or partially, and make him acquainted with it; however, I begged the lady to allow me to replace the word in such a manner that it could not easily be seen, even if the top of the box (a small paper wafer-box) were removed. Well, she returned to Alexis, and gave him the box. He looked at it long, and at last said inquisitively, "*un mot de cinq lettres!*" then seven, then eight, and at last *five* again, adding, "I am now sure it is five." I begged her not to tell, and partly succeeded, though it was obvious she was desirous of *helping* him all she could. At last, he said the word ends with the letters *ion*, and tried hard to get the lady to help him out with the rest. If I had not constantly interfered, I saw clearly that he would have bothered or bamboozled her out of them. He then wrote on a paper *ion*, then tried several prefixes to suit, and at last seemed to settle on *motion*, or some word like this, but one certainly ending in *tion*. Two o'clock having now arrived, I was obliged to depart before the box was opened, but I was thoroughly satisfied that some one of his friends had had a glimpse of my word (it was in *large print*), and had told this to him. It was, however, a word not of five, or six, or eight letters, but one of *ten*, viz., *discussion*.

The conduct of Alexis throughout was altogether that of a man who was playing a deceptive part, and looking in all directions for help in his efforts to succeed in what was given him to do. In all his attempts to read the words enclosed in envelopes, he invariably made, in the first place, inquiring guesses as to the word being in writing or print, and especially as to the number of letters; and he and his friends made unconcealed attempts to

wheel the party who gave the word, into conceding something so as to help him in solving the problem. "It is a word of five letters—eh?" "Is it a word of six?—No—it is—eh!" and so on.

Now it is certainly strange that if a man had the power of seeing the word through its covers, he should need such aid, or that such aid could be of any use to him. How can the knowledge of the number of letters in a word, or of the two or three first or last letters in a word, help a man to *see* the remainder? Of course, however, it may help him to *guess* them.

When he took the folded papers in his hands, I observed that in his manipulations—placing it to his stomach, &c.—he was frequently seen by me to unfold the edge slightly, just as if he *wished* to unfold the paper completely; and I observed also that he frequently shaded his face with his hand (*as if meditating*) in such wise as *would have enabled him to unfold such papers unperceived by persons at a small distance from him*, although my close watching rendered this impossible in the present case. I regard this as important, as it indicates how deceit may have been practised in other cases, and how apparent success may have been achieved.

It was also evident, throughout the exhibition, that Alexis had several friends (I do not call them *confederates*—but they afforded, in their conduct, the strongest grounds for suspicion that they were such) who took an active part in trying to help him in his difficulties. Among other manœuvres, repeated attempts were made to get the spectators (and myself especially) removed from the table, under the plea that ladies could not see. A French woman—evidently one of the party—wished me to give one of my boxes to *her*, begging me at the same time to leave the room, as my presence as an unbeliever was hostile to the powers of Alexis, and that *then* she would get him to read the word it contained. Of course, had I complied, there was nothing to prevent her from opening the box and naming the word to the performer. These, and other things of the same complexion, are not merely suspicious, but show that, whatever the results might be, they could not be established on, or derived from, pure unquestionable evidence.

From the whole of the exhibition the following conclusions must be admitted:—

1. That the whole affair bore the complexion of trickery, or, at all events, that it wanted entirely the precision requisite in scientific inquiries.
2. That the total amount of positive failures and positive blunders greatly exceeded that of performances having even a colour or slight degree of success.
3. That the failures occurred in cases where the circumstances were such as to exclude collusion and the exercise of ordinary vision.
4. That all the instances of success occurred where circumstances allowed of collusion or ordinary vision.
5. That in all of the cases of success such collusion or vision was either proved or rendered extremely probable.
6. That there was not one single unequivocal example of what is called *clairvoyance*.
7. That, consequently, this exhibition not only affords not one tittle of evidence in favour of the existence of this faculty in the man Alexis, but presents extremely strong grounds for believing that the pretended power in him is feigned, and that he is consequently an impostor.

From what I witnessed at this exhibition, and at another where it was pretended that the so-called somnambulist exhibited the faculty of having the phrenological organs excited individually by mesmerism, I am much more satisfied than I used to be in regard to the probable causes of the extensive belief in the wonders of mesmerism. On both these occasions it was clear that many of the spectators were either totally unacquainted with the laws of evidence, or that their enthusiastic temperament, or previous convictions or prejudices, rendered them, for the time, incapable of appreciating, or of being guided by, such laws. They admitted, as positive facts, what appeared to calm unprejudiced observers, not only not facts, but the merest assumptions, unsupported by a tittle of the kind of evidence required in scientific investigations. It was also evident that there was, among such

persons, an endeavour to *help* the exhibitor to get at the results proposed, and an eagerness to believe everything without question, and with a proneness of faith unjustifiable, and therefore never admitted, in inquiries of a scientific character. A further source of fallacy existed in the circumstances in which the great majority of the spectators were placed, viz., the utter impossibility, owing to their distance from the scene of action, of their seeing *exactly* what took place, so as to enable them to guard against the possibility of mistakes, misstatements, or collusion. These circumstances, taken in combination with the natural tendency of the human mind to believe rather than to be sceptical, and with the proneness of mankind in general to recollect successful wonders (especially in the way of guessing, divining, or prophesying) rather than failures, may, as I have said, help to explain the wide-spread belief in mesmerism, even if mesmerism should be false.

In concluding these hurried notes, I think it right to state that even now, I only avow myself a sceptic or doubter—not an utter disbeliever—as to mesmerism. I am still open to conviction, when such evidence of its truth is afforded me as is deemed necessary in any other scientific inquiries. The things I have myself seen most assuredly increase very materially the doubts I before entertained; still I do not regard them as sufficient to prove the utter falseness of mesmerism; they prove nothing more than their utter insufficiency to prove its truth. Even the positive proof of trickery and collusion on the part of its professors, however, would afford no sound reason for declaring it to be false. Like medicine, or any other branch of natural science, it may be true, although it be professed and practised by charlatans, cheats, and rogues. Give me the same kind of proofs of *clairvoyance* that I have of other scientific truths, and I will believe it.

SECOND EXHIBITION.

This was what was called a *private sitting*, being held (July 19th) at the house of the physician who now reports it, and who reported the former. On this occasion, M. Marcillet, of course, received his usual fee of five guineas for the performance. The company consisted in all of not less than twenty. All present were medical gentlemen, except *five*, two of the five being of the respective ages of fifteen and sixteen.*

It being well known that the mesmerisers are in the habit of attributing failures, when they occur, to the uncourteous or hostile interference of the disbelievers, it was predetermined that on the present occasion M. Marcillet and Alexis should not only have every courtesy shown them, but should not be interfered with in any way, except in so far as was absolutely necessary to ensure anything like accuracy in observing the proceedings. And this determination was rigidly acted on throughout; M. M. being given distinctly to understand that he was to follow his own plans, the company being simply spectators, unless called on by M. M. himself to assist him or his ward. One of the company agreed to take notes of the proceedings in short-hand. This gentleman placed himself in a corner of the room at some distance from Alexis, in order that he might not attract the attention of the latter. I thought he remained unnoticed, but it was afterwards found that he was noticed by M. M., and his presence was urged as a grievance by M. M., but not until after the occurrence of many failures. It is most certain that the process of note-taking was conducted with the greatest calmness and reserve, so as to be unnoticed by almost every one in the room. This precaution was purposely taken in order to avoid giving offence to M. Marcillet, or interfering in any way with the proceedings of Alexis. It was arranged that, during

certain of the experiments, the minutæ of which the short-hand writer could not distinctly see, another of the company should quietly communicate the facts to him.

About nine o'clock M. M. proceeded to magnetise Alexis by sitting down before him, and steadfastly staring at his countenance. In the course of five minutes, or less, Alexis began to yawn and stretch, and immediately afterwards appeared to fall asleep. After a few further manœuvres, M. M. considered him in a proper condition for action. He had previously prepared the apparatus for bandaging the eyes, but when this operation was going to be set about, Alexis declared his intention not to be bandaged. This was, of course, immediately complied with, without any reason being asked or given; and on Alexis proposing to play cards, a new pack was laid on the table, and a gentleman of the company selected to play with him, as being known to Alexis, and considered by him and M. M. as favourable at least to mesmerism, if not a full believer in it.

I. The game was to be *Ecarté*.

a. Alexis took the pack, threw out the superfluous cards, and the game proceeded in the usual manner—the cards being dealt in the usual manner, sometimes by Alexis, and played with their faces upwards.

b. After a hand or two thus played, Alexis proposed to continue the game with a partition, or screen, placed between him and his partner. The screen used was a music-book (eleven inches high by fourteen wide) supported at the back by a small round sofa-cushion. Several hands were thus played, Alexis playing his cards down on his own side of the partition, or handing them over it, or round the end of it, and his partner laying his cards down on his side of the partition. Although the screen was too low to prevent all possibility of vision, except when the cards of his adversary were kept very close to the cushion (which was on the adversary's side), and although they were not always kept thus close, still, as it cannot be proved that Alexis did see any of his opponent's cards, little or no stress is laid on this circumstance; the fact is merely mentioned historically, and as a hint for future experimenters.

The following is the account of this part of the performance from the notes of the gentleman who took them at the time:—

"*First game*.—Alexis made a mistake in commencing the first hand, by desiring his opponent to play a *spade*, and he stated that his opponent had *four trumps* in his hand when he had *not one*. In the second hand, Alexis said that his opponent had *the ten*, which he had not; but he stated, also, that he had *two trumps*, which was correct; and also that he had *the seven*, which again was correct. In the third hand he was again mistaken in regard to the *trump card*, which he said was a *diamond*, when it was a *spade*; but although he was wrong in regard to the trumps, the cards afterwards fell as he had previously said they would fall. In the next hand the trump turned up he said was a *heart*, when it was a *spade*. He then asked for *five* cards, when he only required *three*. In the next hand Alexis was correct in statements *four times*, but was *wrong in three*.

"*Second game*.—In commencing the next game, Alexis was mistaken in the *trump*, and also in the *number* of cards wanted; and, on the whole hand, he was *twice correct* and *twice in error*. In the second hand the cards were played with *their faces downwards*, when Alexis was again mistaken in the *trump*. In the third hand he was mistaken in the *number of cards wanted*, and he stated he had played a *red card* when he had played a *black one*. He now threw up his hand on the supposition that his opponent had the best cards, when, in fact, he himself had the means of winning the game, having the odd trick in his own hand."

Giving my own general impression of the results of the card-playing and card-seeing, I should say that there was very partial success, and a vast number of failures. The somnambulist sometimes played tolerably well; sometimes he named the number of cards wanted accurately; sometimes he was right as to trumps; but in all these respects he was much oftener wrong than right. In giving the names of cards placed behind the screen, he over and over again not only mistook clubs for spades,

* It is a minute and not very important circumstance, yet one worth mentioning, as showing as well on what small matters these exhibitors glorify themselves, as how their asseverations require being checked by calmer observations, that on this occasion M. Marcillet boasted not a little of the wonderful perspicuity of Alexis, in finding out, and telling him (M. Marcillet) that all the party were medical men (*médecins*) except *two*.

and hearts for diamonds, but he mistook the cards of different colours, and even the court and plain cards of different colours, one for another. He sometimes fancied his opponent had a very good hand when he had a bad one, and *vice versa*. He sometimes followed suit, and sometimes he did not. In a word, his performance seemed decidedly better than might have been expected of a blind man, yet far short of what we had a right to expect from one who professes to see through opaque bodies. Indeed, his guesses as to the cards turned up behind the screen were hardly more prosperous than mere random guesses might be expected to be, when we consider that there was only three to one against any one naming the right colour, and not a very vast odds (I do not know how many) against naming the right card, as all the small cards up to the sevens inclusive are thrown out of the pack.

II. Upon throwing up his cards, Alexis remained for some time in his chair, with M. M. seated by his side, encouraging and condoling with him, while the company were seated or standing round the room, conversing quietly together, not at all interfering with the proceedings of the performers, and carefully keeping their opinions as to the past proceedings from the ears of MM. M. and A. After a considerable time we were informed that Alexis was prepared to exercise his faculty of *clairvoyance* by reading certain words, or sentences, *through* the pages of a book, or through several folds of clean paper, placed on an opened page. The latter being proposed by M. Marcillet himself, three sheets of writing-paper were placed open (that is, three leaves) across the two pages of a small book, opened about the middle. The book was opened at random by myself, and the paper placed on pages, without their being seen by Alexis or myself. The book was a small duodecimo, in French (Dr. De Carro's *Almanach de Carlsbad*), which I feel assured was not seen previously in the house by Alexis.*

a. After poring for a considerable time over the white paper spread on the book, with his hand pressing it in different parts, and his face pretty closely approximated to it, like a short-sighted person, he fixed on a point about the centre of the right-hand page, and spoke the words "*de France*," indicating the spot beneath which these words, he said, lay. I was particular in making him indicate *the exact spot*, and I also made him say whether or not the words (which he also wrote on the paper) were on the page *immediately* below the superimposed writing-paper. He said *they were on this page*; and that both he and M. Marcillet expected to find them there appeared evident to me, from the obvious concern expressed by them when the paper was removed. The page (p. 77 of the book) immediately beneath the sheets of paper, was two-thirds *blank*, there being only seven lines of print at the top of it; and on the exact spot which Alexis fixed on, there was a small black line, or mark, such as printers are accustomed to place at the end of a chapter,—which this was.

Although I regarded this as a complete failure, and it seemed at first to be so considered by MM. M. and A., they immediately shifted their ground, and said it sufficed if the words were found *anywhere* opposite to the indicated spot. They were, according to our plan, humoured in this, and search was made for the words in question. After turning over some leaves, and the exact words not being found, the performers at length seized on the word "*souffrance*," which was found on the leaf next to the blank one (p. 79), in the third line below the level of the spot fixed on by Alexis, and about half an inch to one side of it.

I cannot say how many pages were turned over in searching for the *clear-seen* words, but we certainly did turn over several, both at this time and on the occasion of the next experiment; and it is to be remembered, that while Alexis and myself were doing so (or rather while he was doing so, and I was trying what I could,

* Even this, however, was *possible*, as this book was lying on a table, in the back drawing-room, in which Alexis remained a short time by himself, previously to being magnetised.

without giving offence, to prevent him), M. Marcillet was standing over us, and without restriction, eagerly examining the pages also. These facts, of course, utterly vitiate the succeeding experiments on the same book, as there was a *possibility*, at least, of their seeing words in other pages; and it will hardly be denied that there was an *extreme probability* that they did so. However, on the principle of letting the experimenters have their *own* way, under our close observation, we proceeded to further trials on the same book.

b. The paper was again placed by me on the book opened at random. It happened to be at page 98. On this occasion Alexis did not fix on words, but selected a point at the upper left-hand corner of the page, and said the page began with an *aline*a (a new paragraph, where the print was *set in* to the extent of a couple of letters). He distinctly said the page *began* with this *aline*a, and I marked the spot on and through the paper by strong pressure with my nail. On removing the sheet of paper it was found that the page did *not* begin with an *aline*a, and that the spot indicated by Alexis was altogether above the commencement of the print. There was, however, an *aline*a, or new paragraph, commencing with the *third line* of the page, and this was immediately seized on by MM. M. and A., as the thing seen and indicated. It was denied by M. Marcillet and Alexis that Alexis had said the *aline*a began the page, and the existing *aline*a was considered by them as sufficiently near the spot marked to make the experiment perfectly successful! It is to be remarked that the pages of this book only contained twenty-two lines, and the paragraphs were very numerous throughout. In the very page in question there were two other paragraphs. Of course it was perfectly easy for Alexis to observe, during the search for the words in the former experiment, this disposition of the print.

c. The paper was once more placed further on (p. 133), and after a short time Alexis announced that he saw a certain word, which he was requested to write down exactly over the spot where it was to be found. He did so, writing the word (which, like the words "*de France*," still remains on the paper) "*Mülburn*," with a diæresis over the *u*.

On this occasion I don't think it was stated by Alexis that the word was certainly to be found on the page immediately below the paper, and consequently we allowed him to turn over the pages and look for it. After some time, neither he nor I being able to find the word, and it being regarded by me as of no real moment, even if it was found (the experiment being vitiated by the previous leaf-turning), I shut the book, wishing that we should proceed to some other experiment. Seeing that there was disappointment and some dissatisfaction expressed by M. Marcillet at my conduct, I said, "I have no doubt the word is in the book," thinking this almost certain, as the book was on the waters of Carlsbad.* Accordingly, I gave the book up into their own hands, and after a considerable search not this word exactly, but one very like it, and one which, under ordinary circumstances, would be admitted to be the same, only misspelt—was found—viz., "*Mühlbrunn*," in page 165; that is, thirty-two pages beyond the page on which the sheets of paper were placed. The word was *near* the spot indicated as its site by M. A., but not this spot exactly; it was in the second line above and a little to the right of it. The words on this page, immediately opposite the spot selected by M. A., were "*à-dire de*," and it is to be recollected that there was a series of, at least, *sixty-four* words, superimposed on each other, between the surface to which vision was directed, and this page. It is certainly curious that some one of these sixty-four words was not selected in preference.

Thus ended the trials with books. A period of repose succeeded, during which MM. M. and A. seemed to be mutually comforting and consoling each other, under what, even by their own showing, was by no means tri-

* I mention this particularly, because, at a subsequent part of the evening, M. M. chose to be extremely wroth on account of this action of shutting the book before the word was found.

umphant success. Meanwhile, I prepared what I regarded as the only real experiment, the *experimentum crucis*, viz.,—

III. The reading or divining of words inclosed in opaque covers, respecting which there could be no collusion and no delusion. I laid on the table five packets, informing MM. M. and A. that each contained a French word. Four of these words were in largish print, and one written in good-sized letters. Three of the envelopes consisted of several folds—from two to six—of fine writing-paper, one being gummed and sealed, the others merely carefully folded so that they could not be unfolded without this being observed. No one but myself was aware of the contents of these packets, and each was marked exteriorly with a cypher corresponding with a card in my pocket-book, indicating the word contained in each. Alexis selected one of the unsealed and thinnest envelopes, and set himself, with great apparent earnestness, and without any seeming discontent or distrust, to divine its contents. It contained the word “*Vin*,” written in a large bold hand, on a piece of card. As inclosed in the envelope, the card was covered by only two thicknesses of paper (a fine wove post). Profound silence was preserved in the room, and no one was close to Alexis’s chair but M. Marcillet and myself. His proceedings were—to look intently at the paper for a considerable time in different aspects, pressing it and turning it about in his hands, pressing it occasionally to his breast, forehead, and lips; but still seeming to depend mainly on *his eyes* for the accomplishment of the difficult feat. After a considerable time he said the word contained in the envelope was *printed*. No assent or dissent being expressed, after another examination he said it was *written*, and that he was wrong in saying it was printed. After another long pause, he said the word consisted of *three letters*. Still silence and expectation; and after a short time he declared *he could see nothing*, and threw down the paper. Here the “*sitting*” ended, as far as Alexis was concerned, although he remained a long time in his so-called somnambule state, M. Marcillet soothing and comforting him, and a medical gentleman—a believer in Alexis—doing the same, and also attempting to excite the phrenological organs that might lead to a more cheerful, confident, and hopeful spirit—but in vain; Alexis refused to attempt anything more that evening.

Although the same uniform calm, cautious, and courteous behaviour towards MM. Marcillet and Alexis was still preserved by the company, M. Marcillet several times started up in great excitement, denouncing our proceedings, proclaiming the powers of his *protégé*, &c. The general impression produced by his conduct was, that he was desirous of provoking some retaliation, so that he might have to allege some stronger ground than he possessed for the failure of Alexis. If this was his object, it was entirely balked by the calm behaviour of all present.

The conclusions drawn from the results of the previous exhibition seem equally deducible from those now detailed. Alexis utterly failed, now as then, to show, unequivocally, that power which has been called *clairvoyance*. In several cases, both on the present and former occasions, his guesses (if such they were), even when not correct, came curiously near the truth,—as, for instance, when he named the exact number of letters in the word in the envelope. The failures and blunders, however, were so egregious, and so unaccountable, on the hypothesis of the existence of a *through-seeing* faculty, that they must stagger the most credulous when fairly examined. Still, as was observed on the former occasion, the results being only *negative*, prove nothing more than that nothing was proved. It only remains for the mesmerists to adduce one or two *positive* unequivocal proofs, to put aside all our negative ones. Such proof, however, is, I believe, yet to be exhibited; and until it is exhibited unequivocally,—that is, under similar guards and precautions as the failures now recorded took place,—I, for one, must still remain a doubter at the very least.

Many important remarks on the strange conduct of the mesmerisers, as professors of what ought to be a matter of science, are suggested by the preceding narratives, and

by the proceedings generally. I will here only briefly refer to one point—their *inconsistency* with one another, and with themselves at different times. At the first exhibition, it was declared essential to the reading of the word in the box, that the person giving the box should *know* the word. At the second this was said by M. Marcillet to be unnecessary. And, indeed, the very practice of Alexis himself, at the first exhibition, proved that he considered this knowledge on the part of the propounder to be unnecessary; the *reading of words in the book* through a number of pages being, in fact, the very same thing as reading them through an envelope. The alleged necessity, however, of having the word known by the propounder, obviously supplied one additional means of knowing it through channels common to all; while the manœuvre of reading the book furnished the most facile and ready help to successful imposition. Again, it is maintained by some professors that the somnambulist while wide awake, as far as hearing is concerned, to the mesmeriser, is totally deaf and blind to impressions coming from others—unless *demesmerised in any particular sense* for the nonce. There was nothing of this sort in Alexis; he did not hesitate to confer with and understand every body who chose to address him *in relation* (*en rapport*) or *out of relation*, believer or infidel.

P.S. It has been thought necessary, on this and the former occasion, to be very minute and circumstantial in detailing the experiments, as it is only in this manner that a just judgment can be formed by any reader of the positive value of such experiments. Almost all the published records of mesmeric wonders, and all those I ever heard narrated, are utterly valueless, from being defective in exact and minute details. If the proceedings of Alexis, and a few more of the so-called CLEAR-SEERS, were followed up for a certain time, in the close manner adopted on these two occasions, we should speedily come to positive conclusions respecting the truth or falsehood of these most wonderful wonders.

July 22, 1844.

REVIEWS.

The Actual Process of Nutrition in the Living Structure demonstrated by the Microscope; and the Renewal of the Tissues and the Secretions from the Blood thereby illustrated. By W. ADDISON, F.L.S., Surgeon, &c. Article 3. Trans. of Prov. Med. and Surg. Association.

WE hold it to be a matter of the utmost importance to the future advancement of physiology and pathology that microscopical inquirers should rigidly separate fact from hypothesis—what is actually seen from the speculations formed by the observer. We are at present fortunate in possessing achromatic instruments which fully enable us to attain this end, and yet it is seldom arrived at. This does not so much depend upon the imperfection of the means at our command as upon the superficial observation, rash conclusions, and deficient education of those who employ them. The purchase of a microscope, however excellent or costly, will not constitute the buyer of it a man of science, any more than the possession of an excellent stethoscope will entitle its holder to the character of a good physician. They are both means to an end. To use either with success for the purpose of advancing medical science, it is necessary to be well acquainted with healthy and morbid anatomy, and the existing state of physiology and pathology; to be practically dexterous in its employment; to have cultivated our powers of observation; and, above all, to have studied that rigid mode of induction which Bacon clearly laid down, so that we may be restrained from rashly drawing fallacious conclusions, and prevented from mistaking hypothesis for fact, error for truth. With regard to the microscope we can have no objection to persons amusing themselves with the wonders it displays, or endeavouring to clear up their