

JOURNAL

OF THE

SOCIETY FOR PSYCHICAL RESEARCH.

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SMITH, PROF. JOHN, Sidney University, Australia.

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London, N.

COUNCIL MEETINGS.

At a Council Meeting held on the 30th of January previous to the Annual Business Meeting, the President in the chair, the following Members were present: Messrs. Walter H. Coffin, Edmund Gurney, Chas. C. Massey, F. W. H. Myers, Frank Podmore and Henry A. Smith.

The Minutes of the previous Meeting having been read six new Members and eleven new Associates were elected, whose names and addresses are given on another page.

One Member, Miss A. A. Leith, desired to continue this year as an Associate, and one Associate, Mr. B. Whishaw, desired to become a Member. These changes were agreed to.

Miss Scott desired to resign her Membership, on the ground that circumstances at present prevented her from taking any active interest in the Society's work.

Two donations were reported to the funds of the Society:—One Guinea from Miss Curtis, an Honorary Associate, and Three Pounds from a lady who wished her contribution to be anonymous. The Council recorded its thanks to the donors.

Presents to the Library were also received with thanks from Mr. H. A. Smith, Mr. C. C. Massey, and the Rev. Canon Wood.

The Treasurer reported that the Rev. W. Whitear had become a Life Member, having sent him a payment of £21.

The usual monthly cash account was presented, which showed that only about one quarter of the Members and Associates had sent in their subscriptions for 1885 during the month.

The Assistant-Secretary presented a balance-sheet of the receipts and expenditure of the Society during the year 1884, which had been audited and found correct, and also a report from Mr. Morell Theobald, F.C.A., as auditor. It was resolved that the balance-sheet and Mr. Theobald's letter be laid before the Annual Business Meeting, in the report of which they are more particularly referred to.

At a Council Meeting held on the 13th of February, the President in the chair, the following Members were present: Professor Barrett, Messrs. Alexander Calder, Walter H. Coffin, Edmund Gurney, F. W. H. Myers, Edward R. Pease, Frank Podmore, J. Herbert Stack, and Hensleigh Wedgwood.

The Minutes of the previous Meeting having been read, it was reported that with one or two slight verbal amendments, the whole of the alterations in the Rules proposed by the Council had been adopted, at the Annual Business Meeting, and that the voting at the Annual Meeting had resulted in the election, as Members of the Council, of the Rev. W. Stainton Moses, Dr. C. Lockhart Robertson, and Messrs. G. P. Bidder, Q.C., A. Calder, R. Hodgson, and J. H. Stack.

The Council then proceeded to the election of a President of the Society for the ensuing year. Professor Sidgwick expressed his belief that the time had arrived when it would be best for a change to be made in the position which he had occupied since the foundation of the Society. He entered into various reasons for this belief, explaining that it in no way arose from any diminished interest on his part in the Society; on the contrary, one of the objects he had in view was that it would enable him in a more independent manner to pursue certain branches of the Society's work, and to express his conclusions.

After a free expression of the feelings of the Council, the following resolution was, on the proposition of Professor Barrett, unanimously agreed to: "The Council having heard Professor Sidgwick's announcement of his retirement from the office of President, desire to place on record their sense of the invaluable services rendered by him to the Society during the three years of its existence, and their deep gratification that the Society will still have the advantage of his help and guidance."

Professor Barrett proposed the election of Professor Balfour Stewart, F.R.S., as President of the Society for the year. This proposal was warmly seconded and unanimously carried.

Mr. Alexander Calder and Mr. Edmund Gurney were re-elected as Hon. Treasurer and Hon. Secretary respectively.

On the proposition of Professor Sidgwick, seconded by Mr. Edmund Gurney, Lord Rayleigh, F.R.S., Professor J. C. Adams, F.R.S., and Professor O. J. Lodge, D.Sc., were unanimously elected Members of the Council in accordance with Rule 18.

In harmony with the change in the relation of the Council to the research work of the Society, it was resolved to appoint a "Committee of Reference," to whom all Reports and Papers which it was proposed to publish should be sent in proof.

The following Members of Council were elected as Members of this Committee: Professor Balfour Stewart, *ex-officio* as President; Professor Adams, Professor Barrett, Mr. Edmund Gurney, Professor O. J. Lodge, Lord Rayleigh, Dr. C. Lockhart Robertson, and Professor Sidgwick.

It was resolved that there should be four special Council Meetings in the year, for which the more important business should be as far as possible reserved; and that for attendance at these four Meetings, the expenses of members of the Committee of Reference should be paid.

It was further resolved that a statement of the changes in the method of conducting the experimental investigations of the Society should be inserted in the next Part of the Proceedings.

The following Committees were appointed, with power to add to the number of their members:—

LITERARY COMMITTEE.—Messrs. Edmund Gurney, Richard Hodgson,

Chas. C. Massey, F. W. H. Myers, Frank Podmore, and Professor H. Sidgwick.

LIBRARY COMMITTEE.—Rev. W. Stainton Moses, Dr. A. T. Myers, and Mr. F. W. H. Myers.

HOUSE AND FINANCE COMMITTEE.—Messrs. Alexander Calder, Edward R. Pease, and Josiah G. Stapelton.

Dr. Chas. Richet, of Paris, and Professor John Smith, of Sydney University, Australia, were elected Corresponding Members.

One new Member and eight new Associates were elected, whose names and addresses appear on another page.

It was agreed that Mr. Frank Miles should, at his request, continue as an Associate instead of as a Member.

A copy of a pamphlet entitled "Gedankenlesen," was received from the author, Dr. Carl du Prel, for which thanks were recorded.

Mr. H. Wedgwood brought before the Council the alleged phenomenon of an iron ring too small to have been passed over the hand, which was now on the wrist of Mr. Husk, and proposed that the Council should appoint a Committee to examine and report on the subject. Professor Barrett and Mr. Gurney were requested to inspect the ring, and if possible to obtain the assistance of an anatomist or surgeon.

Professor Barrett being desirous of relinquishing the editorship of the *Journal*, Professor Sidgwick expressed his willingness to undertake that office; and he was appointed accordingly. It was further agreed that for the future the *Journal* should to some extent be regarded as the organ of the Literary Committee; and that its size might extend to 32 pages, in order to afford space for the insertion of matter selected from the evidence collected by that Committee.

The Assistant-Secretary reported that an order had been received from the Hon. Sec. of the American Society for Psychical Research for 300 copies of different Parts of the Proceedings, for the use of their Members, under the arrangement which the Council had proposed.

The next Meeting of the Council will take place on Friday, the 6th prox., at 4.30 p.m.

GENERAL MEETING.

A General Meeting of the Society was held on the evening of Friday, January 30th, at the Rooms of the Society of British Artists, in Suffolk Street, Pall Mall, the President in the chair.

The first paper read was by Mrs. H. Sidgwick, "On the Evidence collected by the Society for Phantasms of the Dead."

After pointing out that the existence of phantasms of the dead can only be established, if at all, by the accumulation of improbabilities in which we become involved by rejecting a large mass of apparently

strong testimony to facts which, as recounted, would seem to admit of no other satisfactory explanation, and that in testing the value of this testimony we are bound to strain to the utmost all possible suppositions of recognised causes, the writer went on to say that the Society now possesses, as the residue of a much larger number, a collection of about 370 narratives that seemed to deserve some consideration, of phenomena not clearly physical. The present paper was chiefly occupied with the possible non-ghostly explanations, one or other of which the writer thought might, by straining, be applied to the greater number of these cases. These explanations she classified by reference to the various sorts of error by which the evidence to such phenomena is liable to be affected, viz., (1) hoaxing; (2) exaggeration or inadequate description; (3) illusion; (4) mistaken identity, including under this head cases where it is possible that a person taken for a ghost has really been alive all along; (5) hallucination.

The first four sources of error she discussed at some length, and illustrations were given of cases where the third and fourth might, perhaps, have occurred.

In dealing with the fifth source of error, the writer said that the great difficulty here arose from the fact that genuine phantasms of the dead, such as were under discussion, would themselves generally take the form of hallucination of the senses, and that, at the same time, as solitary and seemingly non-veridical hallucinations of persons apparently healthy do occur, we should not be justified in assuming a hallucination to be what the Society calls veridical without some special external reason or confirmatory coincidence. When the phantasm is that of a *living* person, information about that person may afford the required confirmation. But in the case of phantasms of the dead, we cannot obtain this kind of confirmation. Other kinds of confirmation are, however, possible. The first mentioned was that which occurs when two people have a hallucination simultaneously. But cases of this kind might, it was suggested, perhaps be explained by Thought-transference between the percipients, without necessarily assuming a cause external to both of them.

The other kinds of confirmatory evidence mentioned were three in number. It might be alleged (1) that the apparition resembled a person unknown to the percipient so strongly that he afterwards recognised his portrait; (2) that two or more people saw independently of each other, and at different times, apparitions which seem clearly to have been very much alike; (3) that the phantasm conveyed correct information unknown to the percipient. The discussion of narratives where confirmation of these kinds is claimed was deferred to another paper.

Mr. F. W. H. Myers then read the second part of a paper "On a

Telepathic Explanation of some so-called Spiritualistic Phenomena." The paper aimed at establishing two points: First, that the unconscious mental action, which is admittedly going on within us, may manifest itself through graphic automatism with a degree of complexity hitherto little suspected; and secondly, that automatic writing may sometimes furnish replies to questions which the writer does not see, and mention facts which the writer does not know, and has never known; the knowledge of those questions or of those facts being apparently derived by telepathic communication from the conscious or unconscious mind of another person. The following is a brief sketch of the arguments used (some of the considerations given in a previous paper being, for the sake of clearness, repeated here): Automatic writing is observed in various morbid states. A man attacked by a slight epileptiform seizure, while in the act of writing, will often continue to write a few sentences unconsciously, which, although probably nonsensical, will often be correct in spelling and grammar. Some agraphic patients also, though conscious that they are writing, are not aware what the letters written actually are; so that the formation of those letters has been an unconscious act. In somnambulism, also, the patient will sometimes write long passages, or even solve mathematical problems with the data of which his waking mind was already familiar. The writer is acquainted with a gentleman who finds that if he fixes his attention on a given word, and then allows his hand to rest in the writing attitude, the word is written without conscious volition of his own, and whether his eyes be open or shut.

The explanation of "planchette"-writing must be sought in analogies like these. A "planchette" is simply a piece of wood supported on two wheels and a pencil, with the objects (1) that a small muscular tremor may be able to set it in motion; (2) that the writer may be able to remain unconscious of what he is writing, which is hard to effect if a mere pencil be employed. The "planchette," of course, affords no evidence, except to the writer himself, that the writing is automatic; but actual experiment shows that perhaps one person in a hundred has this actual tendency to graphic automatism,—a result in no way physiologically surprising. The interest of the matter thus automatically written lies, of course, not in its *substance*, which is generally capricious and incoherent like a dream, but in the indications which it gives of the mode of mental action which has produced it. The gradual acquisition of the faculty of writing with "planchette" presents analogies to the process of learning afresh to write, which patients in a state of so-called *second consciousness* have sometimes to go through. There are analogies also both to atactic and to amnemonic agraphy, substitution of letters often much resembling the classical cases of Jicmnos for James Simmonds, Jaspemos for James Pascoe, and others recorded by Drs. Hughlings Jackson, Ogle, &c. The constant repetition of the

same meaningless word in "planchette"-writing reminds one of the single meaningless utterance of some aphasics. In vocal automatism, the same peculiarity is observable, as in the reiterated cries of the so-called "gift of tongues" in the Irvingite congregation. Taking all these points together, there seems reason to conjecture that automatic writing is, in some cases at least, due to the action of the right cerebral hemisphere, to which Dr. Hughlings Jackson is disposed to attribute the non-propositional utterances of aphasics. A curious confirmation of this view is afforded by the frequency of *reversed script* (Spiegel-schrift, or mirror-writing), early in the development of graphic automatism. Eschenmayer and others have collected cases where *Spiegel-schrift* accompanies left-handedness, and Dr. Ireland conjectures that the verbal image as formed in the right hemisphere may be reversed in this manner.

This unconscious cerebral action may be much more complex than has hitherto been supposed. A gentleman, known to the writer, has repeatedly written down, automatically, a jumbled series of letters which, on investigation, turned out to be *anagrams*, with a definite meaning, sometimes containing a reply to questions. Similarly, a phrase recollected from a dream may for some time puzzle the waking mind to detect its meaning.

But more than this. There are sometimes cases where replies are automatically written to questions which the writer has not seen, and has no means of knowing. Such are some of the cases on which Spiritualists base their belief in an intervening intelligence. But those who have followed the evidence which the Society for Psychological Research have now for nearly three years been publishing, as to the transmission of thought from one mind to another without the agency of the recognised organs of sense, will prefer to look first for the action of the mind of some other person present at the time. For if telepathy be a reality, traces of it must be looked for wherever unconscious mental action is concerned.

Space permits of only one illustration of this telepathic action showing itself in graphic automatism. The Rev. P. H. Newnham, of Maker Vicarage, Devonport, who had had reason to believe that an unusual communication of thought existed between himself and Mrs. Newnham, determined in the year 1871 to try whether he could so transmit questions to her mind, without speech or sign, as that her hand should unconsciously write replies thereto. He arranged tables in such a way that she could not see what he wrote; and then wrote questions, one by one, without informing her what the question was. Her hand wrote automatic answers to these questions, clearly indicating that the question had been understood, though the reply was often of a capricious or evasive kind,—a characteristic frequent in these acts of

the unconscious mind. In some cases correct replies were given to questions involving Masonic secrets, and in other cases answers were given which, though coherent and intelligent, were different from the beliefs, existing in either of the two conscious minds concerned. The series of 309 questions extended over eight months, and was carefully recorded by Mr. Newnham in a note-book which Mr. Myers has inspected. Copious extracts from this note-book will be published in the Society's Proceedings. To an observer less cautious than Mr. Newnham many points in these automatic replies might have suggested the agency of some extraneous intelligence. But Mr. Newnham prefers to suggest (in independent accordance with the view put forward in this paper) that the dreamlike mixture of shrewdness and incoherence seems rather to resemble the action of an "untrained half of the brain;" or, at least, some unfamiliar mode of the working of the writer's own intelligence.

On the whole it seems that if telepathy be admitted as a *vera causa*, it affords a probable explanation of a great mass of cases which Spiritualists have alleged as proving the action of unseen intelligences, and which science has as yet neglected to examine.

Further cases of graphic automatism, spontaneous mirror-writing, &c., (occurring in normal or abnormal states) are earnestly desired, and may be sent to the Secretary, Society for Psychical Research, 14, Dean's-yard, Westminster.

AMERICAN SOCIETY FOR PSYCHICAL RESEARCH.

Our readers will remember that in the November number of the *Journal* we announced the formation of an American Society for Psychical Research. Several meetings of the Provisional Committee have been held in Mr. R. Pearsall Smith's house in Philadelphia and elsewhere, and we are now glad to announce the organisation of what promises to be an influential and valuable Society. We observe with pleasure that Prof. Simon Newcomb, who occupies a foremost place among American men of science, has consented to act as President. The following report appeared in one of the leading New York papers, the *Evening Post*, for January 10th.

BOSTON, January 9th.

At a meeting held on Thursday at the rooms of the American Academy of Arts and Sciences, in this city, the definite organisation of the American Society for Psychical Research was completed. The officers of the Society were elected as follows: President, Prof. Simon Newcomb, of Washington; Vice-Presidents, Prof. G. Stanley Hall, of Baltimore; Prof. G. S. Fullerton, of Philadelphia; Prof. E. C.

Pickering, Dr. H. P. Bowditch, and Dr. C. S. Minot, all of Harvard University; Secretary, Mr. N. D. C. Hodges, of Cambridge, Mass.; Treasurer, Prof. William Watson.

In view of the dangers to which the new Society is exposed in the systematic investigation of the little-known psychical phenomena, great care has been taken to exclude from active control all elements which might turn the energy of the Society into a helpmate of any of the vague, unsettled, and sometimes fraudulent enterprises of Spiritualists. A scientific research must be free from all taint of crankiness. Hence the decision that all persons elected to the Society become associates; from among the associates 100 members to be elected, who alone have the right to vote. Out of the members again are elected a council of twenty-one, including the officers above named; the remaining members of the present Council are: Dr. Wm. James, Prof. George F. Barker, Mr. S. H. Scudder, Dr. C. C. Everett, Mr. Moorfield Story, Prof. John Trowbridge, Prof. A. Hyatt, Prof. J. M. Pierce, Mr. Coleman Sellers, Major Woodhull, Messrs. C. C. Jackson, T. W. Higginson, W. H. Pickering.

The Society, the foundation of which is due to the initiation of Prof. W. F. Barrett, of Dublin, starts with a considerable number of adherents, about eighty members and fifty associates. Its headquarters are, for the present, in Boston, yet it has a widely distributed constituency which is growing rapidly, as the interest felt in the objects of the Society is very general. It is expected that an important part of the work of the Society will be done at Baltimore and Philadelphia.

What is that work to be? Readers of the *Evening Post* will remember the publication of an account obtained from Professor Barrett, of the results of the investigations of the English Psychical Society, showing that there are many obscure phenomena of the mind by no means yet adequately explained. The most remarkable of their announcements was the discovery of thought-transference, mental images, passing from one person to another without following any of the known channels of communication. As this is the most novel and startling of the published conclusions of the English Society, and as it offers varied opportunities for exact scientific experimentation, it has been decided to make the study of thought-transference the first undertaking of the American Society. A committee has been appointed, with Dr. H. P. Bowditch as chairman, to conduct this investigation. A circular will shortly be issued stating the exact methods of experimentation, and asking co-operation. It may be mentioned that it is the policy of the Society to conduct all its investigations experimentally, in the belief that the most satisfactory results will be thus obtained; for the present, at least, it will not attempt to collect other evidence.

The Committee desires first to find sensitive persons, so-called mind-

readers, and to test the exact extent and conditions of their peculiar power, if it exists. They would try with such a person whether he could reproduce a simple drawing which a second person looked at intently, but which the sensitive or percipient could not see; whether he could identify a word upon which another person had concentrated his attention; if this is done the Committee will test the effect of distance between the two persons, of the interposition of various obstacles; use rigid conditions to exclude possible collusion, conscious or unconscious; study the influence of the number of persons who concentrate their attention upon the image the sensitive is to perceive, &c. All these and such other experiments as opportunity and experience may suggest will be work for the Committee itself, but they ask the co-operation of every one interested in bringing them into communication with persons who are supposed to have the faculty of "mind-reading."

The Committee hopes also to carry on a series of statistical researches which it trusts will be participated in by many besides themselves. Let an example suffice to indicate what is intended. Suppose two persons are together; a pack of cards is taken and turned up by one of them, card by card; as they are turned, the second person, who is placed so as to be unable to see the cards, guesses the suit. Now if there is any thought-transference, the guesses must be right oftener when the first person knows the suit of the card turned up, than when he does not; he has, therefore, only to keep tally, and a comparison of the proportion of errors in the two circumstances will show whether thought-transference occurs. To secure a certain result, however, a very large number of observations must be made, and it is desirable to have many observers. Professor Richet, of Paris, has already tried this form of experiment, and reached the conclusion that thought-transference does take place.

It is hardly necessary to point out the profound significance of this inquiry, particularly if the answer is in the affirmative. On the other hand, as the affirmation has already been publicly and repeatedly made, if yet it is erroneous it is most important to demonstrate its falsity. It has such far-going consequences that to establish either alternative would be a public service of the highest value.

At the recent meeting there was much discussion as to the means and conditions of Psychical Research, but no further plans were fully matured. It was announced that an arrangement had been made to supply gratuitously all the members and associates with the Proceedings of the English Society, beginning with number six. It is to be hoped that every one interested will assist the Society. Inquiries and communications should be addressed to the Secretary, Mr. N. D. C. Hodges, 19, Brattle-street, Cambridge, Mass.

PROFESSOR SIMON NEWCOMB AND MR. EDMUND
GURNEY ON PSYCHICAL RESEARCH.

The following discussion between Professor Simon Newcomb and Mr. Edmund Gurney has lately appeared in the pages of *Science*. Prof. Newcomb began with the following paper, which we mentioned at the time as appearing in the same number of *Science* that contained a cordial leading article on the work of our Society.

Although it may be regarded as doubtful whether the Society for the investigation of psychic force, proposed at the recent meeting of the American Association, will result in any new discoveries, yet the philosophy of the subject is of sufficient interest to merit general consideration. The first and greatest obstacle we meet with in such investigations is the absence of clear ideas of what it is we are to look for, and how we are to distinguish between real relations of cause and effect and mere chance coincidences. The state of mind of the community at large is also unfavourable to the attainment of any result. If we take out of it two classes holding quite opposite views,—the one comprising those who look upon the subject with that sentiment of credulity and wonder which is fatal to all scientific accuracy; and the other, those who think it all nonsense, and unworthy the attention of common-sense people—we shall have but few left for patient research.

If, however, this remnant is going to investigate the subject in a scientific spirit, they are entitled to all the light that can be thrown upon it. We begin by warning them against a kind of inquiry which can lead to absolutely no conclusion. We refer to such inquiries as those made in the following extract in the *New York Nation*, of August 28th, 1884:—

“The Society for Psychical Research will be grateful for any good evidence bearing on such phenomena as thought-reading, clairvoyance, presentiments, and dreams, noted at the time of occurrence, and afterwards confirmed; unexplained disturbances in places supposed to be haunted; apparitions at the moment of death or otherwise; and of such other abnormal events as may seem to fall under somewhat the same categories.”

It would be difficult for the Society to put forth anything better fitted than this advertisement to lower the estimation in which their work is held by common-sense people. Let us make a little calculation showing how often coincidences of the kind sought for must really occur in our country. Numerical exactness in our data cannot, of course, be reached: all we can do is to make rough estimates which shall not be unreasonably far from the probable truth. Any physician, we apprehend, will consider it quite within the bounds of probability that one per cent. of the population of the country are subject to remarkably vivid dreams, illusions, visions, &c. This will make half a million such people in the United States. Each of these persons may be supposed to have 50 friends or relations, of whom one per annum dies. If they are subject to a dream or vision once a week, there is one chance out of seven that they have one on the same day that the friend dies. Let us suppose that it takes a combination of eight separate and independent points of resemblance, between the vision and the circumstances attending the death of the friend, to constitute a remarkable coincidence, and that each of these has a probability of one-half. We shall have, in one case out of

256, remarkable combination of coincidences. Putting these results together, we may infer, that, as a matter of fact, some case of extraordinary coincidence between the circumstances of death, and the dream or vision by a friend of the dying person, does occur somewhere in the country nearly every day in the year. Thus, what the Psychical Society will find, will be what we know must exist as the result of chance coincidence. The search after haunted houses is of a different kind, but the result must be equally inconclusive; all that can be discovered is cases in which the cause of some apparently singular phenomena happened to be undiscoverable. The idea seemingly entertained by the psychists—that the residuum, after they have eliminated all cases in which the natural causes could be found, must be genuine—has no logical foundation. One can hardly lie on his bed awake an hour after midnight without hearing some sound the cause of which it is beyond his power to guess; and we do not see any essential distinction between this case and that of a haunted house.

The general question at issue is, whether there is any such process as what the psychists very happily denominate “Telepathy,” which may be defined as *feeling at a distance* without the intervention of any physical agent. And just here we have the real point at issue between them and those people “of the earth, earthy,” who think their work is all nonsense. The real questions are two in number.

First, Can the mind be influenced by things external to itself in any other way than by such things acting physically upon the nervous system? Second, Can the mind, by any act of the will, produce any effect outside of itself, except through the agency of the organs of motion of the body itself acting according to physical laws?

The two questions may, perhaps, be combined into one by inquiring whether it is possible that mind can affect mind otherwise than by some physical connection between the nervous systems with which the two minds are associated. That there is a natural tendency to believe in the possibility of the so-called Telepathy is, no doubt, well-known to all who have considered the subject. The frequently expressed view that the mesmeriser influences his subject by the mere act of his will, and especially the readiness with which this view is received, may be cited as an example. But it is none the less true that the longer we live, the more evidence we see that there is no such action. It is true that this evidence is negative, and so may always lack something of being conclusive; yet the more closely we look into the case, the less foundation we can see for any positive belief in Telepathy. We must remember that the physical connection through which one mind affects another may be of the most delicate kind; may, in fact, nearly evade all investigation. The slightest look, an unappreciable motion of the muscles of the mouth or eyes, made perceptible through the light which is reflected to the eye of the second person, constitute a physical connection. Now, since in the operations of mesmerism the subject is always within easy sight or hearing of the operator, there is always room for the action of a physical cause between the two through the intervention of light or sound. Telepathy between the two could be proved only by finding that the subject was affected by the mesmeriser when the latter was not within sight or hearing or knowledge of the former.

The Society for Psychical Research has published in its Proceedings very detailed accounts of a number of investigations undertaken by its committee and members, some of which are very striking. The report of the Committee on Haunted Houses, however, can hardly be regarded by lookers-on as anything better than very scientific children's ghost stories. The extraordinary cases of events or accidents happening to one person being reproduced in the imaginations or visions of others at a distance, are nothing more than recitals of what we know, from the theory of probabilities, must be very frequent occurrences. A feature of these coincidences which ought not to have escaped the notice of the Society is, that they have no feature in common by which they can be traced to the action of a general cause, and do not even tend to show that there are particular persons who possess the faculty of being influenced by Telepathy. A very striking case is that which most of our readers may have seen, in which a lady awoke under the impression that she had received a blow in the mouth at the very time when her husband, a mile or two away, actually did receive such a blow. Now, if this lady had repeatedly felt her husband's impressions in this way, or if it could be shown that a blow in the mouth or on any other part of the person often makes itself felt by Telepathy, the case would be better worth inquiring into; but there is no common feature of this kind in the cases as reported, and they thus fail to supply good evidence that they are anything more than mere chance coincidences.

The only case that looks at all strong in favour of Telepathy is that in which one person is made to draw figures similar to those thought of by another in his neighbourhood. If any of the members of our home Society can succeed in making this mechanism work, they will have something of great interest to show the critical observer. But we apprehend that the incredulous will, under almost any circumstances, require stronger evidence than any which he has any prospect of getting, to make him believe that there is no physical cause in action by which the subject has an inkling of the drawings he is to make, or an indication whether he is going right or wrong. This incredulous tendency will be greatly strengthened if the assistance of spiritualistic performers is called in.

To this letter Mr. Edmund Gurney replied in the columns of *Science* for December 5th, as follows:—

Your issue of October 17th contained two articles which are of good omen for the future of "Psychical Research" in America. Of the first, the editorial article, I need say little. It is cordially welcomed by my colleagues and myself for its recognition of the far-reaching importance of an enterprise in the further development of which our Society will, we hope, go hand in hand with yours. With the second article, on "Psychic Force," our agreement is less complete; but we still find nothing to complain of in the general attitude of the distinguished writer. He, too, recognises the legitimacy of the inquiry, while clearly apprehending its difficulties. He describes with entire justice the two opposed classes between which Psychical Research has to clear a path,—the party of easy credulity, and the party of easy incredulity; and he points out with no more than proper emphasis the rigorous caution which every forward step demands. Fraud and superstition have

naturally seized on what science has so systematically neglected ; and those who now endeavour to take the subject up from the scientific side must accept the fact and its consequences.

So far, then, we are wholly at one with Professor Newcomb ; but we cannot quite so readily follow him in his criticisms of our own doings. He begins by condemning one of our public appeals for information ; but his strictures seem to assume that all the information which the appeal brings in will be regarded by us as a safe basis for conclusions. The appeal is, of course, merely a first step, for which it would be difficult to imagine any effective substitute ; though I may mention that a very large amount of our information comes to us through private channels. The sifting and treatment of the evidence according to scientific canons must be a subsequent labour, the *rationale* of which could not be set forth, or even suggested, in the terms of a short advertisement. And of this labour no portion is more important than the one which we are glad to find Professor Newcomb so explicitly recognising,—the application of the doctrine of chances. In all those branches of our inquiry where questions of *coincidence* occur, it is clearly essential to ascertain, as definitely as may be, how far the coincidences may fairly be ascribed to *chance*. We have taken, and are still taking, great pains to obtain this definite information. Very wide inquiries have been made ; and the results, though far from complete, may still, I think, claim decidedly more validity, as a basis of computation, than Professor Newcomb's guess at what "any physician will consider quite within the bounds of probability." It would require more space than I can ask for, to comment on Professor Newcomb's numerical argument in detail. But I may remark that he seems to confuse the argument by classing all together what he calls "dreams, illusions, visions," &c. ; at least, if he means to include in this heterogeneous group visual hallucinations of waking persons, which we regard as by far the most important phenomena from an evidential point of view. If any one, in his waking moments, experiences apparitions of human forms as often as once a week, which is the degree of frequency that Professor Newcomb's calculation assumes, it is obvious that the approximate coincidence of one of these apparitions with the death of the corresponding human being will be an insignificant accident. But we have not ourselves met with any specimen of this class. We have collected more than a hundred first-hand cases of apparitions closely coinciding with the time of death of the person seen ; and it is only in a small minority of such cases that our informants, according to their own account, have had any other hallucination than the apparition in question.

The following sketch may serve to show the lines on which our own reasoning in the matter will proceed. We are making a census, which, so far, shows that in this country the proportion of sane persons, in good health and awake, who within the last 10 years have had a visual hallucination representing some living person known to them, is about one in 300. Now, let us make a supposition far below the actual mark, and confine the number of the acquaintances of each of these hallucinated persons to 5. Let us further suppose that one of these 5 persons does actually die in the course of the 10 years. This seems fair, on the whole ; for, though in some cases more than one may die within that time, in others none may die. According

to this estimate, then, the chance that the death will take place within 12 hours of the apparition will be one in $365 \times 2 \times 10 \times 5$; that is, one in 36,500: in other words, only one out of every 36,500 of the hallucinated persons will, in the course of 10 years, hit off the coincidence by chance. But since the hallucinated persons are only a three-hundredth of the whole population, this means that the proportion of the whole population who will by chance have an apparition of a person known to them within 12 hours of that person's death is only one in 10,950,000. Now, we ourselves have a large collection of such recent cases, resting on good first-hand testimony; but let us put the number far below the mark, and say 30 cases. If, then, these 30 coincidences are to be fairly attributed to chance, the population of the country will have to be 328,500,000. But we cannot suppose that our appeal for evidence has reached the whole population; and we shall be making a sober estimate, if we reckon that within the given time 10 times as many cases must have occurred as those we happen to have encountered. This brings the necessary population up to 3,285,000,000; and the number will be further immensely increased if we take count of the fact that many of the coincidences are extremely close—that the times of the two events fall not only within 12 hours, but within one. Thus the theory that chance would account for the cases could only be justified if the population of the country were several hundred times what it actually is. The *reductio ad absurdum* seems tolerably complete.

The case of dreams is, of course, very different. We are most of us constantly dreaming. A very large number of "odd coincidences" between dreams and external events is certain to occur by mere chance; and the cases are rare where the correspondence is of a kind which strongly suggests telepathic influences. Here, therefore, Professor Newcomb's estimate is far more applicable; and we have always felt that dreams, by themselves, could not be expected to afford conclusive proof of telepathy. This, however, does not seem a sufficient reason for ignoring them; since, if the fact of telepathic communication be otherwise established, they may throw light which we could ill afford to neglect, on the nature of the mental and cerebral processes involved.

As regards "haunted houses," we readily admit, and have expressly pointed out, the far greater uncertainty of the evidence as compared with the best telepathic cases. But even here we differ from Professor Newcomb in seeing a distinction between the experiences which we deem of some *prima facie* importance, and the experience which he supposes when a person lying awake an hour after midnight hears some sound the cause of which is beyond his power to guess. Sounds are the very weakest sort of evidence. What strength the *prima facie* case has, depends, not on things heard, but on things seen; and seen, not by one person only, but by several independently and at different times, and, as the seers affirm, without any knowledge on their part that the house was supposed to be "haunted."

Professor Newcomb's concluding remarks, dealing with the *experimental* side of telepathy, deserve careful attention. But his objections here rest entirely on the hypothesis of visual and auditory indications consciously or unconsciously given by the "agent" to the "percipient"; and though it is difficult, I know, to convince persons who have not been present that suffi-

cient precautions have been taken to eliminate this source of error, it must surely be admitted that such precautions are possible. As regards sight, no one will deny the possibility; and, as regards hearing, we think, that, if a careful watch is kept, the means of communication resolve themselves into slight variations of breathing. Such variations were never detected in our experiments, and in any case could hardly be supposed capable of rapidly conveying to the percipient's mind the form of an irregular diagram; and the difficulty would be increased in cases where the signs would have had to be *unconscious*, as in many of our experiments where we were able not only to vary the "agent," but to act ourselves as "agents." As for "indications whether the subject is going right or wrong," they must, of course, be prevented by taking care that the "agent" shall not watch what the "percipient" is doing. Most of the spurious "thought-reading" of the "willing-game" would be prevented, if the "willer," instead of the "willed," were effectively blindfolded.

But we find ourselves once more wholly in sympathy with Professor Newcomb, when he insists that the experiments must be repeated again and again, under the strictest conditions, before we can reasonably expect thought-transference to be accepted as an established scientific fact. So far from resenting the demand for more evidence, we are ourselves unceasingly reiterating it. The responsibility for such novel observations cannot be too widely spread, and glad indeed shall we be to shift some of it to American shoulders.

The following is Professor Newcomb's rejoinder in the same number of *Science* :—

Mr. Gurney's letter suggests many interesting reflections on the probabilities involved in questions of Telepathic Phenomena, and I hope for an early opportunity to engage in a further discussion of the subject in the columns of *Science*. This will naturally involve the consideration of the points raised in his letter. Meanwhile there are two numerical data; and, if he would favour me with them, I should feel much flattered,—firstly, his estimate, from the census results, of the number of persons of the age of 15 and upwards, resident in the British Islands, whose statements he would consider *prima facie* entitled to full credence (to guide him I may remark that I see no reason why the number should not be from 10 to 20 millions); secondly, his estimate of the probability that one of these persons, taken at random, would not be above amusing himself or herself at the expense of a society so eminent as that of which Mr. Gurney is the honorary and honoured secretary. These numbers will come into my discussion, and I should much rather have them from an authority conversant with the subject than attempt to guess at them myself.

Mr. Gurney's reply, which appeared on January 23rd, is as follows :—

In a letter which you published on December 5th, I mentioned a sort of census whereby we are inquiring what proportion of the population has experienced waking visions of absent friends; the object being to discover how far *chance* may account for the numerous cases where such hallucinations

have coincided with the death (or some serious crisis in the life) of the person whose presence was suggested, or how far, on the other hand, these cases drive us to some such hypothesis as "telepathy." In a letter published by you on the same day, Professor Newcomb has objected that untrue answers may be given by persons wishing to amuse themselves at our expense. I am far from denying that persons may exist who would be glad to thwart us, and amuse themselves, even at the cost of untruth. But when the question is put, "Do you remember having ever distinctly seen the face or form of a person known to you, when that person was not really there?" it is not at once obvious whether the *amusing* untruth would be "yes" or "no." In neither case would the joke seem to be of a very exhilarating quality; but, on the whole, I should say that "yes" would be the favourite, as at any rate representing the rarer and less commonplace experience. "Yes" is, moreover, the answer, which, as a matter of fact, it has been very generally thought that we ourselves preferred; so that to give it might produce a piquant sense of fooling us to the top of our bent. But a moment's reflection will show that, so far as the census might be thus affected, it would be affected in a direction *adverse* to the telepathic argument; for the commoner the purely casual hallucinations are reckoned to be, the stronger is the argument that the visions which correspond with real events do so *by chance*. And if the number of these coincident visions makes the chance-argument untenable, even when the basis of estimation is affected in the way supposed, *a fortiori* would this be the case if the *yeses* were reduced to their true number.

While on this point, I may add that in such a census as ours there are reasons why, quite apart from untruth, an unfair number of *yeses* are sure to be obtained. One chief reason is that, when forms to be filled up are distributed on a large scale, it is impossible to bring it home to the minds of many of the persons whose answer would be "no," that there is *any use* in recording that answer. Their instinct is, that results, to be of scientific value, must be positive, like natural-history specimens. This difficulty has been encountered again and again; and I feel little doubt that the proportion of *yeses* to *noes* will in the end be quite double what it ought to be: in other words, the telepathic argument, if it prevails will prevail though based on data distinctly unfavourable to it.

As Professor Newcomb seemed to confine his objection to the results of the census, I need not occupy your space with a description of the various precautions by which we ascertain that our cases of *coincident* visions—of *veridical* hallucinations—are *bonâ fide* records. Suffice it to say, that, whatever the possible sources of error in our evidence may be—and there are some which demand unceasing care and watchfulness—deliberate hoaxing is a danger which we believe we can reduce to an amount that will not affect the validity of our general conclusions.

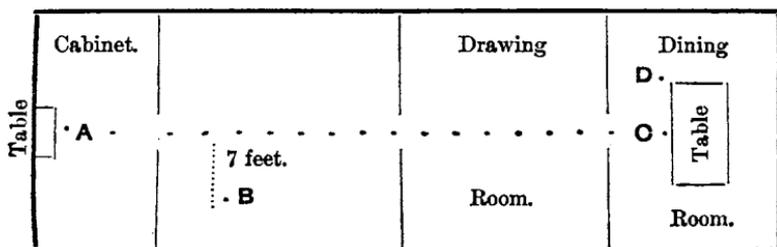
[We are much indebted to our Russian friend, M. Theodore Bruhns, of Simferopol, for several valuable communications. Amongst other papers, he has sent us the following translation of a letter he has received from a physician at the University of Kharkoff. It will be

noticed that the subject Mr. V—— appeared to be hypnotised by the concentration of attention of the operator. This is known to occur to sensitive subjects who have previously been hypnotised by the usual passes, but Dr. Chiltoff does not say whether Mr. V—— had been so treated, probably not. In that case this experiment is of much interest in its bearing upon other facts that have come under our notice in connection with the “willing game.”—ED. JOURNAL S.P.R.]

ON THE ACTION OF THE WILL AT A DISTANCE.

PRELIMINARY REPORT.

For the purpose of investigating the influence exercised by one mind upon another, apart from the recognised ordinary channels of sensation, I have carried out a series of experiments in the presence of many witnesses, and among them of Professor T——. These experiments were made with four gentlemen and two ladies. They consisted in the transmission of motor or inhibitory impulses. The experiments, 40 in number, were for the most part successful, except the series with Mr. A—— (a student of the University). But even in this last case the will of the operator evidently influenced “the subject;” but this subject did not exactly accomplish my orders. For example, when I mentally ordered him to lift his right arm, he raised the left one, &c. The distance between the operator and the subjects varied from three to 50 feet. The experiments were often performed through walls, closed doors, &c. During the experiments the subjects remained quite awake, except Mr. Vyézjaëff (a young officer of the Russian army), who always began to fall asleep at the beginning of each experiment. Herewith are the details of three experiments :



A the operator. **B** my wife. **C** Mdle. T—— (the subject).

D is the position of the subject in Experiment 3. From **A** to **C** is 46 feet.

(1) *April 30th, 1884.* I sitting in the cabinet at my writing-table. Mdle. T—— was sitting in the dining-room at the table, and was occupied in embroidering. The doors were open. Mdle. T—— was mentally ordered to discontinue her work and to go out of the room. She knew

nothing of my intentions. The experiment was commenced at 9.20 p.m. In eight minutes, my wife, who was playing on the piano, came to me and asked if I had not influenced her by my will, for she said that she felt such a fatigue in her hands that she was obliged to discontinue her playing. But I did not think of her, all my thoughts being concentrated on Mdlle. T—. At 9.35 p.m., Mdlle. T— went out of the room. She told me afterwards that an irresistible force compelled her, against her own will, to rise off her chair. She felt a great fatigue.

(2) *October 29th*, 1884. Present: Professor T—, Mr. M— (a physician) and a student of the University of Kharkoff. In the absence of the subject (Mr. V—) Professor T— proposed the following problem: Mr. V— must seize with his left hand the collar of his uniform. The subject sat with closed eyes in an arm-chair. I was seven feet before him. The witnesses sat near me. The experiment began at 10.5 p.m., and in seven minutes Mr. V— had performed the thought-of order.

(3) *November 12th*, 1884. I was sitting in the cabinet at my writing-table. The subject, Mr. V—, was sitting at D in the dining-room at the tea-table. At the same table were also sitting some ladies. The distance between me and Mr. V— was about 50 feet. Mr. V— was ordered to come to me in the cabinet. I had concentrated all my thoughts upon the subject. As will be seen from the sketch, I could not see the subject. But I heard him distinctly conversing with the ladies. The experiment was commenced at 8.30 p.m. In three minutes I heard him saying that he felt a great fatigue. The ladies began to laugh at his intention to sleep in their presence. In 15 minutes I did not any longer hear his voice. At 8.55 my wife came to me, and said to me that Mr. V— fell asleep. At 9 p.m. I saw the subject, with closed eyes, marching slowly towards me. Before the writing-table at which I was sitting, he stopped.

Summing up the results of my 40 experiments, I consider (1) That there exists an unknown force, acting from the operator to the subjects, and according to the wish of the operator, provoking determined muscular contractions. (2) That this force acts directly on nervous centres, and not on the groups of muscles thought of. (3) That the character of the motions provoked by this force shows that they are of a *central origin*. (4) That this force acts as well at the distance of three as at the distance of 50 feet. (5) That this force penetrates through various obstacles, walls, closed doors, &c. (6) That it acts in all possible directions. (7) That the intensity of its action upon diverse organisms depends upon the individuality of each organism.

A. CHILTOFF, M.D.

A NEW HYPNOSCOPE.*

By J. OCHOROWICZ, M.D.

Yesterday an illusion, to-day a reality, hypnotism has definitely entered the domain of science. There is no longer any question either as to the possibility of these strange phenomena or of their high importance; it rather concerns us to increase the number of observations and determine the means of study. It is with this idea in view that I have devised a little apparatus which I call a *hypnoscope*, and concerning which I think it will prove of interest to say a few words. In truth, this little apparatus serves for discovering and, after a manner, of measuring "hypnotic sensitiveness." What is this special sensitiveness? Before it is possible to give a definition of it, it will be necessary to recognise its existence. Up to the present we have had no suitable means that permitted of ascertaining whether a person was "hypnotisable" or not; and we have not even been agreed as to the possibility of reproducing hypnotic phenomena in every one, or in but a limited number of sickly subjects. On the one hand, the exaggerations of "magnetisers," and, on the other, the incredulity of physicians, have for a long time contributed to prevent a solution of this problem. As a general thing, magnetisers have proclaimed the possibility of "making every one feel" their mystic influence, in asserting that "the producing of [magnetic] sleep, in whomsoever it be, is only a question of time," while physicians have been nearly unanimous in recognising that it is only with those having diseased nerves, and especially with hysterical women, that these sorts of experiments have any chance of success. The researches to which I have devoted myself contradict both these assertions.

Hypnotic sensitiveness—that is to say, the faculty of being influenced by the practice of hypnotisation—is neither inherent to everybody nor connected with any disease whatever—hysteria, epilepsy, neurasthenia, or anemia. It is a complex aptitude, but one *sui generis*, which depends upon peculiar reflex relations between the cerebro-spinal and ganglionic systems, and especially between the brain and the vaso-motor nerves. This special aptitude being for the most part innate, one is hypnotisable or not just as he possesses such or such a temperament. The best of intentions, on the one hand or on the other, cannot suffice to put a person asleep who is devoid of such special aptitude.

What is the number of hypnotisable subjects? This question has been recently propounded by Dr. Bremond. "I know," says he, "97 young persons in whom all these nervous states can be produced at will. Here, at Paris, out of nine young people who belonged to liberal pro-

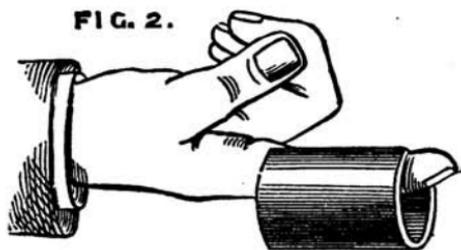
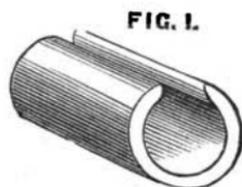
* From *La Lumière Electrique*. See note at end.

fessions, and who consented to undergo experiment, it was found possible, in a few minutes, to put two into these nervous states of fascination, catalepsy, lethargy, and somnambulism. In what proportion are such impressionable subjects found? Who can answer the question?" This is a service that the hypnoscope is destined to render us.

According to the experiments that I have been able to perform among persons of all conditions taken at random, the number of subjects who are hypnotisable amounts to about 37 per cent. These persons are hypnotisable in varying degree; 15 per cent. exhibit complete somnambulism, and 4-5ths per cent. undergo the influence of suggestions, even in a waking state. Thirty per cent. marks a mean. The figure is lower in certain professions, and especially among physicians (about 5 per cent.). It is higher in ordinary people, in the sick, and in young persons between 15 and 25 years of age. Women are no more susceptible than men, and in spite of a certain relation with nervous diseases in general and hysteria in particular, this aptitude *suū generis* is not synonymous with nervousness. A goodly number of extremely nervous persons are not sensitive to hypnotisation, while we find excellent subjects among healthy people who are in no wise nervous. Healthy women are generally less sensitive than men, while among the sick there is a marked preponderance on the side of females. Sometimes the proportion is 45 per cent. in men and 37 in women (service of Dr. Dumontpaillier, at the Hôpital de Pitié). Hysteria seems to present a favourable field, yet there is a goodly number of hysterical women who are absolutely refractory.

And now, if this sort of research has appeared to us worthy of attracting the attention of our readers, it is for the reason that, according to our observations, what is true for hypnotism is likewise so for the *physiological action of the magnet*. Everybody who is sensitive to the magnet is hypnotisable, and this, too, to a degree that entirely corresponds; all others are refractory.

Having remarked this principal fact, I have endeavoured to give the magnet a form that is at once efficacious and practical. The hypnoscope:



is a tubular magnet, whose form (Fig. 1) recalls that of the Joule electro-magnet, only the lines of force therein are directed rather within than

out of the magnetised tube. This latter is only 3·4 cm. in diameter by 5·5 in length, and weighs but 169 grammes. Forged from Alvar steel, it exhibits under this form a remarkable power, since it lifts as much as 25 times its own weight.

The mode of application is very simple. After removing the armature the forefinger of the person who is to be submitted to the test is introduced into the hypnoscope in such a way that it shall touch both poles at once (Fig. 2), and at the end of *two minutes* it is removed, and an examination made of the modifications that it has undergone. In 70 persons out of 100, taken at random, no change will be observed. In about 30 per cent. two kinds of modifications will be observed—viz., *subjective or objective*.

Here is where we think that we have found an answer to the question raised by Sir William Thomson in his last lecture "On the Senses of Man." Have we a special sense for the impressions of magnetism? "It is possible," says the English scientist, "that there is a magnetic sense, and that a magnet of *very great power* may produce a sensation entirely different from that of heat, force, or any other sensation; . . . at all events, the fact merits profound research."

In answer to these reflections, I will limit myself to the remark that in experimenting since 1880 I have never observed sensations that were entirely new, and as, moreover, it would be difficult to find organs for such new sense that were adapted to it, there is no ground for admitting a sixth, *magnetic* sense. But this does not prevent more than a quarter of humanity from being influenced by a magnet of medium power, and experiencing certain very distinct sensations. The principal of these are the following:—

Twenty times out of 100, disagreeable stinging and itching; and, sometimes, one would say sparks or needles pricking the skin. Seventeen times out of 100, a sensation as of a cold blast, or one of heat and dryness. The two impressions may co-exist—one in the right arm and the other in the left. Thus, a magnet placed under the feet of paralytics has been observed to warm them, although a good fire was powerless to do so. The cold draught much resembles that which one experiences in front of an electro-static machine. Eight times out of 100 there are painful sensations—pains in the joints. "I should say that my bones were being broken," exclaim the subjects under experiment. Five times out of 100 there is a sensation of inflation of the skin—and one which may be real, since it is sometimes difficult to remove the subject's finger from between the poles of the hypnoscope. Two times out of 100 there is a sense of weight in the finger or the entire arm; also a sensation of being irresistibly carried along, followed by a *real attraction*, and almost always a contraction with complete insensibility. This is an exceedingly curious

phenomenon. I exhibited this experiment before the Medical Society of Lemberg in 1881. The subject (who was in excellent health) was asleep, the eyes closed, the pupils directed upward, and the head completely covered with an opaque veil. At every approach of the magnet to within a distance of about 15 cm. his hand was quickly extended toward it, and followed all its motions until it became rigid and insensible. Then it became necessary to restore sensibility, or rather hyperæsthesia, in order to re-begin the experiments. I hasten to add that the same phenomenon was reproduced, although, perhaps, a little less markedly, by the approach of a metal, of glass, or of any other body whatever. The subject, when questioned in his sleep, said that he felt as if he were being carried along in a given direction without knowing why. The *objective* modifications are profounder, and more important for diagnosis. They belong to one of four categories—*viz.*, (*a*) involuntary movements (quite rare); (*b*) insensibility (complete analgesia or anæsthesia); (*c*) paralysis (impossibility of moving the finger); (*d*) contractura (rigidity of the muscles).

The phenomena that are called forth disappear in a few minutes under the influence of a very slight massage; but, without that, they may persist for several minutes, and even for several hours.

Persons in whom the hypnoscope causes insensibility, paralysis, or contractura may be hypnotised in a single séance. With others the experiment must be repeated.

Let us now touch upon the question of the causes.

So it is evident that the magnet exerts a certain influence upon the nervous system of *persons who are predisposed*. This *physiological* action has been very little studied; there exists, nevertheless, a certain number of experiments relative to the *therapeutic* action. Without speaking of Mesmer, it was established as long ago as 1779 by Drs. Andry and Thouret, and confirmed by Becker (1829), Bulmering (1835), Lippic (1846), and especially by Maggiorani (1869-1880). To-day it is placed beyond controversy by Messrs. Charcot, Schiff, Vogt, Benedict, Vigouroux, Debore, Proust, Ballet, and others.

But, while it is incontrovertible, is it really *magnetic*? It seems to me that it may be so admitted, [only] in part, since (1) the importance of the action is not in direct relation with the power of the magnet, but rather with the degree of hypnotic sensitiveness of the subject experimented upon; and (2) the north pole has no other influence than the south, although it should necessarily have in the case of an action that was purely and simply magnetic. Is it, then, a metalloscopic action, as Mr. Pellot has supposed? This question, which had been already asked at the date at which I made my first communication through Dr. Brown-Sequard, I will answer as follows: (1) the number of persons who are sensitive to metals is less than that of those sensitive to the

magnet, and much less than the number of those who are specially sensitive to *steel*. (2) There are persons sensitive to metals (to copper, for example) and insensible to the magnet, and consequently likewise refractory to hypnotisation.

Then is this mysterious action merely imaginary—the effect of suggestion, as one says to-day after the labours of Dr. Bernheim? No; because (1) it is sometimes (though rarely, it is true) exerted unknown to the subjects under experiment, upon persons asleep, upon animals, &c.; and (2) we may easily distinguish the sensations produced simply by emotion or expectant attention from those produced by the hypnoscope; for imaginary sensations change character or disappear on a new test, while genuine ones always return, preserve their characters, and even become more and more marked. Imaginary sensitiveness becomes effaced, while real sensitiveness is increased by habitude.

Nevertheless, we may grant that the imagination, without being a sufficient cause to explain the phenomena, enters into play in the great majority of cases, as an auxiliary, in preparing the accessibility of the patients. In short, the influence is double—physical and psychical. Being capable of serving as a physical excitant, does the magnet act directly upon the tissues exposed to its influence, or rather indirectly by reflex way? It appears that both cases present themselves, but that the last is the more important. It is the vaso-motor nerves that seem to be reached by preference. Are the direct action upon the tissues or the blood and the reflex action upon the nerves identical? It appears not. At all events, magnetism alone does not explain these effects. I rather incline toward the hypothesis that, in the majority of the phenomena, the magnet is merely the substratum of another action, which is so weak, from a psychical point of view, that it hides itself from our instruments, and exhibits itself only through the intermedium of exceptionally sensitive nervous systems. Is this other physical action due to a new and unknown force? It is probable that it is not an entirely new force, but only a new and unknown manifestation—a peculiar modification of electric phenomena. This is all that the present state of our knowledge allows us to say. But the insufficiency of theory in no wise interferes with the practical use of the hypnoscope, and, if it is true that it gives us at the same time useful indications as to the state of the nerves in nervous complaints, the importance of the application may be readily seen.

My personal idea goes still further. I see in the revelations of this instrument the necessity of a future subdivision of therapeutics. It is useless, and even imprudent, to apply the same remedy to sensitive and non-sensitive persons. With a large number of hypnotisable patients, all remedies are equally good or equally bad, according to peculiar

nervous influences. We may neutralise strong doses of the most typical medicaments, and reproduce their effect in a most positive manner, by *suggestion.* In sensitive persons we obtain an improvement that is often almost instantaneous under the influence of various trifling means that hypnotism and magnetism put at our disposal.

[We reprint Dr. Ochorowicz's paper from the translation which appears in the *English Mechanic*; the author is evidently entirely ignorant of the work done by the Society for Psychical Research, and though his experiments appear to be numerous his generalisations are somewhat hasty, e.g., "everybody who is sensitive to the magnet is hypnotisable," &c.; nor do we think he has taken sufficient precautions to preclude the effect of the imagination, due to expectant attention, from vitiating his conclusions. Nevertheless, the paper is interesting and worthy of record.—ED. JOURNAL S.P.R.]

APPARITIONS AT THE MOMENT OF DEATH.

The testimony of competent witnesses on behalf of apparitions of their relatives or near friends when these are at, or about, the moment of death, is so abundant and the evidence so cumulative that there are few natural phenomena of an infrequent character that can be accepted with more confidence. As a matter of evidence, and also of intrinsic probability, it is better established that such apparitions do occur than that, say, "fire balls" exist, though no meteorologist now doubts these latter, however inexplicable they may be. To the volume of evidence collected by the Literary Committee of the Society for Psychical Research I add the following which reached me whilst in America. Through the kindness of Major Woodhull, M.D., of David's Island, New York, I was enabled to see the narrator, Captain MacGowan, who is in active service in the United States Army, and permits me to give his name; the names of other persons who could confirm the narratives were also given to me, but not for publication.—W. F. B.

In the year 1875, Captain A. B. MacGowan, 12th U. S. Infantry, was stationed at Camp Independence, California; having with him his wife. His two sons, Charles, aged 15, and George, aged 12, were at that time at school, at Napa College, California, and boarded in the house and at the table of one of the instructors, Mr. George.

Mrs. MacGowan was a lady of robust health, almost unacquainted with illness; and at this particular time was arranging to give an entertainment to their friends, military and civil. The station being not only far beyond the railroad, but out of the ordinary line of travel, guests would come to such a party with their own conveyance, and after several days' journey; and arrangements would be made to entertain them over-night and longer. Such a festivity would be quite an event for the outpost and for all those interested in it. There was no telegraphic communication with this camp; and the mails were slow, and the distance long. In fact, from Camp Independence, the school is nearly 600 miles. The boys knew what was going on at home by

previous correspondence, and knew that, so far from there being any cause for uneasiness, the prospect was one of active enjoyment.

On the morning of December 23rd, 1875, Charles, the elder of the boys at school, came to the breakfast-table with a disturbed countenance, but denied having any trouble when asked about it by the teacher. He was unable to eat any breakfast, although allowing himself to be helped; but when the teacher, at the meal, insisted on knowing the cause of his distress, fearing he might be ill, he burst into tears, and exclaimed, "My mother is dead." He then went on to say that, having gone to bed and to sleep as usual, and with no premonition of trouble, he was awakened in the night and saw his mother standing by his bedside; who said to him, "Charlie, be a good boy;" and then disappeared. This occurred between 11 and 12 p.m. He had gone to sleep, not hearing 11 strike; but was awakened by this occurrence, and heard all the other hours strike, including 12 o'clock, till morning. The teacher endeavoured to make light of it; but the boy would not be comforted. In a day or two a letter was received, saying his mother was indisposed, but not seriously; this was followed a few days later by the announcement that she had unexpectedly grown worse, and had suddenly died, at 11.20 p.m., of this same night (December 22nd, 1875), in which the apparition was seen. The teacher, Mr. George, made a note of the occurrence, and subsequently informed Captain MacGowan thereof.

[Captain MacGowan stated that his son had both heard the voice and seen his mother. Though I have been unable to communicate with the son, I am informed that the impression produced on him was most solemn and profound. I have written to Mr. George, *who noted down the facts at the time and before the mother's death was known*, but have had no reply as yet. Mrs. MacGowan was suddenly taken ill and her death was most unexpected.—W. F. B.]

PREMONITION.

The following is also from Captain MacGowan:—

In January, 1877, I was on leave of absence in Brooklyn, with my two boys, then on vacation from school. I promised the boys that I would take them to the theatre that night, and I engaged seats for us three. At the same time I had the opportunity to examine the interior of the theatre, and I went over it carefully, stage and all. These seats were engaged the previous day, but on the day of the proposed visit it seemed as if a voice within me was constantly saying, "Do not go to the theatre; take the boys back to school." I could not keep these words out of my mind; they grew stronger and stronger, and at noon I told my friends and the boys that we would not go to the theatre. My friends remonstrated with me, and said I was cruel to deprive the boys of a promised and unfamiliar pleasure to which they had looked forward, and I partly relented. But all the afternoon the words kept repeating themselves and impressing themselves upon me. That evening, less than an hour before the doors opened, I insisted on the boys going to New York with me, and spending the night at a hotel convenient to the railroad, by which we could start in

the early morning. I felt ashamed of the feeling that impelled me to act thus, but there seemed no escape from it. That night the theatre was destroyed by fire with a loss of some 300 lives. Had I been present, from my previous examination of the building, I would certainly have taken my children over the stage, when the fire broke out, in order to escape by a private exit, and would just as certainly have been lost as were all those who trusted to it, for that passage, by an accident, could not be used. Had I gone my sister, who was present, but in another part of the house, would surely have been lost also, for we had arranged to go home together. As it was she left the building before the play was finished and was at home when the fire began.

I have never had a presentiment before or since. I am not in the habit of changing my plans without good reasons, and on this occasion I did so only with the greatest reluctance.

What was it that caused me, against my desire, to abandon the play after having secured the seats and carefully arranged for the pleasure?

August 27th, 1884.

[Captain MacGowan stated to me that the voice was perfectly clear, "like someone talking inside me," it kept saying: "Take the boys home, take the boys home." And this from breakfast time till he took the boys away, shortly before the theatre opened. He never experienced anything like it before or since; never had any other hallucination. His sister has still got the tickets which he had bought and paid for. Three hundred and five people were burnt to death that night.—W. F. B.]

CORRESPONDENCE.

MODERN PROPHECIES.

To the Editor of the "JOURNAL OF SOCIETY FOR PSYCHICAL RESEARCH."

SIR,—There is one subject which seems to me well worthy of careful investigation by the Society for Psychical Research, *i.e.*, the examination of the evidence for and against modern prophecies. A large number of these, as we all know, are forgeries. Some of the most barefaced are those connected with the name of Mother Shipton in our own country, and which have been exposed in *Notes and Queries*. There are, however, two or three prophecies of Mother Shipton's (or at least quoted in her name in 17th century editions of her prophecies) worth noticing.

Cazotte's famous prophecy has also, I believe, been proved to have been published after the events, and therefore is worthless. But these failures of Shipton's and Cazotte's by no means prove the falsity of all modern prophecy. Let me quote a few worth examination.

1. The prophecy of S. Malachi. This may be disputed in its earlier parts, but in the 19th century some points are very singular.
2. The famous French prophecies of Nostradamus, some of which, as affecting English history, are being published by Mr. Ward in the *Antiquarian Magazine*.
3. The singular forecast of the life of the Empress Josephine, which Sir A. Alison in his history accepts as, on good evidence, told by Josephine many

years before her being empress. Around the Bonaparte family there are a cluster of these forecasts which much affected Napoleons I. and III. to believe in these things.

4. The so-called Merlin prophecies, some of which are obscure, but others very curious, e.g., one, in old Cornish, relating to the place wherefrom I am writing, which may be thus rendered :—

“ They shall land on the rock of Merlin,
Who shall burn Paul, Penzance, and Newlyn.”

The Spaniards landed at Point Spaniard, near the Merlin rock, in 1595, and burnt Paul, Penzance, and Newlyn ; but had it been an afterthought, or a forgery, the mistake would not have occurred of saying they would land on the fatal rock. The prophecy otherwise was fulfilled to the letter.

5. The remarkable prophecies of the fall of Poland in the 17th century.

6. The prophetic history in Latin of the House of Brandenburg.

7. Last, not least, the ancient oracles, especially of Delphi.

Beside these, there are scores of cases in almost every European history of prophecies having been fulfilled. Might not the authorities (before the time) for these prophecies be critically examined ? and where accidental coincidence is a possible explanation, the mathematical law of chances should be applied.

In fine, the questions to be considered are :—

1. Was the prophecy undoubtedly published before the event happened ? If there is any uncertainty about this point, further inquiry is needless.

2. Was the statement actually or only approximately fulfilled ? In the case of imposture or forgery the actual facts would be reproduced. Approximations should encourage further research.

3. Was the prognostication merely the exercise of ordinary forethought on the part of the seer, just as some historians by studying the past have occasionally guessed the probable future pretty well ? In this case it is merely mental acumen involved.

4. May the fulfilment be mere chance ? Here the mathematical law of chance should be applied as in other departments of Psychical Research. There are coincidences, but they are infrequent, and ruled by mathematical laws.

W. S LACH-SZYRMA.

Newlyn S. Peter Vicarage, Penzance.

ANNUAL BUSINESS MEETING.

The Third Annual Business Meeting of the Members of the Society was held at 14, Dean's Yard, London, S.W., on the 30th of January.

The President, Professor H. Sidgwick, briefly referred to the growth of the Society during the past year, mentioning some of the facts recorded on the first page of the *Journal* for January.

An audited balance-sheet of the receipts and expenditure of the Society during the year 1884 was placed before the Meeting. A letter from Mr. Morell Theobald, F.C.A., as the auditor appointed by the Members at the Annual Business Meeting last year, was read, in which he expressed his satisfaction at the way in which the accounts were kept, and made one or two suggestions for the future as to the system adopted. The letter was referred to the Finance Committee. The balance-sheet is given on another page. In further commenting on it

the President said it appeared that, after taking account of moneys due and owing at the end of the year, there was still a balance on the right side; in addition to which there was the Library, the stock of Proceedings, and the furniture and fittings belonging to the Society. It was agreed that a valuation of these should be made during the current year, so that at its close the Society might know its exact position both as to capital and as to receipts and expenditure.

Several alterations in the Constitution and Rules, which had been agreed to by the Council during the past year, were submitted to the Meeting; as also were several proposed by the President and other Members, the tenour of which the Council had approved. The President explained the intention of these, dwelling especially on the changes proposed in Rules 4 and 19. These seemed to him to have become advisable both in consequence of the adhesion to the Society of several persons of scientific eminence, and of some changes which it was proposed to make in the relation of research-committees to the Council.

After two slight verbal alterations had been agreed to the alterations were adopted as follows:—

That in Rule 4 the words—“or a single payment of Twenty Guineas”—be inserted in section (a) after the word “annually.”

That in the same Rule the words—“or a single payment of Ten Guineas, and who shall be eligible to any of the offices of the Society”—be inserted in section (b) after the word “annually.”

That in Rule 6 the following sentence be inserted after the words “for the following year” :—

“The subscription of each year remaining unpaid on and after the 1st of July, will be considered as in arrear, and no Member or Associate so in arrear shall be entitled to enjoy any of his privileges while such subscription remains unpaid.”

That Rule 8 stand thus :—

HONORARY MEMBERS AND HONORARY ASSOCIATES.

8.—The Council may invite any person who

- (i) Is either distinguished for knowledge or experience in Psychical Research or otherwise eminent, to become an Honorary Member of the Society; or any person who
- (ii) Has rendered services to the Society, to become an Honorary Associate, such person to be eligible for re-election annually.

Honorary Members and Associates shall have the privileges without the obligations attaching to Associates.

That Rule 9 stand thus :—

9.—The Council shall have power to elect as Corresponding Members, who shall be on the same footing as Honorary Members, persons able and willing to forward the objects of the Society. They shall be eligible for re-election annually.

That in Rule 10 the clause “shall be given at least seven days previously,” be altered to “shall be given at least ten days previously.”

'That Rule 16 (now numbered Rule 17) stand as follows, and that it be placed immediately following Rule 19 (now numbered Rule 20) :—

17.—If the number of nominations for election to the Council exceed the number of vacancies, voting papers shall be sent round to all Members of the Society, at least ten days prior to the Annual General Meeting. These papers must be in the hands of the Secretary of the Society before the commencement of the Meeting. [The rest as at present.]

'That the first sentence of Rule 19 stand as follows :—

Any Member or Associate of the Society who shall have paid up all subscriptions due from him, including that for the current year, or any Vice-President, Honorary Member, or Honorary Associate of the Society, shall be eligible for election as a Member of Council. [The rest as at present.]

'That in Rule 24 the first clause of the last sentence stand thus :—" Every Committee appointed by the Council shall report its proceedings to the Council through the Chairman or Secretary of such Committee, one of whom must be a Member of Council."

The Meeting then proceeded to the election of new Members of Council to fill the six vacancies caused by the retirement in rotation of five Members, and by the death of Mr. Walter H. Browne. A large number of voting papers having been sent in, the President deputed Mr. Gurney and Mr. Podmore to count the votes. The result was that the following gentlemen were elected :—

G. P. Bidder, Q.C.
Alexander Calder.
Richard Hodgson.

Rev. W. Stainton Moses.
C. Lockhart Robertson, M.D.
J. Herbert Stack.

During the time occupied in examining the voting papers, the President entered at some length into the changes contemplated in regard to the position of the Council towards those who were engaged in the work of experimental research. The Hon. Percy Wyndham, M.P., pointed out some respects in which he did not think the new plan would work so satisfactorily as the old one had done. In reply to these remarks, and to others which were made, the President entered into further explanation of his views, referring to the manner in which the Royal Society exercised a control over the papers presented to it. It was agreed that a brief statement should be prepared, explaining the new relationship and the conditions under which the Council would be prepared to aid investigation by pecuniary grants. On the question being put to the Meeting the vote in favour of the change was carried *mem. con.*

