PROCEEDINGS

OF THE

American Society for Physical Research.

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VOLUME I.

(CONTAINING NOS. 1–4.)

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PROCEEDINGS

OF THE

American Society for Psychical Research.

Vol. I. *JULY. 1885.* No. 1.

OFFICERS FOR THE YEAR 1884-85.

President.

PROFESSOR SIMON NEWCOMB, WASHINGTON, D.C.

Vice-Presidents.

Professor G. STANLEY HALL, Johns Hopkins University.

Professor GEORGE S. FULLERTON, University of Pennsylvania.

Professor EDWARD C. PICKERING, Harvard College Observatory.

Dr. HENRY P. BOWDITCH, Harvard Medical School.

Dr. CHARLES S. MINOT, Harvard Medical School.

Treasurer.

Professor WILLIAM WATSON, Boston.

Secretary.

N. D. C. HODGES, 19 Brattle Street, Cambridge, Mass.

FORMATION OF THE SOCIETY.

AT a meeting held in Boston, Sept. 23, 1884, to consider the advisability of the formation of a society for psychical research in America, the whole matter was placed in the hands of a committee of nine, consisting of Dr. G. Stanley Hall of Johns Hopkins University; Professor E. C. Pickering, director of the Harvard College Observatory; Dr. H. P. Bowditch and Dr. C. S. Minot, of the Harvard Medical School: Mr. S. H. Scudder, president, and Professor Alpheus Hyatt, curator, of the Boston Society of Natural History: Professor William James of Harvard College; Professor William Watson of Boston; and Mr. N. D. C. Hodges of Cambridge. This committee held a number of meetings during the months of October and November, and issued an invitation to a number of scientific men throughout the country to join in a society under a constitution upon which the committee had decided. To this invitation there were favorable replies from about eighty.

NOTE. — Branch societies have been formed in New York and Philadelphia.

The first meeting of the society was held in Boston on the 18th of December, at which much of the necessary work of organization was accomplished; and at an adjourned meeting, held in Boston Jan. 8, 1885, the organization of the society was completed.

The Committee on Work, or suggestions as to possible work, sent out circulars to the members of the society, calling for volunteers as members of the investigating committees, and received a number of answers, the most of which were from those specially interested in thought-transference: and the committee recommended the appointment of a sub-committee on that subject. They also suggested that a circular should be issued by the society, describing the methods of making experiments in thought-transference, and pointing out the precautions to be taken. Such a committee was appointed by the Council, and issued a circular (No. 4).

It is the first report of this committee on thought-transference, which makes up the larger part of this the first number of the proceedings. The report was presented at the third meeting of the society, held in Boston, June 4, 1885. With this report are also published the various circulars which have been issued by the society, as showing what methods have been employed to accomplish the objects of the society.

CIRCULAR No. 1.

Issued by the Council.

At a meeting held in Boston, Sept. 23, for the purpose of considering the advisability of forming a Society for Psychical Research in America, a committee with full powers was appointed; and under its auspices The American Society for Psychical Research has been organized, and is now in a position to invite the adhesion of members. The aims of the English society of similar name can be best understood from the following extracts from its printed proceedings: —

"The Society for Psychical Research was formed in the beginning of 1882, for the purpose of making an organized and systematic attempt to investigate that large group of debatable phenomena designated by such terms as 'mesmeric,' 'psychical,' and 'spiritualistic.' From the recorded testimony of many competent witnesses, past and present, including observations recently made by scientific men of eminence in various countries, there appears to be, amidst much illusion and deception, an important body of remarkable phenomena, which are *primâ facie* inexplicable on any generally recognized hypothesis, and which, if incontestably established, would be of the highest possible value. The task of examining such residual phenomena has often been undertaken by individual effort, but never hitherto by a scientific society organized on a sufficiently broad basis.

"The aim of the Society is to approach these various problems without prejudice or prepossession of any kind, and in the same spirit of exact and unimpassioned inquiry which has enabled science to solve so many problems, once not less obscure nor less hotly debated. The founders of this Society fully recognize the exceptional difficulties which surround this branch of research; but they nevertheless hope that, by patient and systematic effort, some results of permanent value may be attained."

The following are among the subjects which have been intrusted to special committees: —

"1. An examination of the nature and extent of any influence which may be exerted by one mind upon another, apart from any generally recognized mode of perception.

"2. The study of hypnotism, and the forms of so-called mesmeric trance (with its alleged insensibility to pain), clairvoyance, and other allied phenomena.

"3. A critical revision of Reichenbach's researches with certain organizations called 'sensitive,' and an inquiry whether such organizations possess any power of perception beyond a highly exalted sensibility of the recognized sensory organs."

The following are the officers of the English society: President, Professor Henry Sidgwick; Vice-Presidents, Arthur J. Balfour, M.P., Professor W. F. Barrett, Rt. Rev. the Bishop of Carlisle, John R. Holland, M.P., Richard H. Hutton, the Rev. W. Stainton Moses, the Hon. Roden Noël, Professor Lord Rayleigh, Professor Balfour Stewart, and Hensleigh Wedgwood.

Professor Barrett, who was present at the preliminary meeting in Boston, after reading the brief outline of the objects of the English society, as given above, made the following statement of the results already obtained: —

"Once the Society's work begun, a stream of testimony set in, and offers of evidence were many. Every possibility of error suggested by experience and ingenuity was eliminated. The experiments made in the last two years by members of the Society will carry conviction, I think, to every candid mind. Many tests were made in which the subject reproduced a diagram or drawing of which some other person thought. . . . The other committees of the Society have studied the subjects assigned to them with great assiduity, and have obtained a vast amount of information and data. . . . The work of sifting out of the mass of errors, misconceptions, and ignorance, which usually surround such stories, the data which may serve for scientific purposes, is an intensely interesting one. Of course persons who take up the matter must expect no little ridicule, and perhaps some abuse. But out of alchemy came chemistry; and out of astrology, astronomy. There may be much in these extraordinary accounts of second-sight, thought-reading, apparitions, and so forth, fit only to ridicule; but if there are any facts at the bottom, we want to find them."

The Council of the American society feel that the evidence published by the English society is of a nature not to be ignored by sci-

entific men, especially where the alleged facts would, if real, permit verification, and the conditions allow control.

In other branches of human experience, the publication of observations, made with as much apparent care, and under such distinguished auspices, immediately invites many careful students to the work of corroboration or disproof. The personal ability and character of the English investigators, and the accuracy of their methods, if they do not compel the doubter forthwith to believe their conclusions, seem at least to make it impossible for him dogmatically to deny them, without support from something more solid than general presumptions about the order of nature, and the fallibility of human testimony.

The Council of the American society therefore feels that the duty can be no longer postponed of systematically repeating observations similar to those made in England, with a view to confirming them if true, to definitely pointing out the sources of error in them if false. If true, they are of value, and the tracing of their limits becomes a scientific duty. If false, no time should be lost in publishing their refutation; for, if allowed long to stand uncontradicted, their only effect will be to re-enforce powerfully the popular drift toward superstition.

The Council therefore begs all persons to whom this circular is sent, who agree with these practical conclusions, and who believe that the exact study of this border-land of human experience is an urgent scientific need, to send in their names to the secretary of the society.

COUNCIL OF THE SOCIETY.

To hold office till October, 1885.

Prof. G. F. Barker, Philadelphia.
Rev. C. C. Everett, Cambridge.
Mr. Samuel H. Scudder, Cambridge.
Mr. Coleman Sellers, Philadelphia.
Mr. Moorfield Storey, Boston.
Prof. John Trowbridge, Cambridge. (Resigned.)
Prof. William Watson, Boston.

To hold office till October, 1886.

Dr. Henry P. Bowditch, Boston.
Mr. C. C. Jackson, Boston.
Col. T. W. Higginson, Cambridge.
Mr. N. D. C. Hodges, Cambridge.
Dr. Charles S. Minot, Boston.
Prof. Simon Newcomb, Washington.
Mr. W. H. Pickering, Boston.

To hold office till October, 1887.

Prof. G. S. Fullerton, Philadelphia.
Prof. William James, Cambridge.
Prof. G. Stanley Hall, Baltimore.
Prof. James M. Peirce, Cambridge.
Prof. E. C. Pickering, Cambridge.
Mr. R. Pearsall Smith, Philadelphia.
Major A. A. Woodhull, New York.

CIRCULAR No. 2.

ISSUED BY THE COMMITTEE ON WORK.

CAMBRIDGE, MASS., Dec. 19, 1884.

DEAR SIR, — The first stated meeting of the AMERICAN SOCIETY FOR PSYCHICAL RESEARCH was held yesterday, and a Council partly elected. This practically completes the formal part of the organization of the Society. The Council, anxious to proceed without loss of time to the accomplishment of material results, desires to gain such information from members and associates as will assist it in deciding what lines of investigation had better immediately be entered upon, and of what persons the respective committees may most advantageously be composed. This circular is therefore addressed to you as one of the Society, with the request that you fill out the appended sheet of questions as fully as lies in your power, and mail it promptly to the address given.

The English society has established permanent committees, as follows: —

Committee on Thought-Transference.
" " Hypnotism (Mesmerism).
" " Apparitions and Haunted Houses.
" " Physical Phenomena (Spiritualism).
" " Reichenbach's Experiments
Literary Committee

Temporary committees have also been formed to report on special subjects, such as the divining-rod. Under these titles, those of our Society who desire to share in the labor of research may conveniently express their preference for one direction of inquiry rather than another; but if any member or associate have inclination or opportunity for work in a direction not embraced under any of these heads, or if he care particularly to study some one phenomenon of one of the classes, it is hoped he will make as definite a statement as possible to that effect.

It is earnestly hoped that volunteers enough will be forthcoming to form committees whose personal composition will be a guaranty of the character of the investigation performed by them. Without such volunteers, it is to be feared that the American Society for Psychical Research may fail to justify its foundation.

We remain very respectfully yours,

WILLIAM JAMES,
HENRY P. BOWDITCH,
Committee on Work.

1. Are you personally able to devote any time to investigation, alone or with others? If so, please state roughly how many hours a week you might possibly give.
2. What subject or subjects should you prefer to study?
3. Will you furnish us with the names and addresses of any other competent persons who might be willing to engage in such labor?
4. Will you give us the names and addresses of any remarkable mediums, mind-readers, clairvoyants, mesmeric subjects, etc., of whom you may have knowledge, and who would be willing to have their powers subjected to examination? Private (that is, unpaid) subjects are preferred, but references to professionals are also desired.

CIRCULAR No. 3.

ISSUED BY THE COUNCIL.

By vote of the Council, all members and associates are entitled, on payment of their assessments, to Nos. VI. and VII. of the Proceedings of the English Society for Psychical Research, and to any other numbers which may be issued this year, and may have the back numbers of the Proceedings at the rate of forty cents each (two dollars for Nos. I.–V.). But the Proceedings will be sent only to those who may so request.

N. D. C. HODGES, *Secretary.*

19 BRATTLE STREET, Cambridge, Mass.

REPORT OF THE COMMITTEE ON THOUGHT-TRANSFERENCE.

PRESENTED TO THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, JUNE 4, 1885.

THE Committee on Thought-Transference has the honor to present the following report of the work which has been accomplished since its organization.

In order to secure the co-operation of as many persons as possible in investigating the subject of thought-transference, the committee prepared and issued Circular No. 4, a copy of which is appended to this report (Appendix A). In this circular, of which about eight hundred copies were distributed,

assistance was asked in two distinct lines of research. In the first place, members of the society and others were requested to forward to us the names and addresses of any persons who were supposed to be particularly sensitive to thought-transference, and who would be available for experiments on mind-reading, which we desired to institute in accordance with the same general plan as that adopted by the English Society for Psychical Research. To this request no satisfactory answers have been received. Since the circular containing the request was quite extensively noticed by the daily papers, this failure to elicit a reply would seem to indicate that in this community those who profess to believe in the genuineness of the phenomena of "mind-reading" are not at present disposed to subject their convictions to the test of scientific experiment.

Circular No. 4 also asked for assistance in the collection of observations made in accordance with the plan recently suggested by Professor Charles Richet of Paris, by means of which the relative number of right and wrong guesses of a series of independent events is used as evidence for or against the existence of thought-transference between an agent knowing and a percipient guessing the events. Three different modes of experimenting were suggested: first, with cards; second, with dice; and third, with numbers: and full directions for making the experiments were given in the appendix to the circular. These forms of experiment may conveniently be designated as the COLOR-TEST, the DIE-TEST, and the DIGIT-TEST. The experiments with the die test which have been reported are so few in number that a discussion of their results would be useless. On the other hand, we have received a very considerable number of returns from persons who have experimented with the color and the digit tests, or who have tried other similar experiments of their own invention. To the following ladies and gentlemen who have favored us with such contributions, we beg to express our most grateful acknowledgments: Mr. Charles H. Blanchard, Miss Grace Blanchard, Professor Pliny E. Chase, Miss Harriet K. Chase, Mr. Glendower Evans, Mr. P. Norman Evans, Mr. T. W. Faires, Dr. and Mrs. Persifor Frazer and Master Persifor Frazer, jun., Mr. Henry Gibbons, Professor G. K. Gilbert, Miss Alice Gray, Misses Constance and Laura L. Hallett,

Professor William James, Mr. A. E. Lehman, Mr. H. R. Marshall, Admiral E. Y. McCauley, U.S.N., Mr. W. J. McGee, Mr. H. H. Mott, Mr. G. W. Nowell, Dr. C. A. Oliver, Professor and Mrs. Edw. C. Pickering, Mr. and Mrs. W. H. Pickering, Mrs. C. Pickering, Mr. W. P. Preble, jun., Mr. Benjamin Sharp, Mr. W. E. Sparks, Miss Florence Taber, Professor and Mrs. John Trowbridge, Mr. G. C. Wetmore, Miss Helen Williston, Mrs. Helen M. C. Wright, Mr. M. St. C. Wright.

These returns have been subjected to a careful mathematical analysis by Professors Peirce and Pickering. A study of their special report on this subject (Appendix B) shows that the general result of these experiments is, at present, unfavorable to thought-transference as a power belonging to mankind in general. The number of the experiments is, moreover, sufficient to cover pretty satisfactorily the particular line of inquiry which suggested them; and it seems, therefore, that investigation on this subject can now be more usefully directed in a different channel.

A further ingenious application of the statistical method to the solution of this problem has been made by Professor Pickering, who has discussed the recorded observations on magnitudes of stars so as to test the existence of thought-transference between the recorder and the observer. A special report on this subject by Professor Pickering (Appendix C) shows that thought-transference, if it exists, may cause a serious error in many scientific investigations. It also indicates that a vast number of observations already exist in which the presence of thought-transference may be readily tested. The complexity of the phenomenon, and the danger of drawing hasty conclusions in regard to its existence, are also well illustrated. A deviation is found which at first sight appears to be almost conclusive evidence of thought-transference, but which is afterwards shown to be mainly, if not entirely, due to a source of error which might have been overlooked. While these observations indicate that thought-transference is not a general phenomenon, they are far from showing that it may not exist in special cases; and it is greatly to be hoped that similar tests may be applied to the observations made by astronomers at other observatories.

The committee has also to report the result of some experiments made by Mr. W. H. Pickering on thought-transference by means of pictures, as practised by the English Society for Psychical Research. In these experiments (Appendix D) the agent fixed his mind on a figure which he had drawn, while the percipient endeavored to reproduce the figure thus thought of. The success which attended these experiments was limited. At the same time the resemblance between some of the originals and the reproductions was sufficient to afford encouragement for persevering in this method of experimenting.

Although the results thus far reached are chiefly negative, they can by no means be regarded as proving that thoughts may not, under favorable circumstances, be transferred to another mind without the use of the senses. Strictly speaking, they show only that thoughts, such as have been made the subject of our experiments, are not likely to be transferred between two individuals taken at random. If thought-transference really exists, it is not unlikely to take place more readily in relation to some kinds of subject-matter than to other. It may, for example, be weak in relation to conceptions of color or of number, but much more active in relation to conceptions of geometric form or arrangement. In fact, some observations recently reported by A. Enbule-Evans to the English Society for Psychical Research seem to indicate that a difference of this sort really exists.

We have now under consideration some forms of experiment founded on this hypothesis, and at the same time capable of bringing the question to exact numerical tests. We believe that, by experimenting in this direction, and by taking advantage of every opportunity of investigating the power of mind-reading in persons supposed to be specially gifted in it, we shall place ourselves in the most favorable conditions for obtaining positive evidence of the existence or non-existence of thought-transference.

(Signed.)

H. P. BOWDITCH, *Chairman.*
C. C. JACKSON.
CHARLES SEDGWICK MINOT.
J. M. PEIRCE.
EDWARD C. PICKERING.
WM. WATSON.
N. D. C. HODGES.

APPENDIX A.

CIRCULAR No. 4.

ISSUED BY THE COMMITTEE ON THOUGHT-TRANSFERENCE.

IN requesting the co-operation of all persons interested in investigating the subject of thought-transference, — that is, in ascertaining whether "a vivid impression or a distinct idea in one mind can be communicated to another mind without the intervening help of the recognized organs of sensation," — the committee desires to explain the manner in which such co-operation may be made most effective.

It is the intention of the committee to make experiments, under their own personal supervision, upon persons supposed to have the faculty of "mind-reading." Your assistance is therefore asked in putting the committee in communication with such persons as are believed to be specially sensitive to thought-transference. The names and addresses of any suitable persons available for experiments will be gladly received. At the same time additional information, based upon personal knowledge of the supposed "*mind-reader*," will enable the committee to proceed more intelligently in their work.

If persons are found who can really reproduce the thoughts of others without communication by the ordinary channels, the committee will endeavor, first, to verify the fact under rigid experimental conditions, such as to exclude the possibility of conscious or unconscious collusion; next to ascertain the conditions which impede or facilitate the transference, to discover whether the consciousness of the percipient is a factor in thought-transference, to test the influence of distance, of various obstacles and physical surroundings, of the number of persons having the same mental image at once, and of such other circumstances as may appear desirable.

The committee also desires to collect statistics as to experiments of uniform character, but made by a large number of observers.

It has been asserted by Professor Charles Richet of Paris that experiments similar to those proposed below indicate the actuality of thought-transference by showing, that, when one person guesses in

the presence of another person who knows what is to be guessed, then the guesses are more often right than when neither of the two know what is to be guessed. Now if, as has been maintained, there are persons who have the faculty of mind-reading to a high degree, then probably there are many persons who possess it to a slight degree. The committee desires to test this by gathering a large number of experimental statistics. Your assistance is therefore asked in making experiments, the results of which shall be communicated to the committee.

These experiments may be made in various ways. The committee has selected the three following forms of experiment as the most convenient or satisfactory. Two persons are sufficient in each case.

1. With cards. One person holds the pack, faces down, and turns up the cards one at a time; the other person guesses the color; and the number of correct guesses, and also the whole number of guesses, are recorded. Two series of guesses are to be made, — one in which the person holding the pack knows the color before each guess, and one in which he does not know the color. If thought-transference takes place, then the number of correct guesses will be greater in the first series than in the second.

2. With dice. The dice are thrown and the number guessed, and two series of observations made, just as with the cards.

3. With numbers. Numbers are written down in arbitrary succession on blanks furnished by the committee, and the guesses recorded on corresponding blanks.

Precise directions for making each series of experiments are appended to this circular: they must be *exactly* followed to render the statistics of any value. It must be specially remembered that *selected* statistics are worthless for the purposes of the committee. ALL the observations (both successful and unsuccessful) made in any series should be sent in. The percipient should in no case be told, during the progress of an experiment, whether his guesses are right or wrong. The agent and percipient should both sign the record, and give their addresses, as a pledge of their good faith.

Full acknowledgment will be made of all assistance rendered. The statistics will be published as soon as a sufficient number have been collated.

In entering on this inquiry, the committee wish to be understood as expressing no opinion, on one side or the other, in regard to the reality of the supposed thought-transference. They simply seek to institute a thorough and entirely unbiassed investigation of the class of phenomena known under the name of "mind-reading," in the

hope of taking at least a distinct step towards the true explanation of those phenomena, whatever that explanation may be.

All inquiries and communications should be addressed to the secretary, Mr. N. D. C. Hodges, 19 Brattle Street, Cambridge, Mass.

(Signed)

H. P. BOWDITCH, *Chairman.* E. C. PICKERING.
C. C. JACKSON. WILLIAM WATSON.
C. S. MINOT. N. D. C. HODGES, *Secretary*
J. M. PEIRCE.

DIRECTIONS FOR MAKING EXPERIMENTS.

First, *with Cards.* — The object is to guess the *color only*, — *black* or *red*. All the observations must be recorded. Only two persons should be engaged in the experiment; and they should remain quiet and undisturbed, for concentrated attention is considered necessary. The one who guesses is called the subject, or percipient; the other, the agent. When the subject is fatigued by the effort of attention, the experiment should be discontinued.

The agent holds a pack of cards from which two cards, one black and one red, have been removed, making a pack of fifty; it being desirable, for convenience in reckoning, to record the guesses by fifties. The pack is placed so that the subject cannot see it. The color of each card is then guessed in the order in which it comes. After the card is guessed, it is laid in one of two piles, according as the guess was right or wrong. After the pack has been gone through, each pile is divided into red and black, so that there are then four piles, — one of red cards that have been rightly guessed; a second, reds wrong; a third, blacks right; a fourth, blacks wrong.

The subject must on no account see the piles, or receive any intimation of any kind, whether he has been right or wrong, until the whole fifty cards have been gone through with. There should be *no contact* between agent and percipient. Independent experiments, in which there is joining of hands, or other contact, will also be acceptable to the committee; but the contact should be carefully noted and defined.

Two sets of guesses should be made. First, the agent looks at each card, fastens his attention upon the color, and says, "*Now!*" The

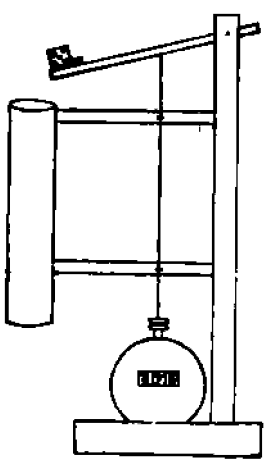
percipient then endeavors to guess. When he has stated what color he thinks it is, the card is put in the proper pile, as the guess is right or wrong.

Second, the color is guessed, but before the agent looks at the card. In this set the agent acts solely as recorder.

The percipient must never, while the experiment is going on, know whether the agent has looked at the card to be guessed, or not. The pack should be thoroughly shuffled immediately before each set of guesses. Whenever possible, two sets, one of each kind, should be made at the same sitting, with the same number of guesses in each set. The results of each sitting should be recorded on a separate blank (A), which may be obtained from the secretary.

Experiments giving either positive or negative results will be equally acceptable to the committee, because the object is to ascertain whether thought-transference occurs with many persons, and, if so, to what degree and in what proportion. To insure important results, it is desirable that from one to two thousand guesses be recorded for each agent and percipient; the blanks, when filled in, to be sent to the secretary of the committee.

Second, *with Dice*. — A single die should be used, and thrown from a dice-box in the ordinary manner. Two sets of experiments should be made, in one of which the agent should, and in the other should not, look at the die thrown, before asking the percipient to guess. A separate record should be kept of the number of throws and of the correct answers in each set. All the precautions indicated in the directions for experiments with cards should be employed in the experiments with dice.



Combined Die-Thrower and Tally-Keeper.

The labor of keeping a correct record may be much lessened by the use of an automatic tally-keeper,[1] a pressure upon which, every time the die is thrown, causes a movement of the recording-machinery, which enables the experimenter at any time to read off on the face of the instrument the total number of throws which have been made. If desired, the work may be still further facilitated by connecting the tally-keeper with an apparatus such as is represented in the accompanying sketch, by means of which the same movement which throws the die also makes the pressure on the tally-

[1] To be obtained of Wright & Ditson, 580 Washington Street, at the price of $2.50.

BLANK A.

EXPERIMENTS ON THOUGHT-TRANSFERENCE.

GUESSING THE COLOR OF CARDS.

Agent's Name and Address .....

.....

Percipient's Name and Address .....

.....

PLACE.

Date.	RIGHT.			WRONG.			Total Answers.	Agent knowing Card. Yes or No.
	Red.	Black.	Totals.	Red.	Black.	Totals.		

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keeper, thus insuring an absolutely correct record. It will of course be necessary to make a separate record of the number of correct guesses. If a number of persons desire to use an instrument of this sort, the committee will have them made, and furnish them at cost price, which, including the tally-keeper, will not exceed three dollars.

THIRD, *with Numbers.* — In making experiments on thought-transference, it is essential that all the results should be reported, whether they are successful or not. Blank B furnishes a convenient form of record. It may be used in a variety of ways. For example: let one person, who may be designated as the agent, enter in the first column of one of the ruled squares the ten digits in any order taken at random. Let him then concentrate his attention on the first of these numbers; and let a second person, the percipient, who has been so placed that he could not see the figures, attempt to guess this number. The agent enters the figure guessed at the top of the second column, and then concentrates his attention on the second figure of the first column: this, in turn, is guessed and recorded. After repeating this with the ten figures, they are again tried in inverse order, the agent always thinking of the figures in the first column, but passing alternately down and up. When the square is filled, one hundred trials will have been made and recorded. If the thought-transference had been complete, all the figures on each line should be the same as those in the first column. On the other hand, if there is no thought-transference, the chance in any given case is only one out of ten, and in only ten cases should a figure of the first column be repeated in the remainder of the table. If, then, we find only a few coincidences, we may infer that there is no transference; but if the number is large, as twenty or over, it becomes a matter of interest to repeat the experiment, varying the conditions as much as possible. The date and time of beginning and ending each experiment should also be recorded. If thought-transference is indicated, a witness should be asked to watch that the figures recorded are identical with those guessed. It may prove best for the witness to make the record. The effect of taking hands, looking in each other's eyes, or imitating the processes of the professional mind-readers, may also be tried. All deviations from the form prescribed above should be fully explained in the notes. Another modification would be for the agent and percipient each to fill a square with numbers in a specified order, and afterwards to compare the results. If the percipient is notified when he is right, the probable number of coincidences is increased; but he may be aided in detecting the proper frame of mind in which he should place himself to guess correctly.

BLANK B.

EXPERIMENTS ON THOUGHT-TRANSFERENCE.

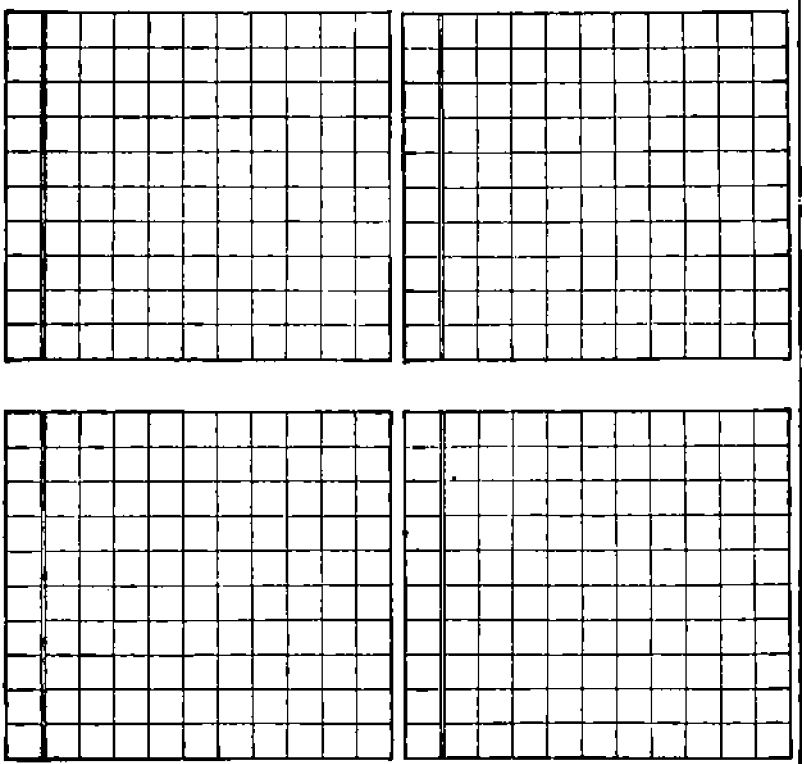
GUESSING THE DIGITS.

Agent's Name and Address .....

.....

Percipient's Name and Address .....

PLACE. .....



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APPENDIX B.

Discussion of the Returns in Response to Circular No. 4.

We present in this appendix a detailed discussion of the experimental results which have been sent to us in response to Circular No. 4. In this discussion, we have thought it advisable to use great fulness of statement and explanation, in order to impart to all who are interested in the objects of the Society for Psychical Research as complete a knowledge as possible of the evidence which we ourselves have before us, and to enable persons who are unfamiliar with the principles of mathematical probability to form their own independent judgment of the soundness and the just application of our methods, and of the fairness of our conclusions. The original papers sent in to us are preserved, and can be seen by any member or associate of the society, on application to the Secretary.

Thirty-six experimenters have taken part in the experiments which we call the color-test and the digit-test. We designate each experimenter by a Roman numeral; the same numeral being everywhere used for the same experimenter.

THE COLOR-TEST.

The description of this experiment (the experiment with cards) is given in Appendix A, and need not be repeated. The percipient is required to name the color of a card drawn from a pack, on an even chance of its being *red* or *black*. *Fifty* such judgments compose a *set*. In the first form of the experiment, which we here call Form A, *the agent knows the color* before it is named by the percipient. In the second form, which we call Form B, *the agent does not know the color* before it is named by the percipient, and thought-transference cannot exist.

Of Form A, we have received 110 sets of trials (besides two performed under conditions slightly varied from those given in the circular), comprising 5,500 separate judgments; of Form B, we have received 103 sets, comprising 5,150 judgments. These trials have been made by twenty pairs of experimenters, comprising twenty-two different individuals.

Table I. gives the detailed record, for each pair of experimenters, of the numbers of correct judgments obtained in the successive sets of fifty trials of judgment made by that pair. Table II. exhibits the number of sets in which each experimenter took part as percipient, and the number in which he took part as agent, and the mean number of correct judgments to a set in each case. In both tables, the results for Forms A and B are exhibited separately. The experimenters are designated, as already stated, by Roman numerals.

TABLE I.

DETAILED RECORD; COLOR-TEST.

PAIRS.		CORRECT JUDGMENTS OUT OF FIFTY.	CORRECT JUDGMENTS OUT OF FIFTY.
Percipient.	Agent.	A.	B.
VIII.	IX.	23.	25.
IX.	VIII.	28, 29.	25, 29.
X.	XIII.	29.	25.
XI.	X.	26.	19.
XII.	X.	25.	24.
XIII.	X.	24.	21.
XIV.	X.	20.	23.
XV.	X.	16.	20.
XVI.	XVII.	24.	22.
XVII.	XVI.	23.	30, 19.
XXV.	XXX.	31, 25, 30, 21, 22, 22, 25, 20, 24.	28, 18, 22, 27, 25, 31, 33, 26, 27.
XXVI.	XXV.	24, 21, 24, 26, 23, 24, 29, 23, 26.	27, 26, 26, 29, 23, 19, 26, 27, 27.
XXVII.	XXVI.	27, 23, 23, 30, 23, 31, 23, 31, 22.	25, 23, 20, 27, 27, 28, 26, 27, 24.
XXVIII.	XXVII.	22, 27, 25, 33, 25, 29, 24, 28, 29.	29, 29, 21, 28, 29, 23, 24, 24, 30.
XXIX.	XXVIII.	22, 25, 21, 28, 27, 20, 20, 25, 25.	23, 28, 29, 31, 23, 27, 25, 24, 27.
XXX.	XXIX.	29, 24, 24, 28, 28, 28, 28, 33, 24.	21, 27, 28, 31, 24, 24, 28, 25, 28.
XXXI.	XXXII.	27, 21, 28, 23, 35, 24, 26, 26, 24, 23.	25, 29, 22, 19, 19, 20, 27, 34, 27, 27.
XXXII.	XXXI.	28, 23, 26, 21, 22, 24, 19, 20, 25, 26, 22, 21, 23, 25, 26, 29, 27, 28, 27, 24.	24, 18, 24, 25, 24, 22, 22, 26, 26, 25, 27, 23, 24, 30, 25, 20, 23, 32, 21, 24.
XXXIV.	XXXIII.	27.	26.
XXXV.	XXXVI.	27, 30, 21, 21, 30, 31, 25, 24, 28, 25, 25, 28, 23, 19.	25, 26, 23, 26, 26, 27.

TABLE II.

SUMMARY FOR EACH EXPERIMENTER; COLOR-TEST.

EXPERIMENTER.	A.				B.			
	AS PERCIPIENT.		AS AGENT.		AS PERCIPIENT.		AS AGENT.	
	No. of Sets.	Mean.	No. of Sets.	Mean.	No. of Sets.	Mean.	No. of Sets.	Mean.
VIII.	1	23.0	2	28.5	1	25.0	2	27.0
IX.	2	28.5	1	23.0	2	27.0	1	25.0
X.	1	29.0	5	24.0	1	25.0	5	21.4
XI.	1	26.0	–	–	1	19.0	–	–
XII.	1	25.0	–	–	1	24.0	–	–
XIII.	1	24.0	–	–	1	21.0	–	–
XIV.	1	29.0	–	–	1	23.0	–	–
XV.	1	16.0	–	–	1	20.0	–	–
XVI.	1	24.0	1	23.0	1	22.0	2	24.5
XVII.	1	23.0	1	24.0	2	24.5	1	22.0
XXV.	9	25.8	9	24.4	9	26.3	9	25.6
XXVI.	9	24.4	9	25.9	9	25.6	9	24.6
XXVII.	9	25.9	9	25.9	9	24.6	9	26.3
XXVIII.	9	25.9	9	23.7	9	26.3	9	26.3
XXIX.	9	23.7	9	27.3	9	26.3	9	26.2
XXX.	9	27.3	9	25.8	9	26.2	9	26.3
XXXI.	10	25.7	20	24.3	10	24.9	20	24.2
XXXII.	20	24.3	10	25.7	20	24.2	10	24.9
XXXIII.	–	–	1	27.0	–	–	1	26.0
XXXIV.	1	27.0	–	–	1	26.0	–	–
XXXV.	14	25.5	–	–	6	25.5	–	–
XXXVI.	–	–	14	25.5	–	–	6	25.5

The 110 sets of Form A, exhibited in the above tables, contain 2,778 correct judgments, giving a general average of 25.25 correct judgments to a set, or a percentage of 50.51. The 103 sets of Form B contain 2,593 correct judgments, giving an average of 25.17 to a set, or a percentage of 50.35. As the chances are even for the correctness or incorrectness of each single judgment, the theoretical average is 25, or 50 per cent of the whole number of judgments. The deviation from this theoretical average exhibited by Form B may be taken as showing the order of magnitude which such deviation, when due to pure chance, may be expected to attain in such a number of trials as we here have under consideration.

The *probable errors* of the above averages, computed on the ordi-

nary principle used in the reduction of observations of a single quantity (that quantity being, in this case, *the measure of the tendency to form correct judgments* in such trials as the present), will also serve to indicate, so far as an inference can be drawn from the present series of experiments, the range through which the averages given by similar future series may be expected to vary. The results, with the addition of their probable errors, may then be stated as follows:—

Form A, percentage of correct judgments $= 50.51 \pm 0.45$.

Form B, percentage of correct judgments $= 50.35 \pm 0.45$.

It is worthy of notice, that the results of these trials are in close accordance with those of a nearly equal series of similar trials made by Quetelet, and mentioned in his "Lettres sur la Théorie des Probabilités" (p. 57). In 5,460 drawings from an urn containing, at each drawing, equal numbers of white and black balls, Quetelet drew 2,756 white balls, a percentage of 50.48.

The case of widest deviation from probability in this series of experiments, and the only case which requires notice, is that in which XXX. was percipient, and XXIX. agent,—where 246 correct judgments were made in a set of 450 judgments. The probability of the occurrence of so great a proportion of correct judgments in any set of 450 judgments, in a series of 10 such sets (which approximately represents our present series of experiments), is about 0.2; so that a case as striking as that now presented to us would occur, by the mere operation of chance, in one out of five series of trials like the present. The case does not, therefore, exhibit a remarkable proportion of successful judgments.

But the theory of probabilities enables us to compute, for any great number of sets of trials, not only the probable *general average* of correct judgments for the whole series, but also the proportion in which different numbers of correct judgments in a set ought to be *distributed* through the series: and this computation will furnish a further and more searching test of the conformity of our results with those which the hypothesis of pure chance would lead us to expect.

Table III. gives the probability (to the nearest thousandth) of the occurrence, in any set of 50 judgments (each judgment being equally likely to be correct or incorrect), of every possible number of correct judgments from 14 to 36 inclusive. The numbers below 14 and above 36 are omitted, because the probability of there being any such number of correct judgments is so small as to count for less than 1 in 1,000 sets. It is to be added that the probability of the occurrence of any number of correct judgments is, also, the probable *proportion* of occurrences of that number in any long series of sets.

In this table, column x gives the numbers of correct judgments from 14 to 25, and column y from 25 to 36. The other columns give, for each value of x or y, the probability of there being *any number* of correct judgments *below* that value of x or y, of there being *exactly* x or y correct judgments, and of there being any number *above* x or y. The name of the column is to be read at the *top* for the numbers in column x, and at the *bottom* for those in column y.

TABLE III.

PROBABILITIES; SINGLE CHANCE EVEN; SET OF 50.

x.	Below x.	Exactly x.	Above x.	
14	0.000	0.001	0.999	36
15	0.001	0.002	0.997	35
16	0.003	0.004	0.992	34
17	0.008	0.008	0.984	33
18	0.016	0.016	0.968	32
19	0.032	0.027	0.941	31
20	0.059	0.042	0.899	30
21	0.101	0.060	0.839	29
22	0.161	0.079	0.760	28
23	0.240	0.096	0.664	27
24	0.336	0.108	0.556	26
25	0.444	0.112	0.444	25
	Above y.	Exactly y.	Below y.	y.

We see, for example, that out of every thousand sets of 50 judgments in each set, the alternatives of right and wrong being equally probable in each judgment, there ought to be, in the long-run, 101 sets in which less than 21 correct judgments are made, 60 sets of exactly 21, and 839 sets of more than 21; that there ought to be 839 sets giving less than 29, 60 giving exactly 29, and 101 giving more than 29; again, that more than half the sets (520 out of 1,000) ought to give 23, 24, 25, 26, or 27 correct judgments in each set, and that more than seven-eighths (882 out of 1,000) ought to give from 20 to 30 each.

The theoretical probabilities on which the above table depend are given more precisely in Table XII. The first column gives the number of cases in which a correct guess is made; and the second column gives the logarithm of the corresponding probability, in the

case of guessing colors, or where fifty guesses are made; the probabilities being one to one in each case. The third column gives the numbers corresponding to these logarithms. This column, given to the nearest thousandth, is, therefore, the same as the third column of Table III. If the numbers of the first column are subtracted from 50, the second and third columns will give the probability of a number of correct guesses greater than 25. Thus the probability is the same for 9 as for 41 correct guesses. The last two columns give the logarithm and numerical value of the probability in the case of one hundred guesses, where the probability in each guess is one out of ten. These columns were used in computing the changes in guessing the digits, and the last column expressed in thousandths is accordingly the same as the third column of Table VI.

Table IV. exhibits the *distribution* of numbers of correct judgments, per set of 50 judgments, for the actual series A and B, and for the theoretical series obtained by probabilities, which we denote by P. For convenience of comparison, all our results are reduced to the scale of 100 sets of judgments; that is, to percentages. We omit the enumeration of cases "above x," which is easily derived from the other columns of the table, and give the *residuals*, or positive and negative *deviations* of the actual from the theoretical values. The numbers are given to the nearest unit; and this will account for some apparent discrepancies, which are due to the concurrence of fractions having the same sign.

We see, for example, from this table, that there were less than 24 correct judgments to a set in 32 per cent of the sets of series A, and in 29 per cent of the sets of series B, against a theoretical percentage of 34, the deficiencies being 2 and 4 per cents respectively; and that exactly 24 correct judgments were made in 14 per cent of the sets of A, and in 12 per cent of B, theory requiring 11, and the excesses being 2 and 1 per cent.

Taking the numbers of judgments in groups of five, arranged symmetrically about the most probable group of five (namely, 23–27), we see, from Table IV., that there are —

	A.	B.	P.
Below 18 . . .	1	0	2
18–22	19	20	22
23–27	54	57	52
28–32	23	20	22
Above 32 . .	4	2	2

The general agreement with probability is very close. Future series of experiments may lead us to regard the slight deviations from the law of chance, which appear in these results, as regular and significant, not accidental; but, so far as the investigation has yet gone, they cannot be regarded as indicating any real cause tending to disturb that law.

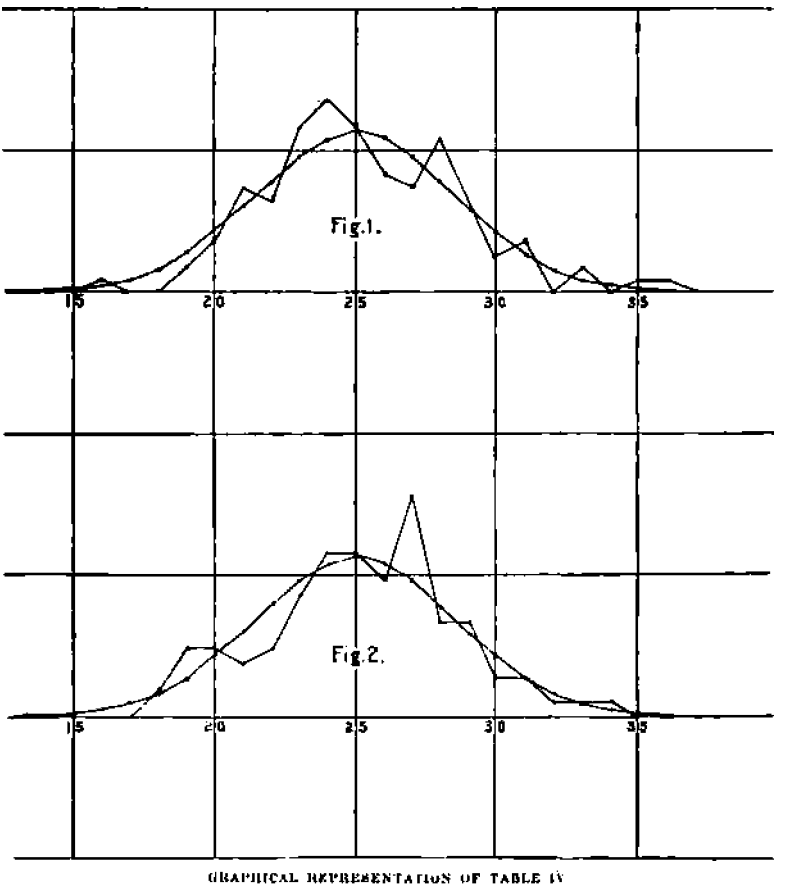
TABLE IV.

DISTRIBUTION; COLOR-TEST; SCALE OF 100 SETS OF 50 JUDGMENTS EACH.

x.	Occurrences of Numbers below x.			Occurrences of Numbers exactly x.			Residuals below x.		Residuals exactly x.	
	A.	B.	P.	A.	B.	P.	A.	B.	A.	B.
15	0	0	0	0	0	0	0	0	0	0
16	0	0	0	1	0	0	0	0	+1	0
17	1	0	1	0	0	1	0	−1	−1	−1
18	1	0	2	0	2	2	−1	−2	−2	0
19	1	2	3	2	5	3	−2	−1	−1	+2
20	3	7	6	4	5	4	−3	+1	−1	+1
21	6	12	10	7	4	6	−4	+2	+1	−2
22	14	16	16	6	5	8	−2	−1	−2	−3
23	20	20	24	12	9	10	−4	−4	+2	−1
24	32	29	34	14	12	11	−2	−4	+3	+1
25	45	41	44	12	12	11	+1	−4	+1	0
26	57	52	50	8	10	11	+2	−3	−3	−1
27	65	62	60	7	10	10	−1	−4	−2	+0
28	73	78	76	11	7	8	−3	+2	+3	−1
29	84	84	84	6	7	6	0	+1	0	+1
30	90	91	90	3	3	4	0	+1	−1	−1
31	93	94	94	4	3	3	−1	0	+1	0
32	96	97	97	0	1	2	0	0	−2	−1
33	96	98	98	2	1	1	−2	0	+1	0
34	98	99	99	0	1	0	−1	0	0	+1
35	98	100	100	1	0	0	−2	0	+1	0
36	99	100	100	1	0	0	−1	0	+1	0
37	100	100	100	0	0	0	0	0	0	0

The figures on page 24 are graphical representations, illustrating Table IV. The smooth curves are the probability curves for this case; the abscissas being the numbers in column x, and the ordinates being the numbers under P in the column headed "Occurrences of numbers exactly x." The ordinates of the angular points of the

jagged lines are the numbers under A and B; Fig. 1 containing the points given by the numbers in the column A, and Fig. 2 those given by the numbers in the column B. Fig. 1 shows a slight depression at the beginning, and a slight elevation at the end, but the main course of the curve indicates no tendency to an excess in the number of correct judgments. In fact, if we throw out the five sets which



GRAPHICAL REPRESENTATION OF TABLE IV

give numbers below 18 or above 32, we have 105 sets and 2,625 correct judgments, — an average of precisely 25, or 50 per cent.

THE DIGIT-TEST.

In this experiment, of which the description is given in Appendix A, under the designation of the experiment with numbers, the chance of a single judgment being correct is only 1 in 10. The square con-

taining 100 judgments may be regarded as a set. But this may be subdivided into columns, or smaller sets, of 10 judgments each: and, again, when a sheet of ten squares, containing 1,000 judgments, has been filled out by one pair of experimenters, it may be treated as a larger set.

Tables V., VI., and VII. give the probabilities of the different possible numbers of correct judgments in a column (a set of 10), in a square (a set of 100), and in a full sheet (a set of 1,000). The comparison of these tables well illustrates the principle, that, as the number of trials increases, the number of correct judgments has an increasing tendency to approach the most probable number, which is, in this case, always *one-tenth* of the whole number. Thus the probability of as many as 2 correct judgments in a set of 10 is 0.264, or more than 1 in 4; so that, out of 1,000 sets of 10 judgments, 264 ought to contain as many as 2 correct judgments. But the probability of as many as 20 in 100 — that is, of an *average* of as many as 2 in 10 for ten sets of 10 — is only 0.002. Again, the probability of as many as 12 in 100 — an average of 1.2 in 10 for ten sets of 10 — is 0.297, nearly 1 in 3; but the probability of an average of as many as 12 in 100 for ten sets of 100 is only 0.022, less than 1 in 40.

TABLE V.

PROBABILITIES; SINGLE CHANCE = $\frac{1}{10}$; SET OF 10.

x.	Below x in 10.	Exactly x in 10.	Above x in 10.
0	0.000	0.349	0.651
1	0.349	0.387	0.264
2	0.736	0.194	0.070
3	0.930	0.057	0.013
4	0.987	0.011	0.002
5	0.998	0.001	0.000
6	1.000	0.000	0.000

TABLE VI.

PROBABILITIES; SINGLE CHANCE = $\frac{1}{10}$; SET OF 100.

x.	Below x in 100.	Exactly x in 100.	Above x in 100.
0	0.000	0.000	1.000
1	0.000	0.000	1.000
2	0.000	0.002	0.998
3	0.002	0.006	0.992
4	0.008	0.016	0.976
5	0.024	0.034	0.942
6	0.058	0.090	0.883
7	0.117	0.089	0.794
8	0.206	0.115	0.679
9	0.321	0.130	0.549
10	0.451	0.132	0.417
11	0.583	0.120	0.297
12	0.703	0.099	0.198
13	0.802	0.074	0.124
14	0.876	0.051	0.073
15	0.927	0.033	0.040
16	0.960	0.019	0.021
17	0.979	0.011	0.010
18	0.990	0.005	0.005
19	0.995	0.003	0.002
20	0.998	0.001	0.001
21	0.999	0.000	0.000
22	1.000	0.000	0.000

TABLE VII.

PROBABILITIES; SINGLE CHANCE = $\frac{1}{10}$: SET OF 1,000.

x.	Below x in 1,000.	Exactly x in 1,000.	Above x in 1,000.
70	0.000	0.000	0.999
71	0.001	0.000	0.999
72	0.001	0.000	0.999
73	0.001	0.001	0.998
74	0.002	0.001	0.997
75	0.003	0.001	0.996
76	0.004	0.001	0.995
77	0.005	0.002	0.993
78	0.007	0.003	0.990
79	0.010	0.003	0.987
80	0.013	0.004	0.982
81	0.018	0.005	0.977
82	0.023	0.007	0.970
83	0.030	0.008	0.962
84	0.038	0.010	0.951
85	0.049	0.012	0.939
86	0.061	0.014	0.925
87	0.075	0.017	0.908
88	0.092	0.019	0.889
89	0.111	0.022	0.867
90	0.133	0.025	0.842
91	0.158	0.028	0.814
92	0.186	0.030	0.784
93	0.216	0.033	0.751
94	0.249	0.035	0.716
95	0.284	0.037	0.678
96	0.322	0.039	0.639
97	0.361	0.040	0.599
98	0.401	0.041	0.557
99	0.443	0.042	0.515
100	0.485	0.042	0.473

x.	Below x in 1,000.	Exactly x in 1,000.	Above x in 1,000.
100	0.485	0.042	0.473
101	0.527	0.042	0.432
102	0.568	0.041	0.391
103	0.609	0.039	0.352
104	0.648	0.038	0.314
105	0.686	0.036	0.278
106	0.722	0.034	0.244
107	0.756	0.031	0.213
108	0.787	0.029	0.184
109	0.816	0.026	0.158
110	0.842	0.023	0.135
111	0.865	0.021	0.114
112	0.886	0.018	0.095
113	0.905	0.016	0.079
114	0.921	0.014	0.065
115	0.935	0.012	0.053
116	0.947	0.010	0.043
117	0.957	0.008	0.035
118	0.965	0.007	0.028
119	0.972	0.006	0.022
120	0.978	0.005	0.017
121	0.983	0.004	0.013
122	0.987	0.003	0.010
123	0.990	0.002	0.008
124	0.992	0.002	0.006
125	0.994	0.001	0.005
126	0.995	0.001	0.003
127	0.997	0.001	0.003
128	0.997	0.001	0.002
129	0.998	0.000	0.001
130	0.999	0.000	0.001

We have received, in the digit-test, 116 squares, comprising 11,600 judgments, besides several incomplete squares, containing 53 columns, or 530 judgments; so that we have, in all, 12,130 judgments. We have also one square and two columns of another square, in which the experiment of contact between the agent and percipient was tried, with no observed change of result. These trials have been

made by twenty-nine pairs of experimenters, twenty-seven different individuals participating.

Tables VIII. and IX. give the detailed record and summary of these experiments.

TABLE VIII.

DETAILED RECORD; DIGIT-TEST.

Percipient.	Agent.	No. of Correct Judgments.
I.	II.	10, 13.
II.	I.	9, 10.
II.	XVIII.	4 [in 90].
II.	XIX.	7.
II.	XX.	9.
II.	XXI.	11.
III.	II.	7.
III.	IV.	12.
III.	V.	11 [in 60].
IV.	III.	9 [in 90], 5 [in 90].
V.	III.	5 [in 90].
VII.	VI.	7, 10, 11, 10, 8, 12, 10, 10, 8, 4.
X.	XII.	9, 9, 7, 11, 8, 10, 8.
X.	XIII.	14, 11.
XII.	X.	8, 12, 6, 17, 10, 17, 12.
XIII.	X.	9, 8.
XIX.	II.	8.
XX.	II.	11.
XXI.	II.	10, 8.
XXIII.	XXII.	11.
XXIV.	XXII.	12 [in 90].
XXV.	XXX.	7, 14, 11, 12, 13, 8, 8, 8, 13, 7.
XXVI.	XXV.	13, 10, 8, 10, 11, 7, 10, 14, 13, 11.
XXVII.	XXVI.	9, 10, 13, 8, 10, 13, 9, 9, 16, 10.
XXVIII.	XXVII.	11, 10, 11, 11, 13, 9, 15, 14, 4, 9.
XXIX.	XXVIII.	14, 16, 6, 8, 18, 9, 8, 20, 18, 10 (E).
XXX.	XXIX.	9, 9, 9, 6, 13, 9, 11, 6, 20, 11.
XXXII.	XXXI.	9, 17, 8, 11, 11, 6, 9, 6, 12, 15.
XXXIV.	XXXIII.	11, 8, 12, 9.

TABLE IX.

SUMMARY FOR EACH EXPERIMENTER; DIGIT-TEST.

Experimenter.	As Percipient.		As Agent.	
	No. of Sets.	Average.	No of Sets.	Average.
I.	2.0	11.5	2.0	14.0
II.	5.9	10.0	7.0	9.6
III.	2.9	10.3	2.7	7.0
IV.	1.8	7.8	1.0	12.0
V.	0.9	5.6	0.9	12.2
VI.	–	–	10.0	8.8
VII.	10.0	8.8	–	–
X.	9.0	9.4	9.0	11.0
XII.	7.0	11.7	7.0	8.6
XIII.	2.0	8.5	2.0	12.5
XVIII.	–	–	0.9	4.4
XIX.	1.0	8.0	1.0	7.0
XX.	1.0	11.0	1.0	9.0
XXI.	2.0	9.0	1.0	11.0
XXII.	–	–	1.8	12.8
XXIII.	1.0	11.0	–	–
XXIV.	0.6	15.0	–	–
XXV.	10.0	10.1	10.0	10.7
XXVI.	10.0	10.7	10.0	10.7
XXVII.	10.0	10.7	10.0	10.7
XXVIII.	10.0	10.7	10.0	12.1(E)
XXIX.	10.0	12.1(E)	10.0	10.3
XXX.	10.0	10.3	10.0	10.1
XXXI.	–	–	10.0	10.4
XXXII.	10.0	10.4	–	–
XXXIII.	–	–	4.0	10.0
XXXIV.	4.0	10.0	–	–

These tables will at once be seen to exhibit one case of marked deviation from probability; namely, the series in which XXIX. was percipient and XXVIII. agent, a series of ten sets giving the average of 12.1 correct judgments to a set. The probability of so high an average in a series of ten sets of 100 is, by Table VII., 0.017; and the probability of such a case occurring in *eight* such series (which may be taken as roughly representing the present collection of re-

sults) is 0.13, or 1 in 8. This case, which we will designate as case E, exhibits no striking improbability, as these numbers show; but we have thought it desirable to submit it to separate discussion; and, on the other hand, it may properly be left out of account in estimating the general character of the main body of our results.

Let us now consider the results of this experiment in their totality. The number of correct judgments made in the whole series of 12,130 judgments (which we denote by C) is 1,253, a percentage of 10.33; but, if we exclude the exceptional case E, we have 11,130 judgments (which we denote by D), of which 1,132 are correct, a percentage of 10.17. The theoretical percentage, on the hypothesis of chance, is 10.00. Adding the probable errors, we have for C, 10.33 $\pm$ 0.20; for D, 10.17 $\pm$ 0.20.

Turning next to the question of *distribution*, we give in Table X. the proportion in which each number of correct judgments, and in which any less or any greater number, occurs in the series of sets. We must here limit ourselves to the complete sets of 100 judgments each. Under C we place the results for the full number of 116 complete sets; under D, the results for the 106 sets which remain when case E is excluded; and under P, those given by the theory of probabilities. For convenience of comparison, all the results are reduced to the scale of 100 sets of complete judgments, or to percentages of the whole number of sets. The general agreement of C and D with P is obvious at a glance, the agreement in the case of D being a little closer than in that of C. The experiment presents a slight excess of high values of x. But it is the usual experience in experimental work, that scattered instances of wide deviation from probability are to be expected in any series of trials. On the other hand, it is very observable that the number of cases near the mean is decidedly larger in the experiment than would be expected theoretically. Thus there are 9, 10, or 11 correct judgments in 45 per cent of the cases of Series C, in 47 per cent of Series D, and in only 38 per cent according to theory. But this discrepancy, which consists in an excess beyond the demands of the theory of chance of those cases which are, by the theory of chance, the most probable, can hardly be regarded as due to thought-transference.

Table XI. gives the distribution of correct judgments among the columns. In forming this table, we are obliged to leave out of account a series of 18 squares, of which only the aggregates have been reported to the committee. The cases included under C make 1,033 columns; those included under D (case E being omitted) make 933 columns. All the results are reduced to the scale of 1,000 columns.

TABLE X.

DISTRIBUTION; DIGIT-TEST; SCALE OF 100 SETS OF 100 JUDGMENTS EACH.

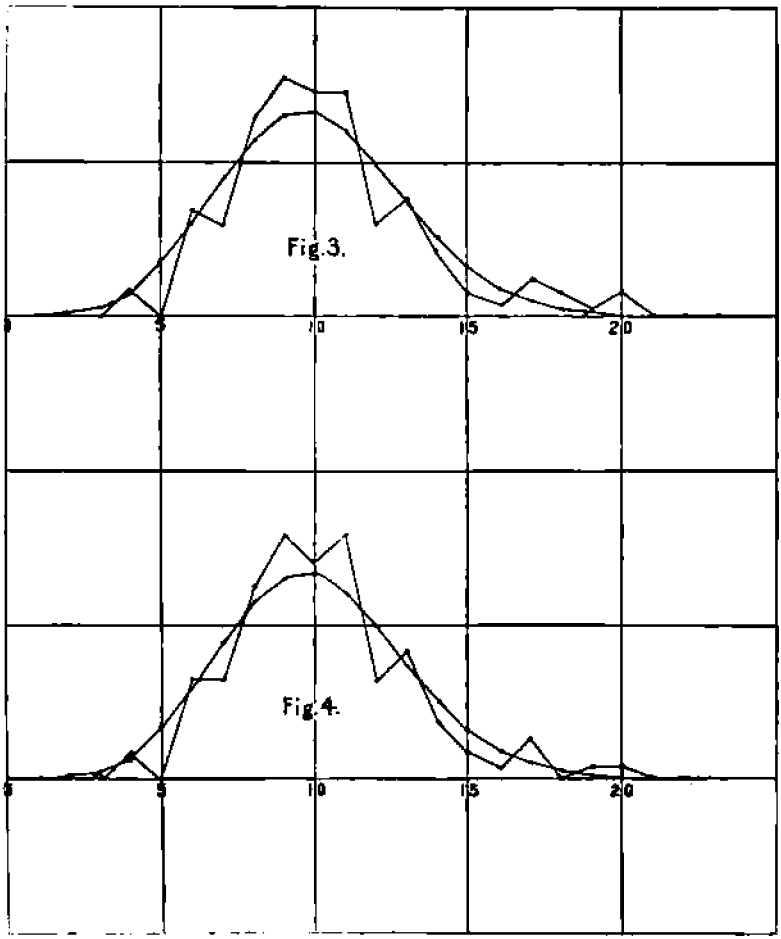
x.	Below x.			Exactly x.			Residual below x.		Residual exactly x.	
	C.	D.	P.	C.	D.	P.	C.	D.	C.	D.
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	1	0	0	−1	−1
4	0	0	1	2	2	2	−1	−1	0	0
5	2	2	2	0	0	3	−1	−1	−3	−3
6	2	2	6	7	7	6	−4	−4	+1	+1
7	9	8	12	6	7	9	−3	−3	−3	−2
8	15	15	21	13	12	11	−6	−6	+1	+1
9	28	27	32	16	16	13	−5	−5	+3	+3
10	43	43	45	15	14	13	−2	−2	+1	+1
11	58	58	58	15	16	12	−1	−1	+3	+4
12	72	74	70	6	7	10	+2	+3	−4	−3
13	78	80	80	8	8	7	−2	0	0	+1
14	86	89	88	4	4	5	−1	+1	−1	−1
15	91	92	93	2	2	3	−2	0	−2	−1
16	92	94	96	1	1	2	−4	−2	−1	−1
17	93	95	98	3	3	1	−5	−3	+1	+2
18	96	98	99	2	0	1	−3	−1	+1	−1
19	97	98	100	1	1	0	−2	−1	+1	+1
20	98	99	100	2	1	0	−2	−1	+2	+1
21	100	100	100	0	0	0	0	0	0	0

TABLE XI.

DISTRIBUTION; DIGIT-TEST; SCALE OF 1,000 SETS OF 10 JUDGMENTS EACH.

x.	Below x.			Exactly x.			Residual below x.		Residual exactly x.	
	C.	D.	P.	C.	D.	P.	C.	D.	C.	D.
0	0	0	0	345	352	349	0	0	−4	+ 3
1	345	352	349	389	393	387	− 4	+ 3	+2	+ 6
2	734	745	736	189	178	194	− 2	+ 9	−5	−16
3	923	923	930	52	53	57	− 7	− 7	−5	− 4
4	975	975	987	20	20	11	−12	−12	+9	+ 9
5	995	995	998	3	2	1	− 3	− 2	+2	+ 1
6	998	998	1,000	0	0	0	− 2	− 2	0	0
7	998	998	1,000	1	1	0	− 2	− 2	+1	+ 1
8	999	999	1,000	0	0	0	− 1	− 1	0	0
9	999	999	1,000	1	1	0	− 1	− 1	+1	+ 1

The following figures are graphical representations of the column "Exactly x" in Table X. It is worthy of notice, that if the two squares of Series D, which give 19 and 20 correct judgments respectively, and which correspond to the slight elevation at the end of Fig. 4, be thrown out, we have 10,930 judgments, of which 1,093, precisely 10 per cent, are correct. Fig. 3 represents column C; and Fig. 4, column D.



GRAPHICAL REPRESENTATION OF THE COLUMN "EXACTLY x" IN TABLE X.

It remains to consider case E. In looking over the sheet which contains this case, one cannot fail to be struck by a peculiarity in one of the squares on that sheet; namely, the frequent repetition of a

digit in the same horizontal line or row, in cases where it has no relation to the digit thought of for that row by the agent. We reproduce this square to add clearness to our discussion.

5: 9, 6, 3, 4, 3, 8, 3, 7, 7, 7.
2: 7, 9, 7, 7, 7, 9, 4, 9, 6, 4.
8: 5, 7, 5, 5, 5, 7, 5, 8, 5, 5.
4: 3, 5, 3, 3, 3, 5, 3, 3, 3, 3.
9: 1, 3, 1, 1, 1, 1, 1, 1, 1, 1.
0: 0, 0, 0, 3, 4, 0, 0, 0, 0, 0.
3: 2, 2, 2, 2, 2, 2, 2, 2, 2, 2.
1: 4, 4, 4, 4, 6, 4, 4, 4, 4, 4.
6: 6, 6, 6, 5, 6, 6, 7, 6, 6, 6.
7: 8, 9, 7, 3, 5, 3, 6, 5, 5, 2.

It will be seen that the third row contains seven 5's; the fourth, eight 3's; the fifth, nine 1's; the sixth, eight 0's; the seventh, ten 2's; the eighth, nine 4's; the ninth, eight 6's. It happens that, in two of these rows, that of 0 and that of 6, the prevailing digit coincides with that thought of by the agent; and we thus get 16 of the 18 correct judgments which occur in this square.

The tendency to the repetition of a digit, or group of digits, in a row, is also observable in other squares of Case E. Thus we find in that sheet such rows as the following: —

6: 0, 2, 1, 2, 2, 2, 0, 4, 7, 2;
7: 5, 4, 6, 8, 7, 7, 7, 5, 4, 6;
9: 1, 0, 0, 4, 4, 8, 8, 7, 7, 3;
7: 1, 0, 1, 2, 1, 9, 0, 2, 3, 1;
0: 0, 2, 7, 5, 4, 7, 7, 5, 4, 7;

where the number placed before the colon is that thought of by the agent.

This approximate regularity in the arrangement of the digits suggests the question whether the succession of judgments made by the percipient, in going up and down the vertical lines or columns, was not in fact governed — doubtless, without his consciousness — by some principle of arrangement in his own mind. Professor Pickering observed that such a principle of arrangement, in fact, exists. In the first column of the square given above, the judgments occur in the order —

9, 7, 5, 3, 1, 0, 2, 4, 6, 8;

the odd numbers being first named in regular decreasing order, and then the even numbers in regular increasing order. In the other columns we have merely slight variations of this pattern. But this principle of arrangement has not been imparted to the mind of the percipient from that of the agent, for it does not appear in the series thought of by the agent; namely, —

5, 2, 8, 4, 9, 0, 3, 1, 6, 7.

The agreements which exist in this square arise mainly, as has been pointed out, from the accidental concurrence at two points (the 0 and the 6) of two differently arranged series.

A similar principle of arrangement can be traced in other squares of Case E. Indeed, there is a tendency throughout this sheet to the separation of odd and even numbers into two series, each series being thought of in a regular order. In some cases this is varied by a tendency to the natural order of digits.

It is further noticeable, that, in that set of experiments in which XXIX. (the percipient in Case E) was the agent, the series of numbers thought of by him, and placed in columns on the left of the successive squares, exhibit a similar principle of arrangement. Those series are as follows (we give them in successive columns): —

6	8	5	4	6	4	3	2	5	6
4	6	0	6	7	2	1	7	7	9
8	4	3	8	9	0	4	8	9	0
0	2	4	0	3	1	5	1	0	4
2	1	7	1	1	3	8	5	1	8
1	3	9	3	4	5	0	6	3	2
3	5	6	5	5	7	9	3	8	5
5	7	8	7	8	9	2	4	6	1
9	0	1	9	3	6	6	0	4	3
7	9	2	2	0	8	7	9	2	7

There is an evident tendency to separate odd and even numbers, and place them in ascending or descending order; and from this tendency the agent has not wholly escaped, in spite of some endeavor to give variety to his arrangements.

Now, a tendency in the mind of the percipient to follow a system in the order of his judgments may easily give the appearance of thought-transference; but it must seriously interfere with real thought-transference, if that exists. Thus, in the present case, the tendency

to the repetition of a digit throughout a row makes a set of a hundred judgments approximate to equivalence with a set of only ten judgments; and hence wide deviations from the normal result (of ten per cent of the judgments being correct) cease to be improbable. For, if the tendency were complete, the probability would be judged by Table V., not by Table VI. On the other hand, this repetition arises in fact from the percipient's tendency to reproduce his own former thought, not the thought of the agent. Case E, therefore, appears to afford no evidence of thought-transference.

It may be added that Dr. C. S. Minot has found evidence in Case E, and in other series of squares, of a more comprehensive principle governing or influencing the order in which the digits have been named by percipients. He is now engaged in investigating this subject, which promises to be of considerable interest, in its bearing on our experiments, and from a general psychological point of view.

OTHER TESTS.

Besides the experiments already discussed, the committee have received one return of trials of the die-test and other forms of experiment, in all of which the chance of any single judgment being correct was one in six. These experiments were performed under the conditions designated by A and B in the color-test; that is, "agent aware," and "agent ignorant." The results are: —

	A.	B.
Number of judgments	318.0	234.0
Number of correct judgments . . .	60.0	35.0
Percentage of correct judgments . .	18.9	15.0
Theoretical percentage	16.7	16.7

This is a striking result; but it is founded on an insufficient number of trials, and the conditions of the experiment need to be more definitely fixed.

It is proper to say, in conclusion, that the computations which are involved in this appendix have been directed by well-known formulæ, to be found in any good treatise on probability; for example, in the "Calcul des Probabilités" of H. Laurent. The chief formula is that for the probability of k occurrences, in a set of n independent trials, of an event of which the probability of a single occurrence in one trial

is equal to λ. This formula may be written as follows, in which $n!$ denotes "n factorial;" that is, $n! = n(n-1)(n-2)\ldots 3 \cdot 2 \cdot 1$:—

$$\frac{n!}{k!(n-k)!}\lambda^k(1-\lambda)^{n-k}.$$

It is the $(k+1)^{th}$ term in the development of $[\lambda + (1-\lambda)]^n$. In the color-test, $n = 50$, $\lambda = \frac{1}{2}$. In the digit-test, $n = 10$, 100, or 1,000, according to the number of judgments in a set; and $\lambda = \frac{1}{10}$.

The factorials of large numbers can be computed approximately by an exponential formula, which will be found in Laurent (p. 13), —

$$n! = n^n e^{-n}\sqrt{2\pi n}, \text{ approximately.}$$

TABLE XII.

PROBABILITIES; SINGLE CHANCE; EVEN; SET OF 50; AND = $\frac{1}{10}$; SET OF 100.

No.	Log.	Probability.	Log.	Probability.
0	84.9485	0.00000,00000,00000,888	5.4243	0.0000266
1	86.6475	0.00000,00000,00044,4	6.4700	0.000295
2	88.0307	0.00000,00000,0100	7.2103	0.00102
3	89.2408	0.00000,00000,174	7.7700	0.00589
4	90.3108	0.00000,00002,05	8.2004	0.0158
5	91.2746	0.00000,00018,8	8.5204	0.0338
6	92.1493	0.00000,00141	8.7746	0.0595
7	92.9480	0.00000,00887	8.9483	0.0888
8	93.6784	0.00000,0477	9.0594	0.115
9	94.3473	0.00000,222	9.1146	0.130
10	94.9601	0.00000,912	9.1193	0.132
11	95.5208	0.00003,32	9.0778	0.120
12	96.0327	0.00010,8	8.9937	0.0986
13	96.4986	0.00031,5	8.8700	0.0741
14	96.9203	0.00083,3	8.7090	0.0511
15	97.3008	0.00200	8.5131	0.0326
16	97.6408	0.00437	8.2841	0.0192
17	97.9419	0.00875	8.0237	0.0105
18	98.2051	0.0160	7.7332	0.00541
19	98.4314	0.0270	7.4139	0.00259
20	98.6218	0.0419	7.0671	0.00117
21	98.7767	0.0508	6.6937	0.00049
22	98.8967	0.0788	6.2946	0.000197
23	98.9821	0.0980	5.8707	0.0000743
24	99.0333	0.108	5.4227	0.0000265
25	99.0504	0.112	4.9513	0.00000894

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APPENDIX C.

Possibility of Errors in Scientific Researches, due to Thought-Transference.

If the theory of Richet is true, an important error may enter many scientific researches in which an assistant is aware of facts a knowledge of which the observer intentionally avoids. An excellent example occurs in the revision of the northern stars, contained in the Durchmusterung of Argelander, which has been undertaken by the Astronomische Gesellschaft. It was provided that the observers, after familiarizing themselves with the scale of magnitudes of the Durchmusterung, should estimate the brightness of each star observed. The Durchmusterung magnitude was then read aloud by the recorder, to enable the observer to continually correct his estimates of the scale of magnitudes. Let M represent the number of cases in which the difference between the estimated and catalogue magnitudes was D. If the number of observations is large, we should in general expect that the relation between N and D would be represented by a smooth curve. If no errors entered but those due to accident, this would become the probability curve. On the other hand, if any thought-transference occurs between the recorder and observer, we should expect an increase in the value of N when D is zero; that is, of cases in which the magnitude was estimated correctly. It is accordingly only necessary to count the values of N corresponding to various values of D. These results may then be compared with that given by the law of frequency of error; or a curve may be constructed with the various values of N and D, not including those in which D equals zero. The value of N, when D is zero, is now derived from the curve passing through the other points. If the actual value of N, when D is zero, in general exceeds that given from the curve, we may infer that thought-transference occurs, unless some other explanation can be found. The amount of material available for this discussion is very large. The number of stars to be observed exceeds a hundred thousand, each of which is measured on at least two nights. More than a dozen observatories participated in the work; so that the test may be applied to many different persons. The stars between $+50°$ and $+55°$ were observed at the Harvard College

Observatory. A count has been made of the residuals in 0, 6, 12, and 18 hours of right ascension. This furnishes sufficient material for the present investigation, although only about one-sixth of the entire work. Similar estimates of magnitude were also made in connection with observations with the meridian photometer, and thus the results of a number of observers and recorders could be tested. The various series employed are compared in the successive lines of Table I., where a comparison is also made with the result derived from the theory of probabilities, assuming that no error enters but that due to accident. The successive columns give a number for reference, the initial of the observer who becomes the percipient if any thought-transference occurs, and the recorder or agent. The letters C., E., M., P., R., and W. indicate Messrs. Cutler, Eaton, McCormack, Pickering, Rogers, and Wendell respectively. When the results of various persons are combined, they are indicated by V. The fourth column gives the number of observations contained in the series; the fifth, the average value of the residual, or arithmetical sum of all the residuals divided by their number. The sixth column gives the number of cases in which the residual is zero; and the seventh, the ratio of these numbers to the numbers in the fourth column. This quantity is, therefore, the observed proportion of zeros. From the average deviation we may compute what proportion of residuals should be zero according to the theory of probabilities. The average deviation of each series was next multiplied by .845, which gives the probable error according to the formula of Peters, and .05 was divided by this quantity. The quotient gives the fraction of the probable error which an error must not exceed to give a residual zero. A table of the frequency of error then gives the proportion of the observations whose error should fall within this limit, or which should give residuals zero. These computed proportions are given in the last column but one of Table I. The last column is found by subtracting the computed from the observed proportion of cases in which the residual is zero. About four-fifths of the stars are estimated in the Durchmusterung as fainter than the magnitude 7.9; and these only are employed, since the brighter stars are much more difficult to estimate. In line 7 all the stars are included, and all are brighter than this limit. This is probably the cause of the larger average deviation.

The first four lines of the table give the results of the observations of Professor Rogers, in 0, 6, 12, and 18 hours of right ascension, respectively, with the meridian circle. It is impossible to determine whether the conditions in this case were favorable to thought-transference, as Mr. McCormack is not now living. He was instructed to

TABLE I.

No.	Percipient.	Agent.	No. of Observations.	A. D.	No. of Zeros.	Observed Proportions.	Computed Proportions.	O–C
1	R.	M.	981	.223	101	.195	.143	+.052
2	R.	M.	750	.244	129	.170	.129	+.041
3	R.	M.	458	.231	92	.201	.135	+.066
4	R.	M.	930	.233	152	.163	.134	+.029
5	P.	E.	514	.240	74	.144	.131	+.013
6	P.	E.	540	.200	88	.163	.158	+.005
7	P.	E.	402	.332	51	.104	.096	+.008
8	P.	C.	513	.226	75	.153	.139	+.014
9	P.	W.	580	.213	108	.186	.147	+.039
10	P.	W.	600	.100	97	.150	.167	−.008
11	W.	E.	163	.108	30	.184	.160	+.024
12	W.	C.	141	.100	30	.233	.192	+.041
13	W.	P.	402	.190	82	.204	.159	+.045
14	W.	P.	486	.180	100	.206	.177	+.029
15	R.	V.	3,128	.232	504	.180	.135	+.045
16	P.	V.	3,248	.231	403	.152	.136	+.016
17	W.	V.	1,102	.187	242	.203	.170	+.033
18	V.	V.	7,508	.226	1,200	.172	.139	+.033

record the estimated magnitude before calling out the catalogue magnitude; and, if he did not look at the catalogue magnitude until then, no thought-transference would be indicated. Line 5 gives the observations made in series 1 to 100 with the meridian photometer, or between Feb. 28, 1882, and Jan. 23, 1883. The observer had probably not as yet acquired a fixed habit of estimating the magnitudes. Line 6 relates to series 101 to 400 between the dates Jan. 23, 1883, and Feb. 7, 1885. Line 7 relates to similar estimates of the magnitudes of the standard stars of the Uranometria Argentina, and are the only estimates not relating to the Durchmusterung magnitudes. Line 9 contains the observations contained in series 301 to 400, between July 25, 1884, and Feb. 7, 1885; and line 10, those from series 401 to 450, between Feb. 10, 1885, and April 25, 1885. The same distinction applies to lines 12 and 13. A portion of the last five series were recorded by Professor Searle, but not enough to render a subdivision desirable. Lines 15, 16, and 17 give the results of all of the observations by the three percipients respectively; and line 18 gives the results of all combined.

Table II. gives the details of the count of the number of residuals

of various magnitudes. These magnitudes are given in the first column, and the successive columns give the number of residuals in the first fourteen lines of Table I. When the residual is larger than one magnitude, it is indicated by an L in the first column. The numbers at the top of the columns of Table II. have the same meaning as those in the first column of Table I.

TABLE II.

Residual.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
+L.	1	4	-	2	-	-	14	-	-	-	-	-	-	1
+1.0	2	-	-	-	-	-	5	-	-	-	-	-	-	-
+0.9	2	1	-	2	1	-	4	-	-	-	-	-	1	-
+0.8	1	11	-	2	2	2	10	-	1	-	1	-	-	1
+0.7	6	5	4	8	-	1	13	1	3	-	-	1	-	-
+0.6	6	13	8	16	4	3	9	5	2	1	-	1	4	2
+0.5	27	36	8	31	5	8	21	8	8	3	4	1	3	5
+0.4	37	27	25	49	12	17	23	16	16	11	7	2	8	9
+0.3	85	65	40	77	28	26	35	31	22	30	12	6	21	13
+0.2	111	85	62	131	55	44	40	59	37	37	12	7	34	43
+0.1	132	95	65	111	73	63	43	46	78	70	29	16	44	66
0.0	191	127	92	152	74	88	51	75	108	97	30	33	82	100
−0.1	114	95	41	104	54	84	51	68	85	113	26	34	52	89
−0.2	89	72	43	91	69	77	58	63	80	101	13	20	53	70
−0.3	68	39	28	67	51	52	34	53	50	72	14	10	46	45
−0.4	37	28	12	38	22	25	31	52	41	42	4	5	30	14
−0.5	19	16	12	20	24	15	20	20	20	17	6	3	17	13
−0.6	14	6	5	7	16	14	16	12	10	7	-	1	2	10
−0.7	9	5	1	6	10	6	8	2	7	4	3	-	2	3
−0.8	6	1	2	2	8	1	5	2	1	2	2	-	1	1
−0.9	2	2	-	2	3	-	1	-	1	-	-	-	-	-
−1.0	1	3	1	2	2	1	2	-	2	2	-	-	-	-
−L.	18	8	6	6	1	-	-	-	2	-	-	-	2	2

Every residual in the last column of Table I., with one exception, is positive. The actual number of residuals equal to zero is, therefore, in excess of that given by theory; and this effect is most marked in the cases of Professor Rogers and Mr. Wendell. It would not be safe, however, to infer from this the existence of any thought-transference until all other explanations of this deviation have been carefully considered. If the probable error is diminished in any series of observations, the theoretical number of zero-residuals would be increased. But, in almost every series of observations, the num-

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ber of large residuals is greater than that given by theory, on account of various sources of large errors. Such, in the present case, are variability of the stars, clouds, error in identification or of record. According to theory, the entire number of residuals exceeding a magnitude should not exceed half a dozen, or one tenth part of its actual amount. On the other hand, the estimated magnitudes differ systematically from those of the catalogue, as is shown in several series by the difference in the number of positive and negative residuals. The effect of this would be to diminish the theoretical proportion of zero residuals. Moreover, if thought-transference really exists, the excess of zero-residuals should not be included in deducing the probable error. The latter would then become larger, and the computed proportion of zero-residuals would be diminished. If the recorder should enter the catalogue magnitude by mistake for that estimated, the number of zero-residuals would be increased. But, with the careful recorders employed, it can hardly be supposed that this effect could be sensible.

A comparison must next be made, of the number of zero-residuals with those of other magnitudes. In Table III., the first column gives the magnitudes of the residuals, as in Table II. The next three columns give for the three observers the proportion of residuals of each magnitude which constitute series 15, 16, and 17. The next three columns give the residuals found by subtracting from these quantities the theoretical proportions, according to the law of the frequency of error. A correction is first applied for the constant differences in the estimated scales from that of the Durchmusterung. In the case of Professor Rogers, his estimates, on the average, were too faint by .02. Mr. Wendell's estimates, and my own, were too bright by .05 and .07, respectively.

The last three columns show that the agreement with the probability-curve is all that can be desired, except for the residual's zero. The graphical comparison by drawing a smooth curve through the given point is not needed. The zero-residuals, however, show a marked result of observation over theory, which is much too great to be ascribed to accident, at least in the case of Messrs. Rogers and Wendell.

One other source of error remains to be considered. The stars in the Durchmusterung are not distributed regularly, according to magnitude. There is an excess of those in which the tenth of a magnitude is either 0 or 5, and a deficit for 1, 4, 6, and 9 tenths. If a similar irregularity occurred in the scale of an observer, we should expect an excess of residuals 0 and 5, as compared with the other

TABLE III.

Residual.	15.	16.	17.	15.	16.	17.
+L.	0.002	0.004	0.001	+0.002	+0.004	+0.001
+1.0	0.001	0.002	0.000	+0.001	+0.002	0.000
+0.9	0.002	0.002	0.001	+0.001	+0.001	+0.001
+0.8	0.004	0.005	0.002	+0.001	+0.002	+0.002
+0.7	0.007	0.008	0.001	−0.001	+0.001	−0.001
+0.6	0.014	0.007	0.000	−0.004	−0.003	+0.002
+0.5	0.033	0.016	0.011	−0.001	−0.004	0.000
+0.4	0.044	0.020	0.022	−0.014	−0.000	−0.005
+0.3	0.085	0.052	0.044	−0.003	−0.009	−0.013
+0.2	0.124	0.084	0.080	+0.011	−0.006	−0.010
+0.1	0.130	0.114	0.130	0.000	−0.002	−0.008
0.0	0.181	0.151	0.205	+0.045	+0.019	+0.040
−0.1	0.113	0.140	0.108	−0.012	+0.005	+0.003
−0.2	0.004	0.138	0.131	−0.010	+0.015	−0.007
−0.3	0.008	0.000	0.006	−0.008	−0.004	−0.002
−0.4	0.030	0.070	0.044	−0.012	−0.001	−0.014
−0.5	0.023	0.030	0.032	−0.005	−0.010	+0.004
−0.6	0.010	0.023	0.011	−0.004	−0.004	0.000
−0.7	0.008	0.011	0.007	0.000	−0.002	+0.004
−0.8	0.004	0.008	0.004	+0.001	0.000	+0.003
−0.9	0.002	0.002	0.000	+0.002	+0.002	0.000
−1.0	0.003	0.003	0.000	+0.003	+0.003	0.000
−L.	0.012	0.001	0.004	+0.012	+0.001	+0.004

residuals. Unfortunately, the only means of determining the irregularity in an observer's scale is by counting the number of times he has employed each tenth of a magnitude. It then becomes difficult to decide how far this irregularity is caused by that of the Durchmusterung. A discussion of the magnitudes 7.5 to 9.2 shows, that, in the Durchmusterung, the proportion of stars having the tenth of a magnitude 0 or 5 is .22, instead of .10. About .05 are in each class, differing one-tenth from these, or having the tenths, 1, 4, 6, and 9. About .09 differ two-tenths, or equal 2, 3, 7, and 8, each. These proportions, for Professor Rogers, become .16, .07, and .10. My early estimates were mainly made in half magnitudes; and in line 5 of Table I. the proportions are, accordingly, .22, .04, and .10. Later, my scale became the same as Mr. Wendell's, and gave the proportions, .14, .08, and .10.

This source of error will be eliminated if the scale, either of the catalogue or of the observer, is rendered uniform, however great

the irregularity is in the other. Accordingly, a re-count of the residuals was made, selecting the first twenty-five in each series for which the Durchmusterung magnitude was 8.3; and an equal number for each of the magnitudes, 8.4, 8.5, to 9.2. This count was made for each of the series given in lines 1, 2, 3, 4, 13, and 14. Lines 11 and 12 were also included with 13. It did not seem necessary to re-count my own estimates, since the evidence of thought-transference is here very slight. The results of this count are given in Table IV., which has a form similar to Table III. The four series of Professor Rogers are combined, as in line 15 of Table I. Occasionally there were not a sufficient number of estimates of a given magnitude, and in these cases the proportion of each was assumed from what observations were actually made.

TABLE IV.

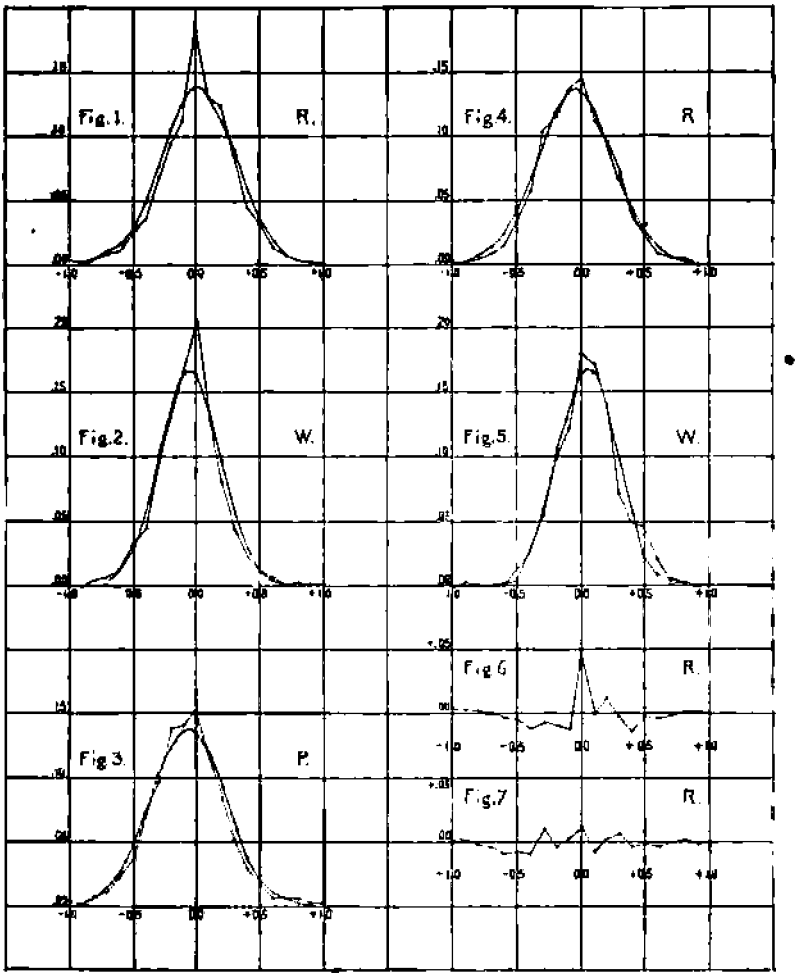
Residual.	13.	14.	15.	13.	14.	15.
+1.0	0.000	0.000	0.015	0.000	0.000	+0.015
+1.0	0.000	0.000	0.000	0.000	0.000	0.000
+0.9	0.000	0.000	0.000	0.000	0.000	−0.001
+0.8	0.004	0.000	0.004	+0.002	−0.002	+0.001
+0.7	0.004	0.000	0.005	0.000	−0.004	0.000
+0.6	0.004	0.034	0.009	−0.007	+0.023	−0.003
+0.5	0.002	0.032	0.022	+0.037	+0.005	−0.002
+0.4	0.087	0.012	0.039	+0.030	−0.045	−0.004
+0.3	0.081	0.064	0.072	−0.015	−0.032	+0.009
+0.2	0.133	0.143	0.095	−0.005	+0.005	+0.003
+0.1	0.130	0.212	0.110	−0.035	+0.047	−0.008
0.0	0.176	0.183	0.145	+0.011	+0.018	+0.012
−0.1	0.104	0.140	0.137	−0.034	+0.002	+0.003
−0.2	0.092	0.113	0.115	−0.001	+0.015	−0.003
−0.3	0.081	0.027	0.105	+0.023	−0.031	+0.010
−0.4	0.028	0.032	0.058	0.000	+0.004	−0.001
−0.5	0.000	0.004	0.038	−0.011	−0.007	−0.007
−0.6	0.000	0.004	0.015	−0.003	+0.001	−0.009
−0.7	0.000	0.000	0.000	−0.001	−0.001	−0.004
−0.8	0.000	0.000	0.005	0.000	0.000	−0.002
−0.9	0.004	0.000	0.002	+0.004	0.000	+0.001
−1.0	0.000	0.000	0.001	0.000	0.000	+0.001
−1.1	0.000	0.000	0.001	0.000	0.000	+0.001

In each of the three last columns of Table IV. the differences corresponding to the zero-residuals are greatly diminished. They are

still positive; but this may be due to the fact that the reduction is only approximate, and the number of observations insufficient to render the accidental errors very small. At least, the differences, which in Table III. were so large that it was impossible to assign them to chance, are now not much greater than the other quantities in the same column, and do not require any special cause to account for them. The reality of this small positive excess is, however, confirmed by some other facts. It is perceptible in line 7 of Table I., although in the Uranometria Argentina there is no perceptible excess of the magnitudes 0 and 5 tenths. If due to the irregularity of the scale, it should be more marked in line 5 than in the following line. Finally, it is difficult to understand why the effect appears so much more marked in Mr. Wendell's observations than in mine, when we were both employing the same scale. All these deviations are, however, so small that much weight should not be assigned to them.

The results of Tables III. and IV. are represented on the opposite page. Horizontal distances indicate the magnitude of the residuals, and vertical distances the corresponding number of residuals expressed as a fraction of the whole number of residuals. The smooth curves indicate theoretical values, the broken lines the results of observation. Figs. 1, 2, and 3 show the proportion of residuals of various magnitudes corresponding to the observations of Professor Rogers, Mr. Wendell, and myself. They, therefore, show the results of the second, fourth, and third columns of Table III. The preponderance of zero-residuals is well shown, in Figs. 1 and 2, by the projection of the broken lines above the curves. Fig. 4 represents the corresponding values from Professor Rogers's observations, after correction for the inequality in the scale of the Durchmusterung. These quantities are also given in the fourth column of Table IV. The mean of the second and third columns of Table IV. are shown in Fig. 5. It gives the result of Mr. Wendell's observations after correction for inequality of scale. Figs. 4 and 5 show how greatly the excess of zero-residuals is reduced by the application of these corrections. Figs. 6 and 7 show the differences between the observed and computed proportion of residuals in Professor Rogers's observations before and after the correction for inequality of scale. They represent the fifth column of Table III., and the last column of Table IV.

It is extremely desirable that a discussion similar to this may be made at the other observatories taking part in the revision of the Durchmusterung. The apparent absence of thought-transference in the observations at Cambridge by no means proves that it may not



GRAPHICAL REPRESENTATION OF THE RESULTS OF TABLES III. AND IV.

exist elsewhere. The time required to apply this test is so small that it is to be hoped that the opportunity will not be neglected, to search for a phenomenon, which, if real, would exert so wide an influence on human affairs.

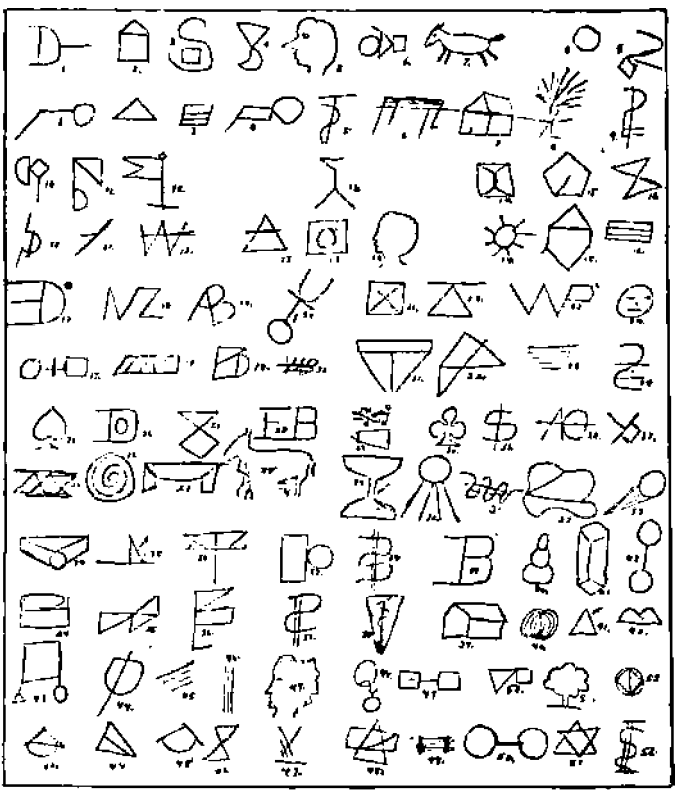
E. C. PICKERING.

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APPENDIX D.

Thought-Transference by Means of Pictures.

Besides the experiments called for by Circular No. 4, Mr. W. H. Pickering of Boston met with some success in the experiments which have attracted so much attention from the English society, — experiments in which a drawing thought of by one person is reproduced by another, who has no visible means of obtaining information as to what the drawing may be. In the accompanying illustration we have reproduced all the figures as they were drawn, numbering them from 1 to 52. The upper line in each case contains the originals, and the lower the reproductions. The originals were made either by Mr. Pickering or by one of his friends; and the reproductions were most of them made by a young lady, who, on one or two evenings when



the experiments were tried, met with some success. It may be well to state, that, with Figs. 6, 7, 8, and 20, certain extraneous causes acted which interfered with the results. The first forty figures were all made in one day; Figs. 41 to 47, inclusive, were made by another person; the remaining figures were made by the sensitive, so called, on a day when she showed no powers of mind-reading.

CIRCULAR No. 5.

ISSUED BY THE THOUGHT-TRANSFERENCE COMMITTEE.

EARLY in the year, the Committee on Thought-Transference issued a circular (No. 4) with a view to obtaining the co-operation of all persons interested in their investigation. In that circular it was stated that the committee desired to make experiments upon persons supposed to have the faculty of mind-reading, and requested that any persons conscious of the power, and willing to aid the committee, should send their names and addresses to the secretary of the society. The main object of the circular was to describe experiments in the guessing of digits, the colors of cards, and the number upon a die, which should show whether the power of mind-reading existed to any extent in ordinary persons, — experiments similar to those which have been carried out by Professor Charles Richet of Paris. In answer to this circular, a large number of returns have been received, which have been carefully discussed by members of the committee; and a report has been prepared, which will appear in the first number of the Proceedings of the Society. It is thought that these returns are ample to cover the form of investigation proposed.

It is now the wish of the committee to carry the investigation one step farther. The most promising results obtained by the English society were when the conceptions were those of simple geometrical forms. It will be understood, that, in the former circular (No. 4) of our committee, the conceptions were those of number and color. In the series of experiments which follows, it is sought to give directions by which experiments may be tried in transferring from one mind to another the conceptions of geometrical forms in such a way that the result may be readily tabulated, and subjected to mathematical discussion. The percipient should be told after each guess if he is right, that he may endeavor to put himself in the same frame of mind for the next following trial. This can do no harm in the experiments described below, as the chance of his guessing correctly remains the same whether he knows or not as to the correctness of any previous guess.

It is desirable that records of experiments should be forwarded to the secretary as fast as they are made; and all returns should be in his hands by Sept. 15, 1885.

All inquiries and communications should be addressed to the secretary, Mr. N. D. C. Hodges, 19 Brattle Street, Cambridge, Mass.

(Signed)

H. P. BOWDITCH, *Chairman.*
C. C. JACKSON.
C. S. MINOT.
J. M. PEIRCE.
E. C. PICKERING.
WILLIAM WATSON.
N. D. C. HODGES, *Secretary.*

DIRECTIONS FOR MAKING EXPERIMENTS.

In these directions, the person whose thought is to be transferred is called the agent; the person to whom the agent's thought is to be transferred is called the percipient. We number our tests continuously from Circular No. 4.

FOURTH, *Card-Face Test.* — The kings, queens, and knaves are removed from a pack of playing-cards; so that just forty cards remain, running from the ace to the ten, inclusive, in the four suits. The agent holds the pack of forty cards, shuffles it, cuts or opens it at random, and observes the card thus disclosed. He notes only its *denomination*, as an ace, two, or card of other number; paying no attention to its suit or color; not thinking of its value, either as an abstract number, or as a trick-taking card; but fixing his mind on *the arrangement of pips* on its face, by which the value of the card is ordinarily recognized by a player. The percipient, having his thoughts also occupied with the different arrangements which appear on the faces of cards, tries to name the denomination (not the color or suit) of the card seen and thought of by the agent. He immediately enters his judgment in blank D, under the heading "Percipient." The agent then names the true card, which the percipient repeats aloud, and then enters in blank D, against his own judgment of the same, under the heading "Agent." The agent re-shuffles the pack, and the trial is repeated.

The cards should be held out of the sight of the percipient; and both experimenters should use every precaution to avoid the passage of any intimation, either consciously or unconsciously, from the agent to the percipient. They should speak no more than is necessary. Thus the conversation should be only as follows; where, for the sake of illustration, we suppose that the percipient guesses "nine," and that the true card is a "four:"—

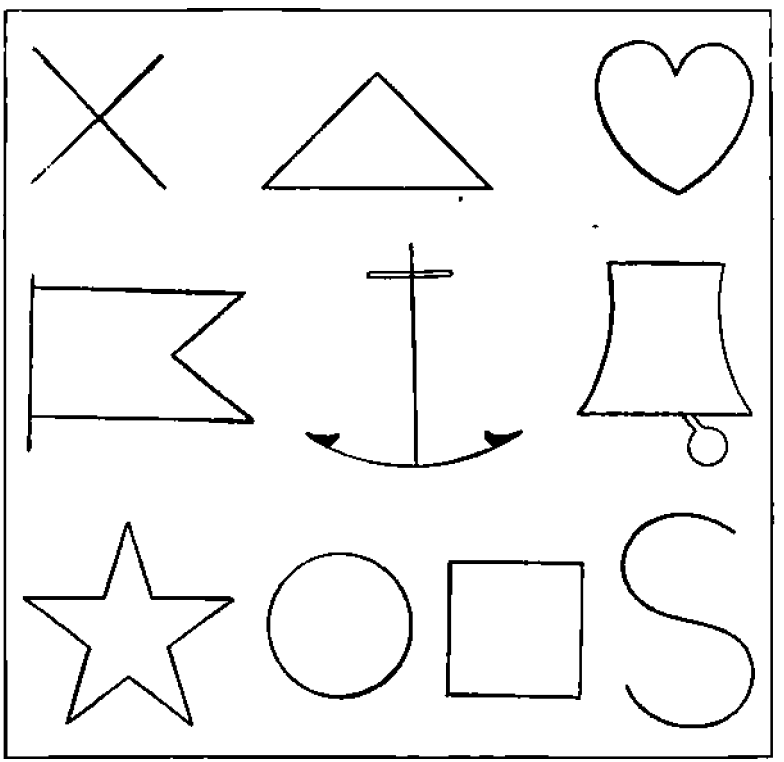
Agent (as soon as he has noted the card). — Yes (or, Ready).

Percipient. — Nine (enters 9 in blank D).

Agent. — Four.

Percipient (repeating after the agent). — Four (enters 4 in blank D).

The agent should thoroughly shuffle the pack before each trial, so as to make each cutting a pure matter of chance. The percipient should cover the record while guessing, and should avoid thinking of the cards already cut, and of his own previous judgments, so as to receive freely every influence of thought-transference, if such an influence exists. The percipient should not unduly hurry his guess.



Figures for Use in the "Diagram-Test" of Thought-Transference.

The experiment should not be continued at any sitting after either experimenter is tired, or otherwise unable to fix his mind on the work.

It is desired that each pair of experimenters (the same person acting as agent, and the same person as percipient) should hand in their results in sets of a hundred judgments; and it is hoped that some pairs of experimenters will send in several (say ten) such sets. Less than a hundred judgments from one pair of experimenters will be hardly of value to the committee.

It will be interesting for every pair of experimenters to try different sets of experiments, reversing the parts of percipient and agent. But these parts should be unchanged throughout each set of a hundred judgments.

The agent should take pains to have the exact pack of forty cards in his hands at each trial.

The ten cards prepared for the diagram-test may, however, also be used in this experiment; and trials with those cards will also be acceptable to the committee.

Fifth, *Diagram-Test.* — On the preceding page are given ten simple figures; and accompanying this circular is sent a set of ten cards, on each of which is printed one of the figures. The agent is to take the pack of cards, and shuffle them, and then is to place before him, out of sight of the percipient, the card at which the pack may be cut. He should then look as steadily as possible, or at least keep his mind fixed upon, the figure upon the card; and the percipient, with pencil and paper before him, should endeavor to reproduce that one of the ten diagrams which he thinks the agent may have in sight. The resulting drawings should all be entered according to Blank E, and forwarded to the secretary. To render the discussion more easy, it is important that the drawings should be made in sets of ten; that is, each percipient should make at least ten trials.

That the percipient may not be too hasty in deciding upon the diagram which he thinks the agent may have in mind, it is directed that the percipient shall actually draw the figures. Those who prefer may simply name the figure, without drawing it; but it should be stated, on the returns made to the secretary, which method was pursued.

Sixth, *Free Drawing Test.* — Many must have heard of the striking results obtained by the English society, where the percipient was able to reproduce a drawing which he had not seen, but was only thought of in the agent's mind. We have already given specific directions for the carrying-out of this experiment with a set of ten fixed diagrams; but as the experiment of free drawing may prove more interesting to some persons, it is hoped that more elaborate figures may be tried, and the results forwarded. In this experiment, the agent makes any drawing he chooses, and the percipient, without knowing the drawing made by the agent, tries to make a reproduction of it on another sheet.

The percipient should not be allowed, during the drawing, to see the motion of any part of the pencil, or to hear any sound from it. The agent should avoid taking suggestions for his drawings from surrounding objects, or from objects which are specially likely to be present to the mind of the percipient.

SEVENTH, *Game.* — It is not expected that the game with cards described below will give results which will be in themselves of importance, but it is possible that through it some persons may be found who possess the power of thought-transference without knowing it. If such persons are willing to submit themselves to proper tests, they will very materially aid the committee in its work. Four persons are seated, as in whist. A pack of cards is divided between them, so that each player holds all of one suit. Each player in turn then selects a card from his hand, places it face downward on the table, and tries to communicate to his partner, by thought-transference, the number of the card. If the partner names the card correctly, it is turned up, and placed on the table in front of him. If the power of thought-transference exists in perfection between all the players, it is evident, that, after each has played thirteen times, the suits will have all changed hands; i.e., the player who began by holding spades will end by holding clubs, etc. If, on the other hand, there is no thought-transference, the successful guesses are only such as are due to chance. It is also evident that each successful guess increases the probability of further success, until finally, when twelve cards have been named correctly, the thirteenth is known with certainty.

EXTRACTS FROM THE SECRETARIES' RECORDS.

Boston, Dec. 18. — First meeting of the society. The meeting was called to order by Prof. E. C. Pickering. Mr. S. H. Scudder was chosen chairman *pro tem.*, and Mr. N. D. C. Hodges secretary *pro tem.* Mr. Scudder stated the origin of the society, and what had been done by the committee on organization, and called on the secretary to read the list of the names of those who had accepted the invitation to join, issued by the committee on organization. The first business in order was the election of a council, and the following were elected: G. Stanley Hall, George S. Fullerton, William James, E. C. Pickering, three years; Simon Newcomb, C. S. Minot, H. P. Bowditch, N. D. C. Hodges, two years; George F. Barker, S. H. Scudder, C. C. Everett, Morefield Storey, John Trowbridge, William Watson, Alpheus Hyatt, one year. It was *Voted*, That the American Society for the Promotion of Psychical Research accepts with thanks the offer of the English society to furnish its members with the proceedings of the English society at reduced rates. The sub-committee on work, of the committee on organization, made an informal report, in which they suggested that the society should consider the three main questions: (1) Thought-transference; (2) Hypnotism; (3) Spiritualism, physical manifestation. Adjourned.

Boston, Jan. 8. — Second meeting of the society. Prof. E. C. Pickering in the chair. After the routine business, the society proceeded to the election of six members of the council, three to hold office for three years, and three for two, and chose Prof. J. M. Peirce, Coleman Sellars, Major A. A. Woodhull, three years; Col. T. W. Higginson, C. C. Jackson, W. H. Pickering, two years. Professor Pickering then declared the organization of the society complete, and spoke of the need of some investigations. Dr. Bowditch spoke of the intention of the council to appoint a committee on thought-transference. A lengthy discussion followed. Adjourned.

Boston, June 4. — Third meeting of the society. Prof. E. C. Pickering in the chair. The first report of the committee on thought-transference was presented. Prof. J. M. Peirce gave an abstract of the discussion by Prof. E. C. Pickering and himself of the discussion of the returns in answer to Circular No. 4. Dr. Minot was called to the chair, and Professor Pickering presented a paper on the possibility of errors in scientific research due to thought-transference. Dr. James reported that the committee on mediumistic phenomena had made a number of visits to mediums, but had nothing of importance to report. Adjourned.

CONSTITUTION.

Article I. — Name and Objects.

Section 1. This association shall be called the American Society for Psychical Research.

Sect. 2. The object of the Society shall be the systematic study of the laws of mental action.

Article II. — Government.

Section 1. At the first meeting of the Society, a Council shall be chosen consisting of twenty-one members, — seven to hold office for one year, seven for two years, and seven for three years; and thereafter seven shall be chosen by the members at each annual meeting, to serve for three years.

Sect. 2. The Council shall elect from its number each year, at its first meeting after the annual meeting of the Society, the following officers of the Society: a President, a Secretary, and a Treasurer, who shall discharge the duties usually assigned to these respective officers. The Council shall elect as many Vice-Presidents as shall be deemed advisable.

Sect. 3. The Council shall exercise general supervision of the investigations of the Society, and shall appoint the investigating committees.

Sect. 4. Vacancies in the Council, caused by death or resignation, shall be filled by the Council.

Article III. — Members and Associates.

Section 1. Any person of respectable character and attainments is eligible to the Society as an associate. Associates shall receive all the publications of the Society, may participate in all the meetings, present communications, and join in the debates.

Sect. 2. Members, not exceeding one hundred in number, may be elected by the Council from the body of associates. Members have all the privileges of associates, are entitled to vote, and are eligible to the Council.

Sect. 3. Associates may be elected by ballot at any meeting of the Society, after nomination in writing by two members or associates, and approval by the Council.

Sect. 4. Each member and associate shall pay to the treasurer an annual assessment of three dollars. The name of any member or associate two years in arrears for annual assessments shall be erased from the list of the Society; and no such person shall be restored until he has paid his arrearages, or has been re-elected.

Sect. 5. Any member or associate may be dropped from the rolls of the Society on recommendation of the Council and a two-thirds vote at any meeting of the Society, notice of such recommendation having been given at least two weeks previously.

Article IV. — Meetings.

Section 1. The annual meeting shall be held the first Tuesday in October.

Sect. 2. Other meetings may be held at the call of the Council.

Article V. — Quorum.

Ten members shall constitute a quorum of the Society, and five a quorum of the Council.

Article VI. — Accounts.

A committee of two shall be appointed at each annual meeting to audit the accounts of the treasurer for the year closing with that meeting.

Article VII. — Similar Societies.

It shall be the policy of this Society, by correspondence and otherwise, to co-operate with societies of similar object elsewhere.

Article VIII. — By-Laws.

Section 1. By-laws recommended by the Council may be adopted at any meeting by a majority vote.

Sect. 2. By-laws may be rescinded or changed upon recommendation of the Council, at any meeting, by a majority vote.

Article IX. — Amendments.

Amendments to the Constitution, recommended by the Council, may be adopted at any annual meeting by a vote of two-thirds of the members present.

LIST OF MEMBERS.

Dr. CHARLES C. ABBOTT, Trenton, N.J.
Prof. G. F. BARKER, 3909 Locust St., Phila.
Dr. H. P. BOWDITCH, Harv. Med. School, Boston.
Rev. PHILLIPS BROOKS, 233 Clarendon St., Boston.
EDWARD BURGESS, Soc. of Nat. Hist., Boston.
LUCIEN CARR, Cambridge.
Dr. J. R. CHADWICK, 270 Clarendon St., Boston.
Prof. EDWARD D. COPE, 2100 Pine St., Phila.
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PROCEEDINGS

OF THE

American Society for Psychical Research.

VOL. I. *JULY, 1886.* No. 2.

CONSTITUTION.

ARTICLE I. — NAME AND OBJECTS.

SECTION 1. This Association shall be called the AMERICAN SOCIETY FOR PSYCHICAL RESEARCH.

SECT. 2. The object of the Society shall be the systematic study of the laws of mental action.

ARTICLE II. — GOVERNMENT.

SECTION 1. At the first meeting of the Society a Council shall be chosen consisting of twenty-one members,— seven to hold office for one year, seven for two years, and seven for three years; and thereafter seven shall be chosen by the members at each annual meeting, to serve for three years.

SECT. 2. The Council shall elect from its number each year, at its first meeting after the annual meeting of the Society, the following officers of the Society: a President, a Secretary, and a Treasurer, who shall discharge the duties usually assigned to these respective officers. The Council shall elect as many Vice-Presidents as shall be deemed advisable.

SECT. 3. The Council shall exercise general supervision of the investigations of the Society, and shall appoint the investigating committees.

SECT. 4. Vacancies in the Council, caused by death or resignation, shall be filled by the Council.

ARTICLE III. — MEMBERS AND ASSOCIATES.

SECTION 1. Any person of respectable character and attainments is eligible to the Society as an associate. Associates shall receive all the publications of the Society, may participate in all the meetings, present communications, and join in the debates.

Sect. 2. Members, not exceeding one hundred and fifty in number, may be elected by the Council from the body of associates. Members have all the privileges of associates, are entitled to vote, and are eligible to the Council.

Sect. 3. Associates may be elected either by the Council or by the executive committee of any branch, after nomination in writing by two members or associates.

Sect. 4. Each member and associate shall pay to the treasurer an annual assessment of three dollars. The name of any member or associate two years in arrears for annual assessments shall be erased from the list of the Society; and no such person shall be restored until he has paid his arrearages or has been re-elected.

Sect. 5. Any member or associate may be dropped from the rolls of the Society on recommendation of the Council and a two-thirds vote at any meeting of the Society, notice of such recommendation having been given at least two weeks previously.

Article IV. — Meetings.

Section 1. The annual meeting shall be held the second Tuesday in January.

Sect. 2. Other meetings may be held at the call of the Council.

Article V. — Quorum.

Ten members shall constitute a quorum of the Society, and five a quorum of the Council.

Article VI. — Accounts.

A committee of two shall be appointed at each annual meeting to audit the accounts of the treasurer for the year closing with that meeting.

Article VII. — Similar Societies.

It shall be the policy of this Society, by correspondence and otherwise, to co-operate with societies of similar object elsewhere.

Article VIII. — Branch Societies.

Section 1. A branch of the Society may be established in any place by the Council, on written application from not less than five members resident in that place.

Sect. 2. The members of the Society on whose application a branch is established shall constitute an executive committee to arrange the affairs of that branch. The executive committee shall

have power to add to their numbers by the election of other members of the Society belonging to that branch. They shall also have power to choose from their own members officers of the branch, to frame by-laws for its government, and to elect persons resident in their immediate vicinity as associates of the Society and members of the branch.

ARTICLE IX. — BY-LAWS.

SECTION 1. By-laws recommended by the Council may be adopted at any meeting by a majority vote.

SECT. 2. By-laws may be rescinded or changed upon recommendation of the Council at any meeting by a majority vote.

ARTICLE X. — AMENDMENTS.

Amendments to the Constitution, recommended by the Council, may be adopted at any annual meeting by a vote of two-thirds of the members present.

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T. K. WORTHINGTON, Johns Hopkins Univ., Baltimore.
MORRILL WYMAN, Jun., Cambridge, Mass.

MEETINGS OF SOCIETY.

BOSTON, Oct. 6, 1885.

Fourth meeting (annual) of society.

Fourteen present. Professor E. C. Pickering in the chair.

The Treasurer's report was read.

The proposed [1] changes in the constitution of the society were adopted, the new article to be called Article VIII.

The members named in the following list were elected to the Council for three years.

JOSIAH ROYCE.	J. C. ROPES.
WILLIAM WATSON.	S. H. SCUDDER.
E. H. HALL.	M. J. SAVAGE.

COLEMAN SELLERS.

The committee appointed to consider the advisability of form-

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[1] ARTICLE VIII.

SECTION 1. A branch of the Society may be established in any place by the Council on written application from not less than five members resident in that place.

SECT. 2. The members of the Society on whose application a branch is established shall constitute an executive committee to arrange the affairs of the branch.

The executive committee shall have power to add to their numbers by the election of other members of the Society belonging to that branch. They shall also have power to choose from their own members officers of the branch, to frame by-laws for its government, and to elect persons resident in their immediate vicinity as associates of the Society and members of the branch.

To amend Art. VIII., Sect. 3, so as to read: Associates may be elected either by the Council, or by the Executive Committee of any branch, after nomination in writing by two members or associates.

ing a permanent Committee on Apparitions and Haunted Houses (see Council meeting, Sept. 29, 1885) reported in favor of such a committee. Report accepted, and referred to Council.

Dr. Bowditch made an informal report for the Committee on Thought-Transference, which was commented upon by various members, — Prince, Pickering, Palmer, James, Higginson, Cory, and Minot.

Phantasms of the dead discussed by James and Higginson.

The annual meeting adjourned, to meet on the second Tuesday in January, 1886.

JAN. 12, 1886.

Fourth (adjourned) meeting of the society.

Forty-one persons present. Professor Bowditch in the chair.

Report of the previous meeting (Oct. 6, 1885) read and approved.

List of candidates for associate membership, as approved by the Council at various times since Oct. 6, 1885, was read, and all present named in the list were elected Associates.

List of new members elected by Council at meeting of Jan. 12, 1886, was read.

Sect. 2, Art. III., of the Constitution was amended by inserting the words "and fifty" after the word "hundred."

Sect. 1, Art. IV., of the Constitution was amended so as to read, "The annual meeting shall be held the second Tuesday in January."

President Newcomb's address was read.

Dr. Minot was called to the chair, and Professor Bowditch reported for the Thought-Transference Committee.

Dr. Minot spoke on guessing at digits, and the preference and aversion shown toward particular numericals.

Dr. Royce reported for the Committee on Apparitions, outlining the plan of work adopted.

Dr. James reported for the Committee on Hypnotism; putting Mr. Carnochan into the hypnotic state in the presence of the audience, and causing him to exhibit various phenomena characteristic of this condition.

The meeting then adjourned.

E. H. HALL, *Secretary.*

ADDRESS OF THE PRESIDENT.

It might naturally be expected that in addressing you on the present occasion your president should enter into an account of work done and results gained. There are, however, difficulties in the way of doing this in a satisfactory way. It has been my misfortune to reside so far from the seat of the society, that I have not been able to take that active part in your work which would have been appropriate to my office. Moreover, so far as I have followed this work, it would seem that up to the present time it consists more in preliminary efforts, and preparations for further research, than in finished experiments leading to establish conclusions. Under such circumstances, the question in what direction our efforts should tend is a most important one; and I shall, therefore, ask your permission to enter into a discussion of the general aspect and relations of the subject.

Looking at the situation from the most general point of view, the first question to present itself would be: Why are we here? what is our field of work? We might reply in a way equally general, that we are investigating those obscure mental phenomena which do not seem to accord with the laws of mental action as ordinarily apprehended through the experience of the race. We are more particularly concerned with a large class of sporadic, but well-known phenomena, which seem to indicate that the mind may possess certain susceptibilities outside the limits which experience teaches us is commonly imposed upon its powers.

We are perfectly familiar with a certain system of inter-action between mind and matter. Every instance of voluntary motion, and every instance of a mental effect produced by an external cause, is a case of such inter-action. Taking any one mind, we may consider it either as an agent producing effects external to itself by the action of the will, or as an object acted upon by external causes. Now, a very wide induction from general experience shows us that this inter-action is, in our ordinary experience, subject to the following restrictions: —

Firstly, no individual mind can be acted upon except through

the medium of a material organism with which it is associated. The external cause, whatever it may be, must act on the organization itself in order that the mind may either be excited to consciousness, or affected in any other way. Moreover, the action of such external causes is a physical process, subject to purely physical laws.

Secondly, the mind cannot act upon any thing external to itself, except through the agency of its material organism; and, this organism being set in action, the effect is subject to purely physical laws.

Both of these laws are strikingly illustrated in our every-day experience. For example, if a living organism is left unsupported, it will fall exactly like dead matter, in spite of any thing the mind can do to stop it. When supported, it presses upon the support with a force equal to the weight of the matter composing it; and no effort of the will can increase or diminish this pressure. Two persons in each other's neighborhood cannot be conscious of each other's existence except through the physical medium of light, sound, or material motion, produced by one and acting upon the organism of the other. By no act of the will can we produce motion or any other change in an external object unless we set in operation a sufficient physical force through the medium of our organism. These, I say, are hypothetical laws, and may be regarded as conclusions from general experience. They are, however, like all other general laws, in seeming disaccord with occasional phenomena. It is these sporadic phenomena with which we are mainly concerned, and which we desire to subject to some form of law. If mind is not subject to the restrictions which have been just defined, we have a mental *actio in distans* which is variously known as "thought-transference," "telepathy," and "mind-reading." Granting this apparent *actio in distans*, we may either suppose it real, or attribute it to some unrecognized physical agency. This question will, however, arise at a later period in our researches. The main question with which we are now concerned is, Can one mind influence another in any other way than through the action of known physical causes acting between and through their respective organisms? If this question is answered in the affirmative, then a great dis-

covery is made, opening up a new field, not only of research, but of philosophical speculation and of practical application. If answered in the negative, our work is not done, because we then have to explain the sporadic phenomena which seem to indicate thought-transference.

Let us begin by looking at the question from its two sides, beginning with the affirmative one. If we consider the current of our mental processes while sitting listlessly at our desks, we may find our minds to wander in a half-unconscious way from one subject to another. Vague emotions of various kinds may arise without our being able to assign any reason for them. We may feel elated without being conscious of any agreeable event to cause elation, and depressed without having heard any evil tidings. The visual image of absent friends, or the thought of an exciting scene which has been before us, may arise unbidden. Memories follow each other without any apparent logical order. Ideas come and go as if of their own accord.

That these mental impressions are all results of sufficient causes, is a conclusion so instinctive that we can feel no doubt of its truth, and therefore shall take it for granted. The first question which arises is whether the causes are all contained, consciously or unconsciously, within the organism; or whether they may operate and produce their effect through it from outside, without the mediation of the organism. Considering the subject apart from our general experience of the world, there does not seem to be any reason, *a priori*, why we should admit one of these hypotheses rather than the other. The belief that the impressions of distant friends or relatives are in some way reproduced in our minds, is one generally entertained in infancy. Neither to the infant nor to the adult mind need the question, how can such impressions be conveyed from mind to mind, cause any more difficulty than the question how a body millions of miles away can exert force upon a ball in my hand. If we know by experience that the force is exerted, that must satisfy us. The discovery of the medium, if any, by which the effect is produced, is a different and independent problem.

The mental operations alluded to may be rationally attributed, not only to the action of distant minds known to us, but

to that of minds otherwise totally unknown. It is not uncommon among some classes to attribute those varying mental states which they cannot otherwise account for to the action of intelligences in another and invisible sphere. From a scientific point of view, the whole question is an open one, except so far as it may have been settled by observation and experiment.

The opinion that a mind can act where the organism is not is one which we know to have been held in one form or another by men in all ages. In it originates the belief in the possession of miraculous powers by gifted beings. Indeed, were we asked what is the distinguishing mark of the conception of a miracle, as it exists in the mind of a believer, we might reply by saying that it is the belief that certain gifted persons possess the power of producing effects through the immediate agency of their minds, without bringing into action any sufficient physical cause. Although the belief in the possibility of such a power is stronger and more general among the lower races, we cannot say that men of any race or degree of intelligence are wholly free from it. From his own observations the writer believes that one-third of the intelligent people of his acquaintance in England and America are more or less under its influence. The fact that the majority of the soundest thinkers not only do not accept the opinion, but look upon it with a greater or less degree of contempt, as an evidence of mental weakness, exerts a repressive effect upon its free expression, and thus diminishes its apparent prevalence.

The speaker distinctly remembers the development of his own ideas on the subject in childhood. Remarks dropped in the conversation of others, coupled with a deep feeling of the wide range of possibilities involved in the universe so newly opened to his mind, led him to grasp with some eagerness at the idea that impressions might be conveyed from one sympathetic mind to another at great distances. But continued observation never showed the slightest connection between his own mental states and those of his friends or relatives. One attempt to put the supposed law to a practical use is still distinctly remembered. He set out for a schoolhouse where his father (the teacher) usually remained a short time after school to read. He was extremely desirous of reaching his father be-

fore the latter should leave, and therefore exerted himself to the utmost to concentrate his desires on the father in such manner as to induce him to remain. Arrived at the schoolhouse, he found him still there, but just about to leave. The boy inquired diligently of the father whether he had felt any unusual disposition to remain. The reply was, that he had remained only to finish what he had just been reading, and that he had felt no impression whatever tending to make him stay. The natural conclusion was adverse to what is now called telepathy, and it may be supposed that the majority of thinking men reach the same conclusion in much the same way.

When we look carefully into the subject, we find that the general course of experience tends in this direction. The fact that many drugs stimulate in the highest degree the mental processes which I have sought to describe, gives color to the view that their origin is not without the organism. In our common life-experience we find that one mind acts on another only through the medium of physical causes emanating from one organism and reaching the other. It is quite true that the connecting link may be so delicate as almost to evade recognition. Shades of feeling in one mind are made known to another by changes in the countenance so slight and delicate as to entirely evade description. But the medium of communication is always present in the light, which, reflected from one face, paints its image on the retina of the eye. This is shown very conclusively by the fact, that, if the room is darkened, the one will cease to be conscious of the feelings of the other. We also find that it is not at all necessary to the conveyance of intelligence by such connecting physical causes that the person receiving the intelligence, or otherwise acted upon, should be conscious of it. He may have no more conception of the mode of action than the opium-eater has of the causes of his visions.

If thought-transference really exists, it has hitherto failed in the case where its agency has been most urgently required by society. A man on trial for murder knows well whether he has or has not done the deed; and his mind is agitated by impressions, which, could they be conveyed to those who surround him, would settle the question of his guilt or innocence. Yet no case has yet arisen where judge or jury have been con-

scious of any mental effect caused by the transfer of impressions from the mind of the prisoner which could help them to decide this question. In great cities we are surrounded by many thousands of our fellow-men in every stage of mental excitement. Yet, if we close our eyes and ears, we are wholly unconscious of any impression which we can trace to emanations proceeding from their minds.

But a conclusion thus reached is not necessarily beyond further investigation. We must admit, that, until the formation of our parent society in England, no one ever undertook exhaustive experiments to determine whether there is or is not any such action. If the action in question is weak, obscure, or rare, it might well elude the rough tests which have hitherto been applied. The undoubted fact that the belief is generally found in very bad company, though suspicious, is not conclusive. The phenomena of hypnotism afford an excellent illustration of an analagous case. It must be admitted that these phenomena have always been found in very bad company. From this fact alone they scarcely received any attention from investigators for nearly a century; and many rejected them as spurious, or as the result of collusion between the operator and his subject. But, when once taken up in a scientific spirit, a new condition of the nervous system was discovered, the results of which upon our knowledge we cannot yet foresee.

We must not overlook another side of the case. The theories which the performers presented to the public, and by which they professed to explain the phenomena, were as false and as spurious as any one had ever supposed them. There was only a residuum of truth at the bottom of a great mass of fraudulent pretension. Yet that residuum was well worth collecting.

The conclusion which an unbiassed mind should take of the subject, in advance of any investigation or evidence, seems to be this: Leaving out all theories founded on any supposed relation of the mind to the nervous system, there can be no sound reason for denying the possibility of mental action at a distance. At the same time, the probabilities of the case are against it. As it is always best to bet against any individual horse winning a race, or any single number occurring at a turn of the roulette table, so it is sound to consider the probabilities

of the case to be against any scientific theory of the class referred to. In other words, the burden of proof is on the side of the affirmative.

On this side we have a mass of evidence so great that we cannot deal with it in detail, unless our task is facilitated by reference to those logical principles which should direct our thoughts. In order to avoid employing these principles in too abstract a form, I shall borrow them directly from our common-sense methods of drawing conclusions in every-day life. It is, however, necessary to lay bare the frame-work which underlies these methods, and in doing this I must ask your close attention for a few moments.

Every explanation of natural phonomena, when complete, involves two elements, — a general law and a particular fact. The former may, and nearly always is, taken for granted as too well known to need statement. And, in fact, the ordinary mind, how much soever influenced by it, seldom comprehends it with entire clearness. Yet it must exist in the intellect, consciously or unconsciously.

Walking in the fields, I hear a sharp explosion. I explain it by the fact that some one has fired a gun. In doing this, I assume the general law that the firing of a gun causes an explosive sound. To one unacquainted with this general fact, the statement that a gun had been fired would afford no adequate explanation. He would see no connection between the sound he had heard, and my statement that it was caused by firing a gun, until he apprehended the general law.

Sitting at your desk on a sultry afternoon, you find the air gradually growing dark. A flash of light suddenly illuminates the room. The explanation which at once presents itself is that the darkness is caused by a thunder-cloud, and that the flash is the result of an electric discharge in the cloud. Here you have in mind the general laws, that a thunder-cloud cuts off a large part of the solar light, and that an electric discharge produces a brilliant flash. If you never knew that an electric discharge produced a flash, the explanation would fail. But the supposition of the particular fact that a cloud is passing at the moment is equally necessary to the explanation.

I need not stop to point out how the general laws necessary

to the explanation of natural phenomena are inferred by induction. Every rational mind, in the course of its development, may be said to apprehend, consciously or unconsciously, a continual increasing number of laws of nature. Perhaps the qualification "rational" may not here be required. It may be said that all the higher animals reach a conception of such laws, and that the only difference is that the irrational animals entertain this conception unconsciously, while rational minds entertain it consciously, and can separate it from that of the special facts in which it is exhibited.

The main fact which I wish to illustrate by this digression is that every mind, in the course of its development, is modifying or adding to its conceptions of the laws of nature. The higher order of minds continually group the laws apprehended by minds of a lower order, under some more general laws; and it is in this grouping that scientific progress consists. We may say that all the laws apprehended by the common man are grouped by the scientific theorizer under more general laws. In the common mind, there are a great number of laws of nature determining the occurrence of physical pain or pleasure, heat, cold, blows, contact with acids, disease, injuries. In the cultivated mind, this complex system of laws assumes the form of a few more general and simple laws. But how far soever the work of generalizing laws may be carried, they can never be applied to the explanation of phenomena without evoking some special fact, or system of facts, to which they apply.

It follows, that, when a phenomenon is presented to us which we find it difficult or impossible to explain, we must conclude, either that we have some new law of nature to apprehend, or that some particular facts which we do not see are present to modify the action of known laws. Whether our difficulties arise from ignorance of the law or of the fact, is a question which in some cases involves great difficulty, while in others the mind settles it without question. The untutored man, who for the first time sees iron in a state of fusion, learns correctly the (to him) new general law that iron is melted by heat. But he may infer a new law when he really has to deal only with a known law, acting through facts which are concealed from him.

A juggler holds in front of him a dish of water filled with jelly-fish. An assistant having thrown a large handkerchief over the dish, the juggler rolls the handkerchief in a lump; and vessel, water, and fish have all disappeared. A looker-on might see in this the evidence of some new law of nature, in virtue of which a mass of matter could become invisible; but the better informed spectator knows that something has been done under the handkerchief which he did not see, and that no new law of nature comes into play. He might find it impossible to explain, even to his own satisfaction, how the disappearance has come about: but this ignorance does not in any way diminish his confidence that the phenomenon can be fully explained by the presence of some particular circumstances of which he is ignorant.

I hope that the main principle which I wish to enforce will now be clearly apprehended. When a set of phenomena presents themselves to us, apparently defying explanation, we may conclude either that some law of nature of which we have before remained ignorant has come into play, or that the result is due to known laws acting under particular circumstances of which we are ignorant. The whole question of the reality of psychic force is of this kind. We have seen thought transferred from mind to mind. The evidence of the transfer in some cases is beyond doubt. The question is, Did it take place through some physical connection between two organisms which eludes our scrutiny, but which, had we seen it, we should have recognized as involving no new principle, or did some new law of nature come into play? Is there any criterion by which we can decide between these two hypotheses? The history of scientific investigation shows that there is. But, before pointing it out, let us glance at the subject from a slightly different standpoint.

Phenomena which we are unable to explain at the moment are of almost daily occurrence. Every sound which we hear, and of which we cannot state the origin, belongs to this class. The course of our thoughts, and the internal physical pains so familiar to humanity, frequently belong to the same class. Indeed, the number of particular facts which we do not know is so very great, that our natural impulse is always to attribute

any inexplicable phenomenon, not to some new law, but to some unknown combination of circumstances. In many cases we call phenomena thus arising *spurious*, not because they are unreal, but because we may suspect that circumstances which give rise to them have been intentionally produced to deceive us. The word would, however, bear a connotation which we should avoid applying to the present case without explanation.

One very natural way of investigating the question whether inexplicable phenomena belong to the class just mentioned is that followed by our parent society. It consists in carefully investigating all the attendant circumstances with a view of finding whether they afford a sufficient explanation of the phenomenon under known laws. If investigation shows the presence of conditions under which the phenomenon could be produced by such laws of nature, it is then assumed that no new law comes into play; but if the most searching investigation fails to discover any such conditions, then it is to be concluded that a new law of nature is established, with a greater or less degree of probability.

Although this method is in perfect accord with our ordinary modes of investigating phenomena involving no new law, yet I must, with all due respect to those who have applied it, express my dissent from its validity as a method of discovering such laws. In fact, it is not in accordance with our every-day habit of inference to infer a new law by this method. I think the following illustration will make this habit clear.

Let us have presented to us fifty phenomena, all belonging, so far as we can see at the first glance, to one class, and all apparently inexplicable without assuming some new law. We proceed, however, to investigate, with a view of determining whether they are not the product of circumstances not evident at the moment. Suppose, to fix the ideas, that the separate phenomena are fifty in number: it matters not whether fifty repetitions of the same thing, or fifty separate occurrences of the same general character, all differing in their details. What connects them together is some element of similarity. They may be produced by one person, or they may show certain likenesses in virtue of which they supposed them explainable by some one new law.

We now proceed to investigate. A very little examination shows that twenty of them are the product of known causes which we did not at first see. More careful examination, extended through several hours or days, explains twenty more in the same way; leaving only ten from which to infer a new law. Bringing in new means of investigation, and devoting increased industry to the work, we succeed in explaining five more, one by one; leaving yet five which defy our powers. Are we to conclude that these five do not belong to the same class as the others, that there cannot possibly be any circumstances unknown to us which have produced them, and that some new law of nature is therefore established? I think not. I think the man of well-balanced mind in such a case always reasons thus: As first presented to me, these phenomena were all of the same general character. All seemed to point to the existence of a new law of nature. All had the character of individuals claiming that they were not the product of known causes. But, as I went through the investigation, I find that ninety per cent of them had deceived me in various ways by being the product of known causes, concealed from my sight. As some of these hidden causes require little investigation for their discovery, others yet more; and as my powers of investigation are limited, and I can never be sure that no unknown causes are present, — I therefore conclude that the remaining ten per cent are the product of circumstances which have only the common property of eluding my present powers of investigation.

This is, in fact, the method of reasoning which we always adopt in every-day life. We adopt it because we know that circumstances are constantly present, the discovery of which eludes all our powers. No one claims the ability to explain every thing he sees and hears in one day. He knows that unknown causes are continually present, and is satisfied to relegate inexplicable phenomena to their action. Hence, the method of investigation in question can only show satisfactorily our inability to discover the true cause, and can never justify us in concluding that a new law of nature comes into play.

The true method of investigation is exemplified by the whole history of physical science. The general laws of nature are perpermanent: the special circumstances under which they act are

continually varying. We see a law only in a sequence of phenomena permanent in its character. This system is also in perfect accord with our common-sense method of drawing conclusions. When the same phenomenon occurs under the same conditions time after time, we infer a law of nature. When we cannot trace its repetition to any common set of conditions, we conclude that it is due to varying circumstances, perhaps unknown to us.

It is a characteristic of all scientific progress, that, when we ascertain any new law connecting phenomena, we are able to produce them with continually increasing facility. Take the case of electricity, for example. Before regular experiments were made, electrical phenomena were so little known that they might have been deemed entirely spurious. The early experimenters met great difficulty in reproducing them at pleasure. Sometimes they appeared, and sometimes they did not. Sometimes electricity was conducted from one body to another, and sometimes it was not. But, as investigation went on, there was a regular progress, step by step, until a stage was reached at which all the phenomena could be produced at pleasure, and fully explained by known laws and attendant circumstances.

How does psychic research stand this test? I think we must all admit, that, up to the present time, it does not stand it at all. The unwelcome fact seems to be that we have absolutely no general knowledge that we did not have ten years ago. We have seen that there is sometimes an apparent transfer of thought, and that impressions are apparently produced from time to time by unknown causes. We knew this as well before we began our investigation as we do now. If any new law of nature is involved, what is its character? Let us grant that thought is sometimes transferred. What question will then arise? I reply, that the first question to be considered is under what circumstances and conditions, and by what agencies, is it transferred? That these circumstances, conditions, or agencies are exceptional, is perfectly obvious. Were they universal and general, our minds would be affected by those of the thousands who surround us. We know that they are not so affected. The whole question, is, therefore, under what conditions are mental impressions of any kind communicated from mind to mind

without the intervention of known physical causes? I have carefully studied the proceedings of our parent society, as well as articles in magazines describing cases of supposed thought-transference, without being able to find any answer whatever to this question.

Let us now look more closely into the history of the investigation. As our own work is in some sort a continuance of that of the English society, we may begin by recalling certain extremely interesting experiments of the former, which, if properly followed up, might be expected to lead to a definite conclusion.

In the latter part of the year 1882, some members of the society learned through Mr. Douglas Blackburn, an associate, that a mesmerist of Brighton, named Smith, had the power of describing impressions existing in Mr. Blackburn's mind. After some tests of this power, it was found that Mr. Smith could copy a drawing of which it was supposed he had no knowledge, except as it existed in Mr. Blackburn's memory. In copying the drawings, the "percipient," Mr. Smith, sat at a table, blindfolded, while behind him sat the "agent," Mr. Blackburn, thinking intently on the form of the drawing as he had just seen it. Very soon Mr. Smith began to make a copy of the drawing so like the original that no doubt could exist of a relation between the two. This copying of drawings was practised in December, 1882, in Brighton, and again for three or four days during the following month in London.

It was afterwards found that two young ladies in a large drapery establishment in Liverpool possessed a similar power; and reports on them were made to the society by their employer, Mr. Malcolm Guthrie, J.P., and by Professor Lodge. In some respects these trials are more complete than those made with Mr. Smith, since a number of persons seem to have acted successfully as agents. Out of a total of one hundred and fifty drawings, only sixteen are given; so that the data for deducing any law bearing upon the subject are entirely wanting.

These copies of drawings have a great advantage over verbal descriptions, in that the record can be made the subject of future study. It was found that the three or four persons able to copy invisible drawings were also able, as we may well sup-

pose, to describe invisible objects. It is difficult to see how one could draw an object unless he had some conception of it in his mind, and with this conception he should be able to describe it.

There was also one interesting case of an apparently marvellous power of naming objects thought of by others. The Rev. A. M. Creery discovered that his four little girls, as well as a waiting-maid in his family, possessed this power in a remarkable degree. A child being sent out of the room, an object to be thought of was agreed upon by the company, or a card was drawn from a pack and passed around. On being called back to the room, the child was very soon able to name the card or object. What is yet more wonderful, the power was not confined to merely material objects, but extended to the guessing of numbers and names which could convey no definite idea to a child's mind. Judging from the number of reports made about these children, it would seem that some definite conclusion might have been hoped for.

The question which now arises is, Does all this prove that in this case thought was transferred from one person to another without the intervention of previously recognized agencies? The principles I have already enunciated will lead us to answer this question in the negative. All investigation of this kind should assume in advance that the phenomena which we observe are the result of certain causes, or are associated with certain conditions; and that when these causes or conditions are reproduced, the phenomenon will recur. Until these causes or conditions are discovered, nothing can be inferred.

What science concerns itself with is not the mere recurrence of the phenomena, but the nature of the relation between the cause and the effect. Such isolated facts as that some particular man in the fifteenth century got well of a disease after a priest had laid hands upon him, or that a little girl at a certain time guessed a card she did not see, are in themselves of no scientific interest or importance, however well they may be fitted to excite our curiosity. What we want to discover is the invariable relation by which every sick man of a definable class, upon whom the right kind of a priest lays his hands, shall be cured; and to discover all the conditions under which a little girl can name a card. Until these conditions can be discovered,

we have no right to attribute the result to one cause rather than to another. It is true that we have not the right to demand that every little girl shall be able to name the card under the given conditions. There may be only one girl out of a thousand, or only one out of a million, who possesses the required power, just as there is only one man out of a thousand who can integrate a differential equation. At the same time, the cases must be numerous enough to make them a subject of some kind of investigation, and to deduce from them a statement of some kind of general law. The rarer they are, the greater the attention that should be devoted to them when found.

Again, in the case of the drawings, as well as in the other cases, the same question arises. We have given, an "agent" A, and a "percipient" P. It is found that an impression of some sort is conveyed from A to P. What we want to know is, how it is conveyed. When we can answer this question, we shall be able to say whether a new theory of mind is to be established. To find how it is conveyed, the very first step is to determine by experiment the laws of conveyance; that is, the conditions necessary and sufficient to the transmission. The first questions which would arise might be the following: —

Whether the power on the part of A diminishes with the distance from P; and, if so, according to what apparent law?

Whether at any given distance the relative position of the two parties affects the result?

Whether the intervention of a material obstacle, such as a door, interferes with the transmission of the impression?

Whether the presence of light or darkness affects the result?

Whether sight on the part of either A or P is necessary?

Whether the result is any more successful when the object or idea selected originates with the agent than with some other person?

Whether the presence of any particular person is necessary?

After these questions are all answered, other details without number would arise. But these would come first.

It does not appear, that, up to the present time, either the parent society or our own has been able to decide any of these questions. When the experiments were begun, it was indeed

sought to determine whether contact between Mr. Blackburn and Mr. Smith was necessary. This question was decided in the negative. In another case, where the trials were made with Messrs. Blackburn and Smith, the observers, after making eleven numbered experiments, placed the two men in separate rooms. It was then found that the communication failed. But there was no inquiry why it failed, and no statement whether the door was open or shut, or whether the parties were farther apart than they were when the experiment succeeded.

Whatever view we may take of this matter, it seems to me, that, in the absence of any consideration or decision upon the various questions which I have raised respecting the conditions of thought-transference, we are not entitled to conclude that any causes come into play in the matter except unknown conditions. This view is strengthened by another consideration to which I shall call your attention. I have already alluded to the general fact in the history of scientific investigation, that, when sequences of phenomena which are rare in themselves become a subject of inquiry, their reproduction and observation become easier and easier. Two centuries ago the phenomena of electricity produced by artificial excitation were extremely rare and had little variety. But, as science advanced, new methods of producing electrical effects were discovered, and the conditions of the production of electricity became easier and easier to fulfil. Now no one has any doubt or difficulty about the method of producing electrical phenomena at pleasure. Why this should be so is obvious. The more we study a phenomenon which is the product of a law of nature acting under certain conditions, the more likely we are to discover such conditions. The more we find out about them, the easier it will be to produce them, or to determine the law of their recurrence. Easier investigation is therefore the almost necessary result of scientific progress.

On the other hand, if the phenomenon becomes more rare as we proceed, we reach the conclusion that it is not associated with any given conditions by a law of nature, but is only the result of accidental or unknown circumstances unassociated with any new law. I may, perhaps, borrow an astronomical

illustration of this principle. We know that astronomical records contain many observations of dark bodies passing over the disk of the sun. It has frequently been supposed that these phenomena were due to the transits of unknown inter-Mercurial planets. But, when we look into the history of the subject, we find that such observations are nearly always made by comparatively inexperienced observers, with imperfect instruments; and that as instruments are improved, and observers acquire practice, they gradually disappear. These facts alone have sufficed to render astronomers sceptical as to their reality. The fact that the observations cannot be reconciled with each other in such a way as to show that they belong to the same body is generally considered to afford nearly conclusive proof of their spurious character. In fact, we may regard this character as now fully established.

Guided by this analogy, let us see what we should expect the history of psychical research to be, were thought-transference real. An investigator would have found one or more persons possessing some power of influencing the minds of others by a direct transfer of ideas. It would probably have been found that some ideas were transferred more readily than others, and that the transfer was better marked under some conditions than under others. The discovery of these ideas and their conditions would in its turn have facilitated the study of the transfer by teaching how to secure it, and thus the body of knowledge would have gone on increasing. This knowledge would have resulted in the discovery of other laws, and in the gradual enlargement of the number of people who possessed the power. Finally the investigators would have been able to say: If you consider this or that form of thought; if you select a certain definable class of people, and proceed in a certain way, — then you will be able, when you please, to observe thought-transference.

Such has not been the history of the case. The most careful collection of facts and observations during three years has failed to show any common feature in the ideas transferred, and has thrown no light on the question of the condition under which the phenomena can occur. The theory cannot be reconciled on any reasonable hypothesis, even that of thought-transference,

with the absence of such action where we should most expect it.

When we consider the importance of the problems which were presented, we cannot but feel regret that so little public attention was given to the subject. If we accept the conclusion of thought-transference, we have the startling result that there were and probably still are in England a number of people possessed of the power of perceiving or being affected by what is going on in other men's minds. Why did not Parliament grant the necessary funds to enable these people to be collected, supported at the public expense, and experimented upon? "Practice makes perfect," says the proverb; and it might well be hoped that, after a little well-directed practice, these people could perceive the thoughts and memories in the minds of murderers and robbers, and thus do away at one stroke with one of the greatest difficulties in administering justice. Instead of this, the parties and the subject have been lost sight of, so far at least as appears from published records.

To suppose that the society has made no effort to utilize the knowledge acquired during its existence, by discovering other persons possessed of the powers in question, would be too severe a reflection upon its eminent membership for any one to indulge in. In the absence of evidence to the contrary, we are to presume that a very careful search has been kept up. But, if this is so, not only have no new discoveries been made, but the old ones, if we can call the conclusions by that name, have not been confirmed.

I feel it a great misfortune that I have not been able to take an active part in the work of this society, and am not fully acquainted with its latest details. So far, however, as I have learned, we have been less successful than the parent society in finding satisfactory subjects of investigation. We might almost say that careful search has failed to bring us subjects to be experimented upon. An exception to this is found in the case of one of our most eminent members, who has been experimenting upon mesmerized persons. His work having not yet been communicated to the society, I must speak of it with much reserve, and may possibly be out of strict order in alluding to it at all. I cannot, however, refrain from citing one result which he has

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verbally communicated to me. It is well known that mesmerized persons are those supposed to be most susceptible to the reception of agencies exerted by other minds without physical communication. I learn, however, that our fellow-experimenter has not been able to find any cases in which any mental impression could be conveyed to, or any nervous effect produced upon, a mesmerized subject, without a sufficient physical cause being found. Isolate the agent and the subject from each other, and no impression or action whatever can pass from one to the other.

If the investigation of thought-transference is to be still further pursued by us, it may be useful to point out the conditions under which we should expect it to be found. One of these must be found in the case of the man who is surrounded by a crowd watching a pyrotechnic display. Within a few yards of him there are a hundred people who simultaneously receive upon their minds the startling impression of a brilliant rocket. If there is such a thing as telepathy, then, a person standing in the middle of the crowd, with his eyes closed and his ears filled with wax, ought to know just when the rocket appears, by a mental tremor of some kind, not traceable to any physical agency. I suggest this as one very simple experiment on the subject.

Let us take another case. West of the Mississippi River there are probably several hundred thousand persons whose chief amusement is the playing of a game of cards, in which a knowledge of the cards which another person right in front of him is looking at, or even the power to make a probable guess on the subject, would lead rapidly to success and fortune. Yet not a case has ever been known to arise in which a player could get the slighest inkling of what sort of a hand his opponent held by any process of mind-reading. Is it not worth our while to institute an investigation among the players of this game?

The question may arise whether the non-occurrence of the phenomenon under those circumstances where we should most suspect it is not due to the rarity of some special power. This hypothesis is however negatived by the observations of our parent society, already mentioned. We have seen that three or four children and a waiting-maid were found in a single

family, all of whom could name cards which other persons had simply looked at, and could even guess a number which another person thought of. Now, if the power were really rare, what is the probability that four persons possessing it would be found in a single family? We should have to wander among the infinities to investigate it. Possibly it might be suggested that heredity would result in one possessing the same powers that others did. But heredity could not extend to the waiting-maid of the family, unless we introduce some such new biological hypothesis as the absorption of one person's powers by another. Not only were four or five of the persons found in one family, but in other cases two or more were found at work in the same factory. Now, adopt what theory we may, this curious grouping of persons endowed with the power prevents us from regarding it as sporadic. We must form the hypothesis, that, when one individual possesses it, there is a certain chance of its passing to another individual who chances to be an inmate of the same family. But, if we adopt this hypothesis, how shall we prevent it from spreading through the whole community? In fine, what rational hypothesis can we form to explain every thing? If we grant that thought-transference is a fact, just how are we to limit it? How explain its apparent absence under circumstances where we should most suspect it? What prevents any one person from being influenced by the thoughts and feelings of the whole thousand million of other people who live in the world? In the absence of any answer by the Psychical Society, I shall suggest one: The intensity of the effect diminishes very rapidly with the distance.

If this be the case, it should increase very rapidly as the distance diminishes; and of this no evidence has been found. Nor is the hypothesis of dependence upon distance supported by all the facts. In some of the most striking cases on record, the parties were separated by miles; I am not sure but continents or oceans have occasionally intervened.

It appears, therefore, that not only has no theory of thought-transference been constructed, but it does not seem possible even to imagine any one simple theory, or set of general laws, which will explain all the phenomena. I beg leave to say once more, that what we want is a statement of general laws, like

those which we find in books on mechanics, electricity, magnetism, or physiology, setting forth the conditions under which thought-transference can be brought about. That no such work has appeared, or been attempted, can, it seems to me, be accounted for only by the fact just brought out, that no one set of principles can be formulated that will cover all the supposed facts.

When, some two years ago, the early experiments of the English psychical society were made known, it seemed to me that a strong case was made out for a new law of nature governing the transmission of thought, or some form of mental influence from person to person. The state of the case I suppose to be that a number of members found themselves permanently able to copy drawings without other guidance than the thoughts of other members not in physical contact with them. Under the influence of this possibility, I encouraged the formation of our own society, and accepted membership in it.

Being thus interested in the work, my first act was very naturally to enter upon a more critical and careful study of the work of the parent society. I soon noticed that in its essential features it differed remarkably from what I had supposed. It lost the character of generality which I had attributed to it. As the result of the circumstances which I have already considered, I may say that the work of the society seems to me to have almost entirely removed any ground which might have existed for believing thought-transference to be a reality. I have seen nothing in our own work to change that conclusion. Every wide consideration which occurs to me leads in the same direction. We are not dealing primarily with a question of quantity and degree, but with one of yes or no. Considered in advance of experience, it may be an open question whether thought in its very nature is or is not transferrable. Whether we regard thought as simply the working of our own organism, or regard our minds as inhabiting our nervous systems, it may be true in either case that our minds are absolutely incapable of exerting an *actio in distans*. Now, if this be true as an essential quality of mind, then the very expression "thought-transference" involves an impossibility. But granting that it is true, and that thought may be transferred, then reflect upon the number of

people who surround us, and the infinity of the conditions under which thought might be transferred. How is it that with such ample opportunities of experiment extending through centuries, and such industry as has been devoted to the subject here and in England through the last two years, no living person knows any more about the conditions of transference to-day than men did a thousand years ago?

The question suggests itself whether the search for the phenomena under present circumstances is not much that of looking for a kind of gold which shall differ in density from ordinary gold, or for a substance of unheard-of specific gravity. We may advertise for specimens of such things, and execute many weighings, with a view of testing claimants to our attention. Yet I am persuaded that, should we undertake this, the unanimous views of chemists would be that we were wasting our labor. The negative evidence that no gold has been found differing much in specific gravity from that which we carry in our pockets is conclusive against its existence.

Whether we should take the same view of thought-transference is a question on which I refrain from expressing a decided opinion, for the reason that no such opinion is necessary. Even if there is no real thought-transference, we have cases of apparent thought-transference to investigate and explain, which may lead us to the discovery of new laws of mental action.

An illustration of the line of research here indicated may not be out of place. The largest collection of facts made by our parent society comprises occurrences of the following general character. A person, generally one not subject to hallucinations, suddenly receives an impression the cause of which he cannot define. Commonly it is the visual image of some absent friend or relative in a state of suffering, or the voice of a speaker calling aloud, or the impression a pain not associated with any physical cause. After a few hours, days, or weeks, news is received from the friend that something had happened to him at the very moment the impression had been received, bearing too close relation to the impression for a mere accidental co-incidence. Very often the case is one of the death of the friend. Sometimes he cried aloud in pain, and used the very words which the other heard.

Such is the order of events as commonly described; but, if described as they actually come to knowledge, they would appear in a different form. The experience of the observer would be: I heard that my friend was dead, or that he had met with an accident and cried aloud. After inquiring when the death or accident occurred, I remembered that about that time I heard this very exclamation, or saw his image before my eyes.

Now, we have two theories on which this may be explained. It may be that there was a real transfer from the friend to the percipient; or the whole recollection may have been the work of the percipient's mind at the time, — a mere illusion of the memory. My own experience leads me to believe that these illusions are more common and more difficult to distinguish from the reality than generally supposed. I have no reason to consider myself in any unusual degree the victim of illusions; yet I frequently find vague impressions in my mind the reality of which I am unable either to deny or affirm. They may have been dreams, and they may have been occurrences. I frequently have a dream which I forget all about until a day or two afterwards, when perhaps some impression produced in the dream is brought to mind. Having totally forgotten that I had any dream at all, I am often at a loss to say whether the impression is that of something which I really saw, or something which I dreamed of. I do not remember ever to have had an hallucination in my waking hours, but dream hallucinations I find not at all uncommon. It may not be out of place if I relate one, which, after the lapse of more than a year, I am still unable to classify with certainty as a reality or illusion.

I dined with friends at a hotel, later and more generously than was my custom, and retired without the post-prandial airing necessary in my case to sound sleep. The window of my room in the hotel was directly above the kitchen, and I was much disturbed by noise coming from that quarter. Some time in the night, I cannot tell when, I heard, or thought I heard, a window opened above my room, and the voice of a guest calling in a loud voice to the servants below, "If you don't stop that racket, I will get up and leave the hotel." The whole impression was so vivid that I have ever since been in doubt

whether it was a dream or a reality, with perhaps slight probabilities in favor of its being a dream.

I believe that our dream life and our imaginative powers are more potent factors in the production of supposed extraordinary phenomena than is commonly supposed. Whatever may be the fate of the theory of thought-transference, the phenomena of hypnotisms, as well as of dreams, illusions, and faults of memory, are all before us. They form a field of which the cultivation has only commenced, and which ought to prove attractive to all. I even venture to say, that, if thought-transference is real, we shall establish its reality more speedily by leaving it out of consideration, and collecting facts for study, than by directing our attention especially to it.

THE NUMBER-HABIT.[1]

The first report of the Thought-transference Committee discusses the results of the experiments of a number of persons to guess a digit of which another person was thinking. In one series of guesses, the number of right guesses considerably exceeded the probability of chance. This instance of possible telepathy was designated Case E. On p. 33, *ante*, may be found the statement that the case was to be further studied.

This has been done, and has led to the result, that the guesser or percipient had a very decided system of guessing, or an unconscious number-habit, which he was following all the while, and which was different from the habit of numbers of the agent. The two minds were, therefore, working differently, each according to its own habits: hence it is extremely improbable that there was in this case any real thought-transference; or, in other words, that the excess of right guesses was due to any thing but chance coincidences.

The form of the experiments was particularly favorable to the exhibition of a number-habit in the percipient, because each digit appeared once, and only once, in the series from which he was to guess. If the guesses were made entirely by chance, then each digit ought to appear in a large series of trials an almost equal number of times, and in a shorter series of trials an approximately equal number of times. If, on the other hand, the percipient has an unconscious preference for certain digits, they will appear in the record in excess;

[1] Presented as an appendix to the first report of the Thought-transference Committee.

and since the digits are written down without the percipient seeing the record, and are selected while the mind is occupied with another purpose than the study of habit, it is probable that such preferences as the records contain were absolutely unconscious. Finally, it must be noted, that in several instances one thousand or more digits were recorded from a single person, and, moreover, in separate sets of one hundred. The number was sufficiently large to base averages upon. The division into sets rendered it possible, by the separate tabulation of the sets, to ascertain whether the preferences were constant; i.e., truly habitual.

To facilitate the discussion, one of the sets of 100 guesses sent to the committee is reproduced here. It is the fifth of ten sets, by Miss G. B. In the first column are given the digits to be guessed; on

6.	0	2	3	8	3	6	0	6	4	3
0.	3	1	4	5	2	2	0	7	3	4
1.	5	3	6	6	6	4	1	5	2	9
8.	6	6	5	1	4	0	4	3	7	0
9.	8	7	2	0	5	7	3	2	9	2
3.	4	2	0	3	9	3	6	8	5	8
4.	2	4	9	4	6	6	8	3	8	5
7.	1	8	7	5	7	8	2	4	6	7
5.	7	3	3	2	8	3	5	6	2	3
2.	6	4	8	6	5	4	9	7	1	4

each horizontal line are given the records of the attempts to guess the digit at the beginning of that line. For the details of the experiment, see these Proceedings, Part I., p. 15. In the above set are one hundred digits guessed. Of the ten digits we find

that	1	2	3	4	5	6	7	8	9	0
is guessed	5	12	15	13	10	14	9	10	6	6 times.

1 only five times, but 3 fifteen times. If we go farther, and tabulate all the sets, we find that the preferences are maintained more or less positively throughout. The set chosen as a special sample was selected because its preferences nearly coincide with those found by averaging the ten sets. The following table shows the preferences in all the sets of this percipient: —

PERCIPIENT, MISS G. B.

Digits . . .	1	2	3	4	5	6	7	8	9	0	
Square . . 1	12	12	16	10	6	10	10	7	11	6	No. times.
" . . 2	11	10	13	7	12	10	8	9	10	10	" "
" . . 3	11	12	14	10	6	11	9	8	8	11	" "
" . . 4	11	13	13	10	8	12	8	8	6	11	" "
" . . 5	5	12	15	13	10	14	9	10	6	6	" "
" . . 6	8	12	11	11	7	10	9	9	11	12	" "
" . . 7	11	12	13	8	12	13	7	9	7	8	" "
" . . 8	7	11	16	10	11	12	8	7	7	11	" "
" . . 9	5	11	13	12	10	13	10	9	8	9	" "
" . . 0	7	11	14	10	13	10	8	9	9	9	" "
Totals . . .	88	116	138	101	95	115	86	85	83	93	

If there were absolutely no disturbing cause, each total ought, of course, to be exactly one hundred; instead of which there are one hundred and thirty-eight 3's against only eighty-three 9's. These differences are not due to single excesses, either positive or negative, but to the more or less constant repetition of them in each set. The number of times a given digit appears in a single square is extremely variable, which is of course to be expected with psychic phenomena; and we find that in one set the favorite 3 was guessed only eleven times, the same number that the neglected 9 appears in the first set. But it will be noticed that each number has its characteristic range of variations. The following table shows this; the numbers are arranged in the order of the preferences, as indicated by the totals in the preceding table, the totals being given in the second line; the third line gives the highest number of times the digit was guessed in any set, the fourth line, the lowest number: —

Digit	3	2	6	4	5	0	1	7	8	9
Total guesses	138	116	115	101	95	93	88	86	85	83
Highest in a set . . .	16	13	14	13	13	12	12	10	10	11
Lowest in a set . . .	11	10	10	8	7	6	5	7	7	6

From this table it is evident that the centre of variation is higher throughout for the favorite numbers than for the neglected ones. The range of variation is itself variable, and doubtless, also, a matter of habit; but the material is insufficient for studying this special

question satisfactorily. The table shows conclusively, that, despite the variations in each set, the preferences are really maintained throughout. It so happens that in this table the smallest numbers in a set for the three favorites are the same as the highest numbers in a set for the three least-liked digits. The order of preferences is singular: it was not anticipated that 3 would come first, nor 1 so late; but these peculiarities are general, though not uniform.

It seems unnecessary to give all the tables in detail: two are therefore selected to illustrate 1, a set of preferences quite different from those of Miss G. B.; and 2, Case E, Mr. C. H. B.

PERCIPIENT, G. W. N.

Digits	1	2	3	4	5	6	7	8	9	0
Square 1	10	7	13	11	11	11	10	10	9	8
" 2	10	6	10	11	10	11	12	11	8	11
" 3	6	11	9	9	12	13	9	10	12	9
" 4	4	7	12	10	9	16	14	9	10	9
" 5	5	7	11	13	11	11	15	13	10	4
" 6	6	9	13	10	14	11	12	10	9	6
" 7	7	9	11	9	13	12	10	10	10	9
" 8	7	9	10	12	13	10	11	8	11	9
" 9	3	10	13	15	13	10	11	10	9	6
" 10	4	9	8	14	14	11	12	10	10	8
Totals	62	84	110	114	120	116	116	101	98	79

In this series 5 is the favorite, and 1 the least liked; 5 being guessed one hundred and twenty times, nearly twice as often as 1, sixty-two times. The order of preference is 5, 6, 7, 4, 3, 8, 9, 2, 0, 1.

We turn now to Case E, which has particular interest for us: —

PERCIPIENT, MR. C. H. B.

Digits	1	2	3	4	5	6	7	8	9	0
Square 1	10	8	11	10	7	10	10	10	16	8
" 2	10	10	12	11	10	9	10	10	9	9
" 3	9	11	14	13	13	13	11	3	5	8
" 4	12	7	12	12	9	10	12	11	9	6
" 5	8	6	13	10	11	9	12	13	9	9
" 6	8	10	12	12	10	14	11	11	6	6
" 7	10	13	16	15	15	8	10	5	3	5
" 8	10	10	10	10	10	10	10	10	10	10
" 9	9	9	10	12	11	10	15	8	8	8
" 10	11	8	12	12	10	8	11	9	10	9
Totals	97	92	122	117	106	101	112	90	85	78

In this series, 3 is the favorite, and 9 the least liked; but the extremes are by no means so wide asunder as in the previous table. The order of preference is 3, 2, 6, 4, 5, 0, 1, 7, 8, 9. On account of the importance of Case E, the following table, to show the range of variation of each digit as regards its frequency in single sets (squares), is added: —

Digit	3	4	7	5	6	1	2	8	9	0
Highest in a set	16	15	15	15	14	12	13	13	16	10
Lowest in a set	10	10	10	7	8	8	8	3	3	5

We have in this case, also, the previously noted changes in the centre of variation; hence, in the critical "case E," the mind of the percipient was following its own bent. Attention may be directed to the excessive variation in C. H. B.'s guessing of 8's and 9's, which is without a parallel in our remaining cases. The agent in this case was Miss L. L. H., who acted in a set of trials as percipient, with the following result: —

Digit	4	6	3	5	8	0	1	2	7	9	
occurs	121	118	117	107	105	102	96	88	75	71	times.

These preferences are entirely different from those of Mr. C. H. B., just given above. It seems, therefore, impossible to believe that in "Case E," when C. H. B. was percipient and L. L. H. agent, that the mental number-habit of the agent affected the percipient.

The following table summarizes the results: —

Digits	1	2	3	4	5	6	7	8	9	0	Number of times guessed.
Percipient, C. H. B.	97	92	122	117	100	101	112	90	85	78	
" C. H.	73	121	104	97	131	88	112	91	96	87	
" W. P. P.	102	101	107	104	104	81	99	97	104	101	
" G. B.	88	116	138	101	95	115	86	85	83	93	
" G. W. N.	82	84	110	114	120	116	116	101	98	79	
" L. L. H.	96	88	117	121	107	118	75	105	71	102	
" H. K. C.	85	110	111	111	122	116	80	82	94	74	
" G. C. W.	11	10	9	12	9	11	11	11	12	4	
" P. N. E.	38	35	43	41	49	45	46	45	33	25	
" F. T.	83	120	103	123	116	143	104	106	120	73	
Totals	735	802	964	941	959	934	850	813	796	716	

According to this table the digits are to be ranked thus: —

Digit	8	5	4	6	2	7	8	9	1	0	
guessed	964	959	941	934	892	850	823	796	735	716	times.

It should be remarked that 3 does not always come first, but does so only in two cases out of ten; in every case, however, it occupies a high position. Neither do 1 and 0 always come last, but in no case do either of them take a high position. There is, in fact, a sort of general conformity between the persons studied as to their number-habit; we must therefore assume that there is some general reason for the preferences, as well as special reasons to explain the characteristic individual idiosyncrasies.

It was thought that a choice was made between odd and even numbers. Each person has his or her habit; but in this regard the preferences are about evenly balanced, as shown by the table: —

Percipient.	Odd Numbers.	Even Numbers.	
C. H. B.	522	478	Times.
C. H.	516	484	"
W. P. P.	516	484	"
G. B.	490	510	"
G. W. N.	506	494	"
L. L. H.	466	534	"
H. K. C.	501	499	"
G. C. W.	52	48	"
P. N. E.	209	191	"
F. T.	526	574	"
Totals	4,304	4,296	

The original tabulations were made by sets of one hundred, and in every instance it was found that in some of the sets of each series the preferences were reversed. At first, this was puzzling, since the preference was regarded as habitual; but it was noticed that here the question of the centre of variation also comes in as the determining factor. This is shown by all the tables. Two are given as illustrations; C. H. and W. P. P. are selected, as the values of the totals are identical in the two series.

Percipient, C. H.		
Square.	Odd.	Even.
1	49	51
2	54	46
3	51	49
4	57	43
5	50	50
6	47	53
7	54	46
8	52	48
9	54	46
10	48	52
Totals,	516	484

Percipient, W. P. P.		
Square.	Odd.	Even.
1	48	52
2	54	46
3	51	49
4	55	45
5	50	50
6	49	51
7	51	49
8	54	46
9	50	50
10	54	46
Totals,	516	484

Both persons have a decided preference for odd numbers, but both in some sets guess an excess of even numbers: but with C. H. the odd numbers range from 47 to 57, the even numbers from 43 to 53; and with W. P. P. the odd numbers range from 48 to 55, the even numbers from 45 to 52. In both cases, the range of the preferred odd numbers, as regards their frequency in a set, is higher than for the even numbers. In other words, the centre of variation is higher for the preferred numbers. And the fact that the preferences are reversed in certain sets does not indicate that the preferences are not truly habitual; for instance, the less liked even numbers at their maximum frequency with C. H. and W. P. P. occur less times than do the odd numbers at their maximum.

We have in all eighty-six hundred observations; therefore, with all disturbing influences eliminated, each digit ought to occur eight hundred and sixty times; in reality

Digit	Occurs	Times.
3	964	= 860 + 104
5	959	= 860 + 99
4	941	= 860 + 81
6	934	= 860 + 74
2	892	= 860 + 32
7	850	= 860 − 10
8	813	= 860 − 47
9	796	= 860 − 64
1	735	= 860 − 125
0	716	= 860 − 144

showing that 7 is the most impartially treated, and that the extreme dislikes are much stronger than the extreme preferences. On the other hand, the lesser preferences, 4, 6, and 2, are more marked than the lesser dislikes, 7, 8. 9. It results that the balance is kept; the average of all the preferences being 860+78, of all the dislikes 860−78. This exact balance is, of course, involved in the conditions of the experiment.

Calculating from our data, if ten thousand single digits be written down in random order, but with the general intention of putting each digit down the same number of times, we should expect

Digit	1	2	3	4	5	6	7	8	9	0	
to occur	85+	103+	112+	109+	110+	108+	98+	94+	92+	83+	times.

It appears, therefore, that every person concerned in the experiments had their personal and characteristic number-habit, which they adhered to quite rigidly; and we conclude that their mental action was not regulated or perceptibly influenced in guessing the digits by the thought of the digit in the mind of the agent. This conclusion applies to "Case E."

We can, however, go farther; for in Case E the order in which the numbers are guessed is also a matter of habit, presumably unconscious. Examination of the original record showed that whenever a nine or eight was guessed, that the digits fell off on either side of it in a striking manner; thus 4, 8, 9, 7, 5, 3, or 1, 4, 7, 8, 6, 2, 0. A complete tabulation was made and the averages calculated; all the 7's, 8's, and 9's were added together and the average taken; then all the digits next before these same 7's, 8's, and 9's were added together and the average taken; then the second, third, and fourth digits before likewise; next the averages were ascertained for the digits guessed first, second, third, and fourth after the 7's, 8's, and 9's, which mark the centres of the groups. The following table gives the results: —

Fourth digits before	Average	3.3	From 65	observations.
Third " "	"	3.4	" 71	"
Second " "	"	4.2	" 79	"
First " "	"	5.4	" 93	"
Central digits	"	8.7	" 112	"
First " after	"	5.4	" 100	"
Second " "	"	4.4	" 91	"
Third " "	"	3.4	" 79	"
Fourth " "	"	2.8	" 70	"

We see that the habit is so constant that it is plainly shown in the averages. It would be still more marked in the averages, were it not that sometimes, instead of guessing through the whole series, — i.e., up to 9 or 8 and down again, — C. H. B. would take only half a series; for instance, go up, then commence low after the 9 and go up again, — e.g., 1, 3, 7, 9, 0, 2, 4, 6, — or else run down, and then beginning with a 9 go down again, — e.g., 6, 2, 1, 0, 9, 8, 7, 6, 5. In short, C. H. B.'s habit was to guess the digits by skipping irregularly up or down the regular series.

One's first thought is that this is perfectly natural and usual; but on the contrary, as far as our data go, it seems to be in reality very unusual, for no other person among those who have made the digit tests has the same habit. Their guesses were tabulated in the same manner as just explained for C. H. B. The following table gives the average of the 8's and 9's, and of the numbers guessed before them and after them.

	Digits before				8's and 9's.	Digits after.			
	Fourth.	Third.	Second.	First.		First.	Second.	Third.	Fourth.
C. H. . . .	4.1	3.8	4.5	5.0	8.9	4.6	4.0	4.0	3.6
W. P. P. . .	4.2	4.0	4.1	3.5	8.8	3.6	3.2	3.2	4.0
G. B. . . .	3.7	3.6	3.8	4.6	8.6	3.4	4.0	3.1	3.3
G. W. N. . .	4.4	3.1	4.1	4.8	8.8	4.1	2.0	4.3	4.2
L. L. H. . .	3.5	2.9	2.8	4.3	8.7	3.6	3.6	3.8	3.9
H. K. C. . .	4.2	3.6	4.5	4.3	8.7	4.0	3.2	3.9	3.9
G. C. W. . .	4.7	4.9	4.3	3.0	9.0	5.0	4.6	3.8	5.4
P. N. E. . . .	4.5	4.9	4.8	5.5	9.4*	5.0	4.7	4.0	5.3
F. T. . . .	4.6	4.5	4.4	3.9	8.8	3.3	4.7	4.3	5.0

The utmost to be gathered from this table is, that the numbers guessed just before or after an 8 or a 9, are apt to be a little higher than otherwise, but not one of these nine persons has C. H. B.'s habit of order in guessing.

The facts elucidated in this article are unfavorable to the idea of thought-transference having taken place in any of the experiments with digits. We have learned that each person has his characteristic and personal number-habit, and this habit regulates his guessing, and thus becomes evidence of a very positive character that the guessing of the percipient was not regulated by thoughts of digits transferred from the agent's mind. "Case E," which might have

* In this case 10's were used instead of 0's.

been taken as a possible illustration of thought-transference, is found to exhibit an exceptionally rigid and persistent number-habit in the percipient: hence we may safely conclude that the large number of right guesses was the outcome of coincidences merely, not more numerous than, according to the theory of probabilities, we ought to expect in one case out of every sixty (approximately). Such a case may occur at the beginning as well as at the end. Professors Pierce and Pickering have already pointed out that the case is not really remarkable, even if regarded as a coincidence.

Although the laborious digit-tests undertaken at the request of the committee have proved purely negative as regards thought-transference, they have added a very interesting demonstration of the minuteness with which habit plays its part as a factor in our mental operations. This fact has not, so far as I know, been demonstrated before so perfectly; and we may therefore consider the experiments to possess a positive as well as a negative value.

CHARLES SEDGWICK MINOT.

REPORT OF THE COMMITTEE ON HYPNOTISM.

MANY hours have been spent in work upon this subject by the members of the committee, for the most part singly. Mr. Cory has no report to make at present. Messrs. James and Carnochan's experiments were confined almost entirely to students of Harvard College. Out of between fifty or sixty of these, who were operated on, a dozen, more or less, were influenced at the first sitting, being a proportion of about one in five. Two men were so much better subjects than the rest, that they ended by receiving almost exclusive attention.

The comparatively small amount of time at our disposition for these investigations, and the variations of some of the subjects from one day to another, necessitating many repetitions of the same experiment, make it impossible to report any thing definitive this year. A few of our notes may, however, be of interest, although nothing essentially novel is contained therein.

The need of "guiding sensations" for voluntary motion was proved by the artificial reproduction of a rare pathological state. In two persons (one of them being the Mrs. P. who is mentioned in the report on mediumistic phenomena) an arm was made absolutely anæsthetic, whilst retaining its muscular contractility. Under these

circumstances, the subject could execute a commanded movement. — such as raising the arm, clenching the fist, writing the name, etc.. — but only when the eyes were used to superintend. With closed eyes the movements were feeble and ineffectual, and the patient quite uncertain whether the purpose had been accomplished or not. Passive movements communicated to the arm and hand were then unrecognized or misunderstood.

Much time was spent in a quest (as yet only advanced enough to show how far from simple the conditions are) of what the psychical modification is in the hypnotic trance. Is the anæsthesia, for example, produced by suggestion, due to an abolition of sensation or an abolition of "apperception"? Does the subject not *feel?* or is he become incapable of *noticing* what he feels? or is his state something more peculiar still?

That the sensorial process[1] occurs, seems proved by after-images. Two of our subjects who were made completely blind to a red patch laid on a piece of paper immediately saw a bluish-green patch when the red patch was removed.[2]

That the process of apperception, assimilation, or recognition of what the impression is, does also occur, seems proved by observations of a somewhat similar sort on the same two subjects. Make a stroke on paper or blackboard, and tell the subject it is not there, and he will see nothing but the clean paper or board. Next, he not looking, surround the original stroke with other strokes exactly like it, and ask him what he sees. He will point out one by one all the new strokes, and omit the original one every time, no matter how numerous the new strokes may be, or in what order they are arranged. Similarly, if the original single stroke to which he is blind be *doubled* by a prism of sixteen degrees placed before one of his eyes (both being kept open), he will say that he now sees *one* stroke, and point in the direction in which the image seen through the prism lies.

Obviously, then, he is not blind to the *kind* of stroke in the least. He is blind only to one individual stroke of that kind in a particular position on the board or paper, — that is, to a particular complex

[1] By sensorial I do not necessarily mean retinal exclusively. M. Binet, in his excellent little *Psychologie du Raisonnement*, considers that after-images involve cerebral as well as retinal processes. If, namely, the right eye look fixedly at a colored stripe whilst the left eye is closed, the left eye will get an after-image of the stripe when we open it and look at the background, closing in turn the right eye. A student, Mr. R. W. Black, to whom I was showing the experiment, suggested that the after-image might still belong to the shut right eye, combining its darkened field of view with the open left eye's brighter one. This objection to Mr. Binet's interpretation of the process as non-retinal is, at least, plausible. I have as yet been unable to devise an experimental combination for deciding conclusively between the two views. — W. J.

[2] That this was not due to suggestion or expectation, seems proved by its not invariably taking place with the same subject.

object; and, paradoxical as it may seem to say so, he must distinguish it with great accuracy from others like it, in order to remain blind to it when the others are brought near. He "apperceives" it, as a preliminary to not seeing it at all![1] How to conceive of this state of mind, is not easy. It would be much simpler to understand the process, if adding new strokes made the first one visible. There would then be two different objects apperceived as totals, — paper with one stroke, paper with two strokes; and, blind to the former, he would see all that was *in* the latter, because he would have apperceived it as a different total in the first instance.

A process of this sort occurs sometimes (not always) when the new strokes, instead of being mere repetitions of the original one, are lines which combine with it into a total object, say, a human face. The subject of the trance then may regain his sight of the line to which he had previously been blind, by seeing it as part of the face.

When by a prism before one eye a previously invisible line has been made visible to that eye, and the other eye is closed or screened, its closure makes no difference; the line still remains visible. But if *then* the prism is removed, the line will disappear even to the eye which a moment ago saw it, and both eyes will revert to their original blind state.[2]

We have, then, to deal in these cases neither with a sensorial anæsthesia, nor with a mere failure to notice, but with something much more complex; namely, an active counting out and positive exclusion of certain objects. It is as when one "cuts" an acquaintance, "ignores" a claim, or "refuses to be influenced" by a consideration of whose existence one remains aware. This, at least, expresses a provisional hypothesis which may reveal new facts by suggesting new observations to test its truth.

The delicacy of discrimination shown in recognizing the invisible line is often very great. The extraordinary mixture, in the hypnotic trance, of preternatural refinement of discrimination with the grossest insensibility, is one of the most remarkable features of the condition. A blank sheet of paper with machine-cut edges, without water-mark or any thing which could lead to the recognition of one side or edge from the other, is shown to the subject, with the statement that it is a photograph of a well-known face. As soon as he distinctly sees the photograph upon its surface, he is told that it will float off from

[1] M. Ch. Féré was, so far as I know, the first to make this remark.

[2] The phenomenon is described as it most frequently happens. There have been some exceptions, and there are some curious variations in the visibility of the finger with which the subject points out the line he sees when he looks at it with both eyes open and the prism before one; but these we reserve for further study.

the paper, make a voyage round the walls of the room, and then return to the paper again. During this imaginary performance, he sees it successively on the various regions of the wall; but if the paper is meanwhile secretly turned over, and handed to him upside down, or with its under surface on top, he instantly recognizes the change, and, seeing *the portrait* in the altered position of the paper, turns the latter about "to get the portrait right." Here, then, is an hallucination, which, in traversing the room, can conquer the most discrepant backgrounds, but which peculiarities in the look of a sheet of paper, perceivable by no normal eye, can turn upside down! Sheets of paper absolutely indistinguishable by the bystanders, or by the subject himself when awake, are identified in trance, no matter how much they may be shuffled and mixed together, by the imaginary pictures they are supposed to bear. The hallucination is presumably determined by minute peculiarities in the paper, and yet it negates completely the paper's most flagrant characteristic, which is the blankness of its surface.[1] We have no comment to make on the psychic condition here, except to suggest its complexity, and its analogy to the psychic blindness previously described. Both states imply a preliminary process of discrimination and identification of the object really present, *followed* by its *apperception* or *conception* in falsified form. The conception is what the subject believes, and on it he acts. To what degree it carries actual *sensorial* brain-processes with it, is a matter for future research. That it *can* carry them is evident; for, as we have verified, the hallucination of a colored patch on a real white ground will sometimes be followed by a negative after-image when the gaze is transferred to another place. But, on the other hand, when subjects are asked to trace their hallucinations with a pencil, or even to describe them minutely, they often show a vagueness and uncertainty which their previous expressions and actions would hardly have led one to expect.

Another very simple observation shows the delicacy of visual discrimination in the trance state. If a sheet of ruled foolscap paper, or a paper with a fine monotonous ornamental pattern printed on it, be shown to the subject, and *one* of the ruled lines or elements of the pattern be pointed to for an instant, and the paper immediately removed, he will then almost always, when after a short interval the paper is presented to him again, pick out the indicated line or element

[1] This reminds us a little of the state of mind in those perceptions called by Aubert "*secondäre Urtheilstäuschungen*." The moon, e.g., appears to most people *small* through a telescope. The instrument enlarges all its details so that it seems *near*,—so near that we apparently think its retinal image ought to be larger if it were the same moon. *Ergo*, we deem it a smaller moon. In other words, our conclusion turns round and destroys its own premises.

with infallible correctness. The operator, meanwhile, has either to keep his eye fixed upon it, or to make sure of its position by counting, in order not to lose its place.

This puts us on the track of a distinction between the normal and the trance mode of perception, which partly explains the latter. The evolution of man's mind is altogether in the analytic direction. He deals with objects by picking out their "essential" character, tracing its consequences, and ignoring other features. He remembers a house in a street by the one little inconspicuous detail of its number, very likely observing nothing else about it; and similarly he retains the line on the foolscap paper by not dispersing his attention over the sheet, but counting the number of lines between the one selected and the nearest edge. The number thus obtained is a permanent part of the mind's possession, and is obviously for practical purposes more exact than any reminiscence of the "general look" of the line in its place would be.

The trance-subject, however, surrenders himself to the general look. He disperses his attention impartially over the sheet. The place of the particular line touched is part of a "general effect" which he gets in its entirety, and which would be distorted if another line were touched instead. This general effect is lost upon the normal looker-on, bent as he is on concentration, analysis, and emphasis. What wonder, then, that, under these experimental conditions, the trance-subject excels him in touching the right line again? If he has time given him to count the line, he will excel the trance-subject; but, if the time be too short to count, he will best succeed by following the trance method, abstaining from analysis, and being guided by the "general look" of the line's place on the sheet. One is surprised at one's success in this the moment one gives up one's habitually analytic state of mind.

Is it too much to say that we have in this dispersion of the attention and subjection to the "general effect" something like a relapse into the state of mind of brutes? The trance-subject never gives any other reason for his optical discriminations, save that it "looks so." So a man, on a road once traversed inattentively before, takes a certain turn for no reason except that he *feels* as if it must be right. He is guided by a sum of impressions, not one of which is emphatic or distinguished from the rest, not one of which is essential, not one of which is conceived, but all of which together drive him to a conclusion to which nothing but *that* sum-total leads. Are not some of the wonderful discriminations of animals explicable in the same way? The cow finds her own stanchions in the long stable, the

horse stops at the house he has once stopped at in the monotonous street, because no other stanchions, no other house, yield impartially *all* the impressions of the previous experience. The man, however, by seeking to make some one impression characteristic and essential, prevents the rest from having their effect. So that, if the (for him) essential feature be forgotten or changed, he is too apt to be thrown out altogether. The brute or the trance-subject may then seem to outstrip him in sagacity.

It ought to be said, that, in trying to verify in other ways this hypothesis of the trance-subject's non-analytic state of mind, we have met with exceptions which invite to further study. Certain it is that, when expressly stimulated thereto, trance-subjects will reason and analyze acutely. We therefore publish the above notes as suggestions to inquiry rather than as records of results.

The habitual psychic stagnancy of the trance-subject is shown by another simple test. If a lot of dots or strokes on a piece of paper be exhibited for a moment to a person in normal condition, with the request that he say how many are there, he will find that they break into groups in his mind's eye, and that whilst he is analyzing and counting one group the others dissolve. In short, the impression made by the dots changes rapidly into something else. In the trance-subject, on the contrary, it seems to *stick;* and, if the dots did not much exceed twenty, our patients counted them off in their mind's eye with ease.[1]

This is all we can say at present of the hypnotic subject's mental state, — a topic whose investigation will tax the wit, but certainly reward the industry, of the most ingenious psychologist who may devote himself to its elucidation.

There was no sign of any sort of clairvoyance in either of the two advanced subjects above mentioned, nor, as tested by card guessing, in Mrs. P., the medium, when in the hypnotic condition. A very good student-subject, discovered by one of his comrades, was reported, on what seemed not bad evidence, to have named in his trance objects hidden from his sight; but, in the two sittings we had with him, nothing of the sort occurred. Indeed, on the second of these occasions, he was with difficulty kept entranced at all.

The only quite mysterious case of perception we found was with

[1] The stagnancy of mind is also shown by the tranquil way in which the most incongruous suggestions are adopted. A large silk handkerchief was made invisible by suggestion to one of our subjects, and then thrown over the body of a gentleman so as to hide all between his head and his knees. Naturally, as it was opaque as well as invisible, it made invisible whatever it covered. "Is C. still in the room?" the subject was then asked. "His *head* is here," was the reply, made in a perfectly indifferent tone; "I don't know where his body is."

another subject, who in either six or seven different trials picked out from a heap of silver and copper change, consisting of from fourteen to twenty-two pieces, the one coin which had been contributed by his operator to the heap. He never made a false guess on the evenings when these successes occurred; and the only reason he could give for his choice was either that the coin *felt as if* it were the right one, or that it "felt heavy." The coins were of course arranged out of his sight; and in some of the later trials, though not in the whole series, express care was taken to see whether he might not have been guided to his choice by the right coin being *warmer* than the rest, but with a negative result. On *one* evening he altogether failed in this experiment. With handkerchiefs he was less uniformly successful. We shall continue these experiments, so as to ascertain, if possible, the nature of the clew which determined the subject's choice.

A direct difference in the effects of upward and downward passes, independent of suggestion or expectation, has always been part of the orthodox "magnetic" creed. But the recent flood of "scientific" literature on the subject is almost mute on this point. Dr. W. K. Mitchell of Philadelphia, a contemporary of Braid, whose caution, clearness, and cool head ought ere now to have secured for him a prominent name in the history of hypnotism,[1] admitted that the different effects of upward and downward passes were the only sign of a direct physical influence of operator upon subject which he was able to find. Our own experiments verified the difference in question in cases too numerous to be plausibly ascribed to accident. The young men upon whom the passes were made knew nothing of what we were seeking to test, and as often as not answered wrongly when asked later if they knew the direction in which the passes had been made. Yet in five or six individuals, upward passes, the first time they were tried, awoke the patient, or restored his hand, arm, etc., to its natural state, whilst downward passes had a precisely opposite effect. It is a curious thing to see the face of a man whose eyes and mouth have been shut tight by suggestion, and over whose face the operator makes passes in an upward direction on the right side, whilst he makes downward passes on the left. On being told to open their eyes and whistle, two or three such patients have opened upon us only the right eye, and whistled out of the right corner of their mouth. Others showed no difference whatever in their reaction to the different passes. The matter must be prosecuted further. Obviously, so long as it is under dispute, experi-

[1] See his Five Essays, edited by Dr. S. Weir Mitchell, Philadelphia.

ments, to prove any thing, must be made with ignorant subjects, and must succeed the first time they are tried.

Besides the observations we have recorded, we verified most of the now classical and familiar phenomena of trance. A few curious observations on the *rapport* between operator and subject, and on the influence of magnets, had better be treated as coincidences for the present, because not found in the subject at different times. Our experience has impressed upon us the variability of the same subject's trance from one day to another. It may occur that a phenomenon met with one day, but not repeated, and therefore accounted a mere coincidence, is really due to a particular phase of the trance, realized on that occasion, but never again when sought for. To decide definitely between these alternatives, in the case of any special phenomenon, would obviously require many sittings and consume much time.

WILLIAM JAMES.
GOUVERNEUR M. CARNOCHAN.

REPORT OF THE COMMITTEE ON MEDIUMISTIC PHENOMENA.

The Committee on Mediumistic Phenomena has no definitely concluded piece of work to offer. An account of what has been done during the year, however, with a few reflections, may not be out of place.

Mr. Glendower Evans's untimely death, and Mr. T. W. Higginson's resignation, reduced the committee to two members, — Mr. M. J. Savage and Dr. W. N. Bullard. The undersigned, who had resigned, joined the committee again in March. We held no formal meetings as a committee, but each did what work he had opportunity for. Mr. Savage's departure for Europe has made a report from him impossible, although he spent many hours in the service, with results which it is hoped may some day be completed and see the light. Dr. Bullard has no report to make.

My own time was chiefly divided between two mediums, — one a trance-medium, whom, at her request, I shall call Mrs. P.; the other, Miss Helen Berry, whose public "materializing" manifestations are reputed to be among the best of their class.

Concerning Miss Berry, there is little to say. Test conditions against fraud are not habitually offered at her seances. On one

occasion it was granted to Mr. Savage to sit behind the cabinet, others being in front, whilst I explored it after the medium's entrance, and found no confederate concealed. A trap-door seemed out of the question. In a minute two forms emerged from the cabinet. But this was our first sitting, and for certain reasons we cannot call the experiment satisfactory until we have an opportunity of taking part in it again. The real test of the Berry's genuineness is supposed to be the resemblance of the forms to deceased friends of the sitters, and the character of what they say. A large amount of testimony can be collected from sitters as to the unmistakable identity of the forms with their dead wives, husbands, brothers, etc.

I visited twelve seances, and took with me, or sent, personal friends enough to have, in all, first-hand reports of thirty-five visits, embracing sixteen or seventeen seances. No spirit form came directly to any one of us, so we offer no opinion regarding the phenomena.

To turn to the much simpler and more satisfactory case of Mrs. P. This lady can at will pass into a trance condition, in which she is "controlled" by a power purporting to be the spirit of a French doctor, who serves as intermediary between the sitter and deceased friends. This is the ordinary type of trance-mediumship at the present day. I have myself witnessed a dozen of her trances, and have testimony at first hand from twenty-five sitters, all but one of whom were virtually introduced to Mrs. P. by myself.

Of five of the sittings we have *verbatim* stenographic reports. Twelve of the sitters, who in most cases sat singly, got nothing from the medium but unknown names or trivial talk. Four of these were members of the society, and of their sittings *verbatim* reports were taken.

Fifteen of the sitters were surprised at the communications they received, names and facts being mentioned at the first interview which it seemed improbable should have been known to the medium in a normal way. The probability that she possessed no clew as to the sitter's identity, was, I believe, in each and all of these fifteen cases, sufficient. But of only one of them is there a stenographic report; so that, unfortunately for the medium, the evidence in her favor is, although more abundant, less exact in quality than some of that which will be counted against her.

Of these fifteen sitters, five, all ladies, were blood relatives, and two (I myself being one) were men connected by marriage with the family to which they belonged. Two other connections of this family are included in the twelve who got nothing. The medium showed a most startling intimacy with this family's affairs, talking of many

matters known to no one outside, and which *gossip* could not possibly have conveyed to her ears. The details would prove nothing to the reader, unless printed *in extenso*, with full notes by the sitters. It reverts, after all, to personal conviction. My own conviction is not evidence, but it seems fitting to record it. I am persuaded of the medium's honesty, and of the genuineness of her trance; and although at first disposed to think that the "hits" she made were either lucky coincidences, or the result of knowledge on her part of who the sitter was and of his or her family affairs, I now believe her to be in possession of a power as yet unexplained.

The most promising way of investigating phenomena like this seems to be that of learning a great deal about one "Subject," who, of course, ought to be a good specimen of the class. Hitherto we have heard a little about a great many Subjects. Stenographic reports are expensive, but they seem indispensable for a conclusive discussion of the facts. They do away with doubts about the veracity of the sitter's memory; and they enable us to make a comparison of different sittings, which without them is hardly possible at all. Questions arise as to the irrelevant names and facts which almost every sitting to some extent contains. Are they improvisations of the moment? Are they in themselves right and coherent, but addressed to the wrong sitter? Or are they vestiges of former sittings, now emerging as part of the automatism of the medium's brain? A reading of the stenographic reports already taken makes it probable that, for some of them at least, this last explanation is correct. "Spirits" originally appearing to me have appeared in the sittings of others who knew nothing either of their persons or their names.

What science wants is a *context* to make the trance-phenomena continuous with other physiological and psychological facts. Curious to ascertain whether there were continuity between the medium-trance and the ordinary hypnotic trance, I made some observations *ad hoc* upon Mrs. P. My first two attempts to hypnotize her were unsuccessful. Between the second time and the third, I suggested to her "Control" in the medium-trance that he should make her a mesmeric subject for me. He agreed. (A suggestion of this sort made by the operator in one hypnotic trance would probably have some effect on the next.) She became partially hypnotized on the third trial; but the effect was so slight that I ascribe it rather to the effect of repetition than to the suggestion made. By the fifth trial she had become a pretty good hypnotic subject, as far as muscular phenomena and automatic imitations of speech and gesture go: but I could not affect her consciousness, or otherwise get her beyond this

point. Her condition in this semi-hypnosis is very different from her medium-trance. The latter is characterized by great muscular unrest, even her ears moving vigorously in a way impossible to her in her waking state. But in hypnosis her muscular relaxation and weakness are extreme. She often makes several efforts to speak ere her voice becomes audible; and to get a strong contraction of the hand, for example, express manipulation and suggestion must be practised. The automatic imitations I spoke of are in the first instance very weak, and only become strong after repetition. Her pupils contract in the medium-trance. Suggestions to the "Control" that he should make her recollect after the trance what she had been saying were accepted, but had no result. In the hypnotic-trance such a suggestion will often make the patient remember all that has happened.

No sign of thought-transference — as tested by card and diagram-guessing — has been found in her, either in the hypnotic condition just described, or immediately after it; although her "Control" in the medium-trance has said that he would bring them about. So far as tried (only twice), no right guessing of cards in the medium-trance. She was twice tried with epistolary letters in the medium-trance, — once indicating the contents in a way rather surprising to the sitter; once failing. In her normal waking state she made one hundred and twenty-seven guesses at playing-cards looked at by me, — I sometimes touching her, sometimes not. Suit right (first guess) thirty-eight times, — an excess of only six over the "probable" number of thirty-two, — obviously affording no distinct evidence of thought-transference. Trials of the "willing game," and attempts at automatic writing, gave similarly negative results. So far as the evidence goes, then, her medium-trance seems an isolated feature in her psychology. This would of itself be an important result if it could be established and generalized, but the record is obviously too imperfect for confident conclusions to be drawn from it in any direction. Being compelled by other work to abandon the subject for the present, these notes are published merely as a suggestion of lines of inquiry which others may be better fitted than myself to carry out.

If a good trance-subject could be obtained for the society at the outset of her or his career, and kept from doing miscellaneous work until patiently and thoroughly observed and experimented on, with stenographic reports of trances, and as much attention paid to failures and errors as to successes, I am disposed to think that the results would in any event be of scientific value, and would be worth the somewhat high expense which they necessarily would entail. If the friends of spiritualism would contribute money for the thorough

carrying out of any such scheme, they would probably do as much as by any one thing could be done, to bring about the "recognition" of trance-mediumship by scientific men.

As for the other kinds of mediumistic phenomena, I have during the past year been very much struck by the volume of evidence which can be collected in their favor. But the mere *volume* of evidence is of no account unless it can be proved that the evidence is likely to be of the ordinary human sort, bad and good mixed together in the usual proportion. If it is possible that it is unusually bad in *quality*, the quantity of it is of little account. Now, that there *are* reasons for believing its quality to be in these matters below the average, no one familiar with the facts can doubt. Only the establishment of one or two absolutely and coercively proven cases — of materialization, for example — will show that the hearsay evidence for *that* phenomenon may be mixed. And only *then* can the volume of evidence already extant on the subject be taken into account by one who has no direct personal experience on which to rely. The ordinary disbeliever rules out all hearsay evidence in advance. The believer accepts far too much of it, because he knows that some of it is good. The committee of the society should first devote itself to the very exact and complete study of a few particular cases. These may consume much labor and time. But if, after studying them, it should reach favorable conclusions, it would do vastly more to make the vaguer testimony already extant influential with the society as a whole, than it could do by discussing such testimony now.

WILLIAM JAMES.

REPORT OF THE COMMITTEE ON THOUGHT-TRANSFERENCE.

In the first number of the society's Proceedings (p. 45) will be found Circular No. 5, issued by this committee, with the object of ascertaining whether thought-transference might not be more active in relation to conceptions of geometric form and arrangement than it appeared to be in relation to ideas of color and number already investigated. Blanks D and E were issued with this circular to facilitate the recording of experiments with the card face test and the diagram test respectively. The results obtained with the card face test are shown in Table I.

TABLE I. RETURNS OF BLANK D.

CARD-FACE TEST.

No.	Agent.	Percip.	Right.	No.	Agent.	Percip.	Right.
1	M. P. W.	A. W.	15	22	G. S. F.	L. L. S.	14
2	"	"	13	23	"	Mrs. G. S. F.	6
3	"	"	10	24	"	M. E. R.	9
4	"	"	7	25	"	"	12
5	A. W.	M. P. W.	11	26	"	O. M. B.	9
6	"	"	9	27	"	"	8
7	M. B. C.	P. E. C.	9	28	"	"	11
8	P. E. C.	M. B. C.	7	29	"	"	7
9	H. K. C.	P. E. C.	9	30	"	"	11
10	F. A. O.	E. T. O.	10	31	"	E. L. S.	14
11	F. A. O.	E. T. O.	10	32	"	"	10
12	F. A. O.	E. T. O.	6	33	"	"	17
13	L. D. T.	C. R. N.	6	34	"	"	11
14	C. R. N.	L. D. T.	14	35	W. J. A.	A. H. B.	6
15	C. B.	A. A. W.	17	36	A. H. B.	L. A. B.	11
16	A. A. W.	C. B.	8	37	A. H. B.	W. J. A.	13
17	A. A. W.	L. M.	12	38	"	"	10
18	E. L. S.	S. M. B.	8	39	M. A. C.	C. T. R.	10
19	S. M. B.	E. L. S.	10	40	W. H. P.	E. T. B.*	5
20	G. S. F.	L. W.	10	41	G. C. S.	Miss S.	22
21	M. E. R.	Mrs. R. H. L.	12				

* In this set only fifty trials were made.

It will be seen that forty-one returns of Blank D were made, each one (except No. 40) giving the result of a hundred trials. In the fourth column of the table is given the number of successful guesses in each set of a hundred trials.

These figures, in all cases except No. 41, vary between 6 and 17, a range which, in view of the probabilities set forth in Table VI. (p. 25 of these Proceedings), will excite no surprise. In No. 41 alone is the number of right guesses (22) large enough to attract attention. In this case the agent was a graduate of Harvard College and a principal of an academy in the State of New York, and the percipient a young lady in excellent health and about twenty-two years of age. The agent sends the following account of the experiment.

"I enclose the results of a trial made of the card test in two successive evenings. . . . One interesting point, as we were pursuing the experiment, was that, though neither the young lady nor myself had before tried any thing in any wise similar, I observed that she became a good deal interested as we went on; and when she was about to give what turned out to be a correct answer, it seemed as though, by her triumphant tone, she were sure she was right even before I announced the fact. . . . Several times, when the correct answer was given, the percipient would add in the same breath the color and the spot, and again often give the answer in alternates (one of them proving correct), as though she could not give one precisely. It would often seem, and she herself said, that, after looking intently at me and in the direction of the pack (held always so that the per-

cipient could not possibly see the face), she would look away, and then seem to see, especially when right or nearly right, as though projected on the retina, the card with its number."

The result of this experiment is so remarkable that it seems desirable to present it in detail.

TABLE II. BLANK D. CARD-FACE TEST No. 41.

P.	A.	P.	A.	P.	A.	P.	A.	P.	A.	P.	A.
6	6	6 or 3†	7	1	9	9	4	1	2	3	2
1 or 3	1	6	2	4*	4	1	1	4	1	7	3
1	1	3	3	2	7	3	4	5	1	3	2
1	1	1	1	4	2	6 or 4*	6	2 or 3	3	4 or 6	1
4	1	2	8	5*	5	8	10	5	3	10	7
2 or 7	7	4	8	2*	2	6*	6	6	10	6	5
4*	4	3	4	5	7	6 or 3†	1	1 or 2	3	2	3
3	2	8	6	7 or 8	8	7*	4	9	2	9	7
8 or 9	7	3	4	3	1	3	7	2	1	5	6
7	5	4 or 5	5	1	2	2 or 10	3	1	3	2 or 3	1
3	3	2	3	8 or 4	6	3	7	4	5	3 or 6	7
1	6	5	4	3	6	6†	6	9	4	3*	3
5	6	7	1	3	8	3	6	4*	4	7	3
1	4	5	6	9	4	10 or 6†	5	3	3	4*	4
4	3	6	3	7†	7	1	1	6	10	9	7
8	10	1 or 9†	9	6*	6	3	3	5*	3		
8†	6	5	9	1 or 2	1	10†	6	3 or 4	6		

* In these cases, the suit, as well as the color, was correctly given.

† In these cases, the color of the card was correctly given.

An examination of this table shows that twenty-two times in a hundred trials the number of the card cut was correctly given. In nineteen other cases the answer was given in alternates, and in nine of these cases one of the numbers thus given was correct. It further appears, that in twenty instances the color of the card, and in twelve cases the suit as well as the color, were correctly given. These statements as to suit and color were, except in five instances, made in cases where the number was also correctly given.

The probability of as many as twenty-two right guesses being made by chance is shown by the above-mentioned table to be less than one in a thousand; and the correct guesses of suit and color, and those in the cases of alternates, still further increase the probability that something else beside chance was concerned in bringing about this result.

The case, indeed, has the appearance of being one of "thought-transference" of the kind reported by the English society; but the committee feel that a decided opinion cannot be expressed until further experiments by the same agent and percipient have been made under more stringent conditions. Unfortunately the agent and percipient no longer live in the same city, and a continuation of the experiments is therefore for the present impossible. It is worthy of note, that in this experiment the agent was "conscious of considerable

exertion in concentrating his mind steadily, and excluding every thing but the card drawn," while the percipient was conscious of no special mental effort.

The "triumphant tone" noted above suggests an additional condition which should not be overlooked in such experiments as these. When the percipient feels a confidence in the correctness of certain of the guesses, this fact should be noted in each case, provided that it can be done before the result is verified. This record may be made by the percipient, or by a third person present as a witness. If among these guesses, the proportion which proves to be correct persistently exceeds what the theory of probabilities would indicate, we may infer the presence of some other agency than chance.

TABLE III. RETURNS OF BLANK E.

No.	Agent.	Percip.	Right.	No.	Agent.	Percip.	Right.
1	W. J.	M. C.	0	15	O. B. F.	W. L. P.	1
2	H. P. B.	E. W. P.	0	16	H. P. B.	H. I. B.	2
3	J. J. P.	G. W. M.	0	17	H. I. B.	C. C. D.	1
4	C. C. A.	H. C. A.	2	18	P. E. C.	H. K. C.	1
5	G. S. F.	E. L. S.	1	19	T. C. B.	J. S. M.	3
6	C. C.	M. E. C.	1	20	H. P. B.	M. C.	2
7	H. C. A.	R. A.	2	21	W. J.	E. W. P.	1
8	C. C.	A. C.	2	22	E. W. P.	W. J.	0
9	G. S. F.	M. E. R.	1	23	E. H. H.	Mrs. E. H. H.	2
10	"	"	1	24	"	"	0
11	"	"	2	25	"	"	2
12	"	R. H. L.	3	26	"	"	2
13	A. H. B.	W. J. A.	2	27	"	"	1
14	W. L. P.	O. B. F.	1				36

13.3 per cent of the answers were right.

The returns of Blank E were fifty-one in number. Of these, twenty-seven showed but slight evidence of thought-transference, as will be seen by Table III., where the number of right guesses in each set of ten trials is given in the fourth column. It will be noticed, that of the twenty-seven cases there are

22 in which the number of right guesses exceeds 0
12 " " " " " " " " 1
2 " " " " " " " " 2

According to the above-mentioned table of probabilities, these numbers would be 17.6, 7.1, and 1.9 respectively. Such a result, if found to be constant with a larger number of observations, would be regarded as favorable to the theory of thought-transference.

The twenty-four remaining returns of Blank E were all made by a single percipient, and were forwarded by a member of the council who was himself the agent. Some of these returns were so remarkable in their character, that it has been thought best to append to this report a description of them in the words of the agent himself. (See

appendix.) It will be seen that the agent, Mr. William H. Pickering, considers that by these experiments the reality of thought-transference has been proved as completely as is possible by a single pair of observers. The committee regret extremely that it has been found impossible to repeat these experiments under conditions which would justify them in expressing an opinion based upon personal observation of the phenomena.

In addition to these replies to the circulars issued, the committee have to report the result of a few experiments made by members of the society with the free drawing test.

In these experiments, the percipients were a lady living in the suburbs of Boston, whom we will designate as Mrs. T., and her nephew, a boy of ten years of age, whom we will call R. C. The agents were, in most of the experiments, Professor Palmer of Harvard College and the chairman of this committee. The percipient was blindfolded, and seated with the back against a small table at which the agents were seated. The agents each held a hand of the percipient, and their other hands were joined across the table. On the table behind the percipient, and between the agents, was the paper bearing the original drawing, which had been made generally by one of the agents in another room, or in a distant part of the same room, so that the noise of the pencil in making the drawing could not possibly guide the percipient. The agents fixed their attention on the drawing in front of them; and, after a short time, the percipient removed the bandage, and with a pencil and paper, placed on another table, attempted to reproduce the drawing thought of by the agents.

Experiments were made in this way on two successive evenings, resulting in one success out of fourteen trials with Mrs. T., and two successes out of eleven trials with R. C.

Although the successes in these experiments were perhaps not more numerous than could be accounted for by chance, yet there was in the case of R. C. a circumstance attending one of the successful efforts which deserves mention. In the seventh trial, on the evening of Nov. 2. after sitting a short time in the manner above described, holding the hands of the agents, the precipient suddenly dropped them, exclaiming, "I saw something come right up then!" He then seized a pencil and drew the correct figure, — a heart. On being questioned as to his sensations, he replied that he tried to "think of nothing," in which attempt he was at first not successful; but when he had succeeded in banishing all thought, a visual image of a heart, in black and white, seemed to rise before him.

It will be seen from this report, that some cases have been brought

to the notice of the committee which seem to indicate, that, under certain circumstances, the transference of a conception of geometric form from one mind to another may take place without the use of the ordinary channels of sensation. But these cases are at present merely suggestions for further inquiry, and are not in themselves sufficient to establish the reality of thought-transference as a psychological phenomenon. To establish this reality, it will be necessary to make observations, which, by their number and the conditions under which they are made, shall eliminate not only chance, but all other recognized causes, as an explanation. To this end it is very important to investigate the conditions which seem to favor or hinder the production of the phenomenon, in order, by controlling these conditions, to increase the chances of successful observations. It is evident that very little progress has been made in this direction. The only condition which can be suggested as possibly favorable to thought-transference appears to be a certain vacuity of mind. At least two individuals have used the words, "thinking of nothing," or their equivalents, in describing their mental condition at the time of an apparently successful experiment in thought-transference. Another percipient has spoken of the unfavorable effect of a conscious mental effort to read the thoughts of the agent. The mind, she says, must be kept in a passive state. If this absence of conscious thought is really an essential condition of thought-transference, the great rarity of the phenomenon, both in the normal and in the hypnotic state, is easily explained; and our attention must henceforth be directed to ascertaining by what means this form of cerebral activity may be held in check, a problem which lies within the domain of experimental physiology. It is possible that pharmacology may throw some light on the question; for it is by no means impossible that a drug may be discovered which will act upon those cerebral centres whose activity is associated with conscious thought, in the same way that sulphuric ether acts on the centres connected with the perception of painful impressions upon the nerves.

As a working hypothesis, which may be of possible use in guiding research, but which we by no means put forth at present as a theory which we are inclined to adopt, we may conceive that impressions from the minds of those about us are continually reaching our own minds by channels distinct from those of the senses, but that the forms of cerebral activity thus set up are so very feeble in comparison with those which depend, directly or indirectly, upon influences reaching us through the ordinary sensory mechanism, that the former can never rise into consciousness unless the latter are held in abeyance. A phenomenon analogous to the one suggested in this hypothesis pre-

sents itself in connection with the sense of sight. The fixed stars are continually shining upon us by day as well as by night, but the more intense stimulation of the retina by the rays of the sun blinds us to the feeble impressions produced by the light of the stars; and it is only when the sunbeams are withdrawn, that we become conscious of the existence of the stellar universe. In a similar way, we may conceive that it may be necessary that ordinary cerebral activity should be suspended in order that we may become conscious of the feeble influences passing between mind and mind without the aid of the usual channels of sensation.

The difficulties which attend the prosecution of this research are numerous. In the first place, cases which suggest the possibility that thought-transference may be a genuine phenomenon seem to be exceedingly rare. Only three or four such cases have been reported to the committee since they began their researches. In the second place, persons who appear to possess this power manifest it in the most capricious way, as is well shown in the case of the percipient described by Mr. Pickering. In the third place, there is, on the part of some intelligent people, an unwillingness to engage in investigations of this sort, arising, apparently, from a certain vague dread of some mental injury likely to follow such experiments. This feeling, when expressed, will of course tend to discourage those who have given any indication of possessing the power of thought-transference from undertaking a systematic study of the phenomenon.

In spite of these difficulties, the committee hope that individuals may yet be found who will manifest the power under conditions which may permit a satisfactory investigation to be made. To this end an advertisement has been inserted in a paper published in the interests of spiritualism, requesting that names of individuals possessing the power of mind-reading may be sent to the committee. In this way it is hoped that material for study may be collected in sufficient amount to justify a definite conclusion with regard to this important subject.

H. P. BOWDITCH, *Chairman*,
EDWARD C. PICKERING,
WM. WATSON,
EDWIN H. HALL,
CHARLES SEDGWICK MINOT,
C. C. JACKSON,
J. M. PEIRCE,

Committee on Thought-transference.

BOSTON, May, 1886.

APPENDIX.

EXPERIMENTS ON THOUGHT-TRANSFERENCE.

THE experiments described below were made with a young lady, and, although not as numerous as could be desired, seem to confirm the accuracy of the results arrived at by the English Society of Psychical Research. Our earlier experiments have already been described in the first number of the "Proceedings" and in "Science," July 3, 1885. Encouraged by these results, we continued our experiments the following autumn, comforming our methods to the directions given in Circulars Nos. 4 and 5 of the Thought Transference Committee. The results of these experiments may be perhaps best exhibited by adopting the tabular form. Only three of the tests were tried.

TESTS FOR OBTAINING THE REALITY OF THOUGHT-TRANSFERENCE.

DATE.	(1) COLOR TEST.		(4) CARD-FACE TEST.		(5) DIAGRAM TEST.	
	Guesses.	Right.	Guesses.	Right.	Guesses.	Right.
Sept. 1	50	35			10	5
	50	23			10	3
	50	32			10	6
	50	29			10	7 (8?)
	200	119			10	5
					50	26
Sept. 2			10	2		
			10	0		
			10	0		
			30	2		
Sept. 4	50	28	10	1	10	0
	50	28	10	2	10	0
	100	56	20	3		
Sept. 14	50	21			10	0
	50	30			10	0
	50	23			20	0
	150	74				
	450	240	50	5	80	26

The experiments on the diagram test were continued last spring with the following results.

Date.	Guesses.	Right.	Date.	Guesses.	Right.	Date.	Guesses.	Right.
Mar. 20	10	0	Mar. 21.	10	2	Apr. 26.	10	1
	10	3		10	0		10	2
	10	2		10	2		10	3
	10	3		10	1		10	0
	10	1		10	3		10	2
	10	1		50	8		50	8
	60	10						
Guesses, 160. Right, 26.								

On a consideration of the above figures it will become evident that on Sept. 1 there were strong indications of thought-transference both in the color and diagram tests; the probabilities that the results could have been due to mere accident being respectively in the color test (Proceedings, Vol. I., No. 1, Appendix B, Table III.) as 3, as 760, as 32, and as 161 are to 1,000. In the diagram test (Appendix B, Table V.) the probabilities that the results could have been due to chance are as 1, as 69, as 0, as 0, and as 1 are to 1,000. In the third and fourth cases the possibilities of accident are so small as not to be included in the table. Combining these results together, we get a ratio such that the possibility of accident is thrown entirely out of the question.

On the other hand, in the experiments tried on Sept. 2, 4, and 14, there is no evidence of thought-transference whatever; and, in all probability, whatever coincidences were obtained were due to chance. In the experiments of March 20 and 21, and April 26, about an equal percentage of the results were correct on each day; and combining the results so as to take first the first hundred guesses together, and then the last hundred, by Table VI. we find the probabilities of the results being due to mere accident are about as 72 and as 39 are to 1,000.

In these experiments I usually sat behind the percipient, at a distance of about a yard; so that I could readily look over her shoulder, and, as it were, guide her pencil by my eye. I had the ten figures (Proceedings, p. 47) before me, drawn on a sheet of paper, and selected them at random, taking care to have no method in my selec

tions, such as taking alternate ones or employing other artificial systems. She did not look at me, but let her eyes wander freely about the room; and when drawing, as was natural, they were fixed upon the paper. She was generally told when her drawing was correct. Sometimes others were present with us, and sometimes not. Usually they were not interested in our proceedings; though on the first day, when our best results were obtained, I think there were two or three interested spectators. That they gave no physical assistance, both the percipient and myself are confident. Whether their minds aided mine or not, I do not know; but I think that they would have been more likely to confuse than assist the percipient.

On April 24 she made twenty drawings, with Professor E. C. Pickering as agent, but only one of them was correct.

I have tested in all about a dozen different persons for evidences of thought-transference; but though in one or two instances I have thought I detected traces of the capacity, the tests were too few to draw any satisfactory conclusions from them. It seems to me that the free drawing test (No. 6) is best adapted to preliminary testing, and is more likely to succeed than the card or number tests. The forms in general produce a stronger impression upon the mind than either colors or numbers. When employing the diagram test (No. 5), it seems to me better in future to use only five of the simpler figures, instead of as many as ten. A large number confuses the percipient, while a small number involves so many tests in order to obtain a satisfactory result that it tires him out.

An examination of the results of our experiments seems to indicate that on four days out of the seven on which trials were made, the percipient was able to obtain results in guessing which certainly could not have been due to mere chance. This explanation is, I think, therefore thrown completely out of the question. As the young lady is a near relative of mine, I am sure that the results are genuine; and as I exercised no physical influence over her that either we or anybody else could detect, I think that thought-transference is as good a name for the phenomenon as any, until some logical explanation of it has been discovered. In this sense of the word (unperceived physical or mental connection), I think we have proved the reality of thought-transference as completely as it is possible for a single pair of observers to do; and it now only remains for a sufficient number of other people to show that they can obtain the same results, in order to have the reality of the phenomenon admitted as one of the well-ascertained facts of human experience.

This done, the next step will be to obtain some rational explanation of the phenomenon, and to this end my future experiments in this field will be directed.

WM. H. PICKERING.

ON THE EXISTENCE OF A MAGNETIC SENSE.

By JOSEPH JASTROW, Ph.D., and GEORGE F. H. NUTTALL, M.D.

HISTORICAL.

Since the day when Thales, about twenty-four hundred years ago, rubbed a piece of amber on silk and found that it attracted light particles, the phenomena associated with the word "magnetism" have always been regarded with feelings of mystery and wonder. Thales himself is said to have explained it by assuming that the soul of the amber was disturbed, and withdrew to attach to itself the particles from without. Later philosophers made good use of the magnet as an illustration of action at a distance, by means of a living force, itself invisible, immaterial. To this day the magnet is one of the most interesting objects of curiosity to children; and the notion of force is represented, in the minds of many persons, by the picture of the magnet drawing a bit of iron. The mystery was very much deepened by the discovery of the magnetic needle, with its constant indication towards the north.

But no very serious harm was done until the notion was transferred from physics to biology. Soon after Gilbert's inauguration of magnetism as a science, one astrologer after another called upon this great and mysterious power as the source of his inspiration and his lore. Paracelsus ascribed to man a double magnetism,—one, for his moral and intellectual faculties, whose source was in the planets; the other, for his organic functions, coming from the elements of matter. Kircher, a Jesuit doctor, invented the name "animal magnetism" for phenomena not essentially different from those which made the fame of Mesmer. Antoine Mesmer announced a series of remarkable cures by a power given only to himself. His success was very limited until he explained it by a theory. This theory assumed the existence of a universal fluid, with properties analogous to those of the magnet. It exhibited poles which could be connected, inverted, destroyed, and enforced. It affected the animal body, and put it in reciprocal relation with the heavenly bodies. It was an "animal magnetism." This slender analogy was sufficient to introduce a confusion with regard to a series of neurotic phenomena from which the world at

large has not even yet fully recovered. The argument was this: Magnetism is a mysterious force of which we know little; these hypnotic phenomena are mysterious and little intelligible; *ergo*, they are the same thing.

In the experiments of Baron Reichenbach, a serious attempt at a scientific investigation of the effect of a magnet on the human body was made. He began by observing that a magnet, when passed close to the person of many healthy men and women, caused peculiar, not easily describable sensations. They were analogous to sensations resulting from gentle breaths of air, or like pricking or creeping. About one in fifteen or twenty, and often three or four in that number, were found sensitive. In one case of twenty-two young ladies at a seminary, no less than eighteen felt the passes of the magnet. While some of his subjects were healthy men, most of them were of the female sex, and of sedentary habits, with more or less decided tendencies to neurotic manifestations. He next found a special set of sensitives, who saw flames issuing from the poles of a magnet in a perfectly dark room. A very suspicious fact recorded is that some of his sensitives saw the light equally well when the armature was closed. He succeeded in photographing this magnetic light, and used great ingenuity in ascribing a common cause for it and the aurora borealis. He also found subjects whose hands and other parts of their bodies were attracted by a strong magnet; and yet the hand itself did not attract iron filings, even when the body was in direct connection with a magnet. Some of his subjects claimed to be able to magnetize needles by holding them in their hands; but a careful test showed that their pretensions were groundless. Still more curiously, objects once magnetized attracted the hands of some of his subjects; and even objects that were not magnetized (when the subjects thought that they were) had the same effect. He then thought he discovered that all the bodies that had this magnet-like effect had crystalline properties, and was led to a peculiar theory about crystals and the human body and his famous "od" hypothesis. Reichenbach's book impresses one as a sincere but useless piece of work. At the most essential points his evidence is faulty, and the (account of) the conditions hopelessly defective. A modern reader, with a knowledge of the exquisite shrewdness and exalted sensibility that stands at the command of a slightly hysterical girl, cannot fail to see that the opportunities for having the expected result suggested or guessed were many, and that with the suggestion once made the rest follows readily enough.

The provision for Reichenbach committees in our societies for

psychic research has given these researches a new life. The committee of the English society have published a few notes; and their chairman, Professor Barrett, has expressed himself in several publications with regard to the results reached. They complied with the conditions suggested by Reichenbach, and used much more powerful magnets. Their results were entirely negative until the three young men who had proved themselves so useful in the department of thought-transference were called upon. Apparently, of forty-five persons tested, these three alone felt any effect of the magnet. The sensation was described as peculiar and unpleasant; reached its maximum in from fifteen to twenty seconds, and then died down slowly. When one of the subjects was complaining of facial neuralgia, his sensibility was improved. The sensations were most distinct on the forehead. The committee records that one of their subjects was asked to walk up to an electro-magnet and tell whether the current was turned on or off. He answered correctly ten out of twelve times. These same subjects also saw the flames issuing from the magnet in an absolutely dark room; but all attempts to photograph the light with the most delicate plate were futile. The general verdict of the committee is, that certain sensitives are variously affected by the presence of a magnet. They also mention in this connection the alleged fact, that many persons cannot enjoy a good night's rest unless the bed is placed in a definite position with regard to the points of the compass. The only criticism to be passed upon this report is to point out the suspicious peculiarity, that just the same three persons who were good "thought-transferrers" were magnetic sensitives; and that (as will be seen later) the precautions against a knowledge of the condition of the magnet by other means were not sufficiently rigid.

Before these experiments were made, Sir William Thompson had tried the effect of putting one's head between the poles of a powerful magnet, and describes the result as no less than wonderful. The wonder of it was that nothing happened. He thinks it would be very strange if no magnetic sensibility existed, and urges a careful series of experiments upon the question.

More recently, two French observers describe some very remarkable effects produced by the magnet upon hypnotic subjects. When such subjects have re-acted to the suggestion that one-half the body is affected in a certain way (e. g., one arm is insensitive), the application of a magnet on the opposite side of the body will cause the effect to leave the first side of the body and go to the other (i. e., the other arm will be the insensitive one). They call this *psychic "transfert."* They "transfer" sensations, motions, memories, pains,

paralyses, etc. They also describe a more complicated phenomena produced by the magnet, in which the effect suffers a repeated variation from one side to another. This they call "*psychic polarization.*" Dr. Bernheim has repeated these experiments, and always with a negative result when the patient was ignorant of the expected result. As soon as he said something about the effect to his assistant, in the presence of the subject, the "transfert" took place with great regularity. Indeed, the substitution of a bit of wood or chalk, hidden by a cloth, acted quite as well as a magnet after the patient had been told that a magnet was under the cloth.[1] He insists strongly upon the necessity of experimenting with subjects who have never assisted at, or have seen, similar phenomena. By allowing a subject to see the effect of a magnet upon another, he was always sure of a similar effect upon herself the next day. Dr. Bernheim shows what keen observers these sensitives are, and believes that unconscious suggestion is the clew to the whole question.

A magnet has also been employed by several observers for putting subjects into the hypnotic condition. M. Ochorowicz has invented a little instrument, — the hypnoscope, — which is simply a hollow magnet to be placed on the finger, and for which he claims the power of detecting hypnotic subjects. All hypnotizable persons will feel a peculiar sensation when the hypnoscope is adjusted. It is not at all improbable that persons with sufficient command over their imagination to feel a sensation from the hypnoscope will be of that neurotic temperament so common in hypnotic subjects.

Finally, the mere mention of the host of cures and wonders ascribed to magnetic influences will conclude this somewhat sad record of the history of one of the border-lands of science.

METHOD AND APPARATUS.

In view of the unsatisfactory state of the question as to the existence of a magnetic sense, it was thought desirable to make a rigid test upon normal healthy subjects. Especial attention was to be given to the method, to the elimination of coincidences, and to the possible sources of error. After many preliminary attempts, we decided upon the following as the most satisfactory form of experimenting: —

A large, massive electro-magnet, whose base measured three feet in length, was tipped on its side, and supported on a raised platform

[1] One of the present writers has seen this experiment repeated, with the same result. MM. Binet and Fèré, the French writers above referred to, say the effect does not follow if a wooden "magnet" is used. It is possible that the subject was aware of the intended deception.

resting upon two adjoining tables. A space was left between the two tables large enough for the subject to insert his body in a sitting posture. The coils of the magnet were each nine and one-half inches in length, and fifteen and one-half inches in circumference. The core was hollow, and measured seven-eighths of an inch (inside) in diameter. The distance between the poles was just large enough for the subject to insert his head, and have his forehead nearly touching in front, and the back of the head nearly touching behind; i. e., about eight inches. The subject was seated in a chair, in a normal, upright, and fairly comfortable position. When the current was turned on, the magnet was magnetized to saturation, and attracted the blade of a chisel so firmly that it took a violent effort with both hands to wrench it off. Two sets of pole-pieces were used, — one, one and one-eighth inches in diameter; the other tapering down to a blunt point. There would be a stronger magnetic field in the immediate vicinity of the pointed poles, but no difference in the effect was perceived. The subject — that is, the person to be experimented upon — and the magnet were on the third floor of a tall building. In a room on the ground floor of the same building, resting upon a pier built of masonry, was a gramme dynamo machine, to be turned by the hand, and thus to generate the current. It was connected with the magnet by heavy insulated wires running out of the windows along the wall of the building,[1] and in through a window on the third floor to the magnet. The operator was stationed in the room with the dynamo, and communicated with the subject by a system of electric signals at his side. Otherwise they were *completely isolated* from one another, with over thirty feet and two heavy floors between them.

The method employed at first was the following one: When the subject was all ready, and had placed his head in position between the two poles of the magnet, he telegraphed *two* clicks, signifying "ready." The operator had previously signalled "ready" by the same sign. Then, after a brief interval, the subject signalled *one* click, to mean "change." Immediately upon receiving this signal, the operator did one of two things: (1) He turned the dynamo, and sent the current through the magnet, if he had not begun turning it when the subject signalled "ready"; or (2) he opened the key and broke the current, if he had been turning it since the signal "ready" was received; i. e., in either case he changed the condition of the magnet. He was guided in his choice between (1) and (2) by a

[1] The experiments were made in the psycho-physical laboratory of Johns Hopkins University, Baltimore.

chance arrangement of pluses and minuses on his record-slip. After an interval of from fifteen to sixty seconds, — i. e., long enough to fully appreciate the sensory effect of the change, — the subject again telegraphed "change," whereupon the operator restored the magnet to its original condition. After appreciating the effect of the second change, the subject telegraphed *three* clicks, to mean that the observation was finished. The operator then queried "ready?" and the answer was given, and the procedure repeated as before. The observations were made in sets of ten each; and, as a rule, five such sets were taken at one sitting. The operator, as already mentioned, had a record-slip on which were written five pluses and five minuses, in an order determined by the throw of a die or other chance arrangement. The subject recorded his judgment as to whether the first change had been one from magnetization to demagnetization, and the second change the reverse, or *vice versa*, by placing a red card in the first case, or a black one in the second, upon a determined pack. He recorded at the close of each observation, and kept his cards in sets of ten each. At the end of five sets, — i. e., of fifty observations, — the operator went up-stairs, and compared his record of what had really been going on with the successive judgments of the subject, counting off the number of correct answers. The method was a very expeditious, and, after a little drill in the signals, a very easy one.

Denoting the condition of the current's being turned on by +, and of its being turned off by −, it will be seen that the subject had to decide whether the series of operations (1) + − + or (2) − + − had been going on. He knew that it was always one or the other, and so, by mere guessing, one-half of his answers would be correct. He also knew that in each set of ten observations there were five of each kind of operation; but this simply checked the too great preponderance of any one kind of answer. Moreover, his opportunities for judging were extremely favorable. The sensation could probably be most readily detected at the moment when the magnet became magnetized or demagnetized. This moment was under the control of the subject, and thus the maximum amount of attention was insured. The duration of the action of the magnet was also under his control; and he had two opportunities of getting the effect of an alteration in the condition of the magnet in each observation. The question then simply resolved itself into this: If the number of correct judgments were sensibly more than one-half of the total number of judgments, then a sensibility for a magnetic field existed, and the amount of this excess measured the degree of such sensibility; if the number of correct answers differed from half the number of answers

only by an amount, such as would occur by the action of chance in a limited number of trials, then no such sensibility existed.[1]

RESULTS.

At first we two in turn acted as operator and as subject. Four hundred observations on each of us were taken on six days, the result of which is embodied in the following table.

Date.	No. of Sets.	No. of Errors.	Deviation from ½ No. of Answers.	Date.	No. of Sets.	No. of Errors.	Deviation from ½ No. of Answers.
Feb. 24	5	19	−6	Feb. 24	5	28	+8
" 25	5	22	−3	" 25	3	16	+1
" 26	8	39	−1	" 26	9	38	−7
" 27	7	37	+2	" 27	8	40	0
March 4	10	40	−10	March 4	10	53	+3
" 5	5	14	−11	" 5	5	17	−8
Subject, Dr. Jastrow.				Subject, Dr. Nuttall.			

If we consider the results of the first four days' experiments, we find that in two hundred and fifty observations one hundred and seventeen errors were made by one subject, and one hundred and twenty-two by the other. These small deviations would hardly excite any suspicion were it not that at times we seemed to be able to detect the noise resulting from the turning of the dynamo. The sound must have been conducted along the wires to the magnet. In fact, we had made several attempts to remedy this defect, but we had no guaranty of our success. On the last two days, however, a new complication arose, which, added to the old one, at last forced us to a change in the method of experimenting. At each closing and opening of the key, thus magnetizing and demagnetizing the magnet, a faint but yet audible molecular crepitation occurs. The sound produced is a very dull, rather sudden click. The effect is well known to physicists, and is the more marked, the larger the magnet, the more powerful the current, and the more sudden the magnetization and demagnetization. Moreover, the click accompanying demagnetization was much more distinct than that accompanying magnetization; in

[1] It should be added, that the subject was required to decide one way or the other each time. No such answers as "doubtful" were allowed. Very seldom was there any, even the slightest, confidence in the correctness of one's answers; but one had to force the judgment by a distinct effort to give a decision.

fact, it is very doubtful whether we ever clearly heard the latter. At any rate, this indication of the movements of the operator (together probably with the sound of the dynamo) were recognized by one of us on the fifth day of experimenting, and by the other on the sixth day. The sound was not heard, at least consciously, every time, but sufficiently often for the one subject to answer correctly ninety-five times in one hundred and fifty observations, and the other thirty-three times in fifty observations.

It was not at all impossible that unconscious indications might be utilized for detecting the condition of the magnet.[1] The strangeness attending the whole experiment probably prevented our noticing the click before. Whenever we felt an unusual confidence in the correctness of our judgments, we recorded that fact at once. A reference to the accompanying table will show, that, of the first two hundred and fifty judgments, only two were recorded as confident by one subject, and but one by the other. On the last two days twenty such judgments were recorded by one subject, of which eighteen were correct; and eight by the other subject, of which seven were correct. The indications conveyed by the click (and the noise of turning) thus came into consciousness towards the end of the series of experiments. This is shown by the fact that a much larger proportion of the judgments given with confidence were correct, than of the judgments without that mark.

ATE.	No. of Observations.	No. of		No. of	
		Confident.	Correct.	Confident.	Correct.
		Subject, J. J.		*Subject, C. S.*	
First four days,	250	2	1	1	1
March 4 . . .	100	12	11	2	1
" 5 . . .	50	8	7	6	6

We now attacked the problem of getting rid of the noise of the dynamo and the molecular clicks. We finally succeeded by using the following device. To prevent the sound vibrations from being conducted along the wires, the wires were cut, and one end of each was inserted into a mercury cup, while the other was clamped in a binding screw connected with the cup. The wires hung freely in the mercury, and received only a very small share of the sound vibrations from it. Two such pieces of apparatus were inserted in the circuit;

[1] On this point, see a paper on Small Differences of Sensations, by C. S. Peirce and J. Jastrow. Memoirs of the National Academy, vol. iii.

one in the room on the ground floor just after the wires left the dynamo,[1] and the other on the outside sill of the window, as the wires passed the second floor of the building. In this way, with even a more rapid turning of the dynamo than was necessary, not the slightest sound could be heard when the maximum attention was specially directed to the detection of it.

We avoided the click accompanying demagnetization by a change in our method. By the new method, at the beginning of the experiment the magnet was always in a condition of demagnetization: at the signal "change," the operator either (1) allowed the magnet to remain as it was, or (2) he turned the dynamo and magnetized it. The second change was entirely omitted. Then the subject had to choose between (1) — — or (2) — +; and, as before, the chances of a correct guess were exactly one-half. The conditions for judging were less favorable, but hardly appreciably so. The new method was more expeditious, thus avoiding fatigue, and was simpler.

The almost inaudible click accompanying magnetization was avoided by always keeping the key closed, and by turning the dynamo at first slowly, then with gradually increasing speed, thus eliminating the suddenness of the operation.

After assuring ourselves of the reliability of this method, we continued the experiments upon ourselves and upon eight students, young men in good health, with the following result: —

Subject.	No. of Observations.	No. of Errors.	Deviation from the No. of Answers correct by chance.
J. J.	550	264	−11
G. N.	550	263	−12
M. S.	150	74	−1
C. B.	100	50	0
C. H.	100	53	+3
D. B.	100	53	+3
M. C.	100	50	+6
W. B.	100	47	−3
E. S.	100	49	−1
H. N.	100	50	0

This table shows that in not one of the ten subjects was there any

[1] Here the additional precaution was taken of suspending the wires which dipped into the mercury from the ceiling by fine silk threads steadied by attached weights.

decided sensibility for a magnetic field. Deviation from the number of correct judgments by mere guesswork occurred in both directions, and were on the average only 4.2% of that number. Altogether, nine hundred and fifty-nine errors were made, while chance would make nine hundred and seventy-five errors.[1]

In the case of the first two subjects, we continued to record the judgments to which some confidence was attached. But while in the former method almost all such judgments were correct, now of forty-two confident judgments, only twenty-three were correct in one subject; and of fifteen, nine were correct in the other subject. In other words, the confidence was apparently not due to any sensation connected with the condition of the magnet.

CONCLUSION.

We conclude, then, that our experiments, as far as they go, *fail to reveal any sensibility for a magnetic field.* This does not absolutely exclude the possibility of such a sensibility as a morbid phenomenon, but it weakens the probability of such a thing, because faint traces of almost all abnormal manifestations are usually obtainable in normal subjects. It is true that at times we had peculiar sensations in the head, which can best be compared to the startling sensation one experiences when entering an overheated room; but these sensations were very probably due to the excessive strain on the attention, and they occurred when the operator did not interfere with the magnet as well as when he magnetized it. Moreover, it is probable that these sensations influenced our selection of certain judgments as confident, and, as has been seen, such judgments are not more apt to be correct than others.

It was intended to put hypnotic subjects both in their normal and

[1] Since the subject knew that in reality as many of one kind of experiments would occur as of the other, it is interesting to note that almost every one showed a slight preference for one kind of answer above the other; but, in all, these preferences balanced one another. So, too, the proportion of correct answers in each kind of operation is the same.

There is another method of deciding whether the answers are due to guesswork or not. It consists in comparing the theoretical number of sets with each number of errors from 0 to 10, as determined by the theory of combinations, with the actual number as is done in the accompanying table. Considering the limited number of observations, the correspondence is as close as could be expected.

	0	1	2	3	4	5	6	7	8	9	10
Theoretical . . .	0.2	1.9	8.6	22.9	40.0	48.0	40.0	22.9	8.6	1.9	0.2
Actual	1	1	9	27	42	44	41	18	9	3	0

hypnotic conditions to a similar test, but no opportunities offered themselves while the apparatus was in position. Such experiments would be very desirable.

Although the authors regard the many wonderful phenomena ascribed to the influence of the magnet as not due to that source, they do not pretend to explain all such alleged phenomena, but believe that they are eventually explainable on the basis of our knowledge of morbid psychology and physiology.

Apart from the general negative conclusion, attention is called to the following points: —

(1) That a rigid scientific method is necessary to establish any result;

(2) That the effect of chance was accurately eliminated;

(3) That subtle indications of what is going on were possible even when the subject and operator were completely isolated; and that, as precautions against such indications were taken, the results lost their apparently positive character;

(4) That in experimenting with morbid subjects the conditions and precautions must be still more rigid;

(5) That indications of which the subject may be utterly unconscious may nevertheless be used as a basis for forming the judgment.

LITERATURE.

For a general account of the history of the question: "Magnetisme et Hypnotisme." Dr. A. Cullerre. pp. 1–92. Paris, 1886.

The following special works are referred to: —

1. "Physico-Physiological Researches on the Dynamics of Magnetism in their Relations to Vital Force," By Baron Charles von Reichenbach. Translated by John Ashburner. London, 1850 and 1851.

2. "Proceedings of the English Society for Psychic Research." Vol. i., pp. 56–60, 99–101, 230–238; and references there given.

3. "Nature," March 6, 1884. "The Six Gateways of Knowledge." By Sir William Thompson.

4. Binet et Féré. *Transfert Psychique.* "Revue Philosophique." January, 1885.

5. Binet et Féré. *Polarization Psychique.* "Revue Philosophique," March, 1885.

6. Dr. Bernheim. Reply to above. "Revue Philosophique," March, 1885.

7. "Der Magnetische Sinn," by W. F. Barrett, in "Sphinx," April, 1886.

A RESEARCH ON THE REALITY OF REICHENBACH'S FLAMES.

In the experiment described below, an electro-magnet was employed, with coils measuring eight inches long by five in diameter, and with the pole pieces about half an inch apart. It was placed in a dark room, the walls, floor, and ceiling of which were painted black, and all the cracks covered with rubber cloth, so that not a ray of light entered. A powerful current was passed through the coils of the magnet from a two-light Brush dynamo. After sitting for half an hour in absolute darkness, a faint greenish light was seen in front of the observer's eyes. But it was found that this was quite independent of the magnet, and that it did not disappear when a screen was placed between the magnet and his eyes. When the current through the coils was made or broken by an assistant, no perceptible effect was produced. A person totally unacquainted with physiological optics might readily mistake the subjective phenomenon for an objective reality; but the simplest tests, properly applied, would distinguish between the two. There was a very powerful permanent horse-shoe magnet in the dark room, but no glow could be seen in connection with it.

In the above described experiment, as I was the only percipient tested, it should be mentioned that my eyesight is unusually good in the dark, as is shown by the fact that I can see eleven Pleiades with the naked eye, where many people see only six. If the flames, therefore, were visible to all persons with more or less distinctness, and were not exclusively a nervous phenomenon, I certainly should have made a good subject. As, however, no flames were seen, and the apparatus employed was fully as powerful, if not more so, than that used by the English society, the experiment seems to confirm the view, that, even under the most favorable conditions, the flames, if they exist at all, produce no effect whatever on the senses of a normally constituted person.

WM. H. PICKERING.

PRELIMINARY REPORT OF THE COMMITTEE ON APPARITIONS AND HAUNTED HOUSES.

This committee has entered upon its task with the purpose of collecting and criticising stories that may prove to be current concerning the topics committed to its charge, and with the intention of engaging in any other practicable investigations that may seem to be required by the nature of these topics. A brief statement of the spirit in which the committee intends to work may prove useful at this point. In the first place, no immediate or in any wise sensational results can be guaranteed, or need be demanded in this research. The committee feels its work to be auxiliary to that of other committees, and will have done well if it shall make a careful and critical record of a considerable number of characteristic narratives, and a proper examination of the discoverable evidences for the truth of these narratives. In the second place, should the committee receive, in answer to the accompanying circular, evidences of the occurrence of so-called apparitions, and evidences also of the attainment of such information through these apparitions as was capable of objective verification by the persons concerned, and should these evidences in any case successfully bear a rigid historical scrutiny, the committee would then feel itself prepared to examine whether thought-transference, or some like hypothetical or verifiable process, could be used to give a natural explanation for the occurrences in question. In the third place, wherever the stories that reach us prove to be incapable of such verification, they may still be very useful from many points of view. Stories of apparitions, honestly and precisely told, are, even as mere stories, valuable evidences of current beliefs, of current tendencies to explain or to interpret strange experiences, and of the whole popular temperament. The committee wishes, for instance, to know whether narratives of apparitions are as frequently to be found among Americans as the English society has discovered them to be found among Englishmen, whether age, sex, occupation, or other conditions affect their frequency, and what character they usually assume in this day and country. The far-reaching interest of similar investigations in other branches of descriptive psychology leads the committee to hope that the present research, if long enough continued, may lead, if to nothing more marvellous, then at least to a little better comprehension of the psychology of the American people.

But, yet further, as to the spirit in which they work, all the members

of the committee earnestly and especially desire to avoid *a priori* assumptions and unscientific prejudices of every sort, and to receive and examine in a spirit of cautious frankness whatever information may be put into their hands. They seriously request the active co-operation of the members of the society in securing them answers to the accompanying circular; since without many answers, and full ones at that, little can be done to accomplish any of the objects with which the committee has been formed.

In its work thus far, the committee has actually received a considerable number of interesting and valuable replies to its circular, but is not as yet prepared to make any final report of any definite or general results of its investigation.

JOSIAH ROYCE, *Chairman.*

CIRCULAR No. 6.

COMMITTEE ON APPARITIONS AND HAUNTED HOUSES.

Request for Information.

The undersigned, constituting the Committee appointed by the Society for Psychical Research for the investigation of Apparitions and Haunted Houses, issue the present circular to invite communications from persons who may be able to help them in an examination of the phenomena that fall within their province.

I. They particularly desire information regarding supposed cases of Apparitions of Absent or Deceased Persons. It is well known that, from time to time, there are related or published accounts of people who are said to have seen, as present, persons who were at the time actually either absent or dead. As a proof of the genuineness of these appearances, the accounts frequently add that the persons who have had these experiences have learned, through them, about some otherwise unknown facts, afterwards verified; such, for instance, as death or illness or some other calamity which has actually happened, at or near the time of the apparition itself, to the distant person whose appearance is narrated. Other proofs of the reality and significance of the supposed apparitions are sometimes narrated.

The Committee wishes to collect accounts, from trustworthy sources, of all such alleged occurrences, as well as accounts of other similar personal experiences which may have been striking enough for the persons concerned to remember, or perhaps record. Such accounts the Committee proposes to collate and examine, with a view

to drawing such conclusions from them as may seem proper and warranted. In order that the results, if any are reached, may have value, the Committee, while not wishing to exclude any information likely to be useful, will be especially glad to hear directly from the persons themselves who have had the experiences in question, with such further information as will enable the Committee to verify the accounts given, whether by the accounts of other witnesses, by the use of documents, or by means of other collateral testimony. Persons who have information bearing on the matters before the Committee may find the following questions useful guides in stating their evidence. Such answers as can be furnished, in any case, should be given as explicitly as possible, in the communications addressed to the Committee.

QUESTIONS.

1. To whom and when did the experience in question occur? What was his (or her) age, nationality, and occupation; and what was his (or her) state of health or of mind at the time of the apparition? At what hour of the day did it appear, and at what place?

2. Had the narrator of the experience in question ever had hallucinations, or seen apparitions before, or has such an occurrence ever happened since? If so, describe these other experiences, giving their time and place, and compare or contrast them with the one in question.

3. Does the narrator believe in ghosts? Or has he, before this experience, believed in apparitions of any sort, as probable sources of knowledge about absent or dead persons?

4. To what senses did the apparition appeal? If it appeared clearly to the eye, describe the color, the form, place, apparent distance, size, clearness, the length of time of endurance, and all other remembered qualities of the object seen. Was it "as large as life," i.e., as large as the person or thing supposed to have been seen would naturally have appeared? Were the other objects present at the time (such as the real wall, or a real table or chair) visible through it? Did it stand still, or move about? Did it remain clear, or come and go? Could it be touched? Was it seen in the darkness, or in the light? If the experience in question was not something seen, but something heard or felt, describe it as clearly as possible, and in a similarly definite manner, laying stress on whatever may show exactly what was experienced.

5. If the apparition seemed to give warning, or other knowledge, of any future or distant fact, did the narrator relate the incident to any one, or give notice of the warning conveyed, *before* he was able

to verify the facts supposed to have been revealed? Did he *record* these facts before he verified them, or before he could verify them? If so, is the record now extant, or can it be placed for examination in the hands of the Committee? What other persons have heard of this apparition? How soon did they hear of it? Can they now be communicated with? What are their addresses? If possible, transmit their accounts at the same time with the narrative of the one who actually experienced the apparition in question. If two or more had the experience in common, their names and separate narratives should be given. If this is not possible, give their names and addresses.

These questions are not meant to cover all the ground in every case, but only to indicate the information desired by the Committee, and the most helpful sorts of information. In dealing with all these accounts, the Committee will be governed by no pre-conceived theory or prejudice. They wish simply to hear and examine the facts, and to draw therefrom whatever conclusions may prove to be warranted by the evidence. To this end they invite friendly co-operation from all well-disposed persons.

Correspondents may feel assured that their communications will be treated as thoroughly confidential by the Committee when specially requested so to treat them.

II. The Committee may be able to devote a somewhat limited time to the personal examination of the phenomena connected with so-called haunted houses, and will be glad to hear of such phenomena from persons in the vicinity of this city. The fullest details are requested from all who may offer information on this topic.

Communications may be addressed to any member of the Committee.

JOSIAH ROYCE, *Chairman*,
CAMBRIDGE, MASS.
MORTON PRINCE, M.D., *Secretary*,
BOSTON, MASS.
T. W. HIGGINSON,
CAMBRIDGE, MASS.
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40 STATE STREET, BOSTON, MASS.
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CONCORD, MASS.

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PROCEEDINGS

OF THE

American Society for Psychical Research.

VOL. I. *DECEMBER, 1887.* NO. 3.

MEETINGS OF THE SOCIETY.

BOSTON, June 15, 1886.

Fifth meeting of the Society.

Thirty-four persons present. Professor E. C. Pickering in the chair.

Record of the previous meeting (Jan. 12, 1886) read and approved.

Election of Associate Members.

Professor Bowditch read the report[1] of the Thought-Transference Committee, and Mr. W. H. Pickering presented a report[1] on some experiments in Thought-Transference. The subject was then discussed by Drs. Minot, Prince, James Putnam, and by Professors Pickering and Watson.

Dr. Minot then read a paper[1] "On the Existence of a Magnetic Sense" by Drs. Jastrow and Nuttall, of Johns Hopkins University. Dr. Minot also read the report[1] of Mr. W. H. Pickering on the Reichenbach Phenomena.

Professor Royce reported[1] for the Committee on Apparitions and Haunted Houses.

Professor Bowditch read a letter which narrated certain strange occurrences which had come under the notice of the writer.

Professor James reported[1] for the Committee on Hypnotism, and also for the Committee on Mediumistic Phenomena.

The meeting then adjourned.

E. G. GARDINER, *Secretary.*

BOSTON, Jan. 11, 1887.

Sixth meeting (annual) of the Society.

One hundred and fifty persons present. Professor Bowditch in the chair.

[1] See Proceedings, No. 2.

Record of the previous meeting (June 15, 1886) read and approved.

The Treasurer's report was read. Mr. C. C. Jackson and Mr. John C. Ropes were appointed Auditors.

Voted, that the words "from its number" be struck out of Article II. Section 2 of the Constitution, and that to Article II. be added a Section 5, which shall read: "The President shall be a member of the Council."

The members named in the following list were elected to the Council for three years: —

H. P. Bowditch,	C. S. Minot,
E. G. Gardiner,	Simon Newcomb,
C. C. Jackson,	W. H. Pickering,

Morton Prince.

List of persons elected Associate Members by the Council since the previous meeting of the Society was read.

Reports of the chairmen of the different committees were read.

Examples of simulated Thought-Transference were shown by Dr. Minot and Mr. Cory. Mr. Montague gave an interesting exhibition of Muscle-reading, and the subject was discussed by Professors Bowditch and James, Mr. W. H. Pickering and others.

Professor James read a paper on "Sensations from Amputated Limbs."

The chairman called attention to a circular about to be sent to Members and Associates, asking for subscriptions to be sent to a fund to be used to pay the salary of a permanent Secretary, and also to defray the expenses of investigations. The chairman announced that Mr. Richard Hodgson, of London, had been elected as Secretary by the Council, and that Mr. Hodgson had cabled that he would accept the position.

The meeting then adjourned.

E. G. GARDINER, *Secretary.*

Boston, May 12, 1887.

Seventh meeting of the Society.

Eighty-eight persons present. Professor Bowditch in the chair.

Record of the previous meeting (Jan. 11, 1887) read and approved.

List of persons elected Associates by the Council since the previous meeting of the Society was read.

Dr. E. G. Gardiner then resigned his place as Secretary to Mr. Richard Hodgson.

Dr. C. S. Minot read selections from a paper by Miss Alice Fletcher upon "The Supernatural among the Omaha Tribe of Indians," and made some remarks, showing the applications of Miss Fletcher's paper to the work of the Society, urging that for any thorough study of our phantasms the investigation must be extended to those of other races, and the researches be conducted so far as possible from an ethnic stand-point.

The chairman commented on the characteristics exhibited by the alleged ghosts of the Omahas, which were audible rather than visible, and so distinguished from the alleged ghosts of the more civilized white races, where the contrary seemed to be the case.

The Secretary then gave an account of the methods and results of the investigations of the English Society for Psychical Research, and afterwards replied to a question put by Professor James.

The meeting then adjourned.

RICHARD HODGSON, *Secretary.*

THE SUPERNATURAL AMONG THE OMAHA TRIBE OF INDIANS.

BY ALICE C. FLETCHER.

To comprehend the ideas of a people concerning the preternatural and the manifestations of the supernatural among them, it is needful to know something of their beliefs relating to the origin and the future of mankind; their notions pertaining to the natural world and their religious ceremonies.

A clearly-defined cosmogony does not exist among the Omaha tribe of Indians. Myths tell of water animals being engaged in forming the earth, but how water was created, or how life began, is left indefinite.

The general belief of the Omaha Indians is, that in some way man has been developed from animals. How this came about no myth and no man give any explanation. No story exists where a man is born of an animal; yet, as the life of man depends upon the animal as food, so in some mysterious manner the two are bound together in the general continuity that pervades the universe.

In the myth telling of the birth of woman a younger brother is made the medium; a strange thorn pierces his foot, he extracts it, and wraps it in coverings of skin. When the older brothers return home they are startled by hearing a crying, and upon examination of the bundle from which the sound proceeds, they find to their astonishment

a baby in the place of the thorn. The infant rapidly becomes a woman; all the animals obey her call, and she enriches her brothers by her skill and industry.

The myths seem to indicate a linking together of all forms of life throughout nature. The various animals are endowed with speech, and address each other by terms of relationship, and are so addressed by man. The beaver, eagle, and others are called grandfather or grandmother, the titles of respect; but in the various myths these terms are not always applied to the same animal.

The otter seems to be connected with the supernatural. Its skin is twisted about the neck of a man in order to promote the swoon which will bring prophetic vision. Its skin is used in the sacred society when a part of the ceremony consists in the simulation of death. In the myth telling of the introduction of death the otter was sent as a decoy to bring about that event. The story is of a mythical person named Ha-hea-ga, who had a younger brother. (It is noticeable that here again it is a younger brother who introduces the new experience.) One day, Ha-hea-ga warns his brother of the approach of some mysterious impending trouble, and urges him not to venture forth from the tent. Ha-hea-ga goes out as usual to hunt, and returns after a time to find his brother missing. He follows the footprints of the youth until they lead to the water and out on the ice, to where there is a hole; there they disappear, together with the marks of an otter, which had evidently enticed the brother into danger. The myth describes the grief of Ha-hea-ga, the present streams of the country being formed by his tears. He goes among the animals seeking for tidings. At times he becomes enraged and kills those who show no sympathy, but he rewards those that help him. At last he discovers the abode of the strange water-monsters that have caused his brother's death, and by stratagem kills them, and secures all that remains of his brother,— his skin. Ha-hea-ga constructs a sweat-lodge, using serpents instead of boughs; they thrust their tails into the ground and twist their necks together to make the frame-work for the coverings. Ha-hea-ga gathers stones, and appeals to their ancient life for help; he puts them in the fire, calling on this power for assistance; he invokes the aid of water, as he pours it on the heated stones. This he does in the sweat-lodge, having with him his brother's skin. As the steam rises, amid prayerful songs, the brother stirs. Four times Ha-hea-ga goes through these ceremonies before the youth responds to the appeals to return once more to life; at last he says, "Ah, my brother, why do you this? Death is far better." And Ha-hea-ga, filled with chagrin, turns his brother into a stone, and himself becomes a wolf; but death had entered the world.

The Omahas believe that after death the spirit travels four days seeking for the path that leads to the home of the dead. To find this road is not so hard for an adult, but a child experiences much difficulty. The path is visible to us as the "milky way." To assist the dead as they wander forth, a fire is kept burning at the grave during four nights; by that time it is supposed that the path is reached. The spirit then passes on to where the way divides; at this fork an old man sits; he wears in his hair the sacred downy eagle feather and is clad in a skin robe, the hair outside, the head of the animal resting on the left arm, the tail on the right; the robe is always worn in this manner on occasions of solemnity. As the spirit reaches the place where the old man sits, he looks and smiles at those whose lives have been in accordance with the Indian ideal; that is, men valiant, faithful to friends, relentless to foes, just, slow to quarrel, unfailing in hospitality, and exact in all ceremonial observances. To such a spirit the old man points the direction to be taken, indicating the short branch of the "milky way." The spirit passes on, obeying the sign; no word is spoken by either. Those whose lives have not been worthy, travel on, unheeding the muffled figure, and are unnoticed by him; these do not turn aside toward the short way, but continue over the zenith and wander on endlessly, always alone, and with increasing sorrowfulness of heart.

A suicide ceases to exist: for him there is no hereafter.

Heaven is thought to be a place like this world, having mountains, streams, valleys, prairies, and woods filled with game and beautiful with verdure. The vocations are the same as here; the men hunt, the women weave, the children play. Each one enters heaven as he left this world; the adult is still an adult, the child a child. Friends welcome each other and relations are reunited. Enmities are at an end. Sickness and hunger are not suffered there; but sorrow comes when the second death sunders those who are dear to each other. There is said to be a succession of heavens, each one better than the preceding. How many of these heavens there are, no one could state to me. Each succeeding heaven is reached as was the first, the person dying in the heaven where he may be, and entering the next above him; those whom he has left behind, wailing over his departure.

The knowledge of the hereafter seems to have been received by visions coming to persons in a swoon. Those having such visions declare they remain several days where the dead live, but are finally forced to return from loneliness; for, although they see their friends and watch them at their occupations, these will not speak to the

new-comer, and ignore his presence; even the animals fail to take cognizance of the visitor.

According to the cosmography of the Omahas the earth is a vast plain, broken by mountains, valleys, rivers, and lakes; the heavens, a great canopy, held up by the four winds. The sun travels across the sky from east to west, and returns by way of the north, passing below the rim of the earth, the aurora being the light thrown up during this passage. The moon follows the course of the sun, and is made new every month; the period between the death of the old and the birth of the new is marked by a storm, which comes to cover the generation of the moon. The stars are seen to move, and the stationary north star is used as a guide on journeys. No explanation is given of the difference between the stars. Thunder and lightning come from a strange, undefined being in the form of a bird. The flapping of its wings makes the thunder, and the winking of its eyes the heat-lightning. It hurls on men the thunderbolts, and feeds upon the compass-plant (*silphium lucimatum*).

In the sacred ceremonies the earth, winds, sun, and the thunder are commemorated by certain symbols peculiar to each of the foregoing.

The annual festival of Thanksgiving always took place when the tribe were within a few days' march of their permanent village, on their return from the summer tribal hunt, which was always conducted under rigid rules and ceremonies. At a certain part of the proceedings, this figure is marked upon the ground, and within its limits the earth is mellowed and made fine. Some say the form typifies the fireplace, but many agree that it is an emblem of thankfulness, recognizing the earth as the giver of food, the sustainer of life, and that whereon the home is founded. The ground plan of the earth lodge, the permanent dwellings of the tribe, gives the same outline; the circle being the lodge, the projection, the entrance. When a man is about to prophesy concerning the success of a party going forth to another tribe to perform the ceremonies connected with the sacred peace-pipes, this figure is drawn upon the ground. In the distance beyond this outline the man sees prefigured the manner of reception awaiting the party and the gifts that will be brought forth. These gifts are used to assist the poor, and at the same time they bring honors to the donor in his tribe and home. I have seen this same figure cut in the earth to the depth of three inches, upon a high bluff overlooking the surrounding country. My compass showed the projection to face due east; so does the opening of the lodge and tent. The figure was kept clear of weeds and underbrush by some secret hand. Such excavations were said to be

made in accordance with visions or dreams that represented the earth.

The four winds[1] are recognized when the hair of a child is cut for the first time by the old man whose duty it is to perform the ceremony. He lifts the child from its feet and turns it slowly around four times, letting the child's feet touch the ground at each of the four quarters, in honor of the four winds. After that the child is urged forward a few steps, and has thus entered upon the path of life. When a pipe is smoked ceremonially it is lifted to the four quarters. The rattles and tobacco-pouch which accompany the sacred peace-pipes have painted around them a green band with four projecting lines. The same device is tattooed upon the breast and back of a young girl, whose father has acquired certain honors derived through these pipes.



In these same ceremonies the sun is symbolized by a small blue spot tattooed on the forehead of the girl who has the mark of the four winds put upon her. A circle is painted in red upon the breasts of two men, whose duty it is to take a certain part in the ceremonies connected with the pipes. The sun is also typified in the streamers on the sacred peace-pipes, and by the head of the large red-headed woodpecker.

When the first thunder is heard in the spring, members of certain gentes, which possess a peculiar pack, filled with the skins of certain birds, open their pack and chant the sacred songs pertaining to it.

[2]These packs are used on the occasion when a warrior recounts his deeds, in order to secure the right to count his honors. At a signal from the master of ceremonies the man ceases his narrative, and lets fall from his hand, which is extended over the pack, a small reed; if he has spoken truthfully, the reed rests upon the pack; but if he has boasted or falsified, it rolls to the ground. The skins within the pack represent the observing power of the birds during life. These fly over the country, watching all the events that are taking place. By this omniscience they are supposed to be fitted to judge of the veracity of men when narrating their deeds.

The penalty for sacrilegious acts, such as neglect by those in charge of the articles belonging to the sacred tent of war, which include one of these bird-packs, is that the offender will be struck by

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[1] For the further elaboration of these and kindred ceremonies see several papers of mine published in the Sixteenth Annual Report of the Peabody Museum of American Archæology and Ethnology, Cambridge, Mass., 1884.

[2] For an account of the sacred tent of war containing one of these honor-packs, see Eighteenth Report of the Peabody Museum, page 411, 1886.

lightning. A similar punishment will fall on those who neglect to do their share in the great tribal ceremonies. A man who is struck by lightning is buried just as he falls; if he is thrown on his face he is suffered so to lie. No man would dare touch one who had been thus killed. Over such a one the customary mound is not raised; the ground is left flat and unmarked. These ceremonies and penalties, as well as the myths, give evidence that thunder and certain birds are allies. The Instasunda gens, which, from its name, — the flashing eye, — as well as from the names bestowed upon the members of this gens, and some of the ceremonies peculiar to it, refers to thunder and lightning, and has for its symbol and taboo worms and insects.

The ten gentes into which the Omaha tribe is divided have each an animal symbol, and the members of a gens do not touch the animal, or certain portions of it, that is mythically connected with that gens. For example: the Waeginsta gens has the elk: members of the gens do not touch the male elk, under pain of penalties which would follow supernaturally, as sores on the mouth or eyes, or a permanent mottling of the skin with white spots. This gens has a series of names referring to the elk. When a child's hair is cut for the first time, at three years of age, it is trimmed in a manner to symbolize the elk.

A person is born into his gens, and he cannot change it or escape its limitations; but he is not supposed to receive any benefit from the animal connected with his gens or name, because of his birthplace. Animals, however, are supposed to be able to help men; but this help comes through visions or dreams, and is entirely independent of the symbol of the gens or the name of the man.

Medicines are sometimes revealed by animals, as well as the modes of application. The buffalo is thought to have remarkable recuperative power, and this animal made known to a certain man a root useful to heal wounds. A society of men exists who are instructed traditionally concerning this herb and how to use it. The men who dream of the buffalo, on occasions of importance or danger recall their vision, and put a band of black earth across their mouth from cheek to cheek, and a willow twig in their scalp-lock. The band of black typifies the nosing of the buffalo in the earth, and the twig the root thrown up which has the healing power.

There are men in the tribe who spend much of their time in seeking by fasts and other rites to have visions, and a few persons become adepts in obtaining them. Their dreams are supposed to have a peculiar hold upon the supernatural, and there are those among them who profess to have constant dealings with the spirits of animals and men.

The Omahas believe that animals have great recuperative power; they are known to live after being badly wounded, and are seen to breathe upon and lick the wound; therefore there must be a peculiar virtue in the breath and saliva of the animals. Consequently, if a man dreams of an animal and it comes near and speaks to him, and its breath is felt by the man, the peculiar qualities of the animal — its tenacity of life, speed, courage, or whatever may be its characteristics — are transmitted to the dreamer, after he has performed certain rites, and procured something belonging to the object seen in the vision. He may also, in some mysterious way, take on the form of his animal visitant four times, and may reverently recall the vision in times of danger or necessity, relying upon the peculiar powers of the animal being given him for succor or success. For instance: a youth dreams of an elk; he must observe certain rules in speaking of his dream; he must make a collar with a fringe of hair from the dewlap of the elk, and a whistle from one of its bones. By certain ceremonies and gifts he may join the society of those who have had dreams of the elk. This animal is noted for its speed, which enables it to escape from its pursuers, and the man who dreams of an elk is supposed to be endowed thereby with the means to procure this quality from the elk. Should this man be challenged to a race or find himself in danger he must put on his collar of elk hair, place the whistle in his mouth, and call reverently upon his past vision for aid; his memory of the dream thus becomes a present reality, and helps him to victory or escape.

All persons having similar dreams are affiliated, and as some have the power to transform themselves four different times into the animal or bird that appeared in visions, it is said that these men visit cognate tribes in this guise. On their journey they stop to rest; if they stop on a rock they leave the impress of their feet. Those who are birds place their feet where other supernatural birds have rested; those who are animals put their feet in the tracks left by kindred visitants; and in the course of time these footprints deepen by use. There are many rocks pointed out where these impressions are to be seen; one near Ponca City has on it many markings, caused, it is said, by these transformed men resting here when passing between the Ponca and Omaha tribes. These metamorphosed beings sometimes have running and flying matches, to test their strength received by visions; on these occasions, if one should leap over, or fly over, another, the one so passed over would speedily die.

A similar notion seems to prevail among the people. When persons are taking a bath in the sweat-lodge some one is stationed outside to prevent anything passing over the lodge, lest this bring sickness or

death to one inside. If a dog climbs upon the roof of an earth-lodge, and through the central opening for the smoke, chances to look down upon the persons below, the animal must be killed, in order to prevent a death occurring among the number present. A story is told of an old man who had been gifted with visions. One day as he was travelling with some hunters he fell behind to rest; as he sat motionless, a pursued deer in its flight jumped over him. The old man was not able to rise quickly enough to destroy the deer, so he exclaimed to the retreating animal, "Once I was young; then I would have killed you; now I permit you to jump over me!" The old man thought his end near, on account of his years, and was incensed at one who he supposed had turned himself into a deer to thus shorten another's life. Young men throw one leg over a little child and say, "Now you will grow no more!" A gun is rendered useless if it is stepped over, particularly by a woman.

There are other omens of death. The sick, when about to die, see their deceased relatives, who bid the dying ones to hasten and join them. To dream of seeing a person moving about whose feet do not touch the ground is the precursor of that person's death. If the one dreamed of is warned of such a dream, and he will make a sweat-lodge and bathe therein while one of the men gifted with visions sings the sacred songs, the coming death may be averted. Death can also be prevented by the person so dreamed of pouring hot water before the door of his lodge every morning for four days. To accidentally touch any of the sacred tribal articles, or to be neglectful of respect toward them, brings the transgressor into danger of death or grave disaster, which can be averted by sprinking hot water with a spray of artemisia over the offender's person. If a horse shies at a person it is because the animal sees or smells blood belonging to the man, who is thereby warned of approaching death. He can avert this by an ablution in the sweat-lodge, or by making the oblation of hot water upon the ground.

The word for ghost in the Omaha language is "Wa-na-he," a transparent body. Among this tribe ghosts are more frequently heard than seen. One is liable to hear them at any time, but particularly at night, that being the ghost's favorite hour for visiting the living, although the visits are not confined to that part of the day. The presence of a ghost is made known by a whistling sound. I have seen old and young start when I whistled, thinking it was a ghost. I do not recall any Indians whistling, as do white men and boys. This abstinence may be caused by the notion that ghosts whistle, therefore men should not; or it may be because the Indian music does not easily lend itself to such cadences as can be whistled; or it may follow from

physical reasons: the lips of the Indian are less flexible than those of a people speaking a language which demands more use of the labial muscles, and, as a consequence, whistling is a more difficult accomplishment. The little, whirling eddies of wind, raising the dust in a column, so frequently seen on the prairie or on the beaten trail, are said to be ghosts, who are thus detected as they travel over the country.

When a man is murdered, the ghost of the murdered man pursues the man-slayer until the act is avenged or the man has atoned for his violent deed, or else has fulfilled the conditions and the term of his punishment. While the ghost of the murdered pursues the offender, the waving of any garment worn by the man brings added discomfort to the ghost, and, if the man receives punishment, during the four years of his exile he is forbidden to speak aloud or to move rapidly, lest he disturb the air and vex the ghost of his victim.

At one time the tribe moved out on their annual hunt in the summer. For days the people travelled, but no buffalo were to be seen. By-and-by the provisions which they had taken from their village were all used, and the children began to cry with hunger. The runners were sent out far and wide, but no game was found. Because of weakness the tribe could travel but a short distance, and finally they carried the grass of one camp to another, and used it over and over for their bedding, as they were too feeble to cut grass at each camp. The older men and the leaders protested against this act, as to carry straw from camp to camp was a forerunner of famine. At last one of the men, who was gifted with the power of vision, Sha-gde-ska, being called on to tell why the tribe was thus bereft of food, declared "I see the ghost of the man murdered by Ma-chu-num-ba following the camp. He walks yonder, with bowed head, as if in great grief." Then the tribe knew that the wind which attended the ghost blew toward the game, causing it to scent the people and to flee before them, and they blamed Mu-chu-num-ba and his sons for presuming to join the hunt when their misdeeds were unpunished. The offenders were sent back, and soon the people were able to obtain food.

Other tales are told of ghosts following the wrong-doer, and, although the people had provisions, every one was unsatisfied and hungry even after he had eaten. The presence of the ghost took the taste and nourishment out of the food, leaving the people weak.

The story is told that one day a woman made Um-ba-gthe. This dish is composed of a stiff mush of corn and beans; it is always made overnight, and the next day sliced and eaten cold. That night her husband dreamed that he saw a company of strange men, ghosts, enter his lodge, each one bearing a dish. They seated themselves,

and had a feast off the Um-ha-gthe. Next morning the husband bade his wife throw away the food, as the ghosts had meddled with it. The next time the wife made Um-ha-gthe the husband placed a knife over the pot containing it, and that night he dreamed again of the same company of ghosts coming with their dishes to feast on the favorite food, but, finding a knife over it, they were unable to touch it and went away disappointed. When eatables are left overnight a knife is placed on the pot or dish; this prevents ghosts from meddling with the contents, for one must never eat anything a ghost has touched.

Ghosts are supposed to hover about the places formerly occupied by them, and to return to their old hunting-grounds and villages. One fall Sin-de-ha-ha was hunting in company with several men. Evening came on, and they put their horses out to graze, and made camp in a grove. It was a bright starlight night. After they had lain down to sleep they heard footsteps and the cracking of twigs, as if these caught in the hair of the robes worn by those walking. Sin-de-ha-ha and his companions picked up their bows and arrows and stealthily followed the footsteps, which moved faster and faster in the direction of the horses. As the hunters drew near the grazing-ground they saw little whirlwinds of dust travel towards the horses, and as soon as these reached the animals, they snorted, then, tossing their heads, began to run. The men followed hard after them, but the horses were soon far out of sight, and the baffled hunters returned to camp to await the morning. When daylight came the search was renewed. They looked for the footprints of the intruders, as the ground passed over the night before was burnt prairie; the men found their own footprints and the marks of the horses' feet, but nothing else. Following the tracks of the horses, they found them quietly feeding some two miles from the camp. "It was ghosts that drove off the horses," said the narrator, as he finished the story.

Some years since a middle-aged man, a young man, and a lad were out hunting; the latter had with him two white hunting-dogs. In the afternoon the eldest of the party wounded a deer, but failed to capture the animal. He came to the lad and, requested to have the dogs put on the trail of the deer. This was done; the hunters followed the dogs, secured the game, cut it up, and the two younger ones were for starting back at once, although it was late; but the eldest said, "Let us stay here to-night, we shall find our trail better in the morning." So they camped under a walnut tree, the young man and the lad gathering twigs and wood for the fire, and picking up walnuts for their own pleasure. Just as they were about to kindle the fire they heard a boy's voice call, "Wha-âe!" An older

voice, answered, "Wha-ah!" and a third and more distant voice, belonging to a mature man, shouted, "Wha-o-o!"—the call for a dog. The hunting-dogs dropped their tails between their legs, shivered, growled, and huddled close to the men. The eldest hunter at once hailed the new-comers. The three voices paid no attention to the greeting, but kept up their calls to each other, which increased the distress of the dogs. After a time the eldest hunter said, "Build the fire; it is ghosts that we hear." The fire was lighted, the meat cooked and eaten; then the party lay down to rest. The two younger hunters fell asleep, but the elder kept awake until midnight, when the ghosts ceased their calling. "It was strange that the ghosts corresponded in age to our party," remarked the man who told the story, and who was one of the younger hunters.

Once, in the fall, a large number of families started out on a hunt. While they were camped on the south side of the Platte river, nearly opposite the place now known as Grand Island, Nebraska, a woman fell ill. The family to which she belonged and that of a near relative remained behind when the rest of the people moved on. After they had been gone a few hours, and it was about noon, the two families which had remained behind sat down to their dinner. Suddenly the dog began to growl; then it ran out and barked violently; shortly after the laugh of a girl was heard, then a woman's voice. One of the men at dinner exclaimed, "Some of the people have returned!" and he sent his little daughter to see who the folk were. The child came back, saying she could not see any one. So the families resumed their meal. In a moment the voices were heard once more, first as if at a distance, then nearer, until finally words could be distinguished; these sounds were accompanied by the rattling of tent-poles, as when a camp is being set up. Thinking there could be no mistake as to the return of the people who had left in the morning, the head of one of the families that had stayed behind rose from his dinner and went out to greet his friends. As he emerged from his tent he could see nothing but the smoking circles left by the late camp. As he stood wondering he continued to hear voices, the setting-up of tent-poles, the playing of children, and the barking of dogs, his own dog responding vigorously. He knew then that the camping-place had been taken possession of by ghosts. He returned to his tent and told the inmates his conviction; they continued their meal, without further attention to the outside voices. The footsteps of the ghosts and their talking, as they pursued the ordinary occupations of the camp, continued to be heard by the families during their stay; but no one was oppressed by fear of the supernatural visitors.

Num-ba-dou-ba and his family were returning from a hunt, and went into camp on the Logan creek; the moon was shining brightly. As the people sat at supper, their large dog suddenly began to bark, and rushed out of the tent as if to attack some one; in a moment he returned, howling, as if from the pain of a blow. Soon the inmates of the tent heard a sound like a coming breeze; then they distinguished whistles; these were followed by footsteps and whisperings, and shortly the tent was struck, as if with sticks. The wind increased in violence: the dog manifested great fear; and the men of the party determined to fire off their guns, hoping thereby to frighten away the ghosts which they were sure surrounded them. The guns produced no effect; the steps, whistling, and whipping of the tent continued. At last a cloud covered the moon; as it passed by, with lightning, the ghosts disappeared with it, and all was peaceful once more.

Ka-heă-num-ba's mother had a quarrel with her husband when the tribe were moving out on the annual summer hunt, and were already some days distant from the permanent village of the people. She determined not to accompany her husband, but to return to her lodge in the village. Her three sons were absent at the time the woman started across the prairie; when they returned to camp and learned of their mother's departure they put saddles on their horses and set out in pursuit. They sought in vain for any trace of her, and after a time she was given up for lost. The woman when she left the camp hid by day and travelled by night, for she was afraid of the Sioux, who were at war with the Omahas; and she also feared lest her relatives should track her and take her back to the camp. At last she reached the village; the lodges were empty, for everything had been cached. She entered her own lodge; she was hungry and weary, and lay down on one of the reed platforms which are used as seat and a bed; as she lay she heard some one on the roof shout her father's name, as if to the assembled village, saying that his daughter had returned; she also heard people moving about. Her own lodge, she soon found was inhabited by ghostly beings. One afternoon, as she sat in her lodge, she heard a child's feet run past and pause near by; then the voice of a little girl said, "Mother, the people are coming this way, right into our house!" Soon footsteps were heard entering the long projecting entrance-way to the lodge, and the number increased until a large company was present. The drum was brought in and put down in its proper place; the ghostly women as they chatted took their seats in the rear, and the men their accustomed stations. By-and-by the men began to sing and to dance. They belonged to the Hăe-thu-ska,—a society of warriors only. The woman,

as she sat on the platform, heard it all, and she could even see the dust raised from the earthen floor by the men as they danced around the fireplace. As she became familiarized with the scene she tried hard to discern the individuals dancing. At last she was able to distinguish their feet, and finally they became visible as high as the knees. She was never able to see any more of their persons, although they came frequently to her lodge, holding feasts and dancing the Hăe-thu-ska. No one spoke to her, though they talked of her, as well as of their hunting and other matters connected with their daily affairs. One morning she heard an old man on the roof of the house calling out that a runner had come in, bringing news that the Omahas were returning home. Then the ghosts were heard departing, and that afternoon the tribe came back to the village. When the woman heard the ghosts go away she became dejected and homesick, and, when her own family found her, she would neither eat nor speak. She was very thin and haggard, and no one knew what to make of her conduct. It was noticed that she plucked and ate the wild sage. After a time she was persuaded to partake of some corn, and at last she consented to eat meat. It was some time before she became reconciled and willing to resume her old life, for she still mourned for the company of the ghosts. Finally she narrated her experience to her sons, and the people understood what had happened to change her so much.

The Ma-wa-da-ne society is said to have been instituted in the following manner: A long time ago a party were out on the war-path. One night the servers had cooked the meal, called the leader, and placed the food before him for distribution among the party, when a voice was heard singing. The fires were at once extinguished, and the men picked up their bows and arrows. The voice continued to sing, but it was evidently at a distance. The leader started with his warriors to capture the singer. He sent the men forth so as to form a circle around the voice, and then to gradually close in upon the place whence it proceeded. This was done. In the starlight the men silently drew closer and closer together, while the voice rang out clearer and clearer from under a large tree. When the men reached the tree they found lying at its foot the whitened skeleton of a man long since dead. The voice ceased with the sight of the bones. The warriors, when they returned to their tribe, formed a society to give gifts to the poor and to each other. They preserved the song of the ghost, and it has been transmitted to different generations. The songs of this society are marked by their peculiar opening and closing cadences, which are fashioned to resemble the song of the ghost. The Ma-wa-da-ne society came to be considered the most honorable among the tribe; its members at times rode

together in the rear of the camp, when the people were moving on the annual hunt, this being one of the posts of danger, as well as of honor. After the tents were set up these men rode slowly around the tribal circle, singing their songs, their dignity and bearing exciting the admiration of the youth of the tribe.

Many stories are told of hearing ghosts wail at night, and these sounds were always found to proceed from graves; hence the people say that ghosts cry at their own graves.

Ghosts are said to chase persons at night. A man who is out walking suddenly hears footsteps behind him, and he also hears the robe of the ghost catch on the twigs and branches of trees or shrubs, as the wearer moves rapidly on. When a person is so pursued he makes all speed to reach a creek and to cross it; then he is safe, for ghosts cannot cross any running stream.

Certain diseases are caused by ghosts. A paralytic has been touched by a ghost, and the side or part of the body over which the afflicted person has no control is the part which came in contact with the ghost. Sometimes children's eyes become fixed, because of a sudden fright; this is said to be caused by their seeing a ghost.

That which has belonged to an individual, as his garments, or the hair which is cut from or falls from his head, has still some connection with this person, and may be used as a means to influence him. If a man can become possessed of a lock of a woman's hair he can have certain charms and spells wrought upon her. Women are therefore very careful to burn their combings in order to prevent their falling into any one's hands. Similar spells can be worked if the blanket or any garment touching the person can be secured. It is dangerous, however, to employ these charms unskilfully, for in such a case the spell turns upon the user, and he suffers blindness and loss of reason.

A father, going on a long journey, may, if he has a male child, for whom he is ambitious, take his son's moccasons with him. When the farthest point is reached he places the child's moccasons on the prairie, that they may draw their owner thither, believing this will cause his child to live and walk far and bravely over the land. If a child dies, and the father in his grief goes upon the war-path, he sometimes takes in his belt his dear child's moccasons. If he slays a man the moccasons are placed beside the corpse, that the man's spirit may know the child and help it to find its way to the path leading to the land of spirits. The clothing of the dead is always buried with the body; nothing belonging to a deceased person is ever worn by the living.

From the foregoing sketch of the ideas of the preternatural among

the Omahas and of the manifestations of the supernatural among them the following deductions may be made: —

The Indian has a vague belief in the unity of nature and the interdependence of the various forms of life, but he has no knowledge of the laws which govern the universe, or of his place and share in the great economy. As a result of this ignorance all manifestations of power or of life are regarded as upon a general level, and are recognized, appealed to, and propitiated; for he believes that everything has the ability, in a greater or less degree, to help or hinder the happiness and comfort of man. He is equally ignorant of the laws which govern his mental states; he regards his dreams, his vivid fancies, as actualities. As a consequence he classes as evidence equally trustworthy the pictures of his imagination and the tested observations of his senses. His ignorance of the laws of physiology and hygiene tend to still farther obscure his powers of discrimination.

The myths and legends which have crystallized about his beliefs concerning the natural and the supernatural have had much to do in directing his fancies and supplying the imagery of his thoughts when turned toward the invisible. The names bestowed on men and women and the taboo customs of each gens, keep fresh the memory of the animals so mysteriously connected with mankind. The graphic stories of animals wherein are depicted the passions and experiences common among men, bridge the distinctions between the two orders of creation, and tend to form the habit of mind, that does not feel any incongruity in the belief that men can turn into animals through the power of visions.

The desire to possess visions and to receive their mysterious benefits, which will enable one to elude disaster, is inculcated in the child from his infancy; not only has he the hereditary inclination, but his training leads him in that line of thought. Children are sent forth by their parents to seek these supernatural visitants, and these occasions are always reverently remembered. The habit of seeking and resting upon visions makes it easy for the mind to expect something supernatural connected with the ordinary acts of life.

When a vision is called upon in time of need its efficacy depends upon the fact that the person so appealing has about him something that was once a part of the animal. It is also true that in order to charm an individual something personal to him must be obtained to work the spell. The clothing of a person is believed to become possessed of some subtle force that connects it with its owner, as in the case of the moccasons of the dead or living child.

It may be stated as a rule, among this tribe of Indians, that the potency of a supernatural appearance depends upon the physical

presence of something that belonged to the apparition in its natural existence. This, and the fact that the folk-lore of the people has much to do with the peculiarities of the phantasms that appear among them, may explain why the manifestations of the supernatural fail to transcend the experience and vocations of daily life.

PEABODY MUSEUM, CAMBRIDGE, MASS., Feb. 16, 1887.

CRITICISM ON "PHANTASMS OF THE LIVING."

AN EXAMINATION OF AN ARGUMENT OF MESSRS. GURNEY, MYERS, AND PODMORE.

BY C. S. PEIRCE.

THE most imposing of the arguments of Messrs. Gurney, Myers, and Podmore, in favor of spontaneous telepathy, popularly called "ghosts," as presented in their "Phantasms of the Living," is this: Only one person in three thousand each year has a visual hallucination. Hence it is easy to calculate from the annual death-rate that in a population of fifty millions there would be each only one visual hallucination fortuitously coinciding within twelve hours, before or after, with the death of the person represented. But these gentlemen, having addressed, as they estimate, a public of only three hundred thousand persons, claim to have found thirty-one indubitable cases of this kind of coincidence within twelve years. From this they cipher out some very enormous odds in favor of the hypothesis of ghosts. I shall not cite these numbers, which captivate the ignorant, but which repel thinking men, who know that no human certitude reaches such figures as trillions, or even billions to one.

But every one of their thirty-one coincidences sins against one or more of sixteen different conditions to which such an argument must conform to be valid. This I proceed to show.

1st. Every case should have occurred between January 1, 1874, and December 31, 1885, for the calculation of the probabilities depends upon this supposition. Now, Case 199 occurred in 1873; and Case 355 occurred in 1854.

2d. The percipient should in each case have been drawn from their public, which they estimate at three hundred thousand persons who are supposed to have seen the advertisement. But no person could have seen the advertisement who was dead at the time of its publication; and this was the state of the percipients in Cases 170, 214, 238, and 695.

3d. According to their calculations, there ought not to have been

among their three hundred thousand persons any having had two hallucinations fortuitously. Such cases must, if their calculations are correct, be in some way abnormal, and ought to be thrown out. Now the percipient of Case 184 seems to have hallucinations nearly every day. The percipient of Case 175 has had them frequently without any coincidence. In Cases 173 and 298 the percipients had had other hallucinations without significance.

4th. The general frequency of hallucinations, upon which the whole argument depends, was ascertained by asking of certain persons whether or not they had had any visual hallucinations, within the last twelve years, "*while in good health, free from anxiety, and wide awake.*" It is, therefore, an indispensable requisite to the validity of the argument from probabilities, that no account should be taken of coincidences where the percipient was not in good health. This happened in Cases 28, 174, 201, 202, 236, and 702.

5th. For the same reason, cases should be excluded where the percipient was not clearly free from anxiety. But they certainly were anxious in Cases 27, 28, 172, 174, 184, 231, and 240; and were probably so in Cases 182, 195, and 695.

6th. For the same reason, all cases should be excluded where the percipient would not certainly have been confident of having been *wide* awake, even if no coincidence had occurred. Now the percipient of Case 175 says, "I cannot yet answer to my satisfaction whether I was awake or asleep." One of the witnesses to Case 195 calls it a "vivid dream." In Case 702 the percipient is doubtful whether it was anything more than a dream. It is difficult to admit any case where the percipient was in bed, which happened in Nos. 26, 170, 172, 173, 174, 182, 184, 199, and 697. This objection applies with increased force to cases where the percipient was taking an afternoon nap, which happened in Nos. 28 and 201.

7th. All cases should be excluded in which the person who died was not clearly recognized in the apparition. This applies with great force to No. 170, where the apparition was distinctly recognized as the percipient's own mother, who did not die, though a person who resembled her did. It also applies to Case 201, where the percipient says "she could not say who it was." Also to Case 236, where the percipient's original statement was that she saw "a dark figure"; although, after having been shown the testimony of a second witness, who testifies that it "resembled her [the percipient's] brother," she assents to this statement. In Case 249 the supposed ghost only showed his hat and the top of his head. In Case 697 the percipient does not seem to have recognized the apparition until after the news of the death had reached her.

8th. It is absolutely essential to the force of the argument that the death should have occurred within twelve hours before or after the time of the apparition; and it is not sufficient that the evidence should satisfy a mind that already admits the existence of ghosts, but the proof must be strong enough to establish the fact, even if we assume that it is due only to hazard. This is a point which the authors totally fail to appreciate. They have admitted among their thirty-one cases no less than thirteen which might well enough be set down as falling probably within the twelve-hour limit, *once we have admitted any special antecedent likelihood of such an occurrence;* but which beg the question entirely when, the evidence of the coincidence being but slight, they are used to prove the existence of such a likelihood. In Case 26, for example, on the morning after the apparition, the percipient says he searched the newspapers and that day was Saturday. His words are, "The next day, I mentioned to some of my friends how strange it was. So thoroughly convinced was I, that I searched the local papers that day, Saturday." The authors interpret this as meaning that he told his friends one day, and searched the papers the day after that, which is directly contrary to his statement, and unlikely in itself. Their only warrant for this is, that he says the vision occurred on Friday at 2 A.M. But it is certainly more natural to suppose that he inadvertently used this expression meaning the night of Friday at 2 A.M. This is the *more* likely of the two suppositions; but the case ought not to be included, unless it can be shown beyond all reasonable doubt, and irrespective of considerations drawn from the time of the death, that the vision occurred on the night of Thursday. In Case 170 the death was not heard of for months. "Time passed, and all was forgotten." Under these circumstances, as no written note was taken of the time of the apparition, the coincidence is plainly doubtful. I shall discuss Cases 182 and 197, which violate this rule, under another head. In Cases 195, 201, 202, 214, 231, 237, and 355, the date is wholly uncertain. In Case 199 the vision occurred, if at all, on Saturday; the death on Wednesday. In Case 702, the date given for the apparition differs from that of the death by one day; but this is only a blunder, for it is admitted that the date was changed, after ascertaining the day of death, by four days.

9th. Cases ought to be excluded in which it is possible that a real person was seen. In Case 202 the percipient, who "had been ordered by the doctor to take absolute rest, and not read at all, and do no work whatever," and who is excessively near sighted, when she was out driving in the neighborhood of London, met a carriage containing, as she thought, the person who died [although this person's

head was turned away] together with another who did not die. It surely seems a little unnecessary to suppose that this was anything more than a case of mistaken identity. In Case 249, a man, looking out of his window on Christmas-day, saw, on the other side of a brick wall, the hat and the top of the head of what he took to be one of his neighbors coming to see him. He turned round to remark upon it to the persons in the room; and his first surprise came when there was no knock at the door [we may assume after the lapse of more than a minute]. Then, looking out of the window, he did not see anything at all. It appears quite unnecessary to suppose any hallucination here, unless, possibly, some slight aberration of the senses connected with the festivities of the season. I should suggest, as possible, that some boy had stolen the old man's hat, and was perpetrating some Christmas joke, which he was ashamed to confess when it turned out that the person impersonated was at that moment dying. When so simple a hypothesis is admissible, it cannot be said that the appearance of something that was not there has been positively established. There are several other cases which might easily be explained by supposing that a real person was seen.

10th. Every case should be excluded which can be explained on the supposition of trickery. In Case 350, one evening three maid-servants in the kitchen saw a face outside the window. They could see all around it, so that there was no body attached to it; and, while they were looking at it, it turned slowly through a considerable angle, about a vertical axis. Now, the lady of the house is so exceedingly superstitious that she gravely testifies that her dog howls whenever there is a death in the village; and it is more than likely that the maids take after the mistress in this respect. The dog *was* howling at the moment that the face appeared, so that this circumstance may have helped them to identify the face with that of a woman who was at that moment expiring under the surgeon's knife, in an operation for cancer. Although the mistress thinks that they were unaware of the operation, yet, as the cook shortly afterward married the widower, it is not impossible that the servants were better informed than the mistress thought, and that they were, in fact, talking about the woman and her danger (and perhaps even dared to hint at another wedding) when they were confounded by this dreadful sight. One of the three servants testifies that it looked like the "face of a skeleton"; while the other two identify it with that of the woman who died. Meantime, it appears that there were certain young men who had a way of tapping at that window in the evening, and looking in and smiling at the girls, and who had not been treated with quite the politeness to which they probably thought

themselves entitled. What, then, can possibly be more natural than to suppose that these young men had contrived, in some way, to let down a skull by a string from above, perhaps from the roof, to frighten the girls and punish them for their rudeness? Clearly, this cannot be admitted as a proved case of seeing something that was not there.

11th. No case should be admitted upon the unsupported and unverified statement of a superstitious, ignorant, and credulous person. And a common sailor or skipper may be assumed to be such a person. This throws out Cases 300 and 355.

12th. Cases should be excluded in which there is any room to suspect that the percipient was intoxicated. This applies to Nos. 29 and 249; and no doubt to others.

13th. Cases should be excluded which can possibly be explained by the delirium of fever. In Case 214, the percipient first told of the apparition after four months of severe illness, with constant delirium or unconsciousness. It is not at all unlikely that the whole story is the product of a delirious imagination.

14th. No case should be admitted which can be attributed to the effect of imagination. In Case 195 the percipient herself is inclined so to explain her vision.

15th. All cases ought to be excluded in which the percipient did not tell of having seen the vision until after the news of the death had been received; otherwise, all sorts of exaggerations would creep in. There might even be cases of downright lying, besides cases in which the well-known sensation of having undergone a present experience on some previous occasion might have given rise to the idea of an apparition which was really not experienced. This would be a rare case, but we are dealing with rare cases. This objection applies to cases 172, 173, 174, 184, and 214.

16th. No case can be admitted which rests largely on the testimony of a loose or inaccurate witness. Inaccuracies of more or less importance can be detected in Cases 27, 170, 182, 197, and 199. For example, in Case 182, a young lady on shipboard, going from London to the Cape of Good Hope, saw one night, a good while after the lights were out, an apparition of a young girl, a friend or acquaintance of hers, who, as she knew, was out of health, and who had the consumption. She is positive that this vision took place at half-past ten; and, as no bell is rung at that time, this positive precision is already suspicious. She also testifies positively that she mentioned the occurrence the next morning to four persons, who all severally took written notes of it; but the only two of these persons who can be reached now profess to know nothing whatever of the matter.

She gives May 4th as the date of the vision, but the death occurred on May 2d. She says, however, that she is sure she wrote to her father from the Cape, giving the date of the vision, before she heard of the death. Her father, on the other hand, is certain he wrote to his daughter the news of the death by the very next mail after it occurred. Now, since taking this testimony, the letter which she wrote to her father has been found by him. The whole passage about the apparition is not given, as it should be; but it is stated that the letter gives the date of May 4th. Now, the date of the letter is June 5th; and it only takes three weeks or less for news to go from London to the Cape of Good Hope, so that she must have already heard of the death, if her father's statement is accurate. But why is the passage of this letter withheld?

In Case 197, the percipient is a lady. She was at Interlaken at the time of the vision, and the death took place in Colorado. She testifies positively that written notes were taken at the time of the occurrence, both by herself and another; but she is unable now to give the date, and the other witness has not been called upon. Now Messrs. Gurney, Myers, and Podmore request us to accept this as a positively proved case of coincidence, because this one witness avers, with all the solemnity the matter calls for, that, when the news of the death did arrive, it was found to be absolutely simultaneous with the vision, after making the necessary allowance for difference of longitude. But the lady remembers the time of day at which the vision occurred, namely, it was before breakfast when she was lying on her bed. The time of day of the death is also known; and the best supposition that can be made with regard to the date of the vision will make it eight hours from the time of death. We are asked, in the face of this demonstrated inaccuracy, to accept a coincidence of date as beyond question, because this witness testifies that it was a coincidence exact to the minute.

17th. No case can be admitted where there is only a meagre story told in outline, and we are not furnished with any means of judging of the reliability of the witnesses, or where questions might have been asked which would have brought the matter to a test, and have not been asked. Thus, in Case 231 the date is quite doubtful; but it could have been verified by means of the letter which the percipient wrote that day to a newspaper. In Case 236, whatever precision the story possesses is due to the statements of a second witness, who does not seem to have been cross-examined at all. In Cases 237, 240, 298, 300, 355, 695, and an unnumbered case, the story is so excessively meagre as to be worthless.

18th. After all, the reader, who cannot cross-examine the wit-

nesses, and search out new testimony, must necessarily rely upon Messrs. Gurney, Myers, and Podmore having on the whole performed this task well; and we cannot accept any case at all at their hands, unless, as far as we can see, they have proved themselves cautious men, shrewd observers, and severe logicians.

Although there is not a single one of the 31 cases considered which can be accepted for the purpose of the argument, yet some of them may be genuine for all that. It can only be guess-work to say how many; but in my opinion not more than two or three.

Let us now glance at the other numerical data used in the argument. The ratio of frequency of hallucinations without coincidences has been ascertained by inquiries addressed to a large number of persons, going back for twelve years. The authors have thus assumed that a hallucination with coincidence of the death of the person represented, is no more likely to be remembered for a period of twelve years than one which is unaccompanied by such a coincidence. Yet there are numerous cases in their book in which, the death not having been heard of, the vision had been totally forgotten after the lapse of a few months, and was only brought to mind again by the news of the death. I think it would be fair to assume that, in considering so long a period as twelve years, a coincidental apparition would be four times as likely to be remembered as one without coincidence. I also strongly dissent from the authors' estimate that their coincidences have been drawn from a population of only three hundred thousand. I should reckon the matter, for my part, in this way: Every case of an apparition simultaneous with the death of the person represented, or nearly so, becomes known to a circle of two hundred to three hundred persons, on the average. If any one of this circle of persons, some of whom have had an interest in apparitions excited by the story, learn and are interested in the advertisement of Messrs. Gurney, Myers, and Podmore, these gentlemen would learn of the case. Now, I suppose that the advertisement, being of a very peculiar and sensational character, interests one person for every hundred copies of the newspaper printed. On this assumption, since a million and a half is given as the circulation of the newspapers, the instances obtained would really have been drawn from a population of three to four millions. Adopting these figures, they ought to have heard, on the doctrine of chances, of three or four purely fortuitous cases of visual hallucination with coincidence of death. In view of the utter uncertainty of all the data, it would be very rash to draw any conclusion at all. But the evidence so far as it goes, seems to be rather unfavorable to the telepathic character of the phenomena. The argument might certainly have been

constructed more skilfully; but I do not think that there is much prospect of establishing any scientific fact on the basis of such a collection as that of the "Phantasms of the Living."

MILFORD, PA., May 14, 1887.

REMARKS ON PROFESSOR PEIRCE'S PAPER.

BY EDMUND GURNEY.

THE foregoing review has been to me a source of genuine pleasure and profit; not so much in respect of the special points which the writer raises,—though my pleasure is not diminished by the sense that on most of these his objections can be fairly met,—as on account of the business-like and thorough spirit in which he has gone to work. Criticism, as my colleagues and I should allow, and even insist, is what the exponents of every new doctrine must expect; and in the case of a doctrine so new to science as telepathy, the criticism cannot be too searching. But, on this subject, searching criticism is as rare as loose and hasty comment is the reverse. The world is roughly divided into two parties,—those who will not so much as look seriously at any of the alleged facts, and those who swallow them all wholesale. Thus the evidence is either wholly neglected, or is admitted without due warrant, and discredited by being mixed up with all sorts of baseless rumors and uncritical fancies. One person recognizes no difference between the strongest case that can be adduced and some anonymous "ghost-story," and would accept telepathy or any other marvel on the score of a few third-hand reports or vague personal experiences. Another turns away from the facts in whatever strength accumulated, on the ground that they are *à priori* impossible or unprovable. Both are equally remote from the rational scepticism which alone is the proper attitude for approaching psychical investigation. Apart from such an attitude of mind, no treatment of the subject, whether constructive or critical, can be of any value; and here Mr. Peirce and I are wholly at one. But, in an inquiry so novel and difficult, it is likely that two persons, even though they both begin as rational sceptics, will develop differences of opinion; and it is at least equally likely that they will both make mistakes. Thus, some of Mr. Peirce's strictures depend (as I shall hope to show) on distinct errors and misconceptions, while others appear to me to be unreasonable and overstrained. On the other hand, he has pointed out some errors on

my part; and in so doing, and generally in enabling me to make the present *apologia*, he has done me a valuable service.

Mr. Peirce prefaces his detailed criticisms with a more general remark which cannot be quite passed over. Referring to "Phantasms of the Living," Chap. XIII., he objects to the "enormous odds ciphered out in favor of the hypothesis of ghosts,"— more correctly, to the enormous improbability that a certain series of coincidences were due to chance alone — as calculated to "captivate the ignorant," but to "repel thinking men, who know that no human certitude reaches such figures as trillions or even billions to one." It is as well to be accurate, even at the risk of repelling "thinking men." But most thinking men, whose thoughts have been directed to the subject of probabilities, will, I imagine, support me in dissenting from Mr. Peirce's view. There are many cases of practically absolute certitude, where the actual degree of certitude can be measured. For instance, if dice turned up sixes a hundred times running, which could any day be made to happen, the mathematical probability that the dice were not both evenly weighted and honestly thrown would reach a figure higher than those which have offended Mr. Peirce.

To proceed now at once to his numbered list of objections.

1st. Case 199. The discovery that this incident occurred as long ago as April, 1873, was only made after the work was printed off. (That it was made so late was partly due to a very rare accident — a misspelling of a name in the Register of Deaths at Somerset House. Much time was wasted in the search there, before it occurred to me to apply to the Coroner.) The date has been rectified in the "Additions and Corrections"; and it was careless of me not to remember, when this was done, that the case had been included in the list in Chap. XIII., so as to have added a warning in reference to that list. But, of course, the limitation of the list to cases occurring in a period of twelve years, starting from Jan. 1, 1874, was purely arbitrary. Had a period of thirteen years, starting from Jan. 1, 1873, been selected instead, the numerical argument would not have suffered appreciably, if at all.

Case 355. The inclusion of this case was a bad blunder, for which I take the fullest blame. My eye was misled by the date in the first line of the account; but that, of course, is no excuse.

2d. This objection seems to me fallacious. We can scarcely doubt that our number of cases would have been increased had we prosecuted our search during the whole period (1874–85), instead of during

the last quarter of it only. Had we done so, I should still have been perfectly justified in representing the size of the group of persons to whom we had had access by the number of them all alive at any one time — say half a million — though the half-million would not have throughout consisted of the same individuals. The reason why this would have been legitimate is that in the calculation the *whole population* is similarly treated. Of course a much larger number of persons are alive during some portion of a period of twelve years than are simultaneously alive on the day of it when the census is taken. And if the group of half a million were increased so as to allow for persons becoming adults during the period, and thus joining the group (so to speak) at one end while others died off it at the other, the size of the whole population would have to be reckoned in a similar way; and the two increases would balance each other in the calculation, which would only be made more complex without being made more correct. Thus any case of percipience within the given period (where the evidence which reaches us is on a par with firsthand (see Vol. I., p. 148) may be legitimately included, even though the percipient be dead, if it is practically certain that we should equally have obtained it direct from the percipient, had he or she survived. This applies to three of the four cases which Mr. Peirce cites (his number 237, is, I suppose, a mistake for 238). Cases 170 and 695 were obtained through private channels, and Case 238, though our first knowledge of it was due to a published account, would have been at once procured at firsthand from the percipient had we been at work in 1876. The receipt of Case 214, however, was due to a newspaper-appeal of our own, which it is not certain that the deceased percipient would have independently seen and acted on, had it been published during her lifetime; and as, moreover, it is only by straining a definition (as I have pointed out) that this case can be regarded as on a par with firsthand, it would be best to drop it from the list.

3d. Case 184. Mr. Peirce says that the percipient "seems to have hallucinations nearly every day." He has had only one other hallucination in his life. This occurred many years ago, in his boyhood, and represented a vague, unrecognized figure. But the list is confined to cases where the appearance was recognized; and the only subjective hallucinations which have to be considered *per contra* are those presenting the same characteristic. The other experiences from the same informant, Nos. 21, 38, and 56, have, in the first place, been coincidental, and have a fair claim to be considered telepathic; and, in the second place, have not been hallucinations at all. They have conveyed no impressions of external reality, but are distinctly

described as impressions and "mind's-eye" visions, parallel to those which a good visualizer can summon up at will. Thus Mr. Peirce's objection is doubly out of place.

Case 175. The percipient draws a distinct line between the experience which he here describes and those which he has had without any coincidence. In the latter he "quite believes he was asleep," —*i.e.*, there is no ground for regarding them as hallucinations at all, in the sense in which I throughout employ the word.

As regards Cases 173 and 298, Mr. Peirce's use of the plural "other hallucinations" is misleading. Each of the two percipients has had *one* other hallucination, and neither of these was of a nature to affect the legitimacy of including their cases in the list. The narrator of Case 173 had once seen an *unrecognized* figure, which seems curiously to have corresponded in aspect with a person who, unknown to her, had recently died in the room in which it appeared; but it has been impossible to obtain corroboratory evidence of this incident. The other hallucination of the narrator of Case 298 was *not visual.*

4th. The percipient in Case 29 was in perfect health. (Query—Is it Case 28 that Mr. Peirce means, where the percipient "had a headache"? If so, does he really consider that such a condition at the end of a day's work amounts to not being "in good health"?)

Case 201. The percipient says, "I had been in ill-health for some years, but at that time was stronger than I ever was in my life, the warm climate suiting me — so well that I felt a strength and enjoyment of life for its own sake, which was a delight to me." Many of us would be glad enough to be "not in good health" on these terms.

Case 202. The percipient had been ordered to rest and do no work. But hers was not a condition which would have prevented me from counting her hallucination *against* my argument, as a purely subjective specimen, had she happened to be included in the census, and had no coincidental event occurred.

Case 214. The percipient's illness *succeeded* the vision.

In Case 174, the percipient, Miss P., was still "far from well," having recently had a distinct attack of illness; and in Case 702, the percipient, Mr. G., was weak but convalescent after fever. My information on the subject of hallucinations does not lead me to suppose that there was anything in Mr. G.'s state especially favorable to an experience of the sort; as to Miss P., I cannot tell. Unless their state *was* so favorable, — indeed, unless visual hallucinations, representing recognized figures, are markedly common in such states — which is certainly, I think, not the fact — the cases remain very striking ones. There would, of course, be some force in Mr. Peirce's

objection, if my census-list of *non-coincidental* hallucinations would have been considerably larger than it is but for the condition as to health (or as to anxiety—see his 5th objection). But I have explained (p. 7) that the interrogatories were put in separate parts—questions as to the person's bodily or mental state at the time of the experience being kept separate from the question as to the fact of the experience; and the number of *yeses* struck off the list used in the computation, on the ground of an exceptional bodily or mental state at all comparable to that which existed in a few of the coincidental cases, amounted at most to two or three.

5th. I cannot admit the objection in more than one of the cases referred to, and only partially in that one.

The percipient in Case 702 says, "I had no idea of the lady's being ill, and had neither been anxious about her nor thinking about her."

The percipient in Case 174 was not personally intimate with the gentleman who died; and, though she was "aware that he was in a critical condition," she says, "At the time of his death he had been quite out of my thoughts and mind."

The percipient in Case 182 "had not been thinking about her [the girl who died] at all; she was an acquaintance and neighbor, but not an intimate friend."

The percipient in Case 184, having absolutely no ground for anxiety, was naturally not anxious. This boy was perfectly well when he parted from him, and he had since received excellent accounts of him, including an "assurance of the child's perfect health," within three days of the experience described.

The percipient in Case 28 knew that his friend had had an attack of indigestion, and had been given some medicine for it by a chemist. A medical man "thought he wanted a day or two of rest, but expressed no opinion that anything was serious"; and even this not very appalling professional diagnosis did not come to the percipient's knowledge till afterwards.

The percipient in Case 195 was not expecting the death of a relative who "had been ailing for years," and whose "death occurred rather suddenly." The attitude of mind of young persons towards chronic invalids whom they are not personally tending, and whose death is not held to be imminent, is too habitual and continuous, and not sufficiently exciting or abnormal, to be fairly described as *anxiety*, for the purpose of the present argument.

A similar remark applies in Case 27. The percipient had heard two months before that his friend had a complaint which was likely sooner or later to be fatal, but was "in no immediate apprehension

of his death." No more had been heard of him, and the fact that "his name had not been mentioned for weeks" between Mr. R. and his wife is a tolerably conclusive sign that he was not occupying a foremost position in their thoughts. I can scarcely think Mr. Peirce seriously believes that the hallucination here was due to anxiety.[1]

In Case 172, the percipient says that her friend "had been for some time seriously ill, and I was anxious about her, though I did not know that death was near." Here again, though the word "anxious" is used, the anxiety, such as it was, was chronic, not acute; and I certainly should not have felt justified in making such a condition of mind the ground for not reckoning the hallucination, had it happened to fall on the other side of the account, as a non-coincidental instance.

As regards Case 231, I can only quote my own remark, — that it would be pedantic to apply the hypothesis that anxiety may produce purely subjective hallucinations "to cases which occur in the thick of war, when the idea of death is constant and familiar. In such circumstances the mental attitude caused by the knowledge that a comrade is in peril seems scarcely parallel to that which similar knowledge might produce among those who are sitting brooding at home. At any rate, if anxiety for the fate of absent comrades be a natural and known source of hallucinations during campaigns, it is odd that, among several hundred cases of subjective hallucination, I find no second instance of the phenomenon."

In Case 240, the percipient, Mrs. E., knew the person whose face she saw to be ill, but "did not know he was so near death." They were not on friendly terms at the time, and there was probably no anxiety; but the sick man lived only five miles off, and it is possible that Mrs. E.'s mind reverted to him more frequently than to other absent acquaintances. It might be safer, therefore, to drop this case from the list.

Anxiety is clearly a condition which admits of all degrees, while at the same time it cannot be accurately measured; but all that logic demands is that coincidental cases should be excluded when the anxiety was acute enough to be regarded with any probability as the sufficient cause of the hallucination. A person who has been for

[1] An objection might possibly be taken to this case which Mr. Peirce has not taken, — the vision was not absolutely externalized in space; the percipient says that it arose "in my mind's eye, I suppose." At the same time, as I have pointed out, "it took on a sort of vividness and objectivity which he believes to have been unexampled" in his life. And this, combined with the fact that the experience (which occurred while he was dressing in the morning) began with a certain conviction that some one was in the room, — a conviction which made him look round, — seems to justify the treatment of it as a hallucination rather than as a mere vivid idea.

some time ill, but whose condition has not been seriously dwelt on, is in fact not a bit more likely to be represented in a friend's hallucination than the friend's most robust acquaintance. Such, at any rate, is the conclusion to which a wide study of subjective hallucination has led me. And, to be on the safe side, I have included in the purely subjective group (any increase of which, of course, tells against my argument) "several cases where there was such an amount of anxiety or expectancy on the part of the hallucinated person as would prevent us, if it were present in a *coincidental* case, from including such a case in our telepathic evidence."

6th. Case 175. Mr. Peirce ought to have quoted a few additional words: "I only am sure that as the figure disappeared [N.B., not *after* it disappeared] I was as wide awake as I am now."

Case 195. Surely a second-hand informant's use of the word "dream" cannot weigh against the "while yet fully awake" of the percipient, and her statement that she "sat up to see what it was," and looked round the room to discover if the appearance could be due to some reflection.

Case 702. I cannot understand Mr. Peirce's remark, which contradicts the percipient's emphatic statement. He most expressly distinguishes the dream from the waking experience.

Case 28. The "nap" is an inference of Mr. Peirce's from the fact that the percipient had just leaned back on the couch. The inference is incorrect, and surely ought not to have been put forward as though it was a fact which appeared in the evidence.

Still more inexcusable is the assertion that the percipient in Case 201 was napping. She was reading Kingsley's "Miscellanies," and she says: "I then [*i.e.*, after the apparition] tested myself as to whether I had been sleeping, seeing that it was ten minutes since I lay down. I said to myself what I thought I had read, began my chapter again, and in ten minutes had reached the same point."

In saying that "it is difficult to admit any case where the percipient was in bed," Mr. Peirce has apparently not observed that similar non-coincidental cases, where the hallucinated person was in bed, but awake, have been reckoned on the other side of the account. (See Vol. II., p. 12, second note.) It is not less legitimate, and decidedly more instructive, to admit such cases on both sides than to reject them on both sides. It is worth adding — what Mr. Peirce has not perceived — that for purposes of comparison with the census-cases, the question is not whether people were awake, but whether they *believed* they were awake.

7th. Case 170. I have myself drawn attention to the peculiarity of this experience, as regards recognition. The case, however, is one which I am inclined to drop from the list, for a reason which will appear later.

Case 201. Mr. Peirce has misquoted the account. He makes the percipient say, "I could not say who it was." Her words are, "I knew the face quite well, but could not say whose it was, but the suit of clothes impressed me strongly as being exactly like one which my husband had given to a servant named Ramsay the previous year." She suggests what seems a very reasonable explanation of the fact that the face, though familiar, did not at once suggest its owner.

Case 236. I cannot think on what Mr Peirce founds his assertion —which is contrary to the fact—that the percipient had been shown the testimony of a second witness. She states clearly that the apparition reminded her of her brother; and this is independently confirmed by another person to whom she described her experience immediately after it occurred.

Case 249. The important point is surely not how much of a figure is seen, but whether it is unmistakably recognized.

Case 697. Mr. Peirce's remark is again contrary to the facts. The percipient had *not* heard of Z.'s death when she announced that it was his face that she had seen. Most readers would, I think, infer this from the printed account, which I had not perceived to be ambiguous.

8th. Case 26 I am obliged to differ from Mr. Peirce in respect both of what he thinks unlikely, and of what he thinks likely. He thinks it unlikely that the percipient should have told his friends of his experience on one day, Friday, and have searched the local paper on the next day, Saturday. But he did both things on the earliest opportunity, the local paper not being published till Saturday. Mr. Peirce thinks it likely, on the other hand, that when he said "About 2 o'clock on the morning of October 21," which was a Friday, he meant "the night of Friday at 2 A.M.," *i.e.*, 2 o'clock on the morning of Saturday. Now, had he made the statement which Mr. Peirce incorrectly attributes to him, "The vision occurred on Friday, at 2 A.M.," there might be some ground for this view; for "Friday at 2 A.M." is a phrase which one could imagine to be laxly used for 2 A.M. on the night of Friday-Saturday. But the use of the precise phrase "on the morning of," which Mr. Peirce suppresses, and the giving of the day of the *month*, not of the *week*, surely makes a very distinct difference. On what ground can it be held that a person is

likely to say "2 o'clock on the morning of October 21," when he means "2 o'clock on the morning of October 22"?

Case 170. I agree that the degree of exactitude in the coincidence is here doubtful, and I would drop the case from the list in consequence.

Case 182. I do not think that there is much doubt here, as the date of the percipient's experience was particularly remarked at the time, and might well be remembered for a month.

Case 197. I have myself pointed out that it is possible that the limit was exceeded by some hours. But two or three such cases may, I think, fairly be included in the estimate, considering what the object and upshot of the estimate is. The reader may of course be trusted to perceive that had the arbitrary limit been fixed at twenty-four hours instead of twelve, the overwhelming character of the odds against chance would remain. The precise figures would differ, according as a limit of six, twelve, eighteen, or twenty-four hours was selected; but considering that any selection, with the calculation based on it, would lead us to the same conclusion, I see nothing misleading in the inclusion of a case where the interval may have exceeded the actually selected lower limit, provided that it is equally likely *not* to have done so, and provided due warning is given. These remarks apply equally to Cases 201 and 231.

Case 195. It ought to have been stated that the percipient returned home almost immediately after — she and her mother think the very day after — the death, thereby missing a letter which was sent to her, and finding her grandmother dead. She would thus only have to carry her memory back a day or two to identify the date of her vision with that of the death.

Case 202. The percipient distinctly states that she saw the announcement of the death "two or three days" after her experience; to which, therefore, there is again a very high probability that she assigned the right date.

A similar remark applies to Case 237, where the percipient heard of the death "a day or so after" her experience. The interval certainly cannot have been much longer, as she saw her dead friend before the funeral.

In Case 214 we are told that the percipient "noted the day and the hour"; but the testimony to this effect is second-hand, and there was no written note, so that here there is reasonable ground for doubt as to the closeness of the coincidence. The case has been already dropped from the list for another reason; as also has Case 355, where, however, the coincidence, on the evidence, was extremely close.

Case 199. Mr. Peirce says that "the vision occurred, if at all, on

a Saturday; the death on a Wednesday." This seems unwarranted. The narrator thought that *both* the vision and the death had been on a Saturday, but he recollects and says nothing which independently marks the day of the week of the vision. Why is it to be assumed that his memory is right as to the quite uninteresting and little noticeable point of the day of the week, and wrong as to the extremely interesting and noticeable point that the day of the two events was the same? The fact remains, however, that he has made one definite mistake; and the probability that the closeness of the coincidence has been exaggerated in memory seems here sufficiently appreciable to condemn the case for the purpose of this particular list — even had not its retention been made impossible by its having occurred before 1874, as already stated.

Case 702. Mr. Peirce says, "The date given for the apparition differs from that of the death by one day." This is contrary to the fact. The apparition is stated to have taken place on June 11, the day of the death; and as the death occurred in England at 5.20 A.M., and the apparition in Jamaica at a few minutes past 12 A.M., the coincidence of hour would be extraordinarily close if the coincidence of day is correctly remembered. Mr. Peirce's next sentence conveys a totally false impression. In conversation with me, Mr. G. said that he fancied the date of the two events had been June 15, but that he could not be sure of this till he referred to the letter. What he was sure of was the *identity* of the two dates, which, according to his account, was noted both by his friend and himself with special care. Mr. Peirce's way of putting it would imply that there was some independent reason — apart from Mr. G.'s idea that the 15th was the date of the *coincidence* — for believing that the 15th was the day of the *apparition*. But this is not the case; and surely it is obvious that correctness of memory as to a very striking coincidence does not necessarily involve infallibility as to the perfectly insignificant point on what particular day of the month the coincidence fell.

9th. Case 202. "The percipient, who is excessively near-sighted," — this is Mr. Peirce's version of the sentence, "She is short-sighted, but wears suitable glasses, and was wearing them on this occasion." "This person's head was turned away," — this is his version of "I saw only the three-quarter face." He has omitted to notice the improbability, specially pointed out in the account, that a lady of flesh and blood should be wearing a seal-skin jacket in August, and also the fact that the bonnet was recognized; nor does he seem to have remarked the importance of the recognition of the child, which tells strongly against the hypothesis of mistaken identity.

Case 249 (I presume that this is the case meant, though the number given is 201). Most readers of the whole case will, I think, agree with me that, if the facts are correctly stated, mistaken identity is a highly improbable explanation. And I cannot think that it is much helped by the hypothesis of the facetious and then conscience-stricken boy. If that hypothesis be adopted, however, I would venture to suggest the further feature of *stilts*, both as adding to the humor of the "Christmas joke," and as probably necessary in order to enable the boy's head (which he would naturally have practised before a mirror in the method of Mr. X's "peculiar droop") to be visible above the wall.

10th. Case 350. One of Mr. Peirce's suppositions contradicts what is plainly stated in the account — that it was not known that the woman was dying, or in any way near death. She was a chronic invalid. I cannot guess how Mr. Peirce knows that she had cancer, which is nowhere mentioned. The hypothesis of the skull is quite inconsistent with M. J. F.'s and Mrs. R.'s evidence. I may add that "looking in and smiling at the girls" is rather a free version of "trying to look in," which is the expression used in the account.

11th. Case 355 has been already excluded on the ground of the date; but Captain A. impressed our friend and helper, the Rev. J. A. Macdonald, as a reliable witness; and personal knowledge, though not an infallible guide in such matters, is, at any rate, a safer one than such a sweeping presumption as Mr. Peirce enunciates. As to Case 300, I can well imagine a difference of opinion. But, again, the witness appeared to be honest and truthful to a clear-headed cross-examiner, who had begun by disbelieving the story.

12th. By "any room to suspect" I suppose that Mr. Peirce means any appreciable grounds for suspecting, I should be interested to know what his own grounds are. As regards Case 29, would he supplement his assumption that all sea-captains are ignorant and superstitious by the still more robust hypothesis that all gardeners get drunk? The hypothesis, however, whether general or particular, would not at all affect the case, if the percipient's wife is correct in saying that he mentioned the dying lady, as the person whom he had seen, immediately on his return home; *i.e.*, before the news of her death had arrived. But then, perhaps, all gardeners' wives are liars, — a particular hereditary taint, derived from our first parents, may cling to this walk in life. I had better, therefore, quote the words of the Rev. C. F. Forster, vicar of the parish, in a letter written to me on August

18, 1887: "I think the hypothesis that B. was intoxicated is quite untenable. Mine is only a small parish, and I should be certain to know of it if a man was inclined that way. I never heard the slightest suspicion of it. On the contrary, I should have said that, whatever faults he had, he was a thoroughly sober man. Added to this you ought to know that he had come three miles on his bicycle before entering the churchyard; and I should have thought this almost impossible if a man was so intoxicated as this account would make out. Again, we have to account for the coincidence that this appearance to him (drunk or sober) occurred at the time of Mrs. de F.'s decease."

As regards Case 201, though quite in the dark as to Mr. Peirce's principle of selection, I cannot quite believe that he would pitch on this particular informant in connection with this particular suspicion If he has really done so, I shall not insult a lady who is my esteemed friend by making a syllable of reply. But I am fain to hope that by No. 201 he again means No. 249, in speaking of which in another place he has mentioned "the festivities of the season" as a possible element in the case. Not that the idea would be any less absurd in connection with this percipient. Even on Christmas-day, men of business in England are not usually intoxicated at 4 o'clock in the afternoon; and the suspicion seems specially extravagant in the case of an elderly and respected member of the Society of Friends — "a typical Quaker," as Mr. Podmore describes him in a letter which lies before me. Is it likely, moreover, that a man in his position, if he had really been the worse for liquor, would have cared to revive the recollection of the fact in his friends' minds, by calling them to bear witness to the occurrence of a hallucination which took place while he was in that state?

Mr. Peirce seems to have taken a rather unfair advantage of the fact that, though much time has been spent in forming a judgment as to witnesses' characters by personal interviews, and often by prolonged correspondence, I have expressly avoided giving the results in the shape of definite testimonials.

13th. Case 214. There is not a word in the account about "constant delirium," or about any delirium at all. Like the cancer in a former case, it is a contribution of Mr. Peirce's. And what authority has he for regarding illness, caused by shock, as likely to produce a single perfectly distinct and isolated "retrospective hallucination"?

14th. This objection seems to me quite fallacious. The fact of experiencing a hallucination of the senses does not make a person an expert in regard to such phenomena, any more than having an

illness would make him an expert in disease. If, in the course of long study of the subject, including the formation of a large collection of cases of purely subjective hallucination, I have found no evidence that affectionate thoughts directed to a person, even though that person has been "ailing for years," as in Case 195, have the power of evoking a distinct visual impression representing *that person and another*, I am justified in not inventing the hypothesis for this particular case. Nor even if I did invent it, could the *coincidence* do otherwise than enormously detract from its plausibility.

15th. Mr. Peirce's axiom seems to me decidedly too sweeping. As to the hypothesis of lying, I must hold that our mode of conducting the investigation reduces the scope of its possible application to an extremely small proportion — I do not myself believe it to be applicable to a single one — of our cases. Each case must be judged on its merits, with the aid of all the knowledge attainable of the witness's character.

The central fact in Case 173 is an extremely simple one, and there is no attempt at adornment. The account of Case 174 may, to the best of our judgment, be relied on. The absence of any personal relation between the person who died and the percipient makes the narrative a particularly unlikely one to have been consciously invented. In Case 184 — also, I believe, quite reliable — we have a second person's testimony to the percipient's depression, and his anxiety about the child, though he did not mention the cause before the news of the death arrived. In Case 214 we are told that the percipient was clear-headed and truthful, and never varied in her statement.

I do not quite understand Mr. Peirce's suggestion that some of the cases may be explained by "the well-known sensation of having undergone a present experience on some previous occasion." Does he mean that the witness had a sensory hallucination representing the deceased person on some occasion subsequent to the death, accompanied by the delusion of having had it before? But this would involve a double improbability. The supposed delusion is not of the vague sort, unlocalized in time, and often in space, which is the common form of the "well-known sensation" referred to, but a very distinct picture of an experience belonging to a particular hour and a particular place. And, stranger still, the supposed *real* sensory hallucination, which actually does belong to a particular place and time, is clean forgotten — vanishes from the mind — its place being wholly usurped by the retrospective delusion to which it is supposed to give birth.

16th. Case 27. As Mr. Peirce gives no clue to the "inaccuracy of more or less importance" which he detects in this case, and as careful scrutiny fails to reveal any, I can make no reply with regard to it. Is it, perchance, that while the percipient says "Every feature of the face and form of my old friend X," his wife, to whom he immediately mentioned his experience, merely says "X's face"?

Case 180. This case is not included in my list, and I presume that Mr. Peirce has included it in his through rough inadvertence. As he has mentioned it, however, I may quote my comment on it. "It seems practically beyond doubt," as will be admitted, I think, on a perusal of the account, "that at the time that the news arrived, Mr. C., as well as his wife, fixed the date of the dream [more correctly 'Borderland' hallucination] as Monday, the 19th; and the fact that in his letter to us, written more than three years afterwards without reference to documents, he says 'about the 25th,' is therefore unimportant."

Case 182. Mr. Peirce says that the percipient "is positive that her vision took place at half-past ten; and, as no bell is rung at that time, this positive precision is already suspicious." The reader will be surprised to learn that Mr. Peirce is the sole authority for the suspicious circumstance. There is not a word as to the hour of the vision in the percipient's account; and in the passage quoted from her letter to her father, the only indication of time is in the words, "in the night, or rather morning."

The percipient says that she mentioned her experience to "two or three passengers on board, who made a note of it." Afterwards she gives the names of four persons whom she told "next day," but adds nothing there about a note. Mr. Peirce's version of these statements is: "She testifies positively that she mentioned the occurrence the next morning to four persons, who all severally took written notes of it." (I am forced to notice these frequent inaccuracies in his versions of the facts, as they would, of course, be extremely misleading to any one who did not take the pains to study the original cases.) "Two of these persons," Mr. Peirce adds, "now profess to know nothing whatever about the matter." Even this is not quite accurate, as "the matter" was not mentioned by me to one of these two persons; he was merely asked generally if he remembered any singular announcement made by Miss J. during the voyage. I have, however, now received the independent recollections of one of the persons told, to whom I was unable to apply last year, as he was travelling and his address could not be ascertained. He writes as follows: —

"JUNE 1, 1887.

"It was some years [four] ago that the voyage referred to in your note took place; but I distinctly remember that one morning during that voyage, Miss K. J. told me that during the previous night she had dreamed that a lady friend of hers was dead, or (for I cannot now remember which) that this friend had appeared to her on that night and announced her death.[1]

"A short time after arriving at the Cape (about the time that would be required for the transmission of a letter), Miss J. informed me that she had heard that her friend had died on the identical night of the dream or supposed appearance."

In answer to the question whether he made a written note, he says: "It is possible I may have at the time noted the date and the supposed apparition in an ordinary pocket-book; but if I did so, this pocket-book is now lost. I have some recollection of having seen the letter announcing the death of the lady, but none of comparing the date with that in a pocket-book; it is possible, however, that I have forgotten this circumstance."

I regard it as not improbable that Miss J. is wrong in thinking that any of the persons to whom she mentioned her experience made a written note of it. This is just the sort of feature that is likely enough to creep into an account without warrant, owing to the tendency of the mind to round off and complete an interesting story. One might expect *à priori* that this would be so; and the fact is illustrated by the far greater commonness of written notes in second-hand than in first-hand accounts. But in Miss J.'s case, though she is only a second-hand witness as regards the note, I think it probable that the idea of it had some real origin at the time of the event. Very likely one or more of the persons to whom she mentioned her experience said that it was worth making a note of, or that they were going to make a note of it — which has left in her mind the impression that the note was actually made.

Mr. Peirce's sentence, "She gives May 4th as the date of the vision, but the death occurred on May 2d," is extremely misleading. When she wrote her account (as I explain), she had nothing independent by which to mark the day of the vision, and fancied that the vision and the death had both occurred on May 4th. But afterwards (without the real date of the death being recalled to her mind) she stated that she was not sure of the exact date, but that she knew

[1] The second of these alternatives is the right one, but it is not quite correct. The visual experience was certainly a waking impression, not a dream; but there was no impression of an announcement or of any words. This is a good instance of the way in which lapse of time affects memory as to details, without the evidence becoming in the least untrustworthy as to essentials

it had been mentioned in a letter from the Cape to her father. It is contrary to what is stated to say that the letter (*i.e.*, the first letter) written to her father has been found by him. He expressly states that he cannot find it. And why does Mr. Peirce make the assumption, for which there is not the slightest ground, that the whole passage about the apparition, in the letter which is quoted, is not given? Why, again, does he assert that "it is stated that the letter gives the date of May 4th," when it is nowhere so stated, and when the very first words of the extract quoted are, "On the 2d of May"?

The evidence would, of course, be more complete if it could be proved that the percipient gave a written account of her experience (as well as the verbal account which we now have corroborative testimony that she did give) before hearing of the death. In spite of both her own and her father's belief that she did so, I think it more probable that she did not, and that the letter of June 5th was really the first letter; as the way in which the fact of the vision is there mentioned does not suggest that it has been mentioned before. The idea that letters have *crossed*, in a case of this kind, is a likely first dereliction from perfect accuracy. The direction in which imagination and failure of memory gradually tend is just this, of neatening the facts, and supplementing the essential point by details which enhance its interest. Of course it is to be regretted that human memory is not infallible, and that time acts in any way as a distorting medium. But it is very important to avoid confounding the natural growths on the margin (so to speak) of a telepathic record with the vital point at its centre, or concluding that the latter is as likely to be unconsciously invented as the former. Supposing the mistake which I here think probable to have been really made, the substance of the case is not affected. Having specially observed the date, the percipient was likely to retain it correctly for the short period before hearing of the death; and her ability at that time to identify it could not be seriously impugned on the ground of a subsequent mistake as to the date of her first writing home. We should note, too, that in its essentials the case is a specially unlikely one (even apart from the corroborative testimony) to have been the work of imagination; as the percipient was not personally attached to the lady who died, nor had she been thinking about her.

Case 197. Mr. Peirce's phrase, "A coincidence exact to the minute," is not used in the account. What the narrator says is that the date of the death, "allowing for the difference of longitude, coincided" with that of the vision. Mr. Peirce is wrong also in saying that I ask him to accept the coincidence of date in this case as "beyond question," or as "positively proved." I have again and again

urged that exaggeration of the closeness of a coincidence is a common and natural form for exaggeration to take; and I have pointed out that there certainly had been some exaggeration[1] in this particular case. I have quite recently learnt that the error was greater than at first sight appeared. The vision took place on the morning of Sept. 6, that is *the day before* the death. The date is fixed by the entry in the diary of the narrator's friend, Miss K.;[2] under the head of September 5 is written, "On this night Isabella saw Jim vividly appear to her as if dead." The vision was actually in the early morning — that is, at the close of the night Sept. 5–6. The case, therefore, if telepathic, is one in which the telepathic impulse coincided not with death, but with a time of exceptional danger and probably excitement on the side of the agent. Another document which has lately been recovered further strengthens the evidence. This is a letter, sent at the time by the narrator to her sister, which, though it contains no date, leaves no doubt as to the record of the hallucination having been written and sent away before the news of the death arrived. This is really a better and rarer form of documentary evidence than an entry in a diary, which sometimes allows of the hypothesis that it was written later than the day under which it figures. The following is the account in the letter: —

"Hotel Interlaken,
"Wednesday.

"A few days ago, about seven in the morning, I had lain down again after drawing up my blind to let in the beautiful view of the rose-flushed morning, when I saw an appearance of Mountain Jim, looking just as he did when I last saw him. There was an impression on my mind as though he said: 'I have come as I promised. Farewell.' It was curious, and if I had not heard that he was getting well and going about, I should have thought he was dead."

This record, which closely corresponds with the printed account, written more than eleven years afterwards, makes it almost certain that the narrator's memory was at fault as to one unimportant detail, when she said in that account that she was lying on her bed and *writing to her sister* at the moment when the apparition occurred; for

[1] I take this opportunity of noting another instance of exaggeration which I have discovered since the book was published. In Case 29 it is stated that Mrs. de F. was found dead at 7.30 P.M. I learn from a near relative of hers that the time was certainly some hours earlier, about 2 P.M.

[2] Before this diary was recovered, Miss K. wrote to me, "I distinctly remember that on my going into her room in the morning she told me immediately what she has related to you."

had she been so employed she could hardly have failed to mention the experience in that letter, instead of waiting some days.

17th. Case 231. The date could not be verified in the way that Mr. Peirce suggests, since, as I have stated, we have been unable to obtain the address of the witness. The original letter containing the account was not preserved by the editor of the paper in which it was published.

Case 236. Mr. Peirce's remark seems to me utterly without foundation. The percipient's account is quite as precise as that of her friend, who, however, completely corroborates her.

As to Case 237, I can only wish that Providence would bless us with more such "meagre" accounts, with essentials stated in a perfectly clear and straightforward manner, and with not a word suggestive of adornment or exaggeration. If Mr. Peirce really considers such a narrative, if true, as "worthless" for the purpose for which it is used, I am afraid that nothing I can say is likely to influence him.

The same remarks apply with almost equal force to the other cases to which Mr. Peirce refers — to Nos. 298 and 695 with quite equal force. As to Case 300, it would be improved for evidential purposes by being a little *more* meagre, there being, as I have pointed out, some suggestion of exaggeration in respect of details.

18th. It is possible that my colleagues and I fall far short of Mr. Peirce's standard in respect of caution, shrewdness of observation, and severity of logic. I think, however, that some readers of the book may feel the connection between our deficiencies and the evidence which we present less vital than he does — that they may find themselves able to judge the cases on their merits, and to "accept" any case so far as it seems trustworthy (not, of course, as a proof of telepathy, but as an item in the proof), without receiving from us anything beyond the assurance that in our opinion it was certainly given in good faith.

To sum up my view as to the cases in the list. Nos. 199 and 355 must certainly be omitted, as having occurred before Jan. 1, 1874; and Nos. 214 and 240 had better also be omitted, though on grounds different from those which Mr. Peirce adduces. Mr. Peirce seems to be logically right in demanding the exclusion of Nos. 174 and 702, on the ground that *non-coincidental* hallucinations, falling at a time when the percipient was so decidedly below par in point of health as in those cases, would probably not have been reckoned on the other side. If the census of hallucinations had not included so explicit a

condition as to health, these two cases might have been reckoned, without any considerable alteration in the estimate from an increase of the number of subjective hallucinations representing recognized figures to be reckoned on the other side. No. 702 remains, anyhow, a strong case, and may become stronger still if the diary-entry can be recovered when the writer returns to England. As regards closeness of coincidence, the recent information as to case 197, though improving the quality of the evidence, removes it from this particular death-list; and there is enough room for doubt as regards Nos. 170, 201 (a very valuable case), and 231, to make it wiser to exclude them also; though I must point out that I never represented the coincidence as actually proved in every instance to have been close to within twelve hours; that the doubt has been clearly expressed in connection with the particular cases (except in respect of Case 170, an omission which I regret); and that the list and the calculation would necessarily be taken subject to that doubt in respect of a few of the items.

It will be observed that in dropping these cases I am merely conceding their omission from a particular calculation. The omission will not at all detract from their worth, and scarcely at all from the worth of the argument which the calculation exemplifies; since, for this to be appreciably affected, it would be necessary that a large majority of the records in the list should be substantially false, *i.e.*, that the professing percipient should have had no such experience as is described in at all close proximity to the death. The collective force, even of the excluded cases, say of the group 174, 197, 199, and a case which happened a few months earlier, Nos. 500, 201, 231, 702, as evidence of a causal link between the death and the percipient's experience, is alone quite enough to give us pause; and as for the list as it stands without them, most candid students will, I think, find in it good evidence for a sufficient number of highly abnormal experiences, in correspondence with unexpected deaths at a distance, to supply material for a legitimate and exceedingly strong numerical argument. Of the retained cases, there are only seven in which we have not a second person's testimony to the percipient's mention of his or her experience at the time, before the fact of the death was known; or six, if we do not count No. 184, where, though the actual experience was not so mentioned, the special anxiety to which it gave rise was. As for the evidential point in respect of which the substantial accuracy of a certain proportion of the cases may with most reason be questioned — the degree of closeness in the coincidence — it is not of cardinal importance; if the arbitrary limit had been three days, or even a week, instead of twelve hours, the ob-

jectionable odds of billions to one against the proximity in time being due to chance would still be attained. Points of this sort were so obvious that I did not think it necessary to encumber the exposition with them; a very little good-will would enable any reader to see that the particular calculation, based on the particular data assumed, was a mere sample, serving to show what an immense margin there was to the argument, and how little any reasonable abatement would affect its force.

It may be well to point out in a more general way what has already been shown in respect of the particular point of degree of coincidence, that the admission of possible inaccuracies in the cases used is not in any way an afterthought, or in any degree a condemnation of my treatment of them. In the very first page of the chapter which Mr. Peirce has criticised, I say: "It is very necessary to distinguish these two questions: Whether the evidence may be trusted, and, if trusted, what it proves. It is the latter question that is now before us The character of the evidence was discussed at some length in the fourth chapter, and is to be judged of by the narratives quoted throughout the book. In the present chapter it is assumed that these narratives are in the main trustworthy; that in a large proportion of them the essential features of the case — *i.e.*, two marked experiences and a time-relation between them — are correctly recorded." These words naturally refer the reader to the actual cases, and the comments which accompany them, for the means of judging as to their evidential value. He will find that incompleteness and doubtful points are abundantly recognized; but I believe he will also find that the probable or possible mistakes do not generally touch the real core of the case,[1] and that enough reliable ground remains to support a numerical estimate — if not my particular one, another conducted on the lines which that illustrates — of a sort that science cannot afford to disregard.

Mr. Peirce's concluding remarks on "the other numerical data used in the argument" require but brief comment. He says that I "have assumed that a hallucination with a coincidence of the death of the person represented is no more likely to be remembered for a period of twelve years than one which is unaccompanied by such a coincidence." All that I have assumed is that a hallucination of the waking senses, so distinct as those which have occurred in the

[1] I am, of course, not assuming that a case is necessarily a strong item of evidence if it is free from substantial error. There are many weaknesses which are in no sense mistakes; but I do not think that this specially applies to the cases in the Set in question. Granted their substantial correctness, those cases form a very strong group.

coincidental cases, is likely to survive in the mind on its own account, or at any rate to be recalled when the person who has experienced it is put into the right attitude for recalling it by being asked a definite question on the subject. (See Vol. II., pp. 10, 11.)

Mr. Peirce adds, "There are numerous cases in which, the death not having been heard of, the vision has been totally forgotten after the lapse of a few months, and was only brought to mind again by the news of the death." I doubt if there are as many as three such cases in the book; and there is not one in respect of which the expression "totally forgotten" would not be thoroughly misleading. A thing may be totally forgotten in the sense that it is not likely to recur spontaneously to the mind; but this is a very different thing from total forgetfulness in the sense that a question with respect to that very thing will wake no memory of it. There is no coincidental case in the book in which it seems at all likely that such forgetfulness as this followed the hallucination; so that Mr. Peirce's *à priori* argument as to the forgetableness of the non-coincidental experiences of the same kind comes to nothing.

Mr. Peirce's final objection seems to rest on the assumption that, having supposed a quarter of a million of newspaper-readers, I forgot that each of these had a circle of persons sufficiently closely connected with him to make it likely that he would hear of a remarkable experience befalling any one of them, of which he might then let us know, so that the number of persons tapped by newspaper appeals should have been reckoned not as a quarter of a million only, but as a quarter of a million multiplied by the average number of each person's acquaintances. I have been guilty of no such stupendous blunder. Had the cases of the type which is used in the calculation been mainly obtained by means of public appeals,[1] it would, of course, have been very necessary, in estimating the area from which they were drawn, to distinguish the direct from the indirect results of the appeals — that is, to distinguish the cases which were from percipients who had encountered the appeal from those where the percipients had not themselves encountered it, but had been applied to for their accounts on the strength of it. Only five cases, however, out of the whole list, were obtained in this way through public channels; and of these, only one, Case 300, was an indirect result, in the sense just explained. That case was certainly not known to a wide circle; and as I was making a rough, but as I

[1] A sentence in Chap. XIII. (V. of II., p. 14) is certainly calculated to mislead. I say, "our chief means of obtaining information has been by occasional requests in newspapers." I ought to have added, "apart from information derived from our own circle of friends."

believed a very liberal, estimate of the area, I felt justified in including it.

In this connection I may repeat the substance of some remarks which Mr. Peirce has perhaps not observed, and which seem to me of great importance. Of the 64 coincidental experiences of three sorts — vivid dreams of death, and visual and auditory hallucinations — used in the calculations of Chapters VIII. and XIII., 5, or about one-thirteenth, were obtained by canvassing a body of about 5,535 persons, taken at random. It is not unreasonable, therefore, to suppose that the body from which the whole 64 were drawn amounts to 13 times 5,535, or 71,955. No doubt the number of coincidental (or, as we should now say, probably telepathic) experiences yielded by a random group of 5,535 persons is too small for us to be confident that it represents the average proportion in other groups of the same size. But the estimate is probably not so inexact but that it may safely be taken as showing my assumption of 300,000 to be decidedly unfair to the telepathic argument. I have further supposed this area of 300,000 persons to have been drained dry — an extravagant concession; for, though it is easily assumed that any one who has ever had a "psychical experience" is desirous to publish it abroad, as a matter of fact people do not usually take the trouble to write a letter to perfect strangers, about the family and personal matters of themselves or their friends, on the ground of a newspaper-appeal. Would that Mr. Peirce's view of the general eagerness to communicate with us were anywhere near the truth. We know of much evidence which the reluctance or indifference of the parties concerned has made unavailable for our collection; we can scarcely doubt, therefore, that much more remains unelicited, even among those whom our appeal has reached. A further strong argument for the existence of these unelicited facts is the very large proportion of our actual cases (specially large in the group with which Mr. Peirce and I have here been concerned) that has been drawn from a circle of our own, for the most part quite unconnected with "psychical" inquiry — from the friends, or the friends' friends, of a group of some half-dozen persons who have had no such experiences themselves, and who have no reason to suppose their friends or their friends' friends better supplied with them than anybody else's. In view of this latter fact, Mr. Peirce's guess that the cases in the list (or, at any rate, a sufficient number of them amply to support the argument) are "drawn from a population of three to four millions" clearly becomes grotesque.

As to the concluding paragraph, in which Mr. Peirce sums up his view, I may be allowed to point out, that if "the evidence, so far as it goes, seems to be rather unfavorable to the telepathic character of

the phenomena," that is a most important result, and one which would amply repay the time and pains bestowed on collecting and examining the cases. The prime reason why it seems a scientific duty to collect and examine such evidence is not to support a foregone conclusion, not to prove this or that, but to see what is really involved in it; how far, when rationally criticised, it reveals facts which our previous knowledge fails to explain. No rational opinion could be formed on the subject, no rational guess even could be hazarded, till a wide effort had been made, and a large body of material got together and arranged. Mr. Peirce's provisional conclusion is, therefore, a quite sufficient justification for the book; for I do not imagine that he would deny that, if this collection actually goes some distance towards *disproving* telepathy, telepathy is not very likely to be proved. At the same time, his is not a conclusion which I can pretend that I expect many to share who devote an equal amount of study to the matter. He regards me, no doubt, as an advocate rather than a judge; and he is so far justified, in that the mistakes which I have made are all mistakes which tell in favor of my conclusion. He will pardon me if I say that he is in the same position; he has made (I think) a larger number of mistakes in seven pages than I in as many hundreds; and they all tell in favor of *his* conclusion. Thus the impartial reader who may be led to the book by this controversy will start fair; and that some may be so led is, I trust, one probable and useful result of a controversy which, I gratefully acknowledge, has not been without other uses.

Finally, let me urge on American readers that good as criticism is, cases to criticise are even better. I have expressly stated in "Phantasms of the Living," that, though the book may reasonably be accepted as supplying a proof of Telepathy, the proof is not one which all candid minds are likely to accept. More cases, and contemporary cases, are needed; and for this we must largely depend on the wide assistance of educated persons in many countries. We trust that it is from the United States that the next considerable batch of evidence will come.

19 Buckingham Street, Adelphi, London, W.C.

MR. PEIRCE'S REJOINDER.

[*Note.* — In the copy of the above criticism, which was sent to Mr. Gurney, and on which he has based his reply, the following errata occurred: —

Objection	Line	True reading	Reading sent Mr. G.
2	6	238	237
4	8	28	29
4	8	236	214
5	4	695	702
9	9	249	201
12	3	249	201
13	4	or	and
16	3	170	180

C. S. P.]

When "Phantasms of the Living" appeared, I desired for my own satisfaction to examine the arguments for spontaneous telepathy. But, as I lacked the leisure to study the whole, I was forced to confine my attention to a single argument, — the most important one. Having reached a definite opinion in regard to the validity of this, I found myself in the possession of a good many notes which I thought might be useful in economizing the time of another student of the book. I, therefore, abridged these notes as much as possible, and so constructed an article afterwards communicated to the American Psychical Research Society and now printed above. In the abridgment of my notes a number of errors have crept in; but none of these are such as to alter my conclusion; only one or two are important; most of them consist in misstating my points; several are absolutely without significance, and some are errors favorable to the telepathic hypothesis. The reader may well ask whether I have not corrected in the proof-sheets as many of these errors as I have been able to discover; for to bring before the public a paper containing acknowledged faults certainly seems like an act of presumption. In truth, none of the errors have been corrected, except those in the list above, which are of a purely clerical nature. My excuse for pursuing this course will, I hope, be admitted. One of the chief points of Mr. Gurney's reply is that I have committed as many mistakes as he has. Accordingly, instead of simply dropping the cases against which he is forced to admit fatal objections for the purpose of the argument under examination, he labors to show that I have

fallen into some small errors in my account of them. This line of argumentation seems more appropriate to a school disputation than to a scientific inquiry; for it would not help the theory of spontaneous telepathy in the least to prove me never such a blunderer. With Mr. Gurney's own intellectual character it is different. He stands to a certain extent as endorser of the witnesses to his ghost-stories. The public, which comes into contact with these witnesses only through him, is obliged to confide in his sagacity; and it thus becomes very important to ascertain whether he is an accurate and stern logician, or not. Now, the manner in which he conducts his reply might be judged quite significant in this regard; and hence I was unwilling to make corrections which might interfere with the development of Mr. Gurney's thought. I must beg pardon of the reader for the extent to which this course has lengthened the discussion. As long as I allow my errors to stand, since the reply is of the nature of an attack upon my scientific morals, involving accusations of garbling, suppression, and invention of testimony, it is incumbent upon me to notice the strictures in detail; and I have preferred to review the whole argument, repeating as little as possible what I have already said, but rearranging the matter in such a form as to render the force of my various objections more clear. My first paper was intended only for the use of close students of the book, and the several objections were indicated as briefly as possible. The present rejoinder is sufficiently expanded to permit any one who has read the work attentively, and who will actually turn to the pages I cite, to form a judgment of the correctness of what I allege.

Every attempt to explain ghost-stories without admitting anything supernatural (by which I mean anything counter to the great body of human experience) has dealt largely with supposed fortuitous coincidences; and students of the theory of probabilities must have entertained no little doubt whether a larger number of such coincidences were not supposed than was morally possible. Mr. Gurney has, for the first time, undertaken a statistical inquiry with a view of putting this question to rest; and he thinks he has reached an irrefragable conclusion. But I maintain he leaves the question just where he found it. (In the last paragraph but one of his reply, he does not observe the significance of my phrase "as far as the evidence goes." My judgment, I repeat, is that, "in view of the uncertainty of all the data, it would be very rash to draw any conclusion at all." I abstain, after reading the book as I did before, on account of the doubt just mentioned, from any positive denial, though I decidedly incline to disbelieve in any supernatural theory of ghost-stories.)

Mr. Gurney does not demur to my *résumé* of his argument. He

says, "It may be calculated that the odds against the occurrence, by accident, of as many coincidences" within twelve hours, of visual hallucinations with the deaths of the persons presented, as a natural explanation would require, are, from the thirty-one cases he takes as established, "about a thousand billion trillion trillion trillions to one." To my remark that no human knowledge can reach such a probability as this he dissents, and gives an illustration from the throws of a die. I will grant, at once, that problems of that sort can be imagined which yield probabilities indefinitely nearer certainty than the above. For instance, if a die be thrown but once, the odds that one or another of the six faces will turn up is, upon the usual assumptions, absolute certainty, or infinity to one. But this only refers to an imaginary state of things. In any actual case there is a possibility — ordinarily very rightly neglected, but far greater than one out of trillions of trillions — that the die may rest on its vertex, or fly up to heaven, or vanish altogether, or that before it reaches the table earth and heaven shall be annihilated. The continuance of the order of nature, the reality of the external world, my own existence, are not as probable as the telepathic theory of ghosts would be if Mr. Gurney's figures had any real significance. And for that it would be requisite, too, that each one of his thirty-one cases should be established with a degree of certainty far transcending the odds he gives. He might reply that the enormous number given does not profess to be anything but the calculated probability of the thirty-one coincidences happening by chance; but this would be admitting at once what I allege, that the number has no real significance; and it is because the thinking man will see this, while the vulgar may not, that I say such figures may be calculated to overawe the latter, but can only repel the former. Mr. Gurney, in his reply, continues to insist upon the number, for the sake, as he says, of accuracy. To my mind, it is precisely against strict accuracy of thought that such insistance offends.

I will first consider the census of 5,705 persons, taken at random, of whom only 21 could recall having had within twelve years a visual hallucination of a living person while they were in good health, free from anxiety, and wide awake, two of these having had two such experiences. If it would answer the purpose to accept these answers in the rough, as Mr. Gurney has done, the census would be large enough; but this is not so. It is essential to ascertain the proportion of hallucinations that have been forgotten. I have pointed out that Mr. Gurney assumes that hallucinations with coincidence of death within twelve hours of the person presented are no more likely to be remembered for twelve years than similar hallucinations without coincidence! Mr. Gurney, in his reply, has the air of denying that he has made this assumption;

but I submit that a careful reading of the passage will show that, on the contrary, he fully admits it. Mr. Gurney sharply censures me for saying that there are numerous cases in the book of an apparition being totally forgotten after the lapse of a few months. The remark is certainly somewhat exaggerated; I should have said, so far forgotten that in the absence of coincidence they would not have been called to mind in answering the census-question. But I think it is unjust to say that the expression "totally forgotten" is "thoroughly misleading," since it is a very common exaggeration, and I add the qualifying clause, "and was only brought to mind again by the news of the death." Mr. Gurney doubts if there are as many as three cases of forgetting an apparition in the book. I cannot say how many there are; I have noticed the following, and I suppose there are others. In Case 165, "all seemed forgotten." In Case 177, it was not until long after hearing of the death that it occurred to the percipient to "put two and two together" and to associate the apparition with the death, although the recognition was perfect. In Case 235, the percipient says, "But for the fact of his death I should never probably have recalled the circumstance." In Case 258, the percipient only "happened to remember" the apparition. In Case 306, the percipient's mind "recurred to it from time to time," and no doubt would soon have forgotten the apparition in the absence of any coincidence. In Case 552, the percipient testifies that she heard of the death after six weeks, but did not mention the apparition for many months. Mr. Gurney, however, on the ground of subsequent conversation, says that this appears to be an error. In Case 579, the percipient thought no more about the vision, and therefore probably would have forgotten it. In Case 588, "the thing was in great measure forgotten." In Case 607, "no more was thought of it;" but that may not mean by the percipient, who was a child. Perhaps a pedantic accuracy might object to calling these cases "numerous," though there are doubtless others. There are not a great many cases in the book in which an apparition has been recalled at all where the death constituting the coincidence has been heard of only after the lapse of a long time, unless the experience had created the fear of the death of a relative or friend, or was brought to mind by some record, or was kept in remembrance by being a collective or reciprocal experience. I am confident that Mr. Gurney is wrong in supposing that hallucinations are experiences particularly well remembered. They are so with the few persons who take a special interest in them; but whatever has no apparent bearing upon facts we consider important or interesting is quickly lost from mind. I should have said unhesitatingly that I personally

had never had a visual hallucination, until almost as I write these words I recollect such an occurrence about thirty years ago. At any rate, the question cannot be settled by discovering microscopic errors in my criticism; the average index of forgetfulness, in these cases, ought to be positively ascertained; and the census proves nothing until it is made so large that the affirmative replies can be classified according to their dates, without too much diminishing the numbers in the several classes. It would also be needful, in order to arrive at satisfactory results, to separate the different kinds of hallucinations. First, the genuine hallucination, the product of an overwrought brain, which is preceded by great depression, accompanied by faintness (manifesting itself in damp weather as an icy chill as soon as the skin has had time to cool), and followed by an access of terror; second, the dream continued through the process of waking up and even for a second into the wide-awake state; and third, the mere illusion, or imaginative misinterpretation of something really seen, without any disorder of the brain, should be distinguished in this inquiry. There was no good reason for limiting the census-question to a period of twelve years; on the contrary, it would have been better to use all the available data. It was a mistake, too, to limit the question by the clause relative to being in good health, free from anxiety, and wide awake. The entire answers should rather have been printed, and the subtractions on account of illness, anxiety, and drowsiness have been made within the view of the public. Finally, a fallacy seems to be involved in limiting the question to hallucinations presenting persons really (and not merely supposed to be) alive; for there may be a decided tendency for hallucinations to represent those who are approaching their end. A new census should be undertaken upon a larger scale and with the sufficient means to carry it out in a thoroughly scientific manner.

In the estimate which I made of the size of the circle from which the coincidental cases were drawn, I relied on the statements in the "Phantasms of the Living." We there read[1] in the discussions of these cases, "Our chief means of obtaining information has been by occasional requests in newspapers." But Mr. Gurney now says, "Had the cases used been mainly obtained by means of public appeals," this calculation of the population from which the coincidences were drawn, made as it was, would have involved "a stupendous blunder." In point of fact, however, as he says, "Only five cases . . . out of the whole list were obtained in this way." But on the same page of the book last cited he allows 250,000 as the number of persons who have

[1] Vol. II., p. 14.

become acquainted with the inquiry through the newspapers, and only 50,000 as the number of those who have derived the same information through private channels. If the former class have furnished only 5 cases, or 1 for every 50,000, while the latter class have furnished 26 cases, or 1 for every 2,000, it would seem that the bulk of Mr. Gurney's cases have been drawn from a class which is twenty-five times as fertile in ghost-stories as the general population. This furnishes food for reflection. An attempt is made to check the estimate by a piece of imaginative statistics. "Would any one," he asks, "suppose that if he canvassed the first one thousand adults whom he met in the streets of any large town, he would find that twelve or thirteen of them had within the last three years been aware of what we wanted, and of the address to which information might be sent?" Perhaps not; but here again the author forgets that people not only send their *own* experiences, but also cause those of others to be sent, of which they have heard. I have estimated that the advertisements in the newspapers ought to have drawn the really remarkable ghost-stories from a population of three millions; and though I admit the extreme uncertainty of this estimate, I still see no reason to modify it. Mr. Gurney puts forth two objections to it. One is that 5 of his 64 coincidental cases have been obtained by canvassing a body of 5,535 persons taken at random. The other is that a very large proportion of the 31 cases on which the argument under examination has been based, have been the experiences of the friends and friends' friends of half-a-dozen persons. These objections seem at first glance crushing; but they both involve one and the same *petitio principii*. For the whole question is whether the advocate of naturalistic explanations of ghost-stories is forced to assume a greater number of purely fortuitous coincidences than the doctrine of chances will permit. Now this devil's advocate, whose office I endeavor to fill, is not by any means forced to attribute the whole of the 31 visual and 33 auditory cases to the operation of chance alone. I have only examined the former class, but of these I find only one which I am obliged to call a purely fortuitous coincidence. It is the case of Mrs. Duck, number 238. This case did not come from the 5,535 persons, nor from the friends' friends, but was taken from the "Englishman" newspaper of May 13, 1876. If we are to suppose that every very striking ghost-story published in any prominent newspaper back to 1876 and susceptible of investigation has come to Mr. Gurney's ears, surely three or four million is not a very large number to assign to the population from which they were drawn. In my view of the matter, then, what Mr. Gurney calls his well-attested coincidental cases are of two classes: one derived from closely ques-

tioning a relatively small number of persons, not one of these stories being capable of sustaining a severe criticism; the other confined mainly to the more remarkable of the experiences of a far larger population, among which one visual case seems to involve a purely fortuitous coincidence. That something like this is the truth of the matter will, I am confident, be the final judgment of students.

Mr. Gurney takes as the chance that a given hallucination will fall accidentally within twelve hours of the death of a person whom it represents, the ratio of deaths in a day to the number of the population. This would be correct if the death-rate for persons represented in hallucinations were the same as that of the whole population. But the examples given in the book are sufficient to show that this is not the case. Persons who, from the percipient's stand-point, appear particularly likely to die are, we find, particularly apt to appear in hallucinations. This is not surprising, for genuine hallucinations are accompanied by a peculiar terror, as one of their physiological symptoms; so that it is quite natural that they should tend to take the forms of those whose death the percipient has most reason to expect, rather than of those in whom he may be more interested. This is, at least, a natural supposition; the burden of proof is not upon me to show it actually is the rule; for I am not trying to prove anything, but only to show that nothing has been proved. Until we obtain some positive statistics, we can only assume that the thirty-one cases under consideration are fairly representative of hallucinations in general in regard to the lengths of time that the percipients might expect the apparitor to live. Suppose, now, that a given person is to have a hallucination on a given occasion. The apparition might take the form of a person belonging to one of several classes having different death-rates. Let d, d', d'', etc., be the antecedent probabilities to the percipient in the given case that individuals belonging to these several classes will die on a given day. Let h, h', h'', etc., be the antecedent probabilities that the apparition in the same case will take the form of individuals of those several classes. Then, $hd + h'd' + h''d'' +$, etc., will be the antecedent probability that the hallucination in the given case will be accompanied within twelve hours by the death of the apparitor (but it will usually be unnecessary to take account of more than one term of the algebraical expression); and the reciprocal of this quantity will be the number of hallucinations like this among which, in the long run, there would be one accompanied by such a coincidence. We do not, it is true, in our existing ignorance of the subject, know whether more or fewer ordinary hallucinations than of hallucinations *like this* would be requisite to yield such a coincidence. But we can only assume that if we sum these numbers for the whole

thirty-one cases (or as many of them as are admitted into the argument), we shall obtain about that number of hallucinations among which there would be thirty-one coincidences of this sort. If there are two different natural explanations of a ghost-story, one giving P and the other Q as the number of hallucinations per coincidence, and if the respective probabilities of these theories are p and q, where $p + q = 1$, then the number to be adopted is $p\,P + q\,Q$. If one of the explanations is complete, we need only take account of one of the terms of this last formula, since the other will be very small. If there is a probability, r, that the case ought to be excluded from the calculation, then P is to be multiplied by $(1-r)$. I have estimated the numbers given below to the best of my judgment, but it will be seen that for the most part considerable changes might be made in them without essentially affecting the conclusion. But logic will forbid the making of any changes in favor of the telepathic hypothesis, except where the number given by me may be unquestionably wrong.

It will be seen that, in treating the stories upon these principles, I have somewhat refined upon the method of my first criticism. This I have done in response to Mr. Gurney's protest that I have pinned him down to too hard and fast an interpretation of his argument. I thought it fair to meet a roughly stated argument by a roughly stated reply. But since he seems to desire to leave his demonstration of his theory hazy, while insisting on great precision in my objections, I so far comply with his wish as to attempt to estimate numerically the effect of the latter, instead of ruling the case out altogether, when the objections are not absolute in their nature.

In the discussion of each story, I shall endeavor either to show that it has no bearing on the argument under examination, or else to explain it in a way that is more probable than the telepathic theory. This explanation is either *complete*, if it leaves nothing to be accounted for by a chance coincidence, or *partial*, if it serves to increase very greatly the probability of the coincidence. It is necessary and sufficient that the explanation which I propose for each story should be more probable than the telepathic explanation. This opens the question how antecedently probable that theory is. Now there is a considerable body of respectable evidence in favor of telepathy, in general. Yet I am clear that we cannot probably infer that there is any influence of mind upon mind otherwise than through the recognized avenues of sense. It must be regarded as exceedingly unlikely that such a proposition should ever be established by means of evidence of the kind hitherto chiefly relied upon. For this proposition, being counter to some of the fundamental elements of the general conception of nature which we have formed

under the influence of our aggregated experience, has against it antecedently odds of hundreds of thousands, perhaps, to one. In order to refute it, then, for the time being, it is only necessary to bring some other explanation of the facts less improbable than that. Telepathy might conceivably, by another method, be put out of all doubt. You might, for example, begin by establishing a proposition, A, not in itself very improbable, which in turn might lend so much probability to a second proposition, B, that it might be possible to establish this by evidence; and this again might render a third proposition, C, sufficiently probable to be capable of being established by observations; and by proceeding thus, you might bridge over the profound chasm which separates telepathy from the solidarity of our ordinary experience. This is the way in which all the marvels of science have been made credible. But to mix with the well-compacted body of scientific truth sporadic propositions contrary to the main principles of science, simply because we find ourselves without any other ready explanation at hand for certain outlying facts, would be a proceeding calculated to throw our whole knowledge into confusion, even if but a small minority of the propositions so accepted should be false. To admit the existence of a principle, of which we certainly only meet with manifestations in very exceptional observations, is to rashly set the prosperity of scientific progress at hazard. Moreover, though nature gives us examples enough of rare substances, a rarely operative fundamental principle is yet to be discovered. On the contrary, every force or other cause we know works almost everywhere and at all times. But telepathy, as the evidence stands at present, if it acts at all, does so only with the extremest infrequency.

The degree of my disbelief in telepathy in general is such that I might say that I think the odds against it are thousands to one. But even were I convinced of the general phenomenon, I should find the telepathic explanation of ghost-stories but little more acceptable than I do at present. Even if telepathy exists, we know next to nothing of the conditions of its action. I have heard ignorant persons attribute table-tipping to electricity, an agent which they only knew from sporadic manifestations. I thought such persons not only ignorant, but foolish; and it appears to me that we should be imitating them if we were to try to explain anything by an agency that we know so little about as we do about thought-transference. The phenomena, so far as we know them, seem to depend for one condition upon a vigorous effort on the part of the telepathic agent; and it is fair to presume that this would be impaired with other powers in sickness, and would cease with death. Then again, why should we

draw upon such an extreme rarity as telepathy, so long as we have such ordinary elements of human experience as superstition, lying and self-lying (from vanity, mischief, hysteria, mental derangement, and perverse love of untruth), exaggeration, inaccuracy, tricks of memory and imagination, intoxication (alcoholic, opiate, and other), deception, and mistake, out of which to shape our hypotheses? For these reasons, I hold the telepathic theory of ghost-stories to be an unwarrantable and wild surmise. I would prefer to this an explanation which I deemed antecedently very improbable, provided it was not utterly preposterous. I do not therefore think it incumbent upon me in opposing the telepathic theory to suggest only positively probable explanations. No explanation within the bounds of common sense can well be so unlikely as that one. Mr. Gurney, in his reply, admits that he has the bias of an advocate; but thinks that I, on my side, have so too. Perhaps: I certainly profess a legitimate and well-founded prejudice against the supernatural. But observe that a bias against a new and confounding theory is no more than conservative caution; while a bias in favor of such a theory is destructive of sound judgment.

Before I take up the stories in detail, there are a few of my objections concerning which a few additional words seem necessary. In referring to these objections, I preserve the original numbering.

2d. Certain percipients were dead before the advertisements of Messrs. Gurney, Myers, and Podmore were inserted in the newspapers. I propose to surrender this objection altogether. It is logically sound; but the estimate of the population from which the cases have been drawn is so exceedingly uncertain, that it is hardly worth while to insist on this point. Accordingly, I now admit one case of purely fortuitous coincidence, No. 238.

3d. I have not clearly expressed this objection. What I say is that every case must be thrown out in which the percipient has "had two hallucinations fortuitously." But I intended to say, what the logic of the case required, that every case must be thrown out in which the percipient remembers having had any other insignificant hallucination; — for Mr. Gurney has shown that only 1 person in 59 remembers having had the illusion of a voice in twelve years, and only 1 in 248 remembers having seen an apparition of a person in the same period. Hence, as not over half-a-dozen cases of pure coincidence from his list can be admitted by any careful critic, if any of the percipients in these cases remembers a hallucination of any kind at any time of his life, the probability is large that he is abnormally subject to hallucinations. It is to be observed that the census question very rightly says nothing about the recognition of the apparition.

6th. Mr. Gurney says that I have not perceived that the question is not whether the percipients were awake, but whether they believed they were awake. *First*, I think it would be absurd to include dreams in this inquiry. *Second*, waiving this, the question is, not whether the percipients do believe themselves to have been awake, but whether they would have continued to do so had there been no coincidence. For a like reason, the including of cases in the census where the percipient was in bed cannot balance the objection to this circumstance in the coincidental cases.

12th. The percipient may have been intoxicated. I should have added that he may have taken opium, chloral, or other exciting drug. This throws a certain suspicion upon every case in which the percipient was even slightly unwell. Of course, such cases may be thrown out on the ground of ill-health. But that is not an explanatory objection, — it only going to show that the cases have no relevancy to the argument. In the present view of the matter, it appears that there may have been circumstances rendering hallucinations specially probable (relatively to ordinary circumstances), thus partially explaining the coincidences.

15th. If the percipient has not told of the vision until after having received news of the death, several modes of explanation are suggested.

A. He may be lying. This is a disagreeable hypothesis, especially when it is more probable that he is telling the truth. Still, an almost inappreciable possibility of lying may outweigh the probability of the telepathic explanation.

B. In ordinary indistinct vision, if the person is led to think that he ought to recognize what is seen as a certain person or thing, he will often feel sure he has already so recognized it, although the perception may be quite incompatible with the identification made. The same is true with dreams. So far as my own are concerned, I have long convinced myself that they are largely fabricated after I wake up, in trying to recover and go over in my mind what I had been dreaming. I am confident, therefore, that, in some cases, the memory of the hallucination could be greatly modified by subsequent suggestion.

C. Just as a person often has considerable difficulty in persuading himself that he has not previously been in the same situation in which he finds himself, so if, on hearing sudden news of another person, an image of that person is presented before his eyes, he might think he had seen that vision before.

16th. If the principal witness is shown to be inaccurate even in a small matter, we, who have no opportunity to cross-examine him,

must make up for that disadvantage by throwing out the case; for an essential perversion of the truth — an unintentional one — by such a witness is more likely than the telepathic hypothesis. It is not necessary in such a case to make a definite hypothesis of what the truth may be.

17th. A story so meagre that we cannot judge of the thoroughness of the cross-examination nor of the real character of the witnesses, and which does not fully detail the circumstances, must go for nothing. Anyone in a large city by frequenting the right company — that of highly cultivated people, too — may, with a little encouragement, hear such stories in an endless flood.

I will now consider, one by one, Mr. Gurney's thirty-one cases of visual hallucinations with coincidence of the death of the person represented within twelve hours, and show the force of my objections.

Case 26 (Vol. I., p. 207). An old farmer sees the apparition of a cousin. See objections 6 and 8.

The percipient was in bed, but says he was "perfectly wide awake."

There is a doubt about the date; for he says he searched the papers on the same day he told his friends. Namely, his words are, "The next day I mentioned to some of my friends how strange it was. So thoroughly convinced was I, that I searched the local papers that day [Saturday]." The local papers appeared, as Mr. Gurney now tells us, on Saturday. On Saturday, then, the percipient first told his friends. But three of his friends sign a statement that he told them he had the vision "during the previous night." This does not quite agree with his testimony that it occurred "about two o'clock on the morning of October 21st:" for the 21st was Friday. I think the odds, then, two to one that he meant it occurred about two o'clock in the morning of the night of October 21–22, which would harmonize the whole, but spoil the twelve-hour coincidence. Mr. Gurney, on the other hand, thinks that by the statement first quoted he means to say: That same day I mentioned it to my friends, and the next day (Saturday) I searched the local papers. He still insists on using the case as a premise from which to draw a conclusion to which (since "it is as well to be accurate") he assigns a probability of a thousand billion trillion trillion trillions to one.

The percipient's age is seventy-two. He would seem to have no immediate relations; so that I shall assume that those who might be represented in his hallucinations would be as old as he. The probability of dying on a given day at that age is 1 : 5000. But the probability that there was a twelve-hour coincidence is only $\frac{1}{2}$. Then, the probability of such a coincidence, *if this was one*, is 3 : 5000.

Case 27 (Vol. I., p. 209). A gentleman, while dressing in the morning, sees in his mind's eye the face and form of an old friend. See objections 5 and 16. I have reckoned this case among those in which inaccuracies, small or great, might be detected in the testimony. In this case, the inaccuracy I meant, if it be one, is very small. It was supposed to consist in the lady's saying that her husband "had always been particularly unbelieving as to anything supernatural." Everybody who has patiently listened to many such stories knows that phrases like this are so perpetually in the mouths of cultivated people inclined to superstitious credulity, that they are just a little suspicious in themselves. Now, in this case the percipient did not have a regular hallucination at all; so that there was probably no physiological fear; and yet he was more agitated and impressed by the occurrence than a person uninclined to credulity would have been by the most substantial apparition. It therefore clearly conveys an erroneous impression to say that he is "particularly unbelieving." The lady's account contains no sentence attributable to a desire to bring to light any circumstance telling against the supernatural character of the vision; but both matter and phraseology ("strange to say") are directed to heightening the effect. The story is very well told.

I have also reckoned this case among those in which the percipient was anxious. My reasons are as follows: The decedent was an old friend of the percipient, so intimate that the latter was informed of the death by a letter received the next morning; and the peculiar illusion seems (on any hypothesis) to reveal a close bond of sympathy between the two men. Now the percipient knew that the decedent had a mortal disease. Hence, I think a certain degree of anxiety must have existed. This may not have been so great that a really vivid non-coincidental hallucination affected by it would have been on this account unnoticed in replying to the census-question; but the vision in question was only seen "in the mind's eye," and was so little removed from an imagination that the percipient's wife thinks it necessary to say, "My husband is the last person in the world to imagine anything." I think, therefore, that, had there been no coincidence, husband and wife would have concluded that the apparition, if it can be called one, was a product of an imagination worried by anxiety. Mr. Gurney says, "I can scarcely think Mr. Peirce seriously believes that the hallucination was due to anxiety." But it is not the question whether the hallucination was really due to anxiety or not, but whether it is certain that there was not sufficient anxiety to prevent such a case from being reported in the census, provided it had proved to have no significance. In my

opinion the chance is that the case ought to be excluded for this reason.

At the same time if it were a pure coincidence it would be nothing remarkable. Though the percipient was not very anxious, he was probably more anxious about the decedent than about any other friend; so that it may be assumed that the probability that this decedent would be represented in any hallucination that the percipient might have at this time was four-fifths. The decedent was known to have a cancer; and that cancer was a mortal one, because it was an "incurable" one, and the phrase that "we were in no immediate apprehension of his death" shows that he was expected to die of it at some time. The average duration of such a cancer may be five hundred days. But the percipient does not seem to have been very well informed in regard to the particulars; and we may therefore presume he did not know how long the malady had been going on. If so, it was an even chance that the decedent might die in two hundred and fifty days. That is, there was one chance in two hundred and fifty that he would die that day. The antecedent probability of the coincidence is $\frac{4}{5}$ of this, or 1 in 312. The case is thus insignificant, even if it be admitted. In view of the anxiety, I will reckon its antecedent probability as 1 in 156.

Case 28 (Vol. I., p. 210). An employé in an office while on a sofa in the evening sees an apparition of a fellow-employé. See objections 4, 5, and 6. There was a certain inaccuracy in my putting this case among those in which the percipients were taking afternoon naps. But my notes were only the briefest references for students. By the word "nap" I meant that the percipient was not in bed, but either snoozing or liable to do so.

This is a very impressive case, owing both to the unexceptionable character of the testimony and to the numerous details which the fine observation of the percipient brings out. Nevertheless, I do not think it proves anything; and I am gratified to find my judgment borne out by the witness A. C. L. (p. 212, at the end of his letter), who was in so much better a position to judge it than the public can be. The present discussion of the case must of course be limited to its bearing on the single argument under examination.

The percipient was apparently reclining upon a couch at nine o'clock in the evening; but he had only leaned back the minute before. He was, however, not well. He not only had a headache, but he said to his wife that he was, what he had not been for months, rather too warm. He was, therefore, probably feverish. It is possible that he may have taken some exciting medicine. This degree of illness would not have been sufficient of itself, I suppose, to prevent such a case,

if not coincidental, from being reported in the census; but it is significant on another account. For I believe that the derangement of the percipient's health was brought on by sub-conscious anxiety concerning his friend the decedent. Mr. Gurney, in his answer to my criticisms, represents that the only knowledge the percipient had of the illness of his friend was that he knew he had an attack of indigestion. But there was nothing to be called an "attack" of indigestion. On Monday, the decedent "complained of having suffered from indigestion;" that is to say, he had, no doubt, had a pain which he referred to his stomach, and which had been so severe that he mentioned it after it was over; and he still felt that something was the matter, for he consulted an apothecary. This apothecary "told him that his liver was a little out of order, and gave him some medicine," doubtless a blue pill. On Thursday "he did not seem much better," so that it was apparent that there was something more than mere biliousness the matter. Nor was this all; for on Saturday he was absent from the office. All these symptoms were known to the percipient; and, besides these, there must have been indescribable indications of illness. For a man can hardly have an aneurism of the aorta and be so little ill that the derangement of his health wholly escapes the notice of a sympathetic and observant friend who sees him every day. Such a wonderful sympathy existed between these two men, that when A. L., the brother of the decedent (the same whose opinion of the case has been cited above), came to announce the death to N. J. S., the percipient, the following extraordinary conversation took place: "A. L. said, 'I suppose you know what I have come to tell you?' N. J. S. replied, 'Yes, your brother is dead.' A. L. said, 'I thought you would know it.' N. J. S. replied, 'Why?' A. L. said, 'Because you were in such sympathy with one another.'" Here was a man in a better situation to judge the case than any one can now be, and who is so little given to marvels that after this occurrence he continues to disbelieve in telepathic visions, and who says he gives his testimony "to strengthen a cause I am not a disciple of;" and yet this excellent judge thought the percipient would know of the death. The same good judge must, then, have thought the percipient would have been anxious. The reason he gave for his surmise shows that, like a good observer of human nature, he knew that deep sympathy, as the word implies, may produce a wonderful exaltation of sensibility. In such a condition perceptions of the truth may be reached which are founded on differences of sensation so slight that even an attentive scrutiny of the field of consciousness may not be able to detect them, and which may be almost magical in their effects.

I would propose, then, the following hypothesis to account for this story. The exalted sensibility of sympathy had unconsciously detected alarming symptoms in the decedent, and given rise to very great anxiety. But anxiety is a vague sensation, which frequently escapes recognition, even though it be enough to make the person sick. So I suppose it was in the present case. Fever resulted, with headache due to over-excitation and exhaustion of the brain (owing both directly to worry and also to the heat of fever), and faintness due to an irritation of the sympathetic nerves. When the percipient leaned back on the couch I suppose he felt the weakness of approaching faintness; then, a moment later, an icy chill passed through him, — a sure sign that the blood had been withdrawn from the periphery long enough for the skin to cool. The brain must have been already left bloodless; and this withdrawal of the blood, in the condition in which the brain was, sufficed to bring on a hallucination. I submit that this hypothesis keeps nearer to the facts, and is less far-fetched, than that of spontaneous telepathy, and is also far more antecedently probable.

I assume it to be practically certain antecedently that any hallucination that the percipient might have on that day would refer to the decedent, and further that his unconscious, anxious clairvoyance showed that the decedent was a very sick man. It is, therefore, fair to say that the latter's antecedent chance of dying was ten times that of the average man, or say 1 in 2,000, which is, therefore, the antecedent probability of the coincidence.

Case 29 (Vol. I., p. 212). See objections 4 and 12, with Mr. Gurney's replies, especially under the former head, where he communicates the important additional fact that the percipient was in perfect health.[1] I am sorry he does not say on whose testimony he states this, for such supplementary testimony must be received with special caution.

This gardener stumbling about the churchyard in the evening suggests an Ingoldsby legend. When he got home he half thought what he had seen must have been his fancy. Such uncertainty is odd, and seems to show something was the matter with the man. I suspect drunkenness; but perhaps this is too gratuitous, for the man has an excellent character. Yet I do not think that the drunkenness of a man to whose character the vicar of the parish certifies is quite so improbable as the telepathic hypothesis. Let us, however, assign to the former only one-third the probability of the latter.

But, further, as the percipient on his return half thought what he had seen must have been his fancy, he perhaps would have settled

[1] I only refer the reader to Mr. Gurney's replies in cases where they include new testimony.

down to that belief had there been no coincidence, and consequently would not have reported the case, had the census-question been put to him. Observe that I am not supposing there was such a case among the persons to whom the census-question was put; but probability deals wholly with what would happen in an indefinitely long run, and in the long run there would have been such a case; besides, though there may not have been any case in the census exactly analogous to this, yet to balance this defect there were probably cases of suppression of hallucinations which find no precise analogues among the coincidental cases. Still, as the case might have been reported under the circumstances supposed, I will not cut it off altogether on account of this objection, but only reduce its weight by one-third.

Finally, it appears to me that this case has not been sufficiently inquired into. I cannot help thinking, for example, that if we knew as much about it as we do about No. 28, that if we had a better acquaintance with the witness than is conveyed by the vicar's banal certificate to the man's character, and that if we were fully informed concerning the events of that day, some explanation might offer itself which does not now occur to us. I will estimate the probability of this at one-third that of the telepathic hypothesis, to which I think I have thus been unduly liberal. These probabilities sum up to the equivalent of the telepathic hypothesis.

As the news of the death reached the town the next morning, it is fair to assume that the gardener was aware of the illness of the decedent. We may, then, reasonably estimate the antecedent probability that the hallucination would relate to the invalid whose tomb was before his eyes as four-fifths. I further assume that the widow in a coal-scuttle bonnet was sixty-five years of age, and that, being poorly, her chance of dying was five times the normal. According to the table of the English Institute of Actuaries, out of 49,297 assured persons living at the age of sixty-five, 2,141 die in the year, or say 1 in 23. Then the chance that such a person will die on a given day is 1 in 365 times 23, or 1 in 8,400. But this woman's chance was five times that, or 1 in 1,700. However, there was only a probability of four-fifths that she would be the object of the hallucination; so that the probability of the coincidence was only $\frac{4}{5}$ of $\frac{1}{1700}$, or $\frac{1}{2100}$. In other words, there would have in the long run to be 2,100 hallucinations before a coincidence equivalent to this would occur. But there is an even chance that one of the above objections is valid, when we are not obliged to fall back on fortuitous coincidence, so that in the long run only 1,050 hallucinations would be necessary.

Case 170 (Vol. I., p. 428). A woman saw an apparition of her

mother, and her aunt died. See objections 2, 6, 7, 8, and 16. Owing apparently to an error of a copyist, Mr. Gurney understands me, under the 16th head, to object to Case 180, instead of to this; and hence his smooth remarks on my "rough inadvertency."

The percipient was in a delicate condition, and consequently, perhaps, not in good health.

It was in the morning, and she had not risen, though she had been awake, and probably still was so.

She did not recognize the apparition as the person who died, but as another person.

The date is altogether doubtful.

Owing to the lapse of time the testimony is not good.

The case has not been very thoroughly investigated.

Mr. Gurney gracefully surrenders this case, which must go for nothing.

Case 172 (Vol. I., p. 430). See objections 5, 6, and 15. A housekeeper, alone in the house, as she is going to sleep at night, sees the apparition of a dear friend.

The honesty of the witness cannot be doubted. She did not tell the experience, apparently, until long after she had heard of the death; but in this case that could hardly make any difference, unless we suppose outrageous lying without any known motive.

It is quite possible that a real person may have been seen; yet there is no positive indication whatever of the presence of such a person.

The percipient was in bed, and at the beginning of the hallucination, at least, not wide awake, as required by the census-question. Such a case, if non-coincidental, would probably not be reported in the census, and therefore should not be counted in the argument under examination.

Morever, the percipient expressly says, "I was anxious about her." Mr. Gurney replies that she was not anxious in the sense in which he uses the word. But she would have understood the word "anxiety," in the census-question, as she herself uses it. For this reason, I must positively exclude the case.

Yet, even if all the above objections fail, it has no value. For it was antecedently practically certain that the dream would relate to the decedent, an "intimate friend" about whom the percipient was anxious; and since the decedent "had been for some time seriously ill," and anxiety existed, the antecedent probability of death, and, therefore, of the coincidence, may be put at 1 in 200.

Case 173 (Vol. I., p. 431). See objections 3, 6, and 15. The captain of a steamer was killed by the fall of a spar at six o'clock in

the morning. The percipient was the stewardess, and was then asleep in her berth. I suppose there was loud talk about the event, and that this talk, being heard by the stewardess in her sleep, produced a vivid dream. This dream was continued for an instant after she woke or half woke up, "probably between six and seven." She rose at once and went to the pantry and there heard what had happened, being very likely not yet wide awake. This explanation is complete and satisfactory.

Were it necessary to suppose any fortuitous coincidence, we should have to take into the account that the percipient has had another hallucination.

Case 174 (Vol. I., p. 431). A young lady in bed saw a vivid apparition of an acquaintance, Major G., walking in the room. See objections 4, 5, 6, and 15.

The percipient did not mention the vision to the family for fear of ridicule until after the news of the death. Hence, upon general principles, we should entertain a doubt whether her recognition of the person she seemed to see was quite as absolute as she afterwards thought it had been. Yet, in view of the details, — "neither his features nor his figure any whit altered," — I do not think we can attribute any importance to her having kept her experience to herself.

The percipient was not in good health. Mr. Gurney says that unless the percipient's health was favorable to subjective hallucination, her illness is of no consequence.[1] But he himself sufficiently refutes this notion in his summing up. It is not so; for as she was far from being in good health, if the hallucination had been non-coincidental, it would not have been reported in answer to the census-question; and a case which would not have been reported if non-coincidental must not be counted as coincidental. Mr. Gurney is obliged to admit that this is logical. He says he cannot tell whether the percipient's particular malady would be favorable to subjective hallucination or not. But the young lady says, "An attack of rheumatism and nervous prostration left me far from well for some weeks last spring, and one night," etc. This seems to mean that she had not recovered from her nervous prostration. On that night she "had gone to bed early," showing she felt more tired than usual, so that her brain must have been unusually taxed. I should think it plain that such a condition was favorable to the production of hallucinations.

I have reckoned this as a case in which the percipient was certainly

[1] I note in the second proof-sheet, that Mr. Gurney has modified this statement. The passage, as it will go to the reader, furnishes a curious illustration of how the census was constructed.

anxious. I do not, however, think that she was so to such a degree as to exclude the case on that ground. But she knew that the person seen in her vision was fatally ill, and his case had been "a topic of conversation" in the family. "We had also received bad accounts a few days before, and were aware that he was in a critical condition." This, I think, implies such a degree of inquietude about the decedent as to give an antecedent probability of nine-tenths that he would be the object of any hallucination which she might have at that time

After no hopes of his recovery were any longer entertained, further bad accounts were received, and he was "known to be in a critical condition." His chance of dying on any given day may therefore be put at one in ten. Hence, nine-tenths of one-tenth, or one-eleventh, was the antecedent probability of the coincidence.

But, for the reason given above, the case cannot be counted at all.

Case 175 (Vol. I., p. 433). A gentleman dreamt he saw his neighbor lying on the bed between him and his wife, and, waking, still thought he saw him. See objections 3 and 6.

The percipient has had other hallucinations many years before. He describes them as "day-mares." "That is, . . . I quite believe I was *asleep* while experiencing them." The present case was of the same general character, but more vivid, and continued into, or at least up to, a fully waking condition. Probably the old experiences were more vivid than he now remembers them as being; and even if they were not so, I cannot think they were of a radically different nature. He admits that "It is difficult to define the difference in these cases." Mr. Gurney says, "There is no ground for regarding them (the former experiences) as hallucinations at all, in the sense in which I throughout employ the word." But they were so according to the definition of the census-question; that is, they were "vivid impressions of seeing" human beings. The percipient says, "In the earlier cases many years ago I concluded that *waking* had caused what looked real to disappear." The phrase implies that he was some time in coming to this conclusion, and there can be little doubt to an unprejudiced mind that, in the absence of coincidence, he would have come to the same conclusion regarding the present case.

The percipient falls into confusion in trying to make out whether his state during this vision was that of waking or sleeping. He says, "I reflected, 'Am I awake, or is this a dream?' I cannot yet answer this question to my own satisfaction; I cannot tell when my dream merged in my waking thoughts. I only am sure that as the figure disappeared I was as wide awake as I am now." That is, he fully woke just as the figure disappeared, and he knows not whether

to call his previous state sleeping or waking. "I had not a peculiar sense of breaking out of sleep at once, and with a snap, as it were. . . . I believe I might be awake, I even *think* I was awake, with the image of a dream still strongly on my mind. . . . Briefly, I cannot be sure . . . that I was asleep, although all experience would go to say that I was." All this shows it was a dream continued through a slow process of waking up and just into the fully waking state. Cases of this sort are so common, and so little attention is paid to them, that they could not possibly get fully reported in the census, and should be altogether excluded from the class of hallucinations for the purpose of this argument. I am willing, however, to give it one-fourth weight.

There seems to be nothing surprising in the percipient's dreaming of the decedent, who seems to have been an intimate acquaintance, and who was a sufferer from bronchial asthma. There probably was no other acquaintance about whom he was more anxious. I will put the antecedent probability of the hallucination relating to the decedent at two-thirds. A man could not die of asthma without it being generally known to his friends that his attacks were frightful. Hence, I think we may assume that the antecedent probability of his dying on a given day was 1 in 2,500. This would make the probability of the coincidence 1 in 3,700. In other words, 1 hallucination in 3,700 would present a coincidence as remarkable as this. But, owing to the percipient being exceptionally subject to hallucinations of this nature, say more so than 1 man out of 20, we must divide the 3,800 hallucinations by 20, making 190. Finally, as the case is to have only one-fourth weight, we divide again by 4, and so reach the number forty-eight.

Case 182 (Vol. I., p. 441). The case of the young lady on the voyage to the Cape of Good Hope. See objections 3, 5, 6, 8, and 16, and Mr. Gurney's replies, especially under 16. I regret that a number of material errors have crept into my account of the case. Mr. Gurney also now furnishes new testimony, he does not say whose, affording important corroboration of that of the principal witness.

The percipient experienced another apparition shortly afterwards of a dressmaker who died about that time, the dates not being ascertainable. This shows that the percipient was at that time very unusually liable to hallucinations. But it seems to me that the rough coincidence of the second apparition with death almost forbids the hypothesis that either coincidence was purely fortuitous. I can see but two alternatives. The first is, that there has been some important suppression or falsification of the testimony, the nature of which I cannot divine. This possibility should be gravely considered, though

in my numerical estimate I will not take account of it. The second is, that this young lady had a wonderful hypnotoid sensitiveness, by which she was sometimes able to make unconscious estimates, or rather unconscious mental modifications analogous to estimates, of how long consumptives approaching their end would live, with a probable error of perhaps a few months, at the end of which time she would have apparitions of them. It would then be a chance result that in the hallucination on shipboard the error was, say, only three or four hundredths of the probable error. The telepathic hypothesis would leave it very strange that the young lady should have visions of two persons in whom she had no special interest, and whom she had not seen nor probably thought of for a long time.

I assume that the antecedent probability that the hallucination would relate to the decedent was one-half, and that the antecedent probability of death was 1: 200, so that the probability of the coincidence was 1: 400.

Case 184 (Vol. I., pp. 444, 546, lxxx, 196, 235, 255). Mr Keulemans, in Paris, has two visions of his little boy in London. See objections 3, 5, 6, and 15.

I have said that the percipient seems to have hallucinations nearly every day. Mr. Gurney replies: "He has had only one other hallucination in his life. This occurred many years ago in his boyhood, and represented a vague, unrecognized figure." The census-question asks whether the person addressed has "had a vivid impression of seeing . . . a human being." This defines what we have to understand by a hallucination for the purposes of the argument under examination. Now we find (Vol. I., p. 256, note) that on New Year's eve, 1881, this percipient, Mr. Keulemans, had "a vivid picture of his family circle in Holland." Nor was there any coincidence of the death which this vision had led him to expect. What I meant by saying that Mr. Keulemans seems to have hallucinations nearly every day (for I made no positive statement) was that he has constant vivid impressions of seeing objects, not always human beings. Mrs. Keulemans says (p. 256), "My husband looked at some eggs, and made the remark that he had seen them before." This shows that Mr. Keulemans speaks of these experiences as acts of seeing. Mr. Gurney tells us (p. 196), "He has experienced so many of these coincidences that, even before our inquiries quickened his interest in the matter, he has been accustomed to keep a record of his impressions." I assumed, as there was nothing to the contrary, that a large proportion of these would present human beings. But it is not of much consequence whether they do so or not. Unless we adopt the telepathic theory at once, it is plain that this

percipient is so excessively liable to hallucinations that a coincidence or two is no more than natural.

Mr. Gurney says that the percipient, having absolutely no ground for anxiety, was naturally not anxious. The decedent was a child of his, five years old, who had been removed from his parents, and from Paris to London, on account of an outburst of small-pox. Here I think is ground for such a degree of anxiety as would determine the hallucination to take the form it did.

I assume it to have been antecedently practically certain that any hallucination at that time would relate to the decedent. The antecedent probability of death, and therefore of coincidence, may be taken at 1 in 25,000. But, owing to the great liability to hallucinations, I multiply the probability of coincidence by 1,000, making it 1 in 25.

Case 195 (Vol. I., p. 528.) See objections 5, 6, 8, and 14, and the reply of Mr. Gurney under the 8th.

Miss Rogers saw her mother and grandmother about the time of the death of the latter. This happened in 1878, and does not seem to have very profoundly impressed anybody at the time. It is only set down on paper in 1884, one of the family being then interested in telepathy. Consequently the memory of the witnesses is hardly adequate to giving correctly all the circumstances. The percipient "cannot fix exact times and hours; but, at the same time, she thinks her vision corresponded with the time of the death." Mr. Gurney, however, now adds a circumstance to the account (it is a pity he seldom cites any testimony for his numerous additions) which makes an error in the date less probable.

The percipient, I still think, was anxious. A witness whose house she was visiting, and who was therefore in a better condition to judge than we can be, says she "doubtless had gone to bed with an anxious mind."

The percipient herself is inclined to attribute the vision to the effect of a strong imagination. (This comes to us at second-hand. I should like to have her develop her views on this point.) Now, the imaginations of different persons differ enormously, and the percipient ought to know her own imagination better than Mr. Gurney can do, — expert if he be.

As two persons appeared in the vision, and the death of either of these would have been reckoned as a coincidence, the probability is doubled.

That the grandmother would be one of the two persons represented in any such coincident hallucination of the percipient at that time I take to be certain; for she says she was continually thinking of her grandmother. The antecedent probability of death, in view of the

age of the decedent, her state of health, and the anxiety of her granddaughter, I take to have been 1 in 200, which is therefore the probability of the coincidence.

Case 197 (Vol. I., p. 531). The apparition of Mountain Jem. See objections 8 and 16, and Mr. Gurney's reply under the latter head. The following remarks were written before the discovery of the diary.

I carelessly represented the witness as saying that the time of death coincided with that of the apparition.[1] What she does say is, that the "date, allowing for difference of longitude, coincided." We are to conclude, then, that the dates would not have been the same without such allowance. The meridian of the death is seven and a half hours west of that of the apparition, and the apparition occurred at 7 A.M. Thus, what she probably means is, that the civil date of death was one day previous to that of the apparition. I consider the hypothesis that the witness applied the longitude the wrong way both gratuitous and improbable. It is true this would make the hour agree; but she seems to have no remembrance of the hour agreeing. Unfortunately there is no record of the date of the apparition, and probably never was. The witness could not have heard of the death for some weeks, and hence there must be great doubt whether the apparition really came on the right day. On some Wednesday, she says it occurred, "a few days ago." Now, it should have occurred 1874, September 8. But that day was Tuesday. Eight days might conceivably have been called "a few days ago;" but, unless she had already forgotten the day, she would have been more likely to refer to that interval as "about a week ago." Is there no postmark on the letter? Does the hotel register show that she was there on Wednesday, September 16? What was the weather at Interlaken on September 8, at 7 A.M., since she speaks of the rose-flushed morning?

Mr. Gurney admits the coincidence of time is not proved to be within twelve hours, but still thinks the case should be allowed, because the limit of twelve hours is arbitrary, and might have been fixed at eighteen or twenty-four hours. But he is altogether wrong in this. The doctrine of chances supposes the instances to be drawn blindly; and the conditions of the drawings must not be modified so as to take in known cases. If a silver mine was to be sold, and Mr. Gurney, on the part of the sellers, and I, on the part of the buyers, were to be sent to the mine to collect a fair sample of the

[1] It was Mr. Gurney himself who first made this mistake and thus led me into it. For he says (p. 532), "The coincidence cannot have been as close as Mrs. Bishop imagines." But she says nothing of a closer coincidence than a day.

ore, and if, after we had done so honestly, Mr. Gurney were to propose to throw in a particular lump, because he could see, from its appearance, that it was rich in silver, and because it was lying close to another lump that had been taken, I should feel it my duty to say, "No, sir, that is just what you wished to do in Case 197!" But here, in point of fact, it is not a question of a few hours merely. It is quite likely that the time of the vision was several days from that of the death.

The testimony of the witness is not in every respect accurate. There was probably no record made, as she testifies that there was; and she was not writing a letter, but may have been dozing. These symptoms of inaccuracy make the coincidence still more uncertain.

The percipient was in bed, and the vision was very likely a dream.

She knew the decedent was ill; although she had heard he was getting well and going about. She had recently received news of him; and it is no wonder, after his impressive speech at parting with her to the effect that he should see her after death (meaning, I suppose, in another world), that any dream or vision she might have at that time should take that form.

I assume the antecedent probability that the hallucination would refer to the decedent to have been nine-tenths. The chance of death on a given day, since he was ill in Colorado, may have been one in a thousand. Owing to the uncertainty of the date, I multiply by 2, and thus find for the probability of the coincidence 1 in 550.

[The discovery of the diary, which, as I interpret it, makes the vision to have occurred September 5th (according to Mr. Gurney's view the 6th), excludes the case altogether.]

Case 199 (Vol. I., pp. 534, lxxx). Mr. B. in bed with his wife sees a lady friend of his flit across the room. See objections 1, 6, 8, and 16.

Mr. Gurney states that the narrator says "nothing which independently marks the day of the week of the vision." I am at direct issue with him here, for I say the narrative reads as follows: "He was very disconcerted by seeing the form of a lady friend of his glide or flit across the room. He thereupon woke Mrs. B. and informed her of the fact. This was Saturday." The reader will please refer to the book, and decide whose statement is correct.

It may be that a real person was seen.

Mr. B. is a very careless witness. He vouches for an erroneous day and for an erroneous year.

The case is outside of the twelve-year limit; and it would be wholly unwarrantable to change that limit to thirteen years, as Mr.

Gurney suggests doing, for the sake of including a known instance. However, he gives up the case, and it cannot be counted at all.

Case 201 (Vol. I., p. 542). A lady was lying down, when she seemed to see a man come in whom she afterwards identified with an old servant, the decedent. See objections 4, 6, 7, 8, and 9. I have twice mentioned case 201 when I meant case 249, as Mr. Gurney notes.

The percipient "had been in ill-health for some years." True she was better at that time than for long before, so that she says, "I felt a strength and enjoyment of life for its own sake, which was a delight to me." But these are the expressions of an invalid who is making a great improvement, and not those of a person in good health.

The percipient was lying down; and she herself suspected she might have been asleep. She applied a test, and so far deserves credit; but the test is not conclusive.

She totally failed to recognize the person. Mr. Gurney says I have misquoted the account. I have merely abridged the expression, by omitting some words that are altogether in favor of my view. She "knew the face quite well, but could not say whose it was," although "the suit of clothes impressed" her "strongly as being exactly like one which" her "husband had given to a servant named Ramsey the previous year." She thus appears to have recognized the clothes as Ramsey's, and also knew the face quite well; but notwithstanding this, could not say who it was! News of the man's death having arrived, she now adds, "I believe the face of the man I saw was that of Ramsey as I had known him at first, when I visited him as a dying man in the infirmary." She is thus not sure even now.

The date of the apparition is wholly uncertain. It occurred "about March."

Mr. Gurney gives up the case; and I am not inclined to give it any weight.

Case 202 (Vol. I., p. 544). A near-sighted lady sees a victoria, horse, driver, lady, and child. See objections 4, 8, and 9.

The percipient had "been ordered by [her] doctor to take absolute rest, not even to read at all, and to do no work whatever." At the same time, she was apparently allowed to drive about in an open landau. This suggests, at least, some nervous or mental derangement. At any rate, she was not in good health; so that the case is ruled out.

She is also near-sighted, so as to wear glasses, — a fact which is mentioned as if she was unable to recognize anybody without them.

Had it been proved that the lady she thought she saw was, for example, travelling on the Continent at the time, she would doubtless herself have concluded the incident was due to her near-sightedness, and not have reported it in answer to the census-question say six years later, had she answered that question.

The agreement of the date is doubtful, especially as the sole witness may have been hysterical. Mr. Gurney's thinking the probability of the date being correct is "very high" should be noted in connection with objection 18.

The recognition was ambiguous. That is to say, two persons were seen (besides the driver), the death of either of whom would be counted as a coincidence.

I think it plainly a case of mistaken identity. I have often remarked furs worn in hot weather in July in London.

Case 214 (Vol. I., p. 563). An aunt, on receiving delayed news of the sudden death of her niece, falls down, and, after many days of delirium, unconsciousness, or oblivion, not having been out of bed for three months, at length declares that at the instant of the death she saw a startling apparition of the decedent. See objections 2, 4, 8, 13, and 15.

In the copy of my criticism sent to Mr. Gurney, owing to a confusion between this case and No. 236, I committed an oversight (though probably not a misstatement) in enumerating this case among those in which the percipients were not in good health.

Not having mentioned the apparition, as it would seem, on receiving news of the death a week after it occurred, "She fell off from the chair, remembering no more until days afterwards she found herself in bed, where she remained" for about three months. The doctor "said that she had received some great mental shock, and for some time he feared that she would not recover from it." She was in a delirious or oblivious condition for days; and her remaining in bed for three months in consequence of a mental shock suggests, to say the least, some nervous or mental affection.

In my opinion, it is altogether uncertain that she saw any vision before her illness, or, if she did, on what day she saw it. At any rate, it must be allowed that there is a chance amounting say to 1 in 100 that this is the case. The antecedent probability, then, of the event, — perhaps it was a coincidence and perhaps it was not, — is at least 1 in 100. I shall give the case this weight, although Mr. Gurney gives it up entirely.

Case 231 (Vol. II., p. 47). A volunteer officer in Zululand fancies he sees a dying comrade standing outside his tent. See objections 5 and 8.

The percipient's mind was not free from anxiety. It may not have been of a kind to produce hallucinations; but it would have prevented his truthfully answering the census-question in the affirmative. On account of this, I will multiply the probability of coincidence by 3.

There seems to have been an interval of two days between the apparition and the death. Mr. Gurney admits an even chance of this, but still argues that the case might be included. I do not think the chance as great as one-half; but still I will adopt this factor.

The case is most probably a mere instance of a dreadfully fatigued man looking at one person and fancying him another, and therefore not strictly a hallucination at all. In any such mistake that he might make at that time, he would be quite likely to think he saw the friend concerning whom his mind had been worried. We may take two-thirds as the antecedent probability of this.

As the decedent was known to be dreadfully ill, and to have suffered an utter collapse, and as the percipient had been told two days before that he was dying, we may assume as the antecedent probability of death on that day one-third. The probability of the coincidence was then, antecedently, two-ninths, or 1 in 4.5. In other words, there would, in the long run, be a coincidence as remarkable as this for every 4.5 hallucinations. But there is an even chance that there was no coincidence; so that this must be halved. Then, on account of anxiety, there is only a probability of one-third that the case should be counted, so that the number must again be divided by 3, which reduces it to less than unity, so that the case is, for the purposes of the present argument, of less value than the average hallucination. Mr. Gurney gives up the case altogether.

Case 236 (Vol. II., p. 52). A governess fancies she sees a dark figure just outside the [house?] door, in the evening, which reminded her of her brother. See objections 3 and 7, and Mr. Gurney's reply under the latter head.

The percipient had had for weeks a sound in her ears like the ticking of a watch, and shortly before, on several successive nights, had heard a tremendous crash like the smashing of a lot of china. Mr. Gurney admits that these were symptoms of a purely physical affection; and they certainly seem to indicate some disease of the brain. They render a hallucination at least ten times as probable as it would be under average circumstances.

The fright and weakness caused by the apparition, although it was only a dark figure, are most readily explained as physiological, and go to show that a genuine hallucination was experienced. The previous symptoms also render this probable.

The percipient does not say she saw her brother. "I saw what

appeared to me to be a dark figure standing just outside the door, with outstretched arms." Later she says, "The apparition did remind me of my brother." This form of the indicative shows that she had either been shown some statement to that effect or had been asked some leading question equivalent to the exhibition of such testimony. (See objection 18.) In any case, the figure was not recognized as being her brother; it only reminded her of him.

In my opinion, the date of apparition is somewhat uncertain, as it was not recorded, and few persons remember days of the month accurately, especially against the influence of a mental suggestion tending to error. There is no circumstance, not even the day of the week, to corroborate the bare memory of the day of the month.

The second witness does not commend herself to my judgment so much as the percipient herself. This second witness, whose testimony is not in every respect consistent with that of the percipient, says the latter said she knew something must have happened to her brother. The percipient herself mentions no such effect; but there may have been a transitory fear for him, as he was at sea.

The antecedent probability that the hallucination would refer to the decedent may be taken as nineteen-twentieths. Assuming the brother to have been twenty-five years of age, his chance of dying on a given day would normally be 1 in 55,100. But his being a sailor would double this. Hence, there would be one coincidence as remarkable as this in 28,000 hallucinations. But this number should be divided by 2 on account of the defect of recognition, and again by 2 on account of the doubt about the date. Finally, it should be divided by 10 on account of the liability to hallucination. Thus, 1 hallucination out of 700 would be as extraordinary as this.

Case 237 (Vol. II., p. 54). A servant girl sitting with her mother in the evening and reading to herself distinctly saw a dear school-friend, the decedent. See objections 8 and 17.

We are obliged to trust to the apparently unaided memory of one witness as to the year. She says, nearly ten years after, that it happened in 1874. If it really occurred in 1873, of which there may perhaps be one chance in ten, it does not come within the twelve-year period.

We know little of the character of the witness, though the style of the narrative (if she wrote it unaided), as well as the impression she made on Mr. Gurney in a single interview, were very favorable.

We know nothing of the state of her health, which ought in every case to be closely inquired into.

The only person in the room at the time, her mother, thought she might have been dreaming. This is the more important, as the

mother is not convinced by the occurrence, but continues to disbelieve in ghosts. Had there been no coincidence, the daughter would probably in time have fallen in with this view, and would consequently not have reported the vision in answer to the census-question.

After the lapse of ten years, it is impossible to be certain that the death and the vision occurred within twelve hours of one another, there being no record of either. Most persons' memory is very treacherous about coincidences. Mr. Gurney's thinking the probability that there was a 12-hour coincidence "very high" is remarkable.

Not so much as the name of the decedent is given.

We have no information about what kind of a room it was, nor have we any means of assuring ourselves that no real person could have been seen. I confess it seems more likely to have been a hallucination; but this is by no means established.

Mr. Gurney professes to consider this account as eminently satisfactory. But the story is too bald. From this point in the list on, the accounts are generally too meagre. With more details, some other explanation might offer itself.

There seems to have been no particular reason why the decedent should have been the object of the hallucination; so that we fall back on the general calculation that there is 1 chance in 17,000 of a coincidence. But owing to the doubt about the date, I multiply this by 3, making it 1 in 6,000. Since, if non-coincidental, it might have been set down as a dream, I multiply this again by 2, making 1 in 3,000. And on account of the baldness of the story, I multiply again by 2, making 1 in 1,500. I think this number, though I will adhere to it, is really much too favorable to the story.

Case 238 (Vol. II., p. 55). A laborer's wife sees her husband in the woods and speaks to him. See objection 2.

There was a strong hallucination, with faintness, causing the percipient to fall.

I assume that it was antecedently certain that the hallucination would refer to her husband, whom she seems to have loved. This is the assumption the most favorable to telepathy, since he was a well man. The probability that he would die on a given day might be 1 in 40,000; but, as he was exposed to accidents, I will take it at 1 in 30,000. But this probability is so microscopic that a very forced explanation is to be preferred to it, say, for instance, that the whole tale has been concocted. I cannot admit that the chance of there being some such explanation can be less than 1 in 20,000, which value I will therefore adopt.

Case 240 (Vol. II., p. 59). Mrs. Ellis three times during one day distinctly saw the face of an old friend. See objections 5 and 17.

The apparition occurred first at 10 A.M. and last at 6 P.M., so that the 24-hour period within which death would be considered as coincidental ought to be reckoned from 2 A.M. Only the date of the death being known, there is 1 chance in 12 that it did not fall within these 24 hours.

There is no record nor independent recollection of the date of the apparition.

Mr. Gurney says there was probably no anxiety, because the parties "*had not been*" on friendly terms. But the pluperfect, taken with the context, seems to signify that a reconciliation had recently taken place. The mother of the percipient, at the decedent's desire, went to see him just before his death. There was, thus, a redintegration of friendship.

As the decedent was an old friend and known to be near death [for the percipient says, "Nor did I know that he was *so* near death"], it may be taken as practically certain that one or more of the hallucinations would relate to him. The chance that he would die on that day may have been 1 in 5. Owing to various doubts, I will call it 1 in 4. Mr. Gurney abandons the case.

Case 249 (Vol. II., pp. 71, xxiii). This is the case depending on identification by means of a man's hat, the silver hair of the top part of his head, and the droop of his head, seen over a wall. See objections 7, 8, and 12.

No jury would hang a man on such an identification. Far less can such a theory as the telepathic be accepted on such evidence. For here we are dealing with explanations whose antecedent probability is microscopic.

My hypothesis of a slight degree of intoxication is needless and too gratuitous. It is, however, far more probable than the telepathic theory.

As the decedent was a neighbor of the percipient, and known to be ill, we will assume the antecedent probability that the hallucination would refer to him was one-half. As he was an aged man and ill, we will assume his chance of death was ten times the average. As he had silver hair and his head drooped, we will assume his age was eighty. Then, the probability that he would die on a given day was 1 in 256, and the antecedent probability of the coincidence was 1 in 500. But I do not believe there was any hallucination at all, and cannot admit anything more extraordinary than 1 in 100.

Case 298 (Vol. II., p. 143). A woman who is scrubbing a floor

thinks she sees her old lover looking in at the window. See objections 3 and 17.

The percipient has "had an auditory hallucination on one other occasion, when she heard herself called by the voice of her husband, who, it turned out, had died at a distance two days before." Voices of absent loved ones are too common to be reported duly in a census.

There is little evidence that the percipient did not really see the person she thought she saw, except that a witness *says* that the decedent's employers in the city *said* that they had *received news*, the testimony of some witness in Madras, this testimony itself being very likely *second-hand*, that that person had died on that day. I am not convinced he ever went to India at all.

The coincidence of date is not certain. Mr. Hensleigh Wedgwood took a note of the apparition, May 16, 1878. This note gives the time as "one Saturday evening, about six weeks ago." Six weeks before May 16 was April 4, and April 6 was Saturday; but the death was reported to have occurred on Saturday, March 30.

The whole circumstances are not sufficiently given.

The probability of coincidence would be 1 in 17,000; but, owing to the doubt about the date, this would have to be doubled. I prefer, however, the supposition that she saw the real person, since I do not think the probability of this hypothesis is less than 1 in 1,000. This measure of improbability I am willing to allow.

Case 300 (Vol. II., p. 146). A sailor sees his father on a voyage. See objections 11 and 17.

Women, children, sailors, and idiots are recognized by the law as classes peculiarly liable to imposition. If sailors' yarns are to be admitted, the reality of ghosts is put beyond doubt at once, and further discussion is superfluous.

The story is meagre. Mr. Gurney thinks it would be more credible if still more so. I disagree with him. I shall give it no weight whatever.

Case 350 (Vol. II., pp. 244, xxv). This is the ridiculous tale of the three maid-servants and the face in the window. See objection 10. My explanation given above is complete and satisfactory; and Mr. Gurney has not been able to pick any flaw in it of the least consequence. As tricksters invent strange things, and do not tell their secrets, I am at liberty to draw much upon my imagination in this kind of explanation. Nor is it at all necessary to suppose all the details of the testimony true. It is only necessary to invent an explanation which will strike a shrewd person as not utterly preposterous, and as sufficiently accounting for the stories told by the witnesses. Every amateur juggler will agree that it would be asking too much to re

quire me to assume the witnesses saw precisely what they thought they saw. I acknowledge that the mistress says that it was not known that the person with whom the apparition was identified was near death. But that does not prove that the servants did not know all I have supposed they knew. I have said the decedent had a cancer. I may have confounded the case with 27; at any rate, there is no testimony that the disease was a cancer. Mr. Gurney endeavors to make much of this possible error; but it is quite insignificant; no part of my theory is based upon that. He also thinks that I have taken a great liberty with the evidence in changing the phrases "trying to look in" and having "come up [from the village] to make game" of the girls, into looking in and smiling at the girls, where I use no quotation marks. It seems to be the inferred smiling that offends him so. He splits hairs to find a weak point in my theory. He says the skull is inconsistent with some of the evidence, as if we were bound to admit that ghost-seers see all they think they see! I hope the reader will turn to the case and see which hypothesis he judges the more credible. I flatter myself common-sense will be upon my side.

Case 355 (Vol. II., p. 256). A nautical case occurring in 1853. Mr Gurney withdraws it.

Case 695 (Vol. II., p. 693). A mother sees her son, who had died eight hours previously of enteric fever in the Soudan. See objections 2 and 17.

A meagre story, told at second-hand.

We know nothing of the state of health of the percipient.

Her husband says she was not anxious; but this is hard to believe. It is more likely she concealed her anxiety in order not to alarm her husband. The son had dictated a letter August 20, to say he had enteric fever, and had dictated another September 7, to say that he was better and expected soon to be home. There was nothing more till October 12, when he could not even dictate a letter; but a Sister Thomas wrote to say that he had been very ill, but "is getting on very nicely now." This last letter could not have been received long before October 24, the date of the apparition. How could a mother fail to be anxious? Is it not a calumny to say that she was not so? And if the hallucination had proved non-coincidental, would it not have been attributed to anxiety, and so not reported in answer to a census-question?

I assume that it was antecedently certain that the hallucination would relate to her son, and I estimate his chance of dying on a given day at 1 in 100, which is therefore the antecedent probability of the coincidence.

Case 697 (Vol. II., p. 695). The "practical" wife of a "practical business man," who informs us that "there can be no doubt whatever that there is some transmission for which no explanation has yet been given by the savants," sees, one night, an apparition which, the following evening, she recognizes as a clerk in her husband's counting-house, just as her husband is about to announce the death of this clerk. See objections 6 and 7, and Mr. Gurney's reply under the latter head.

The percipient's shivering fright lends color to the view that there was a genuine hallucination.

She may have heard of the death during the day, before she had made up her mind whom the apparition resembled. Mr. Gurney avers that this had not happened; but as he adduces no testimony but his own, the statement goes for nothing.

The practical business man gives us a hint when he says, "I should scarcely have believed [the story] if related to me of any one else." I am somewhat disposed to follow his example.

The lady had seen the unfortunate fellow; and the husband's expression, "I have some sad news to tell you," shows that her pity had been excited; so that we may assume that the antecedent probability that her hallucination would refer to the decedent was one-fourth. Considering what appears to have been the nature of the disease, and its history so far as we can make it out, the antecedent probability that he would die on a given day, though very uncertain, may be taken at 1 in 200. This would make the probability of the coincidence 1 in 800.

Case 702 (Vol. II., p. 703). The percipient, while laid up with Jamaica fever, had a dream, which, after sudden waking, was continued as a vision. It represented an old lady friend of his, who spoke. See objections 4, 5, 6, and 8.

The percipient, in his first account, says, I "believe the following was the result of illness." Although he has since been converted from that opinion by Mr. Gurney, it is clear that if the case had not been coincidental, it would not have been reported in answer to the census-question, with its good-health clause. Hence, it must positively be excluded from the argument.

The date is quite in doubt. In his original account the percipient has the year wrong. He now alters his recollected date by four days, in order to make it accord with that of the death. There is no independent evidence, and he was so ill that his memory was not to be trusted. My original statement conveys an entirely correct impression, except that I may have misunderstood the *altered* statement, that the vision took place "a few minutes past midnight, June 11."

My professional habits led me to understand this in the sense in which an astronomer would use the expression. But as the story has been cooked, I suppose the intention was to make it right.

An unnumbered case (Vol. I., p. 230, note). See objection 17. Mr. Gurney admits that the story is told in so meagre a form that it has no evidential value. Still he retains it. I cannot do so.

I will now collect and sum up the numbers of hallucinations that there would have to be in the long run, to have among them thirty-one coincidences as extraordinary as these. The following are the numbers already estimated: —

Case.	Number.	Case.	Number.	Case.	Number.
26	1,667	195	200	249	100
27	156	197	50	298	1,000
28	2,000	199	0	300	0
29	1,050	201	0	350	0
170	0	202	0	355	0
172	0	214	100	695	100
173	0	231	1	697	800
174	0	236	700	702	0
175	48	237	1,500	Unnumbered	0
182	400	238	20,000		
184	25	240	4	Total	29,851

Thus, 29,851 cases of hallucinations are called for, in order to produce as remarkable a series of coincidences as these. A believer in telepathy would, no doubt, reckon the number as larger; on the other hand, I have ascertained that many shrewd and experienced men would hold that I have not allowed sufficient weight to possibilities of fraud and concoction. I have, of course, been biassed; but I have endeavored to be on my guard against my bias. I am sure that hypotheses of small probability, say less than 1 in 500, have not been allowed their due weight. Especially, I have not sufficiently taken into account the possibilities of explanations that have not been thought of. On the other hand, it is easy to see that Mr. Gurney has not constructed the strongest possible argument of the same general nature. We can only conclude, then, that 30,000 coincidences *may be* the number called for. If we suppose that hallucinations are four times as common as the census shows, the 30,000 coincidences ought to have occurred in a population of two millions; but two-thirds of this number is wanted to account for Mrs. Duck's case alone, and no probable

induction can, of course, be based on a single instance. This case, however, comes from the "Englishman" newspaper, which may recount the most remarkable experiences of more than a million of persons It is likely that some of the other more valuable cases, such as 26, 237, etc., have been derived from the advertisements, which, for the reasons I have given, must have drawn the most remarkable experiences from a large population, going up perhaps into millions. A candid consideration of the whole matter will, I think, convince thereader that until the telepathic theory of ghost-stories has been rendered far more antecedently probable than it now is, it is useless to try to establish it as a scientific truth by any accumulation of unscientific observations.

REPORT OF THE COMMITTEE ON THOUGHT-TRANSFERENCE.

THE Committee on Thought-Transference has little but negative results to report. In fact, the only work of which an account can be given this evening is a set of experiments undertaken by the chairman and secretary of this committee, with the assistance of Dr. W. S. Bigelow and some observations made by the secretary, or communicated to him in response to the last request for coöperation.

Among the conditions possibly favorable to thought-transference, supposing it to be a genuine phenomenon, the effect of a *sudden* and *unexpected* impression made on the mind of the agent seemed particularly worthy of investigation. For this purpose experiments were made in which a brilliantly illuminated figure or diagram could be suddenly displayed to the agent while sitting in a darkened room. This was effected by the withdrawal of a shutter, either permitting the agent to look directly upon a transparent illuminated surface upon which the figure was drawn, or allowing the figure to be projected by a beam of sunlight and a lens upon a screen in front of the agent.

The chairman of this committee, the secretary, Mr. Hodgson, and Dr. W. S. Bigelow took part in these experiments, which were twenty or thirty in number, and conducted on different days in the month of July last. As absolutely no evidence of thought-transference was obtained, the details of the experiments may be omitted.

The suggestion made in the last report of this committee that a drug might be discovered, which by its action on the cerebral centres might favor thought-transference, seemed also worth testing. For this purpose experiments were tried with Mr. Hodgson, acting both

as agent and percipient, while acting under the influence of ether; but the results differed in no respect from those obtained when he was in the normal state, and were not suggestive of any unusual power of mind-reading.

Some further thought-transference experiments have been made by the secretary, Mr. Hodgson, with the same lady and her nephew (Mrs. T. and R. C.) with whom the committee made the observations described on page 110 (Vol. I., No. 2) of these Proceedings. In these experiments some rather striking successes attended Mrs. T.'s attempts to give the suit and number of a card drawn at random from a pack; but the conditions were not sufficiently rigid, nor were the experiments sufficiently numerous, to justify any conclusion as to the reality of thought-transference.

Some trials with the free drawing test have also been reported, in which the apparent success is sufficient to warrant a continuation of the investigation, and the secretary is now engaged in further experiments.

It will be evident to those who have followed the work of the American Society thus far, that the attempt to obtain evidence as to the reality of "thought-transference" has been attended with very meagre results. The cases which have appeared to suggest this method of communication between mind and mind have been few in number, and the apparent success which attracted attention to them at the outset has not attended the subsequent experiments which have been made whenever practicable. If, therefore, "thought-transference" be a genuine psychological phenomenon, it is evident that the conditions favorable to its manifestation are by no means understood. Judging from our experience thus far, it would seem that an inquiring attitude of mind is certainly not one of these favorable conditions. Nor, indeed, need this surprise us, for it is one of the best-established laws of mental action, that the activity of one portion of the central nervous system may, and not infrequently does, check or inhibit the activity of another portion. Hence when two individuals undertake to ascertain, by direct experiments as agent and percipient, whether they can influence each other's minds by channels other than those of the senses, their failure to observe "thought-transference," under these circumstances, cannot be regarded as evidence against the reality of the phenomena; for the mental activity associated with an experimental inquiry may reasonably be expected to restrain and exclude from the sphere of consciousness those feebler psychic influences upon which thought-transference, if it exists at all, may naturally be supposed to depend. If, therefore, success cannot fairly be hoped for when agent and

percipient are consciously engaged in investigating the phenomena of thought-transference, it is worth while to inquire whether better results may be expected when the investigator is watching for and studying cases of telepathy, occurring more or less spontaneously in his presence. Opportunities for this sort of investigation must, of course, be extremely rare; and when they present themselves it would seem to be quite as likely that the mind of the investigator should influence the telepathic phenomena taking place in his presence, as that telepathy itself should exist between the agent and percipient. Whether the nature of this possible influence would be favorable or unfavorable to the production of these phenomena it is, of course, idle to speculate.

If the force of the considerations here presented be admitted, it is obvious that the failure to obtain experimental evidence in favor of thought-transference cannot be regarded as a conclusive argument against the reality of the phenomenon, for the experimental method which has enabled the human mind to achieve its grandest triumphs in the external world seems much less applicable in a research in which the mind itself of the investigator is the object of study.

How, then, it may be asked, are we ever to discover whether thought-transference is, or is not, a genuine psychological phenomenon? The study of cases of apparently spontaneous telepathy, as carried on by the English Society and our own, seems likely to throw some light upon the question; but it may, perhaps, be doubted whether evidence will ever be collected in sufficient amount to cause telepathy to be generally accepted as a recognized means of communication between mind and mind. If a general conviction of the reality of this phenomenon should ever be produced, it will probably be by individual personal experiences, and not by the recorded results of experimental researches.

It is not an uncommon thing to hear intelligent, matter-of-fact people express a belief, derived from their own personal experiences, that there must be such a thing as thought-transference, though these experiences, if recorded, would probably have very little evidential value for others. It is also sometimes asserted by those who claim to have been successful in thought-transference, that good results are only obtained at the beginning of the experiment, one or two successes being always followed by a long list of failures,—a circumstance which suggests the importance of studying spontaneous cases of telepathy instead of trying to produce them experimentally. The duty, therefore, of those who are interested in this branch of psychic research seems to be not so much to institute experimental inquiries as to keep the mind on the alert for the examination of

such cases as may naturally present themselves, avoiding, however, any intense mental activity which might, perhaps, interfere with the phenomenon to be investigated.

Your committee, while they do not feel that their belief in the reality of thought-transference has been strengthened by their experience during the past year, yet freely admit that the conditions under which successful experiments are sometimes said to have been made, are those which a knowledge of the laws of mental action would have suggested as most likely to be favorable to such a phenomenon.

H. P. BOWDITCH,
Chairman.

FIRST REPORT OF THE COMMITTEE ON EXPERIMENTAL PSYCHOLOGY.

The committee has received five hundred returns of Blank F,[1] with the answers to the questions concerning superstitions, and five hundred and fifty postal cards with the diagrams as requested. The latter promise interesting results, but in order to tabulate them in such a manner as to permit safe deductions it is necessary to spend more care and time upon them than has been possible in the short period which has elapsed since the collection was completed. Your committee, therefore, requests permission to report in full upon the drawings at a subsequent meeting of the Society.

The questions on Blank F were intended to test the prevalence of a tendency to superstition in the community. The first three questions were direct. The fourth was indirect, in that the answer depended upon a variety of factors; a number of persons expressed the opinion that the question was badly put. This opinion was gratifying, as it showed that the nature of the conclusion to be drawn from the answers to this question was not understood, and that therefore the answers were more likely to be entirely unbiassed.

It is evident that the questions 1–3[2] inquire not only whether the respondent believes in the superstition named, but also whether he has that form of half-belief, with which we are all familiar, when our reason approves but with doubt, or even actually disapproves, while

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[1] See p. 209.

[2] Should you be influenced by any feeling (whether implying a belief or not, is immaterial) in regard to:—

1. Sitting down thirteen at table?
2. Beginning a voyage on Friday?
3. Seeing the new moon over your left shoulder?

there lingers in the mind a feeling, perhaps unreasonable and even provoking and uncomfortable, which we cannot shake off. Thus it may be presumed that no one in this audience believes in the efficacy of witches' love-potions or philters; but there are probably several who believe in the occurrence of mind-reading, or the reality of thought-transference as an actual possibility; while others, though they do not thoroughly believe in it, yet could not avoid an uncanny feeling if they encountered an instance of a vision of a distant dying person appearing to a friend. These examples serve to illustrate disbelief, belief, and half-belief respectively. If any one answered our questions negatively the answer implied entire disbelief; if affirmatively, then the answer either belief or half-belief. The form of the questions was selected purposely, because the committee regarded these superstitions as on the verge of extinction, and although faith in them was almost gone, they expected to find a certain lingering respect for them, just as true republicans, despite all reason, have involuntarily more awe for a king than a president. The answers show that the tendency to superstition is much more prevalent than we had anticipated.

The fourth question,[1] in regard to haunted houses, would naturally be answered with "Yes" more frequently, because not only the factors mentioned for the three previous questions, but others also, would lead to the answer "Yes." Some persons would like to see a ghost; others would like to prove that the haunting is all nonsense, and to secure their chance would prefer the haunted house. Others would fear that, though the house could not be haunted, yet it might be the secret resort of disorderly persons whose doings had given rise and circulation to stories about the house. Still others would be influenced by the expectation of difficulties due to superstitions of servants. The discussion of these and similar factors leads your committee to think that the question in the form put would bring out affirmative answers from, 1st, those who had belief or half-belief in regard to haunting of houses; 2d, those who thought the belief to have a sufficient standing in the community to earn for it a certain degree of consideration.

Some of the respondents have added explanatory remarks to their answers. A few of these remarks are quoted here as verifications of what has been said in regard to the mental attitudes assumed towards the questions: —

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[1] Should you be influenced by any feeling (whether implying a belief or not is immaterial) in regard to: —

4. Choosing, on your own account, between two otherwise equally desirable houses, one of which was reputed to be haunted?

To 3, "I have no idea that seeing the moon over either shoulder has the slightest influence on anything that is to occur. Still, having heard the thing talked of when I was younger, I *almost* instinctively try to see the new moon correctly." To 1, "Slight feeling; no belief." To 2, "Not sufficient to stop me;" and another, "I should not mind beginning a voyage on Friday; but in making any experiment, or beginning on any serious and to me important work, I should prefer to postpone until next day." To 3 again, "Yes (slight passing uneasiness)."

To question 4, about the haunted houses, come many answers with remarks appended, of which the following are samples: "Yes, not only because hereditary tendencies are more prompt than ratiocinations, but also because I would not want to be bothered with finding out and remedying the mechanical causes." — "Practical considerations, such as servants, etc., would generally make me reject a 'haunted' house." — "Yes. Can't sell it again. Usually means rats." — "Personally no; although I might be influenced by likelihood of relatives or friends disliking to visit a house reputed to be haunted." — "I have thought over this (question) how ridiculous and foolish it is, yet I feel as though I must say yes." — "Yes; but only from the investment point of view." — "I think I should prefer to live in the ghostless house unless the other tenants were unusually quiet. My wife says, however, that she has always wanted to live in a haunted house." — "I should choose the haunted house, so it might afford the opportunity of exploding the superstition." — "I should suspect some cause for the reputation of a house being haunted, like rattling blinds, rats, bad drainage, closeness, etc. Moreover, I would rather live in a house where good people had lived than low and vicious ones. I have felt that influence." — "Yes, one day; no, the next." — "I have no fear of a haunted house. I fully believe in their existence." — "I should be anxious to investigate."

The answers, then, to the first three questions would indicate the prevalence of a *tendency* to superstition, while the answers to the fourth question would indicate the same, plus the willingness to treat a certain superstition with respect, or at least a show of it.

The answers have been tabulated according to sex and age, as shown in the following tables: —

TABLE I. MEN.

Age.	Total No.	Question. 1. Yes.	1. No.	2. Yes.	2. No.	3. Yes.	3. No.	4. Yes.	4. No.
12–15 . .	3	0	3	0	3	1	2	1	2
16–20 . .	14	2	12	1	13	2	12	8	6
21–25 . .	50	4	46	5	45	7	42	24	26
26–30 . .	60	6	54	4	56	5	55	24	36
31–35 . .	45	3	42	3	42	6	39	14	31
36–40 . .	33	5	28	4	29	5	28	13	19
41–45 . .	30	2	28	1	29	2	28	13	17
46–50 . .	32	5	27	5	27	6	26	13	19
51–55 . .	15	0	15	0	15	1	14	8	7
56–60 . .	14	1	13	1	13	3	11	10	4
63–70 . .	6	0	6	0	6	1	5	2	4
72–78 . .	5	1	4	1	4	0	5	4	1
Not given .	2	0	2	0	2	0	2	2	0
Totals . .	309	28	280	25	284	39	269	136	172

TABLE II. WOMEN.

Age.	Total No.	Question. 1. Yes.	1. No.	2. Yes.	2. No.	3. Yes.	3. No.	4. Yes.	4. No.
12–15 . .	5	0	5	1	4	2	3	4	1
16–20 . .	29	7	22	4	25	6	23	19	10
21–25 . .	33	8	30	8	25	3	30	27	6
26–30 . .	30	4	26	2	28	6	24	18	11
31–35 . .	21	3	18	5	16	8	13	14	7
36–40 . .	23	4	19	4	19	4	19	8	14
41–45 . .	11	4	7	2	9	3	8	7	4
46–50 . .	6	3	3	2	4	3	3	2	4
51–55 . .	11	4	7	1	10	3	8	9	2
58–63 . .	4	3	1	0	4	2	2	4	0
66–70 . .	3	0	3	0	3	1	2	3	0
Not given .	15	5	10	4	11	4	11	11	4
Totals . .	191	40	151	33	158	45	146	126	63

The comparison of these tables shows at once a marked difference between the men and the women. There are answers from 309 men and 191 women. The women are younger than the men, as is brought out in detail by

TABLE III.

Age . . .	12–15	16–20	21–25	26–30	31–35	36–40	41–45
Men . . .	8	14	50	60	45	33	30
Women . .	5	29	33	30	21	23	11

Age	46–50	51–55	56–60	60–70	70–80	Not given
Men	32	15	14	6	5	2
Women . . .	6	11	0	4	3	15

The average of all the ages given is: —

Men: — 36·16 years.
Women: — 25·82 years.

The difference is presumably related to the character of the answers.

Of the men about one-tenth express a tendency towards superstition by answering questions 1, 2, 3 affirmatively. There being 309 respondents one-tenth would be nearly 31, and there are 28, 25, 39 affirmative answers to questions 1, 2, and 3 respectively. Of the women, on the contrary, about one-fifth answer affirmatively. The total number of women is 191, one-fifth would be about 38; the women answer *Yes* 40, 33, and 45 times to questions 1, 2, and 3 respectively, or 38⅔ times on the average.

In regard to question 4 the result is similar; considerably less than one-half the men (136 out of 308) answered *Yes*. Of the women, exactly two-thirds (126 out of 189).

If we compare next the fourth question with the preceding we see that the number of affirmative answers to question 4 is for men over four times, for women about three times as great as to questions 1–3.

Another point to be noted is that for the first three questions there is an order of precedence, which is the same for both sexes as regards the affirmative replies: —

Question.	Men.	Women.
3	39	45
1	28	40
2	25	33

The coincidence is probably not the result of chance, but indicates a prevalent order of preference, and we may say that there is more frequently a tendency to superstition about seeing the new moon over the left shoulder than about sitting down thirteen to table or beginning a voyage on Friday. The superstitions which are of distinctly Christian origin have less hold than the one which is purely pagan, at least by general repute. This curious fact will awaken several interesting questions in every one's mind.

In conclusion, it may be said that so far as our statistics go, — of the educated portion of our community, about one man in ten and two women in ten, have a tendency to superstition, and that about four men in ten, and six women in ten, are inclined to pay some attention to a superstition actually encountered. These proportions are not only very large in themselves, but much larger than your committee anticipated. The well-educated class of New Englanders is probably as rationalistic a body of persons as any geographical group in the world. The results of our statistics may be considered as fairly representative. Hence we must believe that even in the most rationalistic community there is to-day a large proportion of the individual members, especially of the women, whose minds inhabit the border-land, at least, of superstition. This discovery, as we believe our conclusion will appear to many of you, is very significant in view of the work which has been undertaken of collecting stories from the public, that is to say, from members of the public. It binds us to greater caution than ever, for reasons that are too obvious to require further exposition.

That women are more inclined towards superstition is probably due in part to the character of their education, in part to the absence of that buffeting with the world which brings men closer to actualities. How far the inclination is inherent in the feminine nature we leave undecided.

CHARLES S. MINOT, *Chairman.*

REPORT OF THE COMMITTEE ON APPARITIONS AND HAUNTED HOUSES.

The first observation which, as chairman of the committee, I venture to make on occasion of this report is that the name of the committee seems to me personally not wholly satisfactory. The name, suggesting, as it does, that our time as a committee is mainly spent in visiting haunted houses and ghost-ridden graveyards, does not

describe our actual office. We have often expressed our willingness to visit haunted houses, or to pass the night in any promising place, for the sake of seeing, of explaining, or of converting from the error of its ways any genuine ghost in the city or in the neighborhood of Boston. We have heard of several houses that once were believed to be haunted; but in no case has the present condition of these houses warranted any interference on our part. The phenomena have, in all the reported cases, ceased for some time, usually for many years before your committee was heard of; and it seems still improbable that in future we shall be very frequently called upon to do what so far we have had no occasion to undertake, *i.e.*, to visit houses now inhabited by vivacious and demonstrative ghosts. While, therefore, I indeed see no ground for discontinuing our vigilance, such as it is, in watching for reports of haunted houses, I must confess that all our more interesting facts belong under quite another category.

More or less completely and objectively verified, or at any rate conceivably verifiable phantasms, visions, dreams, or presentiments have been offered to us by various correspondents. These, mainly through documents obtained by the Secretary of the Society, have already been examined with such completeness as our time and our circumstances have permitted. The incidents that have been most frequently brought to our attention are such events as a dream or a presentiment that is believed by the narrator of the experience to have been verified; or a vision that has had some important relation to persons or places which were at the time very distant from the subject to whom the vision came. I need not say to any one acquainted with current discussions that this part of our work is by far the most likely to furnish results which, whether positive or negative, may have a real bearing upon important modern controversies.

In view of the prominence of this department of our research, I venture, then, to suggest that the name "Committee on Apparitions and Presentiments" might be a more instructive one than our present name. I ought to add that I make this suggestion on my own individual responsibility. The rather amusing obloquy that of course attaches to the name "Committee on Haunted Houses" has, I believe, been heartily enjoyed by all the members of the committee from the very first. My only reason for suggesting the change is the possibly greater clearness of the new name.

Passing to our cases themselves, it is a very natural result of our public request for facts that the most of the cases which have been submitted to us by our correspondents are narratives dependent for

their verification not so much upon documents as upon the memory of certain persons. For instance, A remembers having suffered from some accident several years ago. B remembers having had either a presentiment of the nature of this accident to A, or a vision of the scene at the moment of the accident. B also remembers going to hunt for A at once, or passing a sleepless night because A was too far away to be reached. B still further remembers mentioning his experience to some third person, C, before word could come from A. C also, on the basis of his own memory, confirms the story of B as to this latter point. Finally all three remember comparing their various experiences when they first met after the accident and remarking on the closeness of the coincidence. Thus the presentiment is regarded by them all as verified.

Stories of this kind, from persons of undoubted sincerity, are of course very valuable. The English Society has collected many hundreds of them; we have received a respectable number, sometimes with yet more evidence than in the supposed case above described; this evidence, however, resting solely upon the memories of our narrators. The desirability, meanwhile, of getting yet better evidence than the memories of even a considerable number of the best of witnesses has often been pointed out to the Society. We want, indeed, to hear of all sorts of cases, and even of purely subjective and unverified experiences and impressions, when they fall within our scope at all. We undertake to decide nothing *à priori*. We cordially welcome all accounts by sincere and intelligent persons. What such accounts may in the end prove we shall not know until the evidence is all in. But we want once more to insist upon the obvious fact, sometimes forgotten by our correspondents, that an authentic letter or diary in the hand is worth not only two but twenty remembered facts in the bush. If A himself, or some one else, recorded at the time the date and the hour of his accident, and if B can show an authentic contemporary record of his presentiment, then the only possible alternative to the hypothesis of a true causal relation between the two experiences is the hypothesis of a chance coincidence, and this latter hypothesis might in time be virtually eliminated by a sufficient number of close and elaborate coincidences. I hardly need say that as yet no such number of coincidences is in our hands. Yet already we have several cases of the required sort. Documentary evidence is, then, sometimes forthcoming, and this fact encourages us to beg most earnestly for coöperation in obtaining yet more cases of that sort. Our net is large, and is spread for many kinds of fish; but the largest fish are of course the most welcome to us, since we are looking once for all for curious things.

As examples of cases of the documentary type I here give two that, taken alone, would of course seem to be mere chance coincidences; but, if such cases were of daily occurrence to us all, the hypothesis of mere coincidence would at last become absurd. Whereabouts the line could be drawn were the actual cases to appear more and more numerous as our work goes on, it is impossible to predict, because so much depends upon the quality of the coincidences, as well as upon their quantity; and it must be frankly admitted that the recent attempt of the authors of "Phantasms of the Living" to apply the theory of probability to their facts has not yet taken a logically satisfactory form. But it is not scientific to lay down beforehand what we shall admit to be demonstrable by a long series of complex facts not yet examined. Let us get the facts if we can, and talk about the hypothesis of chance coincidence afterwards.

The first of the two documentary cases that I want here to report, by way of mere specimens of the type, is an amusing case as to the nature of the coincidence, so free from any ghostly horror and of any sublimity is this coincidence. Yet the case is precisely of a sort of which we should be glad to get ten thousand authentic and recent examples, if they exist; for, if we got so many, we might be on the high road to some very interesting results.

A lady of Boston, whose position is an absolute guarantee of perfect good faith, wrote from Hamburg, in Germany, on the 23d of June last, to her sister, who was at that time in Boston. Of a part of this letter we have an authentic copy in our own possession. "I very nearly wrote from the Hague," says the letter, "to say that I should be very thankful when we had a letter from you of the 18th of June, saying that you were well and happy. . . . In the night of the 17th I had what I suppose to be a nightmare, but it all seemed to belong to you . . . and to be a horrid pain in your head, as if it were being forcibly jammed into an iron casque, or some such pleasant instrument of torture. The queer part of it was, my own dissociation from the pain, and conviction that it was yours. I suppose it was some slight painful sensation magnified into something quite severe by a half-asleep condition. It will be a fine example of what the Society for Psychical Research ought to be well supplied with, — an *Ahnung* which came to nothing."

The originality and freshness of just this experience of a double dream-personality is at once plain to any one who has experienced or has studied any of the various sorts of double personality shown in some dreams in certain forms of delirium and in other abnormal states. The letter, written from Europe six days after the nightmare, leaves no room for supposing that any now-forgotten corre-

spondence had passed meanwhile. It is, therefore, interesting to find on a bill made out by a prominent dentist of Boston, under date of June 19 of this year, and addressed to the husband of the lady to whom the foregoing letter was written, an item for 1½ hours' work on June 17. It is also interesting to learn from the lady in question that this work was performed for herself, and was done upon a large and decidedly painful filling. The discomfort succeeding this work continued as a dull pain for some hours, in such wise that, during the afternoon of the 17th, the patient could not forget the difficulty at all. She slept, however, as usual at night. The nightmare in Europe followed the operation in Boston by a good many hours; but then the pain of the tooth returned daily for some three weeks. The coincidence is therefore close enough to be quite noteworthy, and the facts themselves are beyond question. No single case alone proves, or even makes probable, the existence of telepathic toothaches; but, if there are any more cases of this sort, we want to hear of them, and that all the more because no folk-lore and no supernatural horrors have as yet mingled with the natural and well-known impressions that people associate with the dentist's chair. What one case cannot do, many cases together might accomplish, if they would only come to hand.

The other case above referred to is once more a case of physical pain. Chance coincidence is especially suggested by some of the facts as narrated, yet the other facts are more noteworthy.

On Jan. 31, 1886, at 10 A.M., Mrs. T., a lady living in a town in the West, writes to a member of Congress, the husband of her daughter, in Washington. We have an authentic copy of this letter, whereof the original has been seen by Mr. Hodgson and myself. The letter explains a telegram which Mrs. T. had sent only three hours before, inquiring about her daughter's health. The original of this telegram has also been in our hands. The telegram reads: "To the Hon. ——— ———, House Representatives, Washington, D.C. I can. Will come if Nell needs me." The signature is the mother's name. Mrs. T.'s contemporaneous letter of explanation first says that she had been for some days anxious about her daughter "Nellie's" health, although there had been no actual illness of late. Letters from Washington had been lacking for some days; the last one had reported the daughter as having just returned from making fifteen calls, "very tired," and "nearly frozen." There was therefore some ground for a mother's anxiety. But it is the vividness of the mother's experience that makes the coincidence at least suggestive. "I waked," says Mrs. T., "last night, between 12 and 1 o'clock, deeply impressed with the feeling that Nell needed me. Wanted to get up

and send L. with a telegram. I had never before thought of the possibility of such a thing happening. If I had consulted or followed my own inclinations, I would have dressed and gone down to the sitting-room." Later, however, Mrs. T. went to sleep again. But in the morning the vivid impression returns. At 7 A.M. Mrs. T. dispatched the telegram, and writes apparently before she receives an answer; for only in the margin of the letter is added before mailing, the note: "Telegram here; thank goodness you are well." Exactly what *this* return telegram said we do not know from a direct sight of it; but, as a fact, the lady in Washington, whose mother in the West had had so vivid an experience, had been seriously ill during the same night, although the morning had found her much better. Her attack was a very sudden one. She describes it from memory as "neuralgia of the lungs," with a "hard chill," and gives the date as January 30. "It must have been about the hour mentioned in my mother's letter, that I at last exclaimed, 'Oh, don't you wish ma was here! I shall send for her to-morrow if I am not better.'" In the morning comes the telegram from the West. But the patient is much better, and, according to her memory, both she and her husband as well as her brother-in-law, who had come in near the time when the telegram was received, were puzzled at the mother's uneasiness, and replied by telegram: "We are all [well?];[1] what is the matter with *you?*" From both the husband and the brother-in-law we have accounts in substantial agreement with the foregoing, adding details as to the circumstances of the illness, and as to the surprise caused by the telegram.

Here, again, is a case from which the folk-lore element, at least, is absent. The presumption of a mere chance coincidence is at the least somewhat obscured by the vividness and quality of the mother's impression, although, of course, for any single case of the sort, chance coincidence is the natural explanation. But our problem is to find whether such cases are as purely sporadic as they ought to be if they *are* only chance coincidences; and, as has been said above, one cannot estimate such complex probabilities *à priori*. We must first get the cases.

These are two cases only from a number, many of which are highly important and interesting; and I cite these cases here, not as if they were thrilling, but because they indicate what we want. Your committee has absolutely no pet hypotheses to defend. What we are longing for is that mass of facts which would be necessary as a basis for any hypothesis. Our report ought at least to show you

[1] This word, or its equivalent, is omitted in the letter written to us by the daughter.

what we want, and that in our way, and with our very limited time, we are trying to do our work.

The amount of correspondence now done for us by the Secretary of the Society is gratifyingly large and is increasing; and it promises more and more to yield valuable fruit. For my part, while I am not yet at all prepared to accept the hypothesis of genuine telepathy, I regard most of the accounts received, even when they relate to purely subjective experiences, as decidedly and deeply important. Even if a given narrative is unverifiable, even if it is, as Prof. Stanley Hall has lately asserted concerning the stories in the "Phantasms of the Living," only an instance of the mythopoietic tendency in its modern form, I still find in the examination of these subjective cases, granted only that they are sincerely reported, a basis for further research in comparative psychology which we ought to be glad to help in laying. Call a given mental experience slightly abnormal, and you at once give it a place in that still dark but always intensely interesting and vastly significant region of psychical life which lies between the dry and sober regions of bare common sense and the wildernesses of insanity. The merely sane man, in his more public and simpler aspects, is fairly, though still very superficially, known to science. The insane man proper has for years been studied by the specialists. But of the fantastic man, of the dreamer, of the man who lives a perfectly sane life in all but just some one or two realms of his mind, but who in those realms indulges in some sort of abnormal fancies, or is the helpless prey of some oppressive and diseased emotion or dream, of him we know in a scientific way far too little. Yet of such men the larger half of modern civilized humanity is probably made up. This wide and vast border-land region of human consciousness we need to study. Hypnotism has lately opened a new and highly important path for explorations in that field. But as I now suggest: quite apart from the objectively verifiable phantasms and presentiments, those which are not veritable may be found to follow types and to show laws whose study shall lead us into yet other parts of that romantic and unexplored country. No one who realizes how closely the normal and the abnormal are joined in human life, how complex and delicate are their relations, how subtle and significant are their mutual influences, should hesitate to aid in any promising research in so profoundly and tragically important a province of the human spirit.

JOSIAH ROYCE, *Chairman.*

REPORT OF THE COMMITTEE ON MEDIUMISTIC PHENOMENA.

The Committee on Mediumistic Phenomena desire to submit to the Society the following report: —

Since October, 1886, this committee, or at least a portion of its members, has devoted considerable time to the investigation of mediumistic phenomena, and although many of the facts are not yet in a suitable shape for presentation to the Society, they feel justified in making the following statements: —

I. That it is in their opinion inadvisable to undertake further investigation in regard to professional paid materializing mediums, inasmuch as all the materializing séances yet attended by them have been held under conditions which rendered any scientific investigation impossible.

II. That if at any time mediums of reasonably honest antecedents can be found, who are willing to attempt to materialize spirits under conditions acceptable to the committee, the committee will be happy to undertake a thorough examination of the phenomena which occur.

III. That the committee, however, believe that there are certain cases of alleged "mediumship" which are worthy of investigation, but they are compelled to state that no thorough or scientific investigation can be undertaken by them until *much more money* is placed at their disposal.

The committee have, for example, already partially investigated a "medium" who has made a decidedly favorable impression on certain members. Such reports of sittings with her as are already in the possession of the committee are, however, not sufficient to enable them to arrive at a definite conclusion. It is very desirable that more sittings should be held and that exact stenographic reports thereof should be made. This, lack of funds at present prevents our undertaking.

IV. That the committee have had much difficulty in finding persons not professional mediums who were willing to give séances in which "mediumistic phenomena" took place, and that in those cases where such séances were given, the results were negative. The committee would therefore beg all interested in this subject to send to the Secretary of the Society the names of any persons, not professional, who would be willing to exert their powers in this direction in the presence of one or more members of the committee and subject to conditions suitable to a scientific investigation.

THE BASIS OF INVESTIGATION OF MEDIUMISTIC PHENOMENA.[1]

In order that an investigation of mediumistic phenomena should be of real value it must be undertaken as far as possible in an entirely unprejudiced and unbiassed frame of mind, and the investigators should, as far as is possible in human nature, be equally willing that their results should be found on either side. They must, on the one hand, overcome the natural tendency of all persons to desire and believe the marvellous without thorough investigation, and on the other hand they must not through a too narrow conservatism close their eyes to facts which are inexplicable by ordinary causes.

The committee, in considering this subject, have felt that they had a certain basis to start from in the investigation of these facts. This basis is the same as that from which we should start on any other scientific investigation, and it is in our belief the only basis on which a *scientific* investigation can be made. It is a fundamental rule of all science that no phenomenon shall be ascribed to a new law — a new order of things, a new principle of the universe — unless it can be shown that it is not capable of explanation by any of the now known and accepted laws. This holds in every branch of science, in physics as well as in logic, in mediumistic phenomena as well as in geology. This law is of universal application and must always be considered by any scientific observer.

In the present investigation its application is obvious. We are brought face to face with assumed facts and phenomena which, according to their honest defenders (the dishonest ones may be put aside, clever as they often are), are not explicable by any ordinary and known laws of nature. From our stand-point our first duty is to determine the truth of these statements, and our work is at the very beginning divided into two great branches.

I. To test and determine the existence of these facts and phenomena.

II. Their existence being determined, to see if they are not capable of some explanation in accordance with known laws.

And it is not until we have both determined the existence of these phenomena and have exhausted and proved incorrect every explanation by known laws or forces, that we have a scientific right to consider the possible existence of some hitherto undetected law.

First, in regard to the existence of the facts and phenomena vouched for by presumably honest and intelligent witnesses. This is, of course, the primary branch of the subject. If the facts are not true,

[1] The following paper, by the chairman, Dr. W. N. Bullard, was approved by the committee, and is added to their report.

and the phenomena do not exist, our inquiry ends at once. It might seem, and undoubtedly does seem, to many people that facts vouched for by so many witnesses, some of the highest moral character and some of great scientific attainment, *must* be true, and that it would simply be loss of time to seek a further proof of their existence. But he who goes slowly is at least more likely to go safely, and science takes nothing for granted. As we examine more carefully the value of human testimony we are surprised to detect how frequent and how serious are its lapses. How often is it that the things which we see with our eyes and hear with our ears and feel with our hands are not so as we have seen and heard and felt. That this is very often so is one of the sad and solemn facts of life, but it is a fact. Fortunately for us, it does not occur so often in regard to things to which we are accustomed and in relation to which we draw daily conclusions, but it does occur very frequently in regard to certain classes of phenomena, and especially in regard to classes which, if not identical with, at least bear a great similarity to, those which we are called upon to investigate. It is not our desire to enter here upon the vast subject of human credibility, or, in other words, of the value of human testimony, but we cannot pass it over altogether, especially in what relates to our subject. Casting aside at once and as valueless all that testimony in favor of mediumistic phenomena which we have reason to suppose is either fraudulent or hired,— in other words, in regard to the honesty of which we have any suspicion,— we are at once brought face to face with a large mass of perfectly honest but unskilled testimony, the ordinary testimony of the average honest man and woman. What is to be done with such testimony as this? It would undoubtedly seem at first sight to be irrefutable; that we must take the facts as they are stated without further comment. But a little further personal investigation shows the error of this. We find not only the average amount of error in the testimony of persons of this class, who are with us accidentally or otherwise in our investigations, but we find certain special sources of error in the consideration of these phenomena, special and peculiar to the conditions under which the phenomena occur.

The first source of error is a much more frequent one than might be supposed, and affects nearly every person, skilled or unskilled, stupid or clever, susceptible or insusceptible, who is witness to or present at these exhibitions. This is the natural and inherent tendency of the human race to delight in mystery, to take pleasure in what it cannot understand, and in its readiness to attribute that, of which the significance and the explanation are not clear, to supernatural agencies. This tendency is unfortunately, indeed, at times played upon

by certain persons, sometimes themselves deluded, but sometimes only fraudulent impostors, and perhaps most frequently half self-deluded, who assure and assert, and, by mixing hysterical fancies, actual facts, and mystical ideas, and spreading over the whole the protection of a religious belief, produce a hodge-podge or medley of fact and fiction, which in many cases can never be more than partially unravelled, and which they attempt only too frequently to withdraw from investigation under the pretence of its sanctity. This affectation or pretence of sanctity unquestionably prevents many persons from going farther in doubt. They accept unhesitatingly a thing which under other circumstances they would investigate, because it is unholy to doubt and because it offends other people's religious beliefs. Moreover, the mystery and the religion act and react upon each other.

Thus are many honest persons rendered utterly incapable of giving accurate testimony. They are told that they must receive things on faith; they do receive them on faith (partially of course), and finally they come to really believe not only the theories they are taught, but, as an accompaniment and corollary, that the phenomena they see are what they are said to be. The extent to which this can be carried, even with people of at least ordinary intelligence in other directions, is perfectly extraordinary, and almost incredible to those who have not studied this side of human nature. For example, we have not once only been told by persons, to all appearance true believers, that they had seen and conversed with relatives from the spirit-land, but that these relatives did not in the least resemble what they were when on earth. They recognized them, not by sight nor by any known means of recognition, but by a sensation that it was they. We have seen figures recognized by persons, whom we have no reason to suspect of dishonesty, as their near relatives, at séances where later the principal performers were shown to have been simply skilful impostors, and the figures either the medium herself or trained and hired accomplices.

Another source of error is physical. It is due to the inability of the very large majority of persons to perceive accurately the details of even a moderately complicated occurrence, or at any rate to be able to recall these details immediately after the occurrence has taken place. Very few people realize this inability in themselves or even in others, and the majority would become extremely indignant if told of it as applied to themselves. Nevertheless it exists, and its existence can be *proved*. Of course the more complicated the occurrence and the longer its duration the greater the difficulty, other things being equal. Naturally, in cases where practised persons are using their skill to throw their audience off the

track, the difficulty is enormously increased. Not only, however, is the average person unable to relate accurately every detail of an ordinary occurrence, but even when his attention is especially called to the subject and he devotes his whole mind to observation, even then a certain number of actions and events either escape his notice or their *real significance* is not perceived. Many an action is unquestionably perceived by us, which produces a very feeble mental impression, often scarcely rising into consciousness or absolutely not doing so, being put aside, probably, from the unconscious persuasion of its unimportance and want of bearing upon the subject of our thoughts, or upon our general life. But even supposing our perception to be perfect,— and for the sake of argument we are willing to make this assumption,— supposing that every important fact has been perceived, we have only reached the very first step. It is not facts themselves, but the deductions from facts, which form our basis of life. If we know all the facts in the world, and draw false deductions from them, our conclusions will be falsely reached. In regard to the ordinary facts of life, our conclusions, having been confirmed empirically thousands of times, are likely to be correct; but when we cross the boundary line of ordinary experience, and turn our attention to unknown and peculiar phenomena, we have no such guarantee. Our deductions, to have real value, must receive some corroboration, if not absolute proof.

Again, as the time of an event or series of events or occurrences grows more distant, man becomes not only less and less able to recall the details which impressed him least, but he is liable to many absolute errors.

Still another form of error is dependent on the class of phenomena which we are called upon to observe, and the conditions under which they exist. As has already been said elsewhere, the conditions under which the phenomena are offered for observation are unhappily almost always such as entirely to preclude any satisfactory examination, and in many cases even the use of the ordinary senses is denied. *Most unfortunately*, also, the conditions are usually those which will most tend to further and aid imposture and fraud. Spirits who can only appear in the dark and only to those who already either believe or are predisposed to believe, who, when they do appear, reveal nothing of any importance to mankind, nothing that was not either known before or might readily be guessed or is entirely insusceptible of proof so that assertion or denial is alike vain and useless, such spirits will always appear suspicious.

Since fraud has so often been discovered among professional mediums, fraud must always be suspected; and no investigations in which

a rational possibility exists, or in which such conditions are demanded, that fraud is rendered safe and undetectable, are worthy of scientific consideration. Not only are in many cases the conditions of the phenomena such that they are incapable of any scientific value, but the character of the phenomena themselves is often a very doubtful one. There are few or none of the ordinary physical phenomena which are not capable of being produced by trickery. For the investigation, therefore, of these, not only must the observer be specially accurate as regards his facts, not only must he most carefully distinguish between his facts and his deductions, not only must he possess a peculiarly retentive memory and special faculty for *exact* recollection, but, in addition to all this, he must have a certain amount of special knowledge, — knowledge which is not usually acquired even by the most learned scientific men.

This brings us to another branch of our subject. Thus far we have only considered the causes which affect the trustworthiness of the great mass of testimony in favor of mediumistic phenomena. There are, however, a certain number of men, eminent for their scientific attainment and of undoubted integrity, whose judgment on many scientific subjects would be considered conclusive, and who have publicly stated that the evidence was clear to their minds in favor of the reality of spiritualistic phenomena, that is, of phenomena which could not be explained by the ordinary known laws of nature. What can be said in regard to the evidence of such men as these? First and most important in relation to the value of their evidence is the fact that it is entirely *personal* and in its nature insusceptible of proof. If these same observers stated a scientific fact they would scarcely expect its acceptance unless they produced proof with it. As it is we have only their personal belief. In science it has always been an accepted fact that personal belief without proof is of little value, except as the basis of an hypothesis.

Let us examine, however, a little more closely. Are the personal beliefs of these men of any more special value than those of other equally honest men of no special scientific attainment? We are quite willing to say that we believe that this can be answered on the whole in the negative. Valuable as is the possession of scientific accuracy and scientific habits of thought, this is in certain cases more than counterbalanced by the possession of other qualities, and, moreover, it has been abundantly shown that many who have attained to great eminence in certain departments of science have proved themselves to be utterly ignorant of nearly allied subjects.

In making these statements in regard to the proper basis of investigation for mediumistic phenomena the committee do not desire to

appear to act too stringently, or to demand more than is absolutely necessary. They wish to hold themselves in a perfectly neutral position. They would be pleased to obtain evidence in favor of the existence of the phenomena, but they believe that the same rules must be applied to these as to any other phenomena occurring under similar conditions.

WILLIAM N. BULLARD, *Chairman.*

DEDUCTIONS SUGGESTED BY THE STUDY OF HYPNOTIC PHENOMENA.

THE phenomena of the somnambulistic state are spontaneous during ordinary sleep; but in some people a similar state can be artificially induced by what is known as hypnotism.

Unfortunately, until within a very few years, most people considered the hypnotic state to exist only in the imagination of its supporters, and, when convinced of the fact that such peculiar conditions did undoubtedly exist, immediately attributed them to supernatural agency, or at least to the possession of some unusual power, whereby the mind of the subject was controlled or influenced. Modern investigation has shown the fallacy of such conclusions.

Only certain people can be affected to such a degree as to cause entire insensibility, but many are more or less susceptible; although some so slightly that they are unwilling to admit being affected at all. In Heidenhain's experiments upon his class it was found that only one in twelve was capable of being affected. Charcot found the average much larger; but his field of investigation was confined in a great degree to women, and the proportion of good subjects is greater in the female than in the male. My own investigations have shown that about one-eighth of the female subjects experimented with were susceptible, but many of these were not what is called good "sensitives."

During the past three years the writer has experimented with one hundred and seventy-three persons, and of that number twenty-four were found to be sensitives. Of these, one hundred and forty-eight were women and girls, and twenty-three men or boys. Of the former, twenty-two were found to be good subjects, and only two of the latter.

It is not improbable that the antecedent condition favorable to the development of the hypnotic state is an unstable condition of the nervous system: it is well known that continual repetition of

experiments with the same subjects renders them still more susceptible.

Very many different methods are used in producing the hypnotic state. A well-known method is that of gently passing the hand downward, smoothing the forehead and temples with the tips of the fingers or with the palm of the hand. Gazing steadily at a bright object placed considerably above the line of vision is sufficient to produce this condition in many people. It is claimed that by merely sitting still, closing the eyes, and thinking steadily that an ailment is about to disappear or a pain to pass away, is sufficient, in some cases, to produce the desired condition. Here we have an example of what may be known as the mind-cure, which, it is claimed, has been so successful with many people, and which, acting entirely upon imagination, produces a state analogous to the higher phases of hypnotic somnambulism. In many cases hysteria, so common with women, can be relieved immediately, if the subject can be hypnotized, by causing her to sleep a few moments. Upon awaking, the nervous excitement has entirely passed.

An extreme case, showing the effect of imagination, came under my own observation. A lady who was often afflicted with severe headaches went to a so-called mind-doctor, and, according to her statement, was entirely relieved. Several visits followed, whenever the headaches returned, and in each case it is claimed the cure was immediate. On one occasion this lady, being absent from the city, was taken with one of her usual headaches, and telegraphed to the so-called doctor to inquire what she should do to alleviate her sufferings. She received an answer, stating that five minutes after reading the telegram she would be entirely cured. The headache almost immediately left her. Here is a case where the subject has been so used to being influenced, as she supposed, by a certain person, although she would not admit that it was at all due to the imagination, that the mere reading of a telegram, stating that she would be cured, produced the same effect that concentration of attention would have done in the presence of the operator under different circumstances. This is somewhat analogous to the experiments which I have tried with those sensitives who were thoroughly under control, of telling them that at such and such an hour they would enter the hypnotic state, and impressing upon their minds that I would surely cause them to sleep at the hour mentioned; although at the time I might be occupied with some other work, and nothing was farther from my thoughts than the person to whom I had made the statement, yet, upon the occasion of our next meeting, he would tell me that the experiment had been perfectly successful, and that he had gone to sleep at the time mentioned, and

remained insensible for several hours. Here we have imagination producing all the effects which could be induced by the presence of the operator.

The religious excitement produced in many people at camp-meetings, salvation-army gatherings, etc., is probably another analogous manifestation of an influence due to hypnotic suggestion.

The duration of the hypnotic sleep is very variable in different subjects; some wake within a few moments of the time of being put to sleep, others remain insensible for hours, passing into the natural sleep before awaking.

When it is desirable to wake the subject of an experiment, a reversion of the movements by which the sleep was induced is usually sufficient; that is to say, let us suppose we have put a person to sleep by a downward movement of the hand, producing a gentle friction on the forehead; now, to awaken this person an upward movement of the hand is sufficient. Here we have a most interesting condition of the mind; sleep was suggested and impressed upon the mind of the individual during the downward passes of the hand; sleep was associated with the downward passes of the hand. At the moment the upward passes have commenced, the mind of the sensitive recognizes something not associated with sleep. In many cases it is sufficient to perform the upward passes without suggesting to the person that he is to wake. Some will not awaken without being told to do so; but it is not necessary, in producing the hypnotic sleep, to use these upward or downward passes. Generally, after a subject has been repeatedly hypnotized, the simple statement that he is to sleep or that he is to wake will be sufficient.

The hypnotic state is commonly recognized as being separated into three rather broad types, — the cataleptic, the lethargic, and the somnambulic. In the first the limbs of the subject will remain in any position in which they are placed by the operator; the skin becomes insensible to feeling, but sight and hearing are sometimes partially present. While in the so-called cataleptic state, there is often great rigidity of the limbs and body; in this condition, if the head of the subject is placed in one chair and the heels upon another, the entire weight of the body will be supported much the same as if it was a wooden figure placed upon two chairs.

The lethargic is represented by apparent insensibility, relaxed muscles, and slow respiration.

In the somnambulic state the senses are exalted in a wonderful degree in certain sensitives. I say *certain* sensitives, because it must be understood that not all hypnotics are capable of entering this state. Many whom I have experimented with are totally unable

to remain in the intermediate state between coma and their normal condition; upon being awakened they would immediately come to full possession of their senses, and could not be induced to enter the state desired, but would immediately become insensible upon again being hypnotized.

A number of experiments which have been tried show the exalted sense of temperature, sight, and hearing in a most interesting manner. Take, for example, a dozen coins placed upon the table; the operator takes one up and holds it a moment; then, placing it among the others, the sensitive is told to pick from among the coins the one which has been held in the operator's hand. He approaches the table, takes each coin in his fingers singly, until he holds the one which has been selected by the operator. In three cases out of five, when the experiment was tried with thirteen coins, the subject selected the right one. Here we have a sense of temperature so delicate that the difference in the warmth of the coins was easily appreciated. When four or five of the coins were handled by the operator the subject was at fault, but generally selected one of those five; when one of the coins was picked up by the operator, and four or five others by people in the room, the subject would select any one of the coins touched; when all the coins were picked up by different people, the one held longest, no matter by whom, was selected in one case, and the subject was at fault in two other instances.

Experiments showing delicacy of what is probably visual discrimination in the somnambulic condition are especially interesting. A series of volumes in a bookcase were shown for a moment to the subject, not sufficiently long, apparently, for him to study in any way the management of the volumes. Upon one of these volumes being slightly changed, the subject was able to distinguish the difference and point out the volume which had been moved; this experiment succeeded seven times in thirteen attempts,-although the change in the position of the book was very slight.

Again; a blank sheet of paper is shown, with one pencil-mark drawn upon it, and the subject is told that there is no line on the paper, but that the operator is about to draw some lines upon it, and wishes him to count them; here the slight irregularities in the line already drawn upon the paper are seen and fixed in the mind of the subject, who, upon being told that it does not exist, associates it with the paper, and upon the other lines being drawn around it carelessly, will invariably count all the lines except the one originally drawn upon the paper. But if the original line is perfectly ruled and half-a-dozen other lines afterwards ruled as nearly as possible to exactly

resemble the first, so that the difference between the lines is so slight that it is impossible for the subject to distinguish them, he immediately counts all the lines, including the one originally drawn. Another experiment of similar character was tried with a Mr. R. S. Twelve new lead-pencils were selected apparently alike; one of these was slightly nicked with a knife near the end and placed upright upon a marble mantel-piece from which everything else had been removed. Mr. S., who was in a somnambulic condition, was told that there was nothing upon the mantel-piece, and to look carefully to satisfy himself that this was so. He replied that he saw nothing upon the mantel-piece. Eleven other pencils were then placed in a row beside the nicked pencil already there. Upon being asked to count the pencils, Mr. S. counted eleven. A ruler was then taken and held in front of the pencils so as to conceal the ends covering the nick; Mr. S. was again asked to count the pencils, and counted the entire twelve.

Again: if a red wafer be placed upon white paper in sunlight, and the subject told to look fixedly at the paper at the spot where the wafer is, but told that the paper is blank and that there is nothing upon it, upon being asked if he sees anything upon the paper, the response will always be "No." Now, snap the red wafer from the paper, and ask if anything can be seen; in most cases the answer will be "Yes," and the subject will assert that he can see a greenish or a "bluish spot." Here we have an experiment in which the complementary color, which was not originally associated, as the red wafer was, with the paper, is easily distinguished by the subject, while the suggestion that the red wafer did not exist was sufficient to associate it in the mind of the subject with the paper itself.

All these experiments tend to show the need of suggestion in some way by the operator before any result can be obtained from the sensitive; that the suggestion may be conveyed by some slight action or manner, so slight, in fact, that it may be entirely involuntary on the part of the operator, is not only possible, but probable; but there must be suggestion.

In some cases the sensitive imagines that such and such an experiment is about to be tried, and the result is the same as if the operator himself had suggested it.

The writer proposes to give his deductions under different headings, which will be followed by a short account of one or more experiments; which are selected from a large number to illustrate what the writer assumes to be reasonable ground for his hypotheses.

(A.) That the peculiar condition which in some people admits of the induction of what is known as the hypnotic state may be at-

tributed to an abnormal constitution of the nervous system, possibly representing a form of disease.

(B.) That only a comparatively small percentage of people can be hypnotized.

(C.) That the condition is produced entirely by suggestion or association, and that no one can be hypnotized without being first informed, or in some way made to suspect, he is about to be made the object of an experiment.

(D.) That the condition may be self-induced.

(E.) That some people, in certain phases of the hypnotic state, are insensitive.

The following experiments are selected as examples of many, which led to the foregoing conclusions: —

Experiment (C, 1.) Miss Z., a young lady I had often hypnotized, was introduced to Prof. A., and told that he had never tried to experiment with any one, but would like to do so. Miss Z. expressed her doubt as to the ability of Prof. A to make her sleep. Prof A. tried and failed. I then told her that I would draw a glass of water in another room, which, being handed to her, would immediately cause her to sleep. Prof. A. and myself went to another room, where Prof. A. drew a glass of water and carried it to Miss Z., telling her I sent it to her. Upon drinking it Miss Z. almost immediately fell asleep.

(C, 2.) The same experiment tried with Miss X., except that in this case the brother of the young lady assisted me. Later the brother tried to hypnotize Miss X., but failed; she asserted that he could not do so.

(C, 3.) Same experiment, except that I drew the water and took it to Miss X. myself, telling her it was sent to her by her brother, who said that it would make her sleep in the same way as that which I had sent to her previously. Miss X. laughed, and drank the water; no effect.

(C, 4.) Miss L. is requested to go into another room and sit down, being told that within five minutes she will go to sleep. At the expiration of five minutes, upon entering the room, Miss L. is found to be asleep.

(C, 5.) Miss L. is told by her sister, Miss A., the next day, that I am in the parlor down-stairs and desire to try the experiment of putting her to sleep without seeing her. In a few moments Miss L. sleeps, although I am not in the house at the time and did not know when the experiment would be tried.

Miss A. tries to hypnotize her sister the following day in my presence, but fails. Tries again when alone with her sister, and fails again.

(C, 6.) I called on Miss A. and secreted myself behind a screen in the parlor. In a few minutes Miss L. enters and seats herself about ten feet from the screen, with her back towards me. She remained about fifteen minutes and then left the room showing no signs of being sleepy.

(C, 7.) A repetition of the last experiment. I waited nearly twenty minutes. No success.

(C, 8.) Mr. R. has a servant whom he had repeatedly hypnotized, and invited a number of his friends to see his supposed powers. The girl had been made the subject of an experiment so often that the presence of a stranger in my friend's study, when she was called into it, would naturally suggest the idea of being hypnotized. Mr. R. claimed that he could make the girl sleep when she did not know that he was trying to do so. Upon being asked to prove this Mr. R. willingly agreed.

Mr. R. called the girl, whom we will call Mary, into his study, I being present. The girl entered and stood near the door, and Mr. R. told her to sit down while he finished a note which he wished her to mail. In a few minutes the girl closed her eyes and became apparently insensible. Upon being questioned Mr. R. admitted that it was not the usual duty of the girl to mail his letters, and that customarily he would not ask her to sit down. He also admitted that he always tried his experiments with the girl in that room, and generally invited some friend to assist him.

(C, 9.) On another occasion Mr. R. was hidden behind a large screen, and Mary was sent for. I asked her to wait until Mr. R. returned, as we desired to try some experiments, and in the mean time to assist me in sorting some colored worsteds which we intended to use in our proposed experiments; this she did, sorting the colors correctly, and then walked to the window and stood looking out. At the expiration of ten minutes from the time she entered the room she asked me if she could not go and attend to her duties, and be sent for when Mr. R. returned. Mr. R. then came from behind the screen, but accounted for his failure by the fact that Mary's attention was occupied by looking out of the window.

(D, 1.) Miss L was given a silver-plated pencil-case, and told to look at it fixedly for five minutes. She stated that, after looking at it steadily for a short time, it seemed, as she expressed it, to "go away" from her, and she went to sleep, usually sleeping from twenty minutes to three hours

Similar results were obtained with nine other "sensitives," using coins, the pencil-case, and a pearl-handled pocket-knife. In several of these cases the hypnotic state was not actually self-induced, be-

ing, perhaps, the result of suggestion; but in three cases the subject tried the experiment alone, merely from curiosity, having seen or heard of others trying it.

(E, 1.) Miss L. was hypnotized and the points of a coil battery applied to her hands with apparently no sensation and no effect beyond the usual reflex action. Strong ammonia was then held beneath her nose, and a slight contraction of the muscles of the throat was perceptible. Upon waking, Miss L. remembered nothing of what had taken place, but complained of her eyes smarting slightly.

(E, 2.) Mr. J. R., being apparently insensible, the lighted end of a cigar was suddenly applied to his left hand, slightly burning the skin; no apparent discomfort was experienced at the time; upon being awaked he mentioned a smarting sensation in his left hand, and became very indignant when told that he had been burned.

Numerous surgical operations have been performed upon hypnotized persons, perhaps the most interesting of which are some of those described by Dr. Esdaile as having been performed in India, and others recorded in the Zoist.

It is well known that in those people who are termed "sensitives" the hypnotic condition may be induced by any one whom they believe capable of inducing it.[1] In many cases people cannot be hypnotized by their relatives because they believe it to be impossible, and do not concentrate their minds upon the idea that they are about to be put to sleep. I have known a gentleman to fail repeatedly when trying to hypnotize his sister (who was a fine sensitive), but who was perfectly successful with a young lady who did not know him, and believed in his ability to perform the experiment.

In another paper the writer proposes to treat of experiments in producing local anæsthesia, the possibility of benefiting insane people, and investigations concerning post-hypnotic suggestion, which are of too great length to be included in the present paper.

Numerous experiments of much interest have been tried illustrating peculiar phases of the so-called post-hypnotic suggestion. Several of the most interesting cases are given below, without attempting to comment upon the results obtained.

1. Having hypnotized Miss B., she was told to remember three cards, the Ace of Clubs, Queen of Diamonds, and Four of Spades, and

[1] Great care should be taken to avoid being deceived by the subjects into the belief that they are asleep when they may only be in the lighter stages of the somnambulic condition, or even entirely simulating. This is especially to be guarded against in paid subjects, and no experiment should be considered of value with any person, who has not been thoroughly tested to prove the genuineness of the condition. The battery seems to be the most convenient test, although it is claimed that the apparatus invented by M. Richet for testing the breathing of the subject is the most positive. The points of the wires being placed upon the moistened hands of the subject produce a pain too great to be borne easily, and it leaves no after ill effects.

when asked to name three cards to mention those in the order given. Upon being awaked and asked if she remembered what I said to her, she replied that she remembered nothing after hearing me tell her to go to sleep. An hour later, when the father and mother of the young lady were present, I said I should like to try an experiment in thought-transference, and requested Miss B. to write the names of three cards and to show them to her father while she stood at the other end of the room. I then told her that the three cards which she had written were the Ace of Clubs, Queen of Diamonds, and Four of Spades. This was correct, except that Miss B. had reversed the order, writing Four of Spades, Queen of Diamonds, Ace of Clubs. Miss B. assured her father that I had never mentioned a card to her, and she was apparently as much surprised as any one at my success.

2. I hypnotized Miss B., and told her to take a key, which I gave her, and secrete it somewhere in the house. After she had hidden it she was to return, seat herself in the same chair which she then occupied, and immediately go to sleep. Miss B. took the key and, rising, walked slowly to the door and went up the stairs to the floor above. In a few minutes she returned, and, seating herself in the chair, sighed and almost immediately became apparently insensible. I then awoke her and asked if she knew where she had hidden the key. She remembered nothing, and refused to believe she had gone up the stairs. Several days afterwards I hypnotized Miss B. in the same room and told her to get the key which she had hidden. She rose and went up the stairs. We followed her and saw her enter a room and go directly to a small table on which stood a case of cut-glass perfume bottles. One of these she turned upside down and out dropped the key into her hand. Miss B. again descended and seated herself, holding the key in her hand, and almost immediately went to sleep.

3. Miss M. and Miss B. were hypnotized and told that upon the following day, at five o'clock, they would write letters to each other. This experiment failed, as neither wrote to the other, but Miss M. went to Miss B.'s house at about that time.

4. Miss E., after being hypnotized, was told that when I seated myself in a chair she would see her sister enter the room and would say to her, "Why, Bertha, how did you come here?" After waking her I stood for some time leaning against the mantel conversing with Mr. R. H. and Miss E. Upon eventually seating myself in a chair, Miss E. started and looked fixedly at the door. She then rose and moved slowly towards the door, saying, "Why, Bertha;" she said no more, but staggered, and would probably have fallen had I not assisted her. For some time after she was again seated she seemed to

be terrified at something, covering her eyes and trembling. She was made thoroughly awake and asked what was the matter. Miss E. remembered nothing of her sister Bertha, but distinctly remembered a dreadful dream in which she thought she saw her sister's child being run over by a railroad train.

5. Miss E. was hypnotized and told that when she awoke, after I had turned over eleven pages in a book, she was to cross the room and light a candle which was upon the mantel-piece. Shortly after I awoke her and she conversed with Mr. R. H. while I looked over a book at the other end of the room. I turned the pages slowly, and, upon turning the eleventh, Miss E. partly rose, but reseated herself, seeming not to notice what was going on about her, and with her eyes fixed upon the candle. She sat for more than a minute, clasping and unclasping her hands and looking furtively at the candle. I asked her what she was thinking of, and she blushed and hesitated, but finally said that she could not imagine what made her think of such a silly thing; but that she had had, when she partly rose, a great desire to light the candle opposite to her, and, although she knew we must think her crazy, she still had the desire stronger than ever. Would we mind if she lighted it? The candle was taken to her, and she lighted it, laughing as she did so.

CHARLES B. CORY,
Chairman of the Committee on Hypnotism.

REACTION-TIME IN THE HYPNOTIC TRANCE.

The time which intervenes between the giving of an expected signal and the making of a movement (previously determined upon) in response thereto, is called in the works on physiology, "the simple reaction-time" of the subject experimented on. This reaction-time varies from one subject to another, and varies in the same subject when certain conditions vary. It ranges, in ordinary subjects, from one-tenth to three-tenths of a second, or more.

One of the conditions which makes it vary seems to be the hypnotic state. In a suggestive paper published in "Mind" (Vol. VIII., p. 170, 1883) by Professor G. Stanley-Hall, the normal and hypnotic reaction-times of a certain subject are given (averaged) as follows:—

Before hypnotization.	Hypnotized.	After waking.
0.328 Sec.	0.193 Sec.	0.348 Sec.

In the spring of 1885 I made similar measurements on three different hypnotic subjects, with results different from Professor Hall's. I have kept them until now, hoping to be able to add to them; but as there seems small immediate prospect in that direction, I publish what I have ascertained.

The subjects were Seniors in Harvard College, intelligent, and apparently quite normal men. I will call them A, C, and M, respectively. I had hypnotized them all several times before these observations were made, and they went off easily when a few "passes" were made before their face. The signal was the sound of a smart stroke which closed a galvanic circuit. The reaction consisted in raising the hand from a telegraph key and thereby opening the same circuit. A magnetic pen, interposed on the circuit, marked the instants of its closing and opening upon the smoked paper of a revolving drum (Baltzar's Kymograph); whilst a tuning-fork, vibrating fifty times a second, transmitted to the same paper a line of waves which served as measurer of time. With A, three experiments were made on three different days. C and M were each tried twice, on different days. In all, 806 reactions were traced. The results are as follows, times being expressed in thousandths of a second:—

"Subject" and Date.	Number of Reactions.	Average times before Trance.	Number of Reactions.	Average times during Trance.	Number of Reactions.	Average times after Trance.
A. May 1 . . .	27	306	32	294		
May 5 . . .	63	207	74	203		
May 19 . . .	53	204	54	304	52	163
C. May 1 . . .	21	199	51	340		
May 19 . . .	45	282	21	546 [1]	55	166
M. May 5 . . .	31	214	75	292		
May 15 . . .	46	224	53	286	57	209

[1] This figure is less than the real average, as the 21 reactions counted were only a part of those made and embraced all the shorter ones, the rest being omitted to save the toil of the counting.

What one first remarks upon reading these figures is the irregularity of the results. In five of the seven observations made, the reaction-time during trance was considerably longer than the normal reaction-time taken before hypnotizing the subject. In the other two observations it was a very little shorter. The two trances in which it was shortened occurred in the same subject, A, in whom, on another occasion, it was considerably lengthened. This shows that the idiosyncrasy of the subject has nothing to do with the matter, but that it depends on some change of inward condition.

In the three observations in which the reaction-time after trance was recorded, it fell not only below the trance-time but below the normal time before trance. In one subject, C, the fall was very marked. In Professor Hall's subject, the reactions were made half-an-hour after waking the subject, whilst mine were made but five or six minutes later. Taking my three observations as they stand, one might well interpret them by saying that the hypnotic trance inhibits neural processes, and makes them slower, and that when the trance goes off the release from the inhibited condition expresses itself in a proportionate acceleration. This would sound pretty. But the case of A on May 19 forbids one to range it under any such simple conception. In point of fact, A seemed wide-awake when he began his reactions after the trance. But we found, after he had ended them, that he had relapsed into the trance during their performance. It was not outwardly apparent at what moment the relapse occurred, for all the reactions I am describing were executed with closed eyes, so as not to interfere with the concentration of the attention on the acoustic signal. If we average the first and second halves of the

record separately, we find 0.175 seconds for the time of the first 26 reactions and 0.152 for the last 26 reactions. The rapider half of the record must have contained the trance-reactions. The slowest reactions after trance of all were in this case at the very beginning of the record, namely (counted in vibrations of the fork): 33, 26½, 20, 21, 22½, 17, 22, 21. Only two reactions later among the whole 54 rose into the twenties.

To sum up, it is clear that there is no simple hypnotic state which can be quoted as having a determinate effect on the reaction-time. There are hypnotic and post-hypnotic *states* which vary very much, and some of which retard, whilst others quicken, the reactions.[1] These states may very likely shade rapidly into each other. Of other marks, by which to discriminate them, we know nothing.

Professor Hall found the deviations from the average time to be less when his subject was hypnotized, than when awake. In my observations the opposite was the case, so far as I have made the calculations. In C's record on May 19 one need only look at the tracings to see how much more the several trance-reactions differ from each other than do the several normal actions from each other. The least average error in C's record on this day is when his times were shortest, namely, after waking from the trance. A bare inspection of the record shows this. I averaged all the deviations above (+) and all those below (—) the average reaction-time of the case of A on May 19. They run as follows in seconds: —

Before Trance.	During Trance.	After Trance.
+ 0.032	+ 0.095	+ 0.023
— 0.018	— 0.053	— 0.075

I can thus, so far as I have examined my data, draw no general conclusions from them about the average deviation. The only lesson of the facts I report seems to be that we should beware of making rash generalizations from few cases about the hypnotic state. That name probably covers a very great number of different neural conditions. The general drift of recent investigation has tended to bring this into clearer and clearer light; and the little peppercorn of testimony which I herewith offer will perhaps not be regarded as entirely worthless if it be considered as corroborative of what more important investigations have in their way shown.

WILLIAM JAMES.

[1] For instance, Prof. Hall's subject was an admirably prompt and varied histrionic subject, who would copiously act out every suggestion. But my subject C, although he could easily be hallucinated in any desired way, seemed always very drowsy and slow of response during his trance. If left to himself he invariably fell fast asleep.

THE CONSCIOUSNESS OF LOST LIMBS.

MANY persons with lost limbs still seem to feel them in their old place. This illusion is so well known, and the material for study is so abundant, that it seems strange that no more systematic effort to investigate the phenomenon should have been made. Dr. Weir Mitchell's observations in his work on "Injuries to the Nerves" (1872) are the most copious and minute with which I am acquainted. They reveal such interesting variations in the consciousness in question, that I began some years ago to seek for additional observations, in the hope that out of a large number of data, some might emerge which would throw on these variations an explanatory light.

The differences in question are principally these:—

1. Some patients preserve consciousness of the limb after it has been lost; others do not.

2. In some it appears always in one fixed position; in others its apparent position changes.

3. In some the position can be made to seem to change by an effort of will; in others no effort of will can make it change; in rare cases it would even seem that the very attempt to will the change has grown impossible.

I have obtained first-hand information from a hundred and eighty-five amputated persons. Some of this was gained by personal interviews; but much the larger portion consists of replies to a circular of questions of which I sent out some eight hundred copies to addresses furnished me by some of the leading makers of artificial limbs.[1]

The results are disappointing, in that they fail to explain the causes of the enumerated differences. But they tell certain things and suggest reflections which I here set down for the use of future inquirers.[2]

First, as to the relative frequency of the feeling of the lost parts. It existed at the time of answering my interrogatories in about three-quarters of the cases of which I have reports. I say in *about* the

[1] For these addresses I have to thank Messrs. Fisk & Arnold, of Boston; Marks, and Wicket & Bradley, of New York; Clement, and Osborne, of Philadelphia; and Douglass, of Springfield, Mass.

[2] One lesson from them is that in a delicate inquiry like this, little is to be gained by distributing circulars. A single patient with the right sort of lesion and a scientific mind, carefully cross-examined, is more likely to deepen our knowledge than a thousand circulars answered as the average patient answers them, even though the answers be never so thoroughly collated by the investigator. This is becoming apparent in many lines of psychological inquiry; and we shall probably, ere long, learn the limits within which the method of circulars is likely to be used with fruit.

proportion of cases, for many of the answers were not quite clear It had existed in a much larger proportionate number, but had faded out before the time of answering. Some had ceased to feel it "immediately," or "an hour or two" after the amputation. In others it had lasted weeks, months, or years. The oldest case I have is that of a man who had had a thigh amputation performed at the age of thirteen years, and who, after he was seventy, affirmed his feeling of the lost foot to be still every whit as distinct as his feeling of the foot which remained. Amongst my one hundred and seventy-nine cases only seven are of the upper extremity. In all of these, the sense of the lost hand remained.

The consciousness of the lost limb varies from acute pain, pricking, itching, burning, cramp, uneasiness, numbness, etc., in the toes, heel, or other place, to feelings which are hardly perceptible, or which become perceptible only after a good dead of "thinking." The feeling is not due to the condition of the stump, for in both painful and healthy stumps it may be either present or absent. Where it is distinct both the lost foot or hand and the stump are felt simultaneously, each in its own place. The hand and foot are usually the only lost parts very distinctly felt, the intervening tracts seeming to disappear. A man, for example, whose arm was cut off at the shoulder-joint told me that he felt his hand budding immediately from his shoulder. This is, however, not constantly the case by any means. Many patients with thigh-amputation feel, more or less distinctly, their knee, or their calf. But even where they do not, the foot may seem separate from the stump, though possibly located nearer it than natural. A second shoulder-joint case says his arm seems to lie on his breast, centrally with fingers closed on palm just as it did eight or ten hours before amputation.

It is a common experience, during the first weeks after amputation, for the patient to forget that his leg is gone. Many patients tell how they met with accidents, by rising suddenly and starting to walk as if their leg were still there, or by getting out of bed in the same way. Others tell how they have involuntarily put down their hand to scratch their departed foot. One man writes that he found himself preparing with scissors to cut its nails, so distinctly did he feel them. Generally the position of the lost leg follows that of the stump and artificial leg. If one is flexed the other seems flexed; if one is extended so is the other; if one swings in walking the other swings with it. In a few correspondents, however, the lost leg maintains a more or less fixed position of its own, independent of the artificial leg. One such man told me that he felt as if he had three legs in all, getting sometimes confused, in coming down stairs, between the artificial leg

which he put forward, and the imaginary one which he felt bent backwards and in danger of scraping its toes upon the steps just left behind. Dr. Mitchell tells of certain arms which appeared fixedly in the last painful attitude they had occupied before amputation. One of my correspondents writes that he feels constantly a blister on his heel which was there at the time of his accident; another that he had chilblains at the time of the accident, and feels them still on his toes.

The differences in the apparent mobility of the lost part, when felt, are strange. About a hundred of the cases who feel (say) their feet, affirm that they can "work" or "wiggle" their toes at will. About fifty of them deny that they have any such power. This again is not due to the condition of the stump, for both painful and healthy stumps are found equally among those who can and among those who cannot "work their toes." Almost always when the will is exerted to move the toes, actual contraction may be perceived in the muscles of the stump. One might, therefore, expect that where the toe-moving muscles were cut off, the sense of the toes being moved might disappear. But this is not the case. I have cases of thigh amputation, in which all the foot-moving muscles are gone, and yet in which the feet or toes seem to move at will. And I have cases of lower-leg amputation in which, though the foot-moving muscles contract in the stump, the toes or feet feel motionless.

But although, in a gross sense, we are thus forced to conclude that neither the state of the stump nor the place of the amputation absolutely determines the differences of consciousness which different individuals show, it is nevertheless hard to believe that they are not among the more important influencing conditions of the illusion which we are studying. On *a priori* grounds it seems as if they must be so. What is the phenomenon? It is what is commonly known as the extradition, or projection outwards, of a sensation whose *immediate* condition is the stimulation of a central organ of perception by an incoming nerve or nerves. As the optical centres respond to stimulation by the feeling of forms and colors, and the acoustic centres by that of sounds, so do certain other centres respond by the feeling of a foot, with its toes, heel, etc. This feeling is what Johannes Müller called the "specific energy" of the neural tracts involved. It makes no difference how the tracts are excited, that feeling of a foot is their only possible response. So long as they feel at all, what they feel is the foot.[1] In the normal state the

[1] It would seem that, even in the case of congenital defect of the extremities, the brain-centres might feel in the usual ancestral way. "A nineteen-year-old girl and a man in the forties, who

foot thus felt is located where the eye can see and the hand touch it. When the foot which the eye sees and the hand touches is cut off, still the immediate inner feeling of it persists so long as the brain-centres retain their functions; and, *in the absence of any counter-motive*, it ought, one would think, to continue located about where it used to be. There would be a counter-motive, if nerves which in the unamputated man went to the foot and were excited every time the foot was touched, were to find themselves, after the amputation, excited every time the *stump* was touched. The foot-feeling (which the nerves would continue to give) being then associated with the stump-contacts, would end (by virtue of a law of perception of which I made mention in "Mind" for 1887, p. 196) by locating itself at the place at which those contacts were believed, on the testimony of the eye and the hand, to occur. In other words, the foot-feeling would fuse with the feeling resident in the stump. In but few cases does this seem to occur;[1] and the reason is easily found. At the places where the amputation is apt to be made, the nerves which supply the foot are all buried deeply in the tissues. Superficial contact with the stump never excites, therefore, the sensibility of the foot-nerves. All ordinary contacts of the stump, thus failing to awaken the foot-feeling in any noticeable way, that feeling fails to grow associated with the stump's experiences; and when (on exceptional occasions) deep pressure of the stump awakens not only its own local cutaneous feeling but the foot-feelings due to the deeper-lying nerve, the two feelings still keep distinct in location as in quality.

There is, usually, in fact, a positive reason against their local fusion. More than one of my correspondents writes that the lost foot is best felt when the end of the stump receives the thrust of the artificial leg. Whenever the old foot is thus most felt at the moment when the artificial foot is seen to touch the ground, *that* place of contact (being both important and interesting) should be the place with which the foot-feeling would associate itself (by virtue of the mental

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had each but one normal hand, the other, instead of fingers, having only little prominences of skin without bones or muscles, thought they bent their absent fingers when they bent the deformed stump. Tickling these eminences, or binding a string about the fore-arm, caused the same sensations as in amputated persons, and a pressure on the ulnar nerve made the outer fingers tingle. In the same way persons born with a much shortened arm have stated the length of this member to be greater than it really was. An individual whose right fore-arm almost entirely failed, so that the dwarfed hand seemed to spring from the elbow, was conscious of the misshapen arm as normal and almost as long as the other." I quote this remarkable passage from Valentin's "Lehrbuch der Physiologie," Vol. II., p. 609. Valentin gives a number of references to the contemporaneous literature of the subject, and his own remarks, which occupy several pages, are well worth reading, even now.

[1] I have found none. Dr. Mitchell reports one at least, in which the lost hand lay "seemingly *within* the stump" (p. 356. Cf. also p. 351). This was an upper-arm amputation.

law already referred to). In other words, we should project our foot-feeling upon the ground, as we used to before we lost the member, and we should feel it follow the movements of the artificial limb.[1] An observation of Dr. Mitchell's corroborates this view. One of his patients "lost his leg at the age of eleven, and remembers that the foot by degrees approached, and at last reached the knee. When he began to wear an artificial leg it reassumed in time its old position, and he is never at present aware of the leg as shortened, unless for some time he talks and thinks of the stump, and of the missing leg, when . . . . the direction of attention to the part causes a feeling of discomfort, and the subjective sensation of active and unpleasant movement of the toes. With these feelings returns at once the delusion of the foot as being placed at the knee."[2]

The latter half of this man's experience shows that the principles I have invoked (though probably quite sound as far as they go) are not exhaustive, and that, between fusion with the stump and projection to the end of the artificial limb, the intermediate positions of the foot remain unaccounted for. It will not do to call them vague remains of the old normal habit of projection, for often they are not vague, but quite precise. Leaving this phenomenon on one side, however, let us see what more our principles can do.

In the first place they oblige us to invert the popular way of looking at the problem. The popular mind wonders how the lost feet can still be felt. For us, the cases for wonder are those in which the lost feet are not felt. The first explanation which one clutches at, for the loss, is that the nerve-centres for perception may degenerate and grow atrophic when the sensory nerve-terminations which normally stimulate them are cut off. Extirpation of the eyeballs causes such atrophy in the occipital lobes of the brain. The spinal cord has been repeatedly found shrunken at the point of entrance of the nerves from amputated limbs. And there are a few carefully reported cases in which the degeneration has been traced ascending to the cortical centres, along with an equal number of cases in which no such ascending degeneration could be found.[3] A degenerated centre can of course no longer give rise to its old feelings; and where the centres are degenerated, that fact explains all-sufficiently why the lost member can no longer be felt. But it is impossible to range all the cases of non-

[1] The principle here is the same as that by which we project to the extremity of any instrument with which we are probing, tracing, cutting, etc., the sensations which the instrument communicates to our hand when it presses the foreign matter with which it is in contact.

[2] Injuries of Nerves, Philadelphia, 1872, p. 332.

[3] François-Franck: Leçons sur les Fonctions Motrices du Cerveau, 1887, p. 291.

feeling under this head. Some of them date from the first hours after the operation, when degeneration is out of the question. In some the perceptive centres are proved to be there by exciting electrically the nerve-trunks buried in the stump. "I recently faradized," says Dr. Mitchell, "a case of disarticulated shoulder without warning my patient of the possible result. For two years he had altogether ceased to feel the limb. As the current affected the brachial plexus of nerves he suddenly cried aloud, 'Oh the hand,—the hand!' and attempted to seize the missing member. The phantom I had conjured up swiftly disappeared, but no spirit could have more amazed the man, so real did it seem."[1]

In such a case as this last, the only hypothesis that remains to us is to suppose that the nerve-ends are so softly embedded in the stump as, under ordinary conditions, to carry up no impressions to the brain, or none strong enough to be noticeable. Were they carried, the patient would feel, and feel a foot. Not feeling the foot, and yet being capable of feeling it (as the faradization proves), it must be either that no impressions are carried, or else that for some reason they do not appeal to consciousness. Now it is a general law of consciousness that feelings of which we make no practicable use tend to become more and more overlooked. Helmholtz has explained our habitual insensibility to double images, to the so-called *muscæ volitantes* caused by specks in the humors of the eye, to the upper harmonics which accompany various sounds, as so many effects of the persistent abstraction of our attention from impressions which are of no use. It may be that in certain subjects this sort of abstraction is able to complete our oblivescence of a lost foot; our feeling of it has been already reduced almost to the vanishing point, by reason of the shielded condition of the nerve-ends, just assigned. The feeling of the lost foot tells us absolutely nothing which can practically be of use to us.[2] It is a superfluous item in our conscious baggage. Why may it not be that some of us are able to cast it out of our mind on that account? Until a few years ago all oculists believed that a similar superfluity, namely, the second set of images seen by the squinting eye in squinters, was cast out of consciousness so persistently that the eye grew actually blind. And, although the competency of the explanation has probably been disproved as regards the blindness, yet there is no doubt that it is quite competent to prove an almost invincible *unconsciousness* of the images cast upon a squinting eye.

Unconsciousness from habitual inattention is, then, probably one factor in the oblivescence of lost extremities,—a factor which, how-

[1] *Op. cit.* p. 349.

[2] Except the approach of storms; but then it is in cases where the feeling is preserved.

ever, we must regard as unavailing where impressions from the nerve-ends are strong.[1]

Let us next consider the differences in regard to the illusion of voluntary movement in the lost parts. Most of the patients who seem to themselves able to move their lost feet, hands, etc , at will, produce a distinct contraction of the muscles of the stump whenever they make the voluntary effort. As the principle of specific energies easily accounted for the consciousness of the lost limb being there at all, so here another principle, almost as universally adopted by psychologists, accounts as easily for the consciousness of movement in it, and leaves the real puzzle to reside rather in those cases in which the illusion of movement fails to exist.

The principle I refer to is that of the inheritance of ancestral habit. It is all but unanimously admitted at the present day that any two experiences, which during ancestral generations have been invariably coupled together, will have become so indissolubly associated that the descendant will not be able to represent them in his mind apart. Now of all possible coupled experiences it is hard to imagine any pair more uniformly and incessantly coupled than the feeling of effected contraction of muscles, on the one hand, and that of the changed position of the parts which they move, on the other. From the earliest ancestors of ours which had feet, down to the present day, the movement of the feet must always have accompanied the contraction of the muscles; and here, if anywhere, habit's hereditary consequences ought to be found, if the principle that habits are transmitted from one generation to another is sound at all.[2] No sooner then should the brain-centres for perceiving muscular contractions be excited, than those other centres functionally consolidated with them ought to share the excitement, and produce a consciousness that the foot has moved. If it be objected to this that this latter consciousness ought to be ideal rather than sensational in

[1] I have quoted my hundred and forty-odd patients as feeling their lost member, as if they all felt it *positively*. But many of those who say they feel it seem to feel it *dubiously*. Either they only feel it occasionally, or only when it pains them, or only when they try to move it; or they only feel it when they "think a good deal about it" and make an effort to conjure it up. When they "grow inattentive," the feeling "flies back," or "jumps back to the stump." Every degree of consciousness, from complete and permanent hallucination, down to something hardly distinguishable from ordinary fancy, seems represented in the sense of the missing extremity which these patients say they have. Indeed I have seldom seen a more plausible lot of evidence for the view that imagination and sensation are but differences of vividness in an identical process, than these confessions, taking them altogether, contain. Many patients say they can hardly tell whether they feel or fancy the limb.

[2] In saying that if it is sound, then the explanation which I offer follows, I wish to retain reserved rights as to the general question of its soundness, regarding which evidence seems to me as yet somewhat incomplete. But the explanation which I offer could base itself on the invariable associations of the individual's experience, even if the hereditary transmission of habitual associations proved not to be a law of nature.

character, and might therefore not to produce a fully developed illusion, it is sufficient to point to what happens in many illusions of the same type In these illusions the mind, sensibly impressed by what seems a part of a certain probable fact, forthwith *perceives* that fact in its entirety. The parts supplied by the mind are in these cases no whit inferior in vividness and reality to those actually impressing the sense.[1] In all perception, indeed, but half of the object comes from without. The larger half usually comes out of our own head. We can ourselves produce an illusion of movement similar to those which we are studying by putting some unyielding substance (hard rubber, *e.g.*) between our back teeth and biting hard. It is difficult not to believe that our front teeth approach each other, when we feel our biting muscles contract.[2] In ourselves the feeling of the real position of the jaws persists unchanged to contradict the false suggestion. But when we recall that in the amputated no such positive contradiction can occur, since the parts are gone, we see how much easier it must be in their case for the false sense of movement to flourish unchecked.[3]

But how, then, comes it that there can be any patients who lack the false sense in question? In one hundred and forty of my cases, about fifty lacked it completely; and even when the stump-muscles contract violently, many patients are unable to feel any change at all in the position of the imaginary extremity. This is not due to the fact that the amputation is made above the origin of the hand-or-foot-moving muscles; for there are eleven cases where these muscles remain and contract, but yet no sense of movement exists. I must say that I can offer no clear solution of this anomaly. It must be left over, together with those obstinate cases of partial apparent shortening of which we spoke above, for future investigators to treat.

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[1] They are vivid and real in proportion to the inveterateness of their association with the parts which impress the sense. The most perfect illusions are those of false motion, relief, or concavity, changed size, distance, etc., produced when, by artificial means, an object gives us sensations, or forces us to move our eyes in ways ordinarily suggestive of the presence of an entirely different object. We *see* then the latter object directly, although it is not there. The after-image of a rectangular cross, of a circle, change their shapes when we project them on to an oblique surface; and the new shape, which is demonstrably a reproduction of earlier sense-impressions, feels just like a present sense-impression.

[2] See for another example Sternberg, in Pflüger's Archiv., Bd. 37, S. 1. The author even goes so far as to lay it down as a general rule that we ordinarily judge a movement to be executed as soon as we have given the impulse.

[3] Out of the ninety-eight of my cases who feel their limbs to move, there are forty-three who can produce no feeling of movement in the lost extremity without visibly contracting the muscles of the stump. But (leaving out doubtful cases) twelve of the others positively affirm that, after the most careful examination, no contractions can be detected in the stump, whilst yet the extremity seems to move at will. One such case I observed myself. The man had an amputation of the upper arm. He seemed to himself to flex his fingers at will; but I could perceive no change whatever in the stump. The thought of the movement seemed here a sufficient suggestion; as in those anæsthetic cases where the patient thinks of a movement and wills it, and then (if his eyes are closed) fancies it executed, even though the limb be held still by the bystanders.

One reflection, however, seems pertinent to the entire set of phenomena we have studied. They form a group in which the variations from one individual to another, if they exist at all, are likely to become extreme. Darwin notices that no organs in animals are so subject to variation as rudimentary organs. Being functionless, selection has no hold on them, the environment exerts no influence to keep them up (or down) to the proper standard, and the consequence is that their aberrations are unchecked. Now phantasms of lost legs and arms are to the mental organism just what rudimentary organs are to the bodily organism. They have no longer any real relations with the environment, being mere vestiges of something which formerly had real relations. The environment does not correct such a phantasm for any odd course it may get into. If it slips away altogether, the environment lets it go, and doesn't call it back. If it happen "by accident" to harden itself in a fixed position, or shorten itself, or to dissolve connection with its ancestral associates in the way of muscular feeling, the accident is not repaired; and experience, which throughout the rest of our mental life puts prompt bounds to too great eccentricity, here lets it luxuriate unrebuked. I do not know how far one ought to push this idea. But (what we can call by no better name but) accident or idiosyncrasy certainly plays a great part in all our neural and mental processes, especially the higher ones. We can never seek among these processes for results which shall be invariable. Exceptions remain to every empirical law of our mental life, and can only be treated as so many individual aberrations. It is perhaps something to have pointed out the department of lost-limb-consciousness as that in which the aberrant individuals are likely to reach their maximum number.

The apparent changes of temperature of the lost parts form an interesting chapter, which, however, I will not discuss. Suffice it to say, that in many patients the lost foot can be made to feel warm or cold by warming or cooling the stump. A draught of air on the stump produces the feeling of a draught on the foot. The lost foot also sympathizes sometimes with the foot which remains. If one is cold, the other feels cold. One man writes that whenever he walks through puddles and wets his sound foot, his lost foot feels wet too.

My final observations are on a matter which ought to interest students of "psychic research." Surely if there be any distant material object with which a man might be supposed to have clairvoyant or telepathic relations, that object ought to be his own cut-off arm or leg. Accordingly, a very wide-spread belief will have it,

that when the cut-off limb is maltreated in any way, the man, no matter where he is, will feel the injury. I have nearly a score of communications on this point, some believing, more incredulous. One man tells of experiments of warming, etc., which the doctor in an adjoining room made on the freshly cut-off leg, without his knowledge, and of which his feelings gave him no suspicion. Of course, did such telepathic *rapport* exist, it need not necessarily be found in every case. But in none of the cases of my collection in which the writers seek to prove it does their conclusion inspire confidence. All (with perhaps one exception which, unfortunately, I have lost) are vaguely told; and, indeed, among all the pains which come and go in the first weeks of amputation, it would be strange if some did not coincide with events happening to the buried or "pickled" limb. One man writes me that he has dug up his buried leg eight times, and changed its position. He asks me to advise him whether to dig it up again, saying he "dreads to."

In concluding, I repeat that I have been able to throw no new light of a positive sort on those individual differences, the explanation of which was the aim of my inquiry. I have, perhaps, by invoking certain well-known principles, succeeded in making the fundamental illusions, that of the existence, and that of the movement of the lost part, seem less paradoxical, and the exceptions to these illusions less odd than they have hitherto appeared. But, on the whole, I leave the subject where I took it up from Dr. Weir Mitchell's hands; and one of the main effects of the investigation on my own mind is admiration for the manner in which he wrote about it fifteen years ago.

WILLIAM JAMES.

AMERICAN SOCIETY FOR PSYCHICAL RESEARCH.

REQUEST FOR COÖPERATION.

ISSUED BY THE COUNCIL.

5 BOYLSTON PLACE, May, 1887.

THE object of the Society is described in the first article of its Constitution as "the systematic study of the laws of mental action." The results which the American Society has so far achieved have not been so great as anticipated, and the Council thinks it desirable to circulate a brief account of the lines of research now being investigated by the various committees, and to make an appeal for a more zealous coöperation of the members and associates of the Society. One form which this coöperation of our members might profitably take, is the distribution of this *Request* among their friends, with a view to the acquirement of new members, and to the arousing of fresh interest in the investigation.

The American Society was constituted at the end of 1884, for the purpose of making an exact study of that border-land of human experience, to the investigation of which the efforts of an English Society had already been devoted, and in which that Society claimed to have achieved some positive progress. The objects of the English Society have been described as follows: —

The Society for Psychical Research was formed at the beginning of 1882, for the purpose of making an organized and systematic attempt to investigate various sorts of debatable phenomena which are *primâ facie* inexplicable on any generally recognized hypothesis. From the recorded testimony of many competent witnesses, past and present, including observations recently made by scientific men of eminence in various countries, there appears to be, amidst much illusion and deception, an important body of facts to which this description would apply, and which, therefore, if incontestably established, would be of the very highest interest. The task of examining such residual phenomena has often been undertaken by individual effort, but never hitherto by a scientific society organized on a sufficiently broad basis. The following are the principal departments of work which it is proposed to undertake: —

1. An examination of the nature and extent of any influence which may be exerted by one mind upon another, otherwise than through the recognized sensory channels.

2. The study of hypnotism and mesmerism; and an inquiry into the alleged phenomena of clairvoyance.
3. An inquiry as to the existence of relations, hitherto unrecognized by science, between living organisms and magnetic and electric forces, and also between living and inanimate bodies.
4. A careful investigation of any reports, resting on strong testimony, of apparitions occurring at the moment of death or otherwise, and of disturbances in houses reputed to be haunted.
5. An inquiry into various alleged physical phenomena commonly called "spiritualistic."
6. The collection and collation of existing materials bearing on the history of these subjects.

The aim of the Society is to approach these various problems without prejudice or prepossession of any kind, and in the same spirit of exact and unimpassioned inquiry which has enabled science to solve so many problems, once not less obscure nor less hotly debated. The founders of the Society have always fully recognized the exceptional difficulties which surround this branch of research; but they nevertheless believe that by patient and systematic effort some results of permanent value may be attained.

The research work of the American Society is at present divided between five committees: —

1. Committee on Thought-Transference.
2. Committee on Apparitions and Haunted Houses.
3. Committee on Hypnotism (Mesmerism).
4. Committee on Mediumistic Phenomena.
5. Committee on Experimental Psychology.

1. Committee on Thought-Transference.

The Committee for investigating the subject of Thought Transference,— that is, for ascertaining whether "a vivid impression or a distinct idea in one mind can be communicated to another mind without the intervening help of the recognized organs of sensation," — is grateful for the response made by members of the Society to the circulars already issued; but desires to institute a new series of experiments, in the hope of obtaining a much wider coöperation in this branch of the Society's work.

From the returns received by the committee, it appeared that in at least two cases the results were such as to suggest the operation of thought-transference of the kind reported by the English Society; but in these cases, unfortunately, it became impossible to secure opportunities for a fuller investigation. The committee will be very glad to hear of any persons who are believed to be sensitive to thought-transference.

It has been asserted by Professor Charles Richet, of Paris, that experiments made in large numbers indicate the actuality of thought-transference, by showing that, when one person guesses in the presence of another person who knows what is to be guessed, the guesses are more often right than when neither of the two knows what is to be guessed. Now, if, as has been maintained, there are persons who have the faculty of mind-reading to a high degree, it is possible that there are many persons who possess it to a slight degree. The statistics already collected by the committee, with the view of testing this, have not supported those obtained by Professor Richet; but the committee desires to test this yet further, by gathering a fresh series of statistics, and at the same time to stimulate the members and associates to new experiments among themselves and their friends for the purpose of discovering, if possible, any persons who are specially sensitive to thought-transference.

Explanations and suggestions are here given as to the manner of conducting the experiments.

The objects recommended for experiment are: —

I. — Playing-cards.
II. — Free drawings.
III. — Numbers, Words, Names.
IV. — Colors.

The person who guesses the object thought of, is called the *percipient;* the persons who think of the object are called *agents.* If successful results are obtained where more than one agent is engaged in the experiments, further trials should be made with each agent acting alone, for the purpose of ascertaining whether the impression produced upon the percipient is due to one agent rather than another. The persons engaged in the experiments should remain quiet and undisturbed. The agent should concentrate his attention as intensely as possible upon the object, upon which a good light should be thrown; the percipient should remain as passive as possible, his eyes covered with a dark bandage, attending only to any impression which he may appear to receive as it were from without.

The strain upon the agent's attention is considerable, if the experiments are properly made, and the percipient, as a rule, should not wait longer than two or three minutes before guessing the object. On the other hand, the percipient should not unduly hurry his guess. The series of experiments should not be continued after either experimenter is tired or otherwise unable to fix his mind on the work. Owing to the strenuous mental exertion required of the agent, the committee suggests that any particular series should rarely be prolonged after ten or twelve trials.

The experimenters should use every precaution to avoid the passage from agent to percipient, by the ordinary channels of sense, of any intimation, conscious or unconscious, of the object to be guessed. The general conditions of the experiments, such as the relative positions occupied by the agent and percipient, the date and duration of each series of trials, etc., should in every case be recorded. Some instances which have been reported suggest the advisability of first making experiments *with contact*, the agent placing his hand upon that of the percipient, and afterwards repeating the experiments *without contact*. Special care should be taken to record in each case whether the experiment has been made without contact or not.

All the observations (both successful and unsuccessful) made in any series should be sent in. The agent and percipient should both sign the record, not necessarily for publication, but as a pledge of their good faith. All series of experiments, positive or negative, are acceptable to the committee, one of whose objects is to ascertain whether thought-transference occurs with many persons, and, if so, to what degree and in what proportion.

The experimenters are requested to state their views concerning the exact nature of any impressions that may be produced, and also concerning the comparative success of experiments made at different times, in different moods, with one agent, or with several, with persons connected by blood or by any special sympathy. When the percipient feels a confidence in the correctness of certain of the guesses, this fact should be noted in each case, provided that it can be done before the result is verified. Any communication which may throw light upon the sensitiveness of the percipient, or upon any peculiarity in the mental activity of the agent, will be welcomed by the committee.

I. — Playing-Cards.

The agent holds a pack of playing-cards, shuffles it, says *Ready*, then cuts or opens the pack at random, and concentrates his attention upon the card thus disclosed, with the determination to impress the full appearance of the card upon the mind of the percipient. The card guessed by the percipient should be named aloud by him, and written down by the agent in a right-hand column, as in the following Form. The agent should then enter the true designation of the card in a left-hand column. The suits may be indicated by initial letters.

The agent should thoroughly shuffle the pack before each trial, so as to make the cutting a pure matter of chance. Care should be taken that the pack is complete. (It may be found advisable to withdraw the face-cards from the pack. Where this is done a statement should be made in the record to that effect.)

EXPERIMENTS IN THOUGHT-TRANSFERENCE.

PLAYING-CARDS.

Agent. — JOHN SMITH.
Percipient. — MARY SMITH (Sister of Agent).

MAY 6, 1887, 5 P.M. — 5.20 P.M.

Card selected.	*Card named.*
1. 10 of spades.	1. 9 of diamonds.
2. 5 of diamonds.	2. 5 of hearts.
3. 6 of hearts.	3. 10 of spades.
4. 8 of hearts.	4. 8 of clubs.
5. 4 of spades.	5. 3 of clubs.
6. 9 of clubs.	6. No impression after about four minutes.
7. 3 of spades.	7. 1 of diamonds.
8. 3 of clubs.	8. 4 of hearts.

(Rest for ten minutes.)

9. 3 of spades.	9. 10 of clubs.
10. 4 of spades.	10. 7 of spades.
11. King of diamonds.	11. 2 of clubs.

MAY 9, 1887, 9 P.M. — 9.35 P.M.

1. 3 of clubs.	1. 5 of spades.
2. 6 of spades.	2. 7 of spades.
3. 8 of hearts.	3. 8 — suit not seen.
4. 4 of hearts.	4. 4 of hearts.
5. 6 of hearts.	5. 6 of spades.
6. 3 of diamonds.	6. 1 — suit not seen.
7. 9 of diamonds.	7. 6 of hearts.

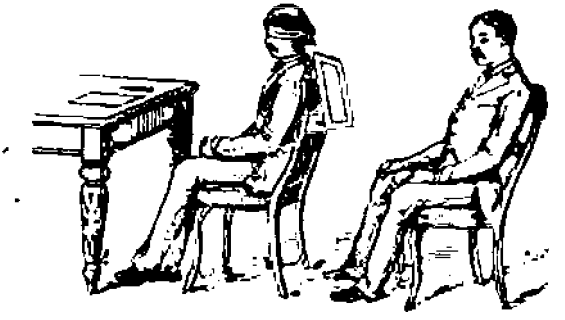
In the above experiments, the percipient was blindfolded and seated in a chair with her back to the agent, who sat about three feet behind the percipient. No contact in any case.

Signed, JOHN SMITH.
MARY SMITH.

II. — Free Drawings.

In these experiments, the agent makes any drawing he chooses, and the percipient, without knowing the drawing made by the agent, tries to make a reproduction of it on another sheet. The agent should avoid taking suggestions for his drawings from surrounding objects, or from objects which are specially likely to be present to the mind of the percipient. The percipient should not be allowed, while the agent is drawing, to see the motion of any part of the

pencil, or hear any sound from it. Similarly the agent should not see the reproduction made by the percipient until it is completed. Two rooms, if possible, should be used for the experiments. The percipient should be seated, blindfolded, in one room, while the agent is drawing a figure in another room. The agent should return with his drawing, enclosed in a book or folio, take his seat behind the percipient, say *ready*, and then open the drawing on a stand fixed for the purpose close behind the chair of the percipient,



as in the accompanying illustration. Silence should be maintained during the experiment. When the percipient announces that he is ready to draw, the agent should enclose the figure as before, and take it with him into the other room. The percipient should then remove the bandage, and make the reproduction, adding any notes concerning his impressions. The committee suggests that the drawings should be about two or three inches in size, and that the agent should draw his lines thickly with soft lead pencil, or, better still, black chalk pencil, on white paper or card, which should be placed against a dark background for the experiment. The sheets of diagrams should be numbered at the top after each experiment, as, Original 1, Reproduction 1, Original 2, Reproduction 2, etc.

III. — Numbers, Words, and Names.

These should be written clearly as in the *free-drawing* experiments, and guessed aloud by the percipient as in the *card* experiments. A record should be kept as in the *card* experiments.

IV. — Colors.

A set of six cards, *black*, *white*, *yellow*, *blue*, *red*, and *green*, may be obtained on application to the Secretary. Trials should be made as in the experiments with playing-cards, care being taken to shuffle the six cards after each trial.

The committee cannot too strongly emphasize the fact that *selected* results are not desired; the committee will be glad to receive any records even of a small series of experiments, whether successful or unsuccessful, on any of the lines indicated.

Records of experiments should be sent to the Secretary, Richard Hodgson, 5 Boylston place, Boston, Mass.

H. P. BOWDITCH,
Chairman.

2. Committee on Apparitions and Haunted Houses.

This committee wishes to collect accounts from trustworthy sources, of apparitions of absent or deceased persons, — of premonitions, whether these occur in dreams or in the waking state, by voices heard, or figures seen, or any kind of extraordinary experience, — and also of disturbances in houses described as "haunted." It is well known that, from time to time, there are related or published accounts of people who are said to have had such experiences, and to have learned, through them, about some otherwise unknown facts, afterwards verified; such, for instance, as death or illness or some other calamity which has actually happened, at or near the time of an apparition, to the distant person whose figure is said to have been seen. The committee will be especially glad to hear directly from the persons themselves, whether connected with the Society or not, who have had any such experiences, and strongly urges upon those who belong to the Society that they should render active assistance to the committee by collecting such accounts, and by obtaining such further information as will enable the committee to verify them in as much detail as possible by the accounts of other witnesses, the use of documents, or other collateral testimony. The names and addresses of the persons concerned should be appended to the accounts as a pledge of good faith; but these will be kept strictly private by the committee, unless special permission is given for their publication. Communications should be addressed to the Secretary, Richard Hodgson, 5 Boylston place, Boston, Mass.

JOSIAH ROYCE,
Chairman.

3. Committee on Hypnotism.

The work in which this committee is most interested concerns the causes and the psychical modifications of the various phases of hypnotic (mesmeric) trance, together with their physiological accompaniments. The committee is especially anxious to discover whether, as is commonly alleged in connection with hypnotic phenomena, there

may exist any possibility of thought-transference between the operator and his subject, and whether any cases can be obtained of what is termed *clairvoyance*, where the subject is said to show a knowledge of persons, or scenes, or hidden objects, in a way that seems to suggest the operation of some unusual power of perception. The committee begs the assistance of members and associates of the Society, and any other persons, in collecting accounts of such cases from reliable sources; but the committee is still more desirous of obtaining references to any persons who are either available at the present time for direct experiment, or are willing to become hypnotic subjects. Communications should be sent to the Secretary, Richard Hodgson, 5 Boylston place, Boston, Mass.

C. B. CORY,
Chairman.

4. Committee on Mediumistic Phenomena.

This committee is chiefly concerned with the experimental investigation of the phenomena commonly described as "spiritualistic," and is particularly desirous of obtaining opportunities for investigation with private and unpaid "mediums," or other persons in whose presence "mediumistic" phenomena occur. Under this head we place table-tippings or movements of other objects, automatic writing, as by planchette or otherwise, voices, unexplained noises, lights, and cognate phenomena. Private persons who themselves experience such phenomena are earnestly requested to communicate accounts of them to the committee, the members of which would be especially grateful for opportunities of witnessing personally the occurrences described. The committee will further be glad to investigate any phenomena of similar character alleged to occur in the presence of professional mediums, when these can be submitted to a scientific scrutiny. Communications should be addressed to the Secretary, Richard Hodgson, 5 Boylston place, Boston, Mass.

WILLIAM N. BULLARD,
Chairman.

5. Committee on Experimental Psychology.

This committee is at present desirous of testing the feasibility of making some successful investigations in folk-thought or the study of sociology in its psychological aspects. It seeks to ascertain not so much the psychical peculiarities exhibited by individuals *qua* individuals, as the psychical characteristics which many individuals may possess in common in virtue of their being members of particular races

or communities. There are many beliefs and habits of thought by which one nation is distinguished from another, and the people of one epoch from those of earlier and later epochs. How far these are due to heredity, how far to simple tradition, how far to transient circumstances of time, and place, and social opinion, how far to the deliberate and rational judgments of the individuals themselves, — what are their causes, and what positions should be assigned to them as regards development or degeneration, are inquiries the prosecution of which the committee trusts will lead to results of the utmost importance. Such results, however, must not be looked for at once. It is clear that, before any reliable generalizations can be reached, much laborious gathering of facts will be needed.

The method which the committee wishes to adopt is to accumulate data from individuals, and by comparison of them with one another ascertain the degree of similarity of mental habit existing between the individuals concerned. To test the method, the committee has selected two subjects intimately connected with other work of the Society, namely, diagram drawing and the prevalence of superstitions. As in this part of the researches of the Society a very wide-spread coöperation is absolutely necessary for the achievement of results of scientific value, it is hoped that the members and associates will not only universally respond themselves, but also induce large numbers of their friends to respond to this appeal.

CHARLES S. MINOT.
Chairman.

It is hoped eventually to found a library for the use of members of the Society. Contributions of books on psychical subjects should be sent to the Secretary.

It is also hoped that voluntary donations to the Society will enable the Council to issue a monthly journal, which shall be circulated gratuitously among members and associates. The object of this journal will be to give information of the business transacted at the meetings of the council, and of the progress made by the various committees, and to furnish to our members early records of matters of interest which would otherwise be delayed till the next publication of the *Proceedings*. The journal, as contemplated, will be open to

correspondence and discussion by members and associates. Pecuniary contributions towards the establishment of the journal will be gratefully received.

Any information or suggestions as to the work of the Society will be gladly welcomed by the council.

All communications or applications for information should be addressed to the Secretary, Richard Hodgson, 5 Boylston Place, Boston, Mass.

(Signed by the Executive Committee on behalf of the Council),

H. P. BOWDITCH,
E. G. GARDINER,
C. S. MINOT.

The Council specially requests prompt payment from any members and associates who are in arrears with their subscriptions.

BLANK F.

AMERICAN SOCIETY FOR PSYCHICAL RESEARCH.

COMMITTEE ON EXPERIMENTAL PSYCHOLOGY.

You are requested to fill up this blank and send it to the Secretary, RICHARD HODGSON, 5 Boylston Place, Boston, Mass.

All answers are private, and will not be shown, except to the Committee and its clerks.

Name, ...

Address, ...

Occupation, ...

Age, ...

Nationality, ...

Should you be influenced by any feeling (whether implying a belief or not is immaterial) in regard to:

	ANSWER. *YES or NO.*
1. Sitting down thirteen at table?	
2. Beginning a voyage on Friday?	
3. Seeing the new moon over your left shoulder?	
4. Choosing, on your own account, between two otherwise equally desirable houses, one of which was reputed to be haunted? . .	

BLANK G.

AMERICAN SOCIETY FOR PSYCHICAL RESEARCH.

COMMITTEE ON EXPERIMENTAL PSYCHOLOGY.

OCTOBER, 1887.

The American Society for Psychical Research is collecting accounts of cases where one person has had some remarkable experience, such as an exceptionally vivid and disturbing dream, or a strong waking impression amounting to a distinct hallucination, concerning another person at a distance, who was, at the time, passing through some crisis, such as death, or illness, or some other calamity. It appears that coincidences of this sort have occurred, but it may be alleged that they are due to mere *chance*. For the determination of this it is desirable to ascertain the proportion between (*a*) the number of persons in the community who have not had any such experiences at all; (*b*) the number of persons who have had such experiences coinciding with real events; (*c*) the number of persons who have had experiences which, though similar to the foregoing in other respects, did *not* coincide with real events.

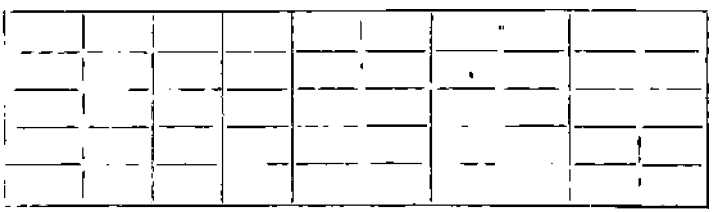
We therefore beg any reader of this circular in the course of the next six months to repeat the following questions, *verbatim*, to as many trustworthy persons as possible, *from whom he does not know which answer to expect, and who have not already been interrogated by some one else*, and communicate the results. The questions are so framed as to require no answer but *yes* or *no*, which should be written in one of the blank squares below each question. We draw special attention to the fact that *the object of our enquiry would be defeated* if replies were received only from persons who have had remarkable experiences of the kind referred to (whether

coincident with real events or not); and there should be *no selection whatever* of persons who have had such experiences. In case of negative answers only, it will be sufficient if the collector will send (not for publication) his own name and address on the circular with the replies which he has received.

If there are any affirmative answers, we desire to receive also (not for publication) the name and address of any person who answers *yes*. If the experience has been coincident with a real event, we specially request the percipient to send us an account of it.

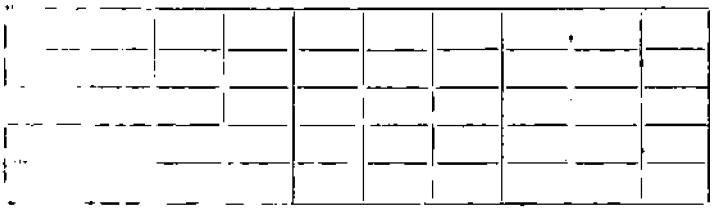
All communications should be sent to the Secretary, RICHARD HODGSON, 5 Boylston Place, Boston, Mass., from whom additional copies of this circular may be obtained. As soon as a circular is filled it should be returned to the Secretary; circulars only partly filled will also be gratefully received. It is of the utmost importance to obtain answers from a very large number of persons, and it is hoped that many thousands of replies will be received.

I. *Have you, within the past year, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least as long as an hour after you rose in the morning?*

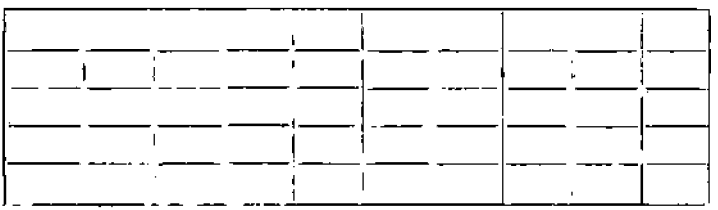


II. *Have you, within the past three years but not within the past year, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at*

the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least as long as an hour after you rose in the morning?

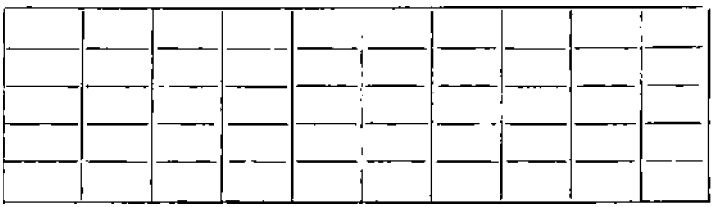


III. *Have you, within the past twelve years but not within the past three years, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least as long as an hour after you rose in the morning?*

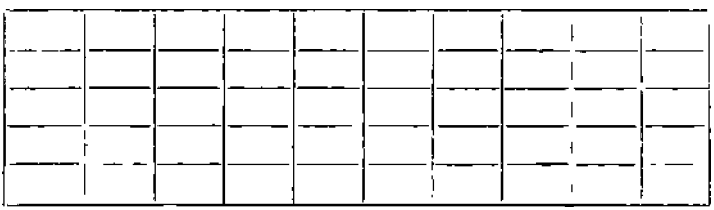


IV. *Have you, at any time during your life but not within the past twelve years, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least an hour after you rose in the morning?*

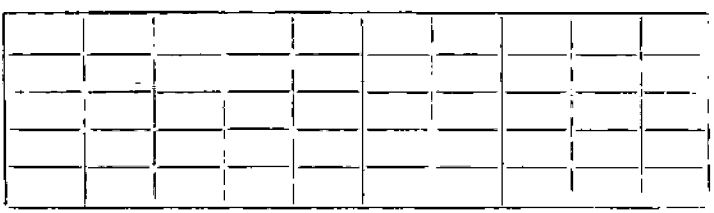
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V. *Have you, within the past year, when in good health, and completely awake, had a distinct impression of seeing or being touched by a human being, or of hearing a voice or sound which suggested a human presence, when no one was there?*

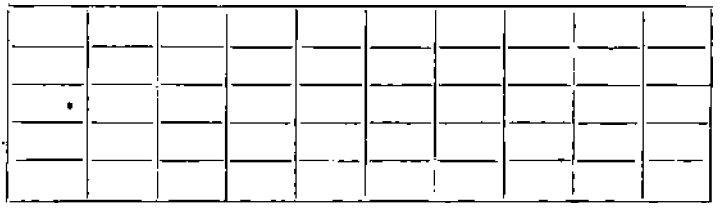


VI. *Have you, within the past three years but not within the past year, when in good health, and completely awake, had a distinct impression of seeing or being touched by a human being, or of hearing a voice or sound which suggested a human presence, when no one was there?*

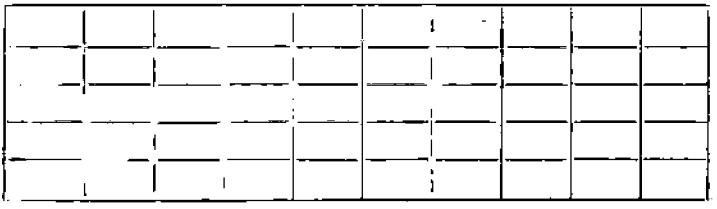


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VII. *Have you, within the past twelve years but not within the past three years, when in good health, and completely awake, had a distinct impression of seeing or being touched by a human being, or of hearing a voice or sound which suggested a human presence, when no one was there?*



VIII. *Have you, at any time during your life but not within the past twelve years, when in good health, and completely awake, had a distinct impression of seeing or being touched by a human being, or of hearing a voice or sound which suggested a human presence, when no one was there?*



Name of Collector:

Address of Collector:

Names and addresses of any persons who reply in the affirmative:

CONSTITUTION.

Article I. — Name and Objects.

Section 1. This Association shall be called the American Society for Psychical Research.

Sect. 2. The object of the Society shall be the systematic study of the laws of mental action.

Article II. — Government.

Section 1. At the first meeting of the Society a Council shall be chosen, consisting of twenty-one members, — seven to hold office for one year, seven for two years, and seven for three years; and thereafter seven shall be chosen by the members at each annual meeting, to serve for three years.

Sect. 2. The Council shall elect, each year, at its first meeting after the annual meeting of the Society, the following officers of the Society: a President, a Secretary, and a Treasurer, who shall discharge the duties usually assigned to these respective officers. The Council shall elect as many Vice-Presidents as shall be deemed advisable.

Sect. 3. The Council shall exercise general supervision of the investigations of the Society, and shall appoint the investigating committees.

Sect. 4. Vacancies in the Council, caused by death or resignation, shall be filled by the Council.

Sect. 5. The President shall be a member of the Council.

Article III. — Members and Associates.

Section 1. Any person of respectable character and attainments is eligible to the Society as an associate. Associates shall receive all the publications of the Society, may participate in all the meetings, present communications, and join in the debates.

Sect. 2. Members, not exceeding one hundred and fifty in number, may be elected by the Council from the body of associates. Members have all the privileges of associates, are entitled to vote, and are eligible to the Council.

Sect. 3. Associates may be elected either by the Council or by the Executive Committee of any branch, after nomination in writing by two members or associates.

Sect. 4. Each member and associate shall pay to the Treasurer an annual assessment of three dollars. The name of any member or associate two years in arrears for annual assessments shall be erased from the list of the Society; and no such person shall be restored until he has paid his arrearages or has been reëlected.

Sect. 5. Any member or associate may be dropped from the rolls of the Society on recommendation of the Council and a two-thirds vote at any meeting of the Society, notice of such recommendation having been given at least two weeks previously.

Article IV. — Meetings.

Section 1. The Annual Meeting shall be held the second Tuesday in January.

Sect. 2. Other meetings may be held at the call of the Council.

Article V. — Quorum.

Ten members shall constitute a quorum of the Society, and five a quorum of the Council.

Article VI. — Accounts.

A committee of two shall be appointed at each annual meeting to audit the accounts of the Treasurer for the year closing with that meeting.

Article VII. — Similar Societies.

It shall be the policy of this Society, by correspondence and otherwise, to coöperate with societies of similar object elsewhere.

Article VIII. — Branch Societies.

Section 1. A Branch of the Society may be established in any place by the Council, on written application from not less than five members resident in that place.

Sect. 2. The members of the Society on whose application a Branch is established shall constitute an Executive Committee to arrange the affairs of that Branch. The Executive Committee shall have power to add to their numbers by the election of other members of the Society belonging to that branch. They shall also have power to choose from their own members officers of the Branch, to frame by-laws for its government, and to elect persons, resident in their immediate vicinity, as associates of the Society and members of the Branch.

Article IX. — By-Laws.

Section 1. By-Laws recommended by the Council may be adopted at any meeting by a majority vote.

Sect. 2. By-Laws may be rescinded or changed upon recommendation of the Council at any meeting by a majority vote.

Article X. — Amendments.

Amendments to the Constitution, recommended by the Council, may be adopted at any annual meeting by a vote of two-thirds of the members present.

PROCEEDINGS OF THE ENGLISH SOCIETY FOR PSYCHICAL RESEARCH.

Members and associates, on payment of their assessments, may have any Parts of the Proceedings of the English Society which are issued during the period of their membership. But the Proceedings will not be sent except to those who may so request. They may also purchase the back numbers of the Proceedings. Parts I.—VIII., 40 cents each; Part IX., 80 cents. Parts X. and XI. will be sent on application to members and associates who have paid the assessment for 1887. To associates elected during 1888 they will be sold, Part X., 60 cents; Part XI., 80 cents. Under no circumstances is a member or associate entitled to more than one copy of each part.

LIST OF

Members and Associates.

(DECEMBER, 1887.)

Vice-Presidents.

Professor HENRY P. BOWDITCH, M.D.,
Harvard Medical School.

Professor CHARLES S. MINOT,
Harvard Medical School.

Professor GEORGE S. FULLERTON,
University of Pennsylvania.

Professor EDWARD C. PICKERING,
Harvard College Observatory.

Council.

Dr. W. S. BIGELOW, Boston.
Prof. HENRY P. BOWDITCH, Boston.
Mr. C. B. CORY, Boston.
Prof. T. M. DROWN, Boston.
Prof. G. S. FULLERTON, Philadelphia.
Dr. E. G. GARDINER, Boston.
Mr. C. C. JACKSON, Boston.
Prof. WILLIAM JAMES, Cambridge.
Dr. JOSEPH JASTROW, Baltimore.
Prof. S. P. LANGLEY, Washington.
Prof. CHARLES S. MINOT, Boston
Prof. SIMON NEWCOMB, Washington.
Prof. E. C. PICKERING, Cambridge.
Mr. W. H. PICKERING, Cambridge.
Dr. MORTON PRINCE, Boston
Prof. JOSIAH ROYCE, Cambridge
Rev. M. J. SAVAGE, Boston
Mr. S. H. SCUDDER, Cambridge
Mr. COLEMAN SELLERS, Philadelphia
Mr. R. PEARSALL SMITH. Philadelphia
Prof. WILLIAM WATSON, Boston.

Treasurer.

Mr. C. C. JACKSON, - - 24 Congress Street, Boston.

Secretary and Asst.-Treasurer.

RICHARD HODGSON, - - 5 Boylston Place, Boston.

MEMBERS

Prof. Geo. F. Barker, 3909 Locust St., Phila.
Pres. F. A. P. Barnard, Columbia Coll., N.Y.
Dr. W. S. Bigelow, 50 Beacon St., Boston.
Dr. W. R. Birdsall, 144 East 74th St., N.Y.
Dr. Clarence J. Blake, 226 Marlborough St., Boston.
Francis Blake, Keewaydin, Weston, Mass.
Prof. H. P. Bowditch, Harv. Med. Sch., Boston.
Rev. Phillips Brooks, 233 Clarendon St., Boston.
Dr. W. N. Bullard, 89 Marlborough St., Boston.
Edward Burgess, Soc. Nat. Hist., Boston.
Lucien Carr, 344 Beacon St., Boston.
Prof. Edward D. Cope, 2102 Pine St., Phila.
C. B. Cory, 8 Arlington St., Boston.
Dr. E. Cowles, McLean Asylum, Somerville, Mass.
Chas. R. Crane, 297 S. Ashland Avenue, Chicago.
Prof. W. O. Crosby, Soc. Nat. Hist., Boston.
Prof. C. R. Cross, Inst. of Tech., Boston.
Prof. John G. Curtis, 127 East 35th St., N.Y.
Thomas Davidson, Orange, N.J.
Dr F. X. Dercum, 630 North 8th St., Phila.
George Dimmock, 61 Sacramento St., Cambridge, Mass.
Prof. T. M. Drown, Inst. of Tech., Boston.
Prof. William B. Dwight, Poughkeepsie, Vassar College, N.Y.
Dr. Robert T. Eden, 1216 Eighteenth St., Washington, D.C.
G. F. Emmons, U.S. Geol. Survey, Box 591, Washington, D.C.
Prof. C. C. Everett, 53 Garden St., Cambridge, Mass.
Dr. W. Everett, Adams Academy, Quincy, Mass.
Mrs. C. L. Franklin, Baltimore, Md.
Dr. Persifor Frazer, 201 South 5th St., Phila.
Prof. George S. Fullerton, Univ. of Penn., Phila.
Thomas Gaffield, 54 Allen St., Boston.
Dr. Edward G. Gardiner, 289 Marlborough St., Boston.
Dr. F. H. Gerrish, Portland, Me.
G. K. Gilbert, Washington, D.C.
Prof. Asa Gray, Cambridge, Mass.
Albert Hale, 18 Boylston Place, Boston.
George S. Hale, 10 Tremont St., Boston.
Dr. E. H. Hall, 5 Avon St., Cambridge, Mass.
Prof. James Hall, Albany, N.Y.
Judge Wm. D. Halsey, Savannah, Ga.
William T. Harris, LL.D., Concord, Mass.
John Heard, Jr., Glenwood, Mass.
Angelo Heilprin, Acad. of Nat. Sci., Phila.
Col. T. W. Higginson, Cambridge, Mass.
E. B. Hill, 59 Wall St., N.Y.
Richard Hodgson, LL.D., 5 Boylston Place, Boston.
Dr. J. B. Holder, Amer. Mus. Nat. Hist., Central Park, New York.
Henry Holt, 29 W. 23d St., New York.
Gardiner G. Hubbard, Washington, D.C
Prof. Alpheus Hyatt, Soc. of Nat. Hist., Boston.
C. C. Jackson, 131 Commonwealth Avenue, Boston.
Prof. William James, Cambridge, Mass.
Dr. Joseph Jastrow, Johns Hopkins Univ., Baltimore, Md.
Prof. H Jayne, 1826 Chestnut St., Phila.
J. H. Kidder, Smithsonian Inst., Washington.
Prof. S. P. Langley, Smithsonian Inst., Washington.
Prof. D. G. Lyon, Cambridge, Mass.
J. B. Marcou, Cosmos Club, Washington.
Prof. John P. Marshall, College Hill, Mass.
W. J. McGee, U.S. Geol. Survey, Washington.
Josiah B. Millet, 150 Charles St., Boston.
C. K. Mills, 1900 Chestnut St., Phila.
Prof. Charles Sedgwick Minot, 22 Marlborough, St., Boston.
Prof. Simon Newcomb, Washington, D.C.
Dr. James R. Nichols, Haverhill, Mass.
Gen. F. A. Osborn, 236 Marlborough St., Boston.
Prof. A. S. Packard, Providence, R.I.
Dr. F. W. Page, Hotel Cluny, Boylston St., Boston.
Prof. G. H. Palmer, Cambridge, Mass.
Wm. L. Parker, 339 Marlborough St., Boston.
Francis Parkman, 50 Chestnut St., Boston.
Prof. B O. Peirce, P.O. Box 74, Waverley, Mass.
Prof. J. M. Peirce, Cambridge, Mass.
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PROCEEDINGS

OF THE

American Society for Psychical Research.

VOL. I. *MARCH, 1889.* No. 4.

MEETINGS OF THE SOCIETY.

BOSTON, Nov. 29, 1887.

Eighth meeting of the Society.

Two hundred and fifty persons present. Professor C. S. Minot in the chair.

Record of the previous meeting (May 12, 1887) read and approved.

List of persons elected Associates by the Council since the previous meeting of the Society was read.

The Chairman drew attention to the various circulars which had been issued by the Society since the previous meeting, pointing out that funds were urgently needed for the continuance of the investigation, and that the active personal assistance of members was required to secure large returns to the circulars of questions issued.

Professor H. P. Bowditch read the report of the Committee on Thought-Transference.[1]

Professor Minot then vacated the chair in favor of Professor Bowditch, and read the report of the Committee on Experimental Psychology,[1] after the reading of which he resumed the chair.

Professor Royce read the report of the Committee on Apparitions and Haunted Houses.[1]

In the absence of Mr. C. B. Cory, Chairman of the Committee on Hypnotism, his report on Hypnotic Phenomena[1] was read by the Secretary.

Dr. W. N. Bullard read the report of the Committee on Mediumistic Phenomena.[1]

The meeting then adjourned.

RICHARD HODGSON, *Secretary.*

[1] See Proceedings, No. 3.

BOSTON, Jan. 10, 1888.

Ninth meeting (annual) of the Society.

Two hundred and fifty persons present. Professor H. P. Bowditch in the chair.

Record of the previous meeting (Nov. 29, 1887) read and approved.

List of persons elected Associates by the Council since the previous meeting of the Society was read.

In the absence of the Treasurer, the Chairman called upon the Assistant Treasurer to make an informal statement as to the financial position of the Society.

Mr. W. L. Parker and Dr. J. W. Warren were appointed auditors of the financial statement to be made by the Treasurer.

The following were elected to the Council, to hold office till 1891: —

Dr. W. S. BIGELOW,	Prof. W. JAMES,
Mr. C. B. CORY,	Prof. S. P. LANGLEY,
Prof. G. S. FULLERTON,	Prof. E. C. PICKERING,

Mr. R. PEARSALL SMITH.

Professor C. S. Minot read the report on the diagram returns received by the Committee on Experimental Psychology.

Professor Royce read the report on the narratives received by the Committee on Phantasms and Presentiments.

Professor James reported on some cases of "Automatic Writing."

The meeting then adjourned.

RICHARD HODGSON, *Secretary.*

REMARKS ON MR. PEIRCE'S REJOINDER.

BY EDMUND GURNEY.

I WILL endeavor to make the present reply as short as possible, my object being, not so much to make controversial points, as to ensure, as far as possible, that Mr. Peirce's treatment of the evidence and argument for telepathy shall not prevent his readers from studying them at length and at first-hand. Consequently I shall say little or nothing on matters where I believe that an impartial study of what has been said in "Phantasms of the Living," or in my previous reply, obviates the necessity of further explanation and defence, nor shall I attempt to put what I have to say in connected literary form. It will be enough to state the points which need stating, one after another, with references to the pages in Mr. Peirce's last paper.

Mr. Peirce's treatment of the question of general probabilities (p. 182) seems to me completely fallacious. My argument was, that a particular series of events, of the sort known as coincidences, could not, according to the doctrine of probabilities, be due to chance. My calculation made out the degree of probability against chance, as the cause of these coincidences, to be enormous; and Mr. Peirce objected to my figures, on the ground that in mundane affairs probabilities never really ran so high. I accordingly gave a simple practical instance where they ran higher, — an instance yielding a probability of almost incalculable magnitude that a particular series of events was not due to chance. The instance was that of a pair of dice turning up sixes a hundred times running, from which we should unhesitatingly conclude that the dice were loaded. Here was a case of an enormous *à posteriori* probability against a chance causation, exactly parallel to my case of the coincidences. Mr. Peirce, not being able to directly deny the legitimacy of the illustration, confuses the question by introducing a case of *à priori* probability, totally irrelevant to the matter in hand. He supposes the throw of a single die, which we should ordinarily regard as certain to turn up one or another of its faces, but in respect of which there is an appreciable possibility that it "may rest on its vertex, or fly up to heaven, or vanish altogether, or that, before it reaches the table, earth and heaven shall be annihilated." It would be easy, but it is unnecessary, to demur to this statement on its own account. The question is not of the appreciable possibility that *one* new and extraordinary event will occur at all; but of the appreciable possibility that a *series* of events, similar in character, but no one of them new or extraordinary, has occurred by chance. Mr. Peirce may hold, if he likes, that the probability, which plain men would describe as certainty, that his die will not accidentally fly up to heaven, rests on "assumptions," and "refers to an imaginary state of things;" it is enough for me that the probability which plain men would describe as certainty, that my dice did not accidentally turn up sixes a hundred times running, rests on no assumptions, and refers to the actually existing state of things. In what way, when estimating such a probability numerically in the analogous case of the coincidences, I can be held to "admit that the number has no real significance," I am at a loss to conceive.

As regards Mr. Peirce's remarks on p. 182, bottom, and p. 183, top, it seems enough to refer to my former reply, p. 176, bottom, and 177. I do not "suppose that hallucinations are experiences particularly well remembered" (p. 183), in the sense which Mr. Peirce implies. I hold them to be neither better nor worse remembered than other equally rare and striking experiences.

Mr. Peirce cannot, I think, have given much time or care to the subject of hallucinations, or he could not have put forward (p. 184), as the one type of "genuine hallucination," "the product of an overwrought brain, which is preceded by great depression, accompanied by faintness, and followed by an access of terror." Such hallucinations are very rare, and are no more "genuine" than numbers of others. (See "Phantasms of the Living," Chap XI., on "Transient Hallucinations of the Sane.")

So far from there being "no good reason for limiting the census-question to a period of twelve years" (p. 184), there were two very good reasons: (1) the imperfection of human memory, of which Mr. Peirce supplies an instance, since he describes a hallucination of his own, of thirty years ago, as having all but escaped his recollection; and (2) the fact that most of the best established coincidental cases, with which the non-coincidental cases had to be compared, fell within the assigned period.

The census inquiry was not limited, as Mr. Peirce represents, to hallucinations presenting persons really alive, but to hallucinations presenting persons who, as in the coincidental cases, were believed by the percipient to be alive; and so far from this involving a "fallacy," a fallacy would have been involved in reasoning conducted on any other basis.

The error in Mr. Peirce's argument at the top of p. 185 may be best shown by an illustration. Suppose I put an advertisement in the papers, asking persons who have had small-pox, though vaccinated in childhood, to communicate with me; and suppose my appeal to reach a circle of two hundred and fifty thousand people, strangers to me, of whom five take the trouble to write and tell me that they have had the experience in question. And suppose that I address inquiries on the same subject to the one thousand people most nearly connected with me and with my few intimate friends, and find that five out of the one thousand have been similarly affected. Mr. Peirce would apparently conclude that the one thousand form a class two hundred and fifty times as "fertile" in cases of small-pox as the general population. Most other people, I fancy, would conclude that only a very small proportion of the newspaper-readers who had had the experience had answered my appeal. As regards my alleged *petitio principii* (p. 185), I can but refer once more to the sentences from the opening of Chap. XIII. of "Phantasms of the Living," quoted in my last paper, p. 176.

P. 186. Mr. Peirce says: "Persons who, from the percipient's stand-point, appear particularly likely to die, are, we find, particularly apt to appear in hallucinations." I suppose that this statement is founded on those cases in "Phantasms of the Living"—an extremely

small proportion of the whole number — where the so-called "agent" was known by the percipient to be seriously ill. But even if such hallucinations were numerous enough to justify Mr. Peirce's assertion, at least two strong objections may be urged to his conclusion, that they must have been due to the percipient's knowledge of the illness.

(1.) By what right does he assume the correctness of the evidence for the fact and the circumstances of the hallucination, in these particular cases, while disputing it in the far more numerous cases where the "agent" was supposed by the percipient to be in normal health? The evidence must surely be judged, throughout, on its own account, and not be picked to suit a particular hypothesis. And of two rival hypotheses, that which covers all the facts, as telepathy does here, is naturally to be preferred to one which only covers a small, arbitrarily-selected group of the facts.

(2.) How does he account for the close correspondence, in time, of the hallucination with the death, in the cases — of which the small class in question chiefly consist — where the more or less serious condition of the "agent's" health had been equally well known to the percipient for weeks, and even months, before?

Mr. Peirce's next sentence (p. 186) reproduces his gratuitous and erroneous view of "genuine hallucinations," already sufficiently noticed (p. 288). The "peculiar terror" is an extremely rare concomitant.

To the two pages 187–9 ("In the discussion of each story" — "destructive of sound judgment") I can give no better reply than is already given in the "General Criticism of the Evidence" ("Phantasms of the Living," Vol. I., Chap. IV., pp. 161–72). I hope that Mr. Peirce's readers will consult that chapter before accepting his sweeping statement that telepathy is opposed to "some of the fundamental elements of the general conception of nature," and to "the main principles of science."[1] Even less defensible is the view, by which much of the remainder of his case is vitiated, that it is sufficient to suggest "an explanation for each story more probable than the telepathic explanation." This, of course, entirely ignores the quintessential point of the telepathic argument — the *cumulation* of similar instances. A single illustration — that of the dice — will again serve. If the dice turn up sixes once, by far the most probable explanation is, that they did so by chance, and no sane person will conclude that they are loaded; but if they turn up sixes a hundred times running, no sane person will conclude anything else.

[1] As to the alleged *rarity* of telepathic effects "we must not be too positive that the telepathic action is confined to the well-marked or extensive instances on which the *proof* of it has to depend." (See "Phantasms of the Living," Vol. I., p. 97.)

P. 189. I have never admitted that I had "the bias of an advocate;" what I admitted was some slight (very slight) justification for Mr. Peirce, if he chose to regard me as an advocate. I approached the subject quite as sceptically as he did; and to this day I agree with him in professing "a legitimate and well-founded prejudice against the supernatural."

A little lower, Mr. Peirce's bare assertion that one of his old objections is "logically sound" is less persuasive than would be some reply to the passage (pp. 158–9) in which I have proved it, as I conceive, to be the reverse. But, as he withdraws the objection, I need say no more about it.

Mr. Peirce has certainly not added to the force of his third objection. The hallucinations in the coincidental cases of the class under debate were recognized as representing particular persons. It is of hallucinations of this class, and of no other, that account has to be taken in estimating the comparative frequency of non-coincidental cases. Whether a recorded hallucination was of the "recognized" class was one of the details as to which inquiry was made after the more general census question had been answered in the affirmative. (See "Phantasms of the Living," Vol. II., p. 7, note.) Mr. Peirce's argument here is curiously suicidal; for, even if it were the case that persons who have had occasional impressions of a quite different kind were "abnormally subject" to this particular type of hallucination, they would be more, and not less, likely than other people to recall instances, which is just what not one of the percipients in the cases to which Mr. Peirce objects has been able to do.

P. 190. Objection 6. In his first comment Mr. Peirce seems to have missed my point. Once more let me repeat, what had to be done was to make a numerical comparison of certain coincidental hallucinations with non-coincidental cases similar in kind. For a non-coincidental case to be included in the statistics used it would be sufficient that the percipient *believed himself* to be awake at the time of his experience. I should not have been justified in rejecting a case merely because I had not conclusive proof that he *was* awake; and the coincidental cases had, of course, to be treated on the same principle. I may add that the belief in question is itself a very strong proof of its own truth, since it very rarely happens that after waking from a dream we continue to believe that it was a piece of real waking experience. To Mr. Peirce's second comment I can allow no weight. There is absolutely nothing in the fact of the coincidence to lead the percipient to conclude that he had been awake rather than asleep at the time of his experience. Rather is the tendency of percipients, shown in several cases, to persuade themselves, as time goes on, that what was

clearly recognized at the moment as a rare thing, viz., a waking hallucination, had been no more than a common thing, viz., a vivid dream, likely to be increased by the fact of the coincidence; which is clearly easier to explain by the natural hypothesis of accident, if the percipient's experience belonged to a *common* class, than if it belonged to a *rare* class.

Objection 12. "The percipient may have been intoxicated," etc. So equally may the subjects of the non-coincidental cases have been. So equally, of course, were they not.

Objection 15. A. "He may be lying." The improbability of cumulative and concordant lying is ignored, like the whole of the cumulative argument. B. The hallucinations have in most cases been quite unlike "ordinary indistinct vision," or "dreams." They have been clear and definite. C. The memory of the hallucination has located it definitely in time and space, which entirely differentiates the cases from the common vague impression of having been in the same situation before.

Objection 16. I have nothing to add to the concluding sections of Chap. IV. of "Phantasms," already referred to. I will just repeat that "it is very important to avoid confounding the natural growths on the margin (so to speak) of a telepathic record with the vital point at its centre; or concluding that the latter is as likely to be unconsciously invented as the former."

Objection 17. I must maintain that the clearly-stated, unadorned, and corroborated piece of evidence which Mr. Peirce condemns as "meagre," differs completely from the narratives which one "may hear in an endless flood," by frequenting the company of marvel-mongers, or even in ordinary society, where unscientific credulity is often the prevailing temper. Whether or not such a piece of evidence "*must*" go for nothing, it certainly *will* not go for nothing, in the eyes of any impartial reader, in whose eyes I am not thoroughly incompetent for my work.

Case 26. I have nothing to add to my remarks on pp. 164–5. I, of course, "use the case as a premise from which to draw a conclusion" of the high degree of probability which has so offended Mr. Peirce, just as I should use each of the hundred throws of sixes to support a similar highly probable conclusion that the dice were loaded.

Case 27. I dissent from Mr. Peirce's remarks, but am quite content to leave the question to the reader; merely protesting against the monstrous assumption "that the probability that this decedent would be represented in any hallucination that the percipient might have at this time was four-fifths." A little study of the subject of hallucinations would have taught Mr. Peirce that the hallucination was every

bit as likely to represent the percipient's wife, or a servant in the house; and far more likely to represent one or another member of this daily-seen class.

Case 28. Again dissenting from Mr. Peirce's treatment, I am quite content to let the reader form his own opinion. It is amusing, by the way, to find Mr. Peirce driven by the momentum of his argument into eulogizing the judgment and observation of one witness, of whom all that appears is — that he believed in telepathic communications on insufficient evidence! Mr. Peirce concludes his comment with a similar monstrous assumption to that noticed in the last case.

Case 29. The percipient's testimony as to his health is this: "I never felt better in my life; there was nothing in the least amiss with me." In the original account he says that while peering forward, for a special purpose, he "slightly stumbled on a hassock of grass, and looked at my feet for a moment only." On the strength of this sentence Mr. Peirce describes the man as "stumbling about the churchyard," — a very characteristic piece of misrepresentation, small in appearance, but eminently calculated to prejudice the reader. He proceeds to adduce as a suspicious circumstance that, "when the percipient got home, he half thought what he had seen must have been his fancy." I go further, for I have hardly a doubt that it was "his fancy,"— in other words, that what he saw was a hallucination. How does that affect the improbability that this fancy, and others of the same sort, would, by chance, closely coincide with the death of the person represented? A little further on, the "monstrous assumption" — as to the probability that this particular person would be the object of the hallucination — duly reappears; partly based in this instance on another — "as the news of the death reached the town the next morning, it is fair to assume that the gardener was aware of the illness of the decedent." This is a specimen of the assumptions which Mr. Peirce regards as "fair." The contrary of what he supposes seems sufficiently implied in the account; but the evidence is certainly improved by the following explicit statement: "I had no knowledge that Mrs. de F. was ill, and was not even aware that she was away from Hinxton. Alfred Bard."

Mr. Peirce says, "If we had a better acquaintance with the witness than is conveyed by the vicar's banal certificate to the man's character." The vicar's certificate may be "banal," but it is at any rate explicit and based on thorough knowledge. But "we" *have* "a better acquaintance," in so far as first-hand acquaintance is better than second-hand; for Mr. Myers and Mr. Hodgson[1] have seen and carefully examined the witness.

[1] Mr. Bard was interviewed, I think in the summer of 1885, by Mr. Myers and myself, and we questioned him closely concerning his experience. R. H.

P. 197, top. Referring to a remark of mine on p. 170, line 8, I much regret the misprint, whereby a repetition of the last five letters of the word *through* has produced an interpolation of the adjective "rough" before "inadvertence." When I found, too late, that I had overlooked this word in the proof, I hoped that (apart from manners) its fatuity in point of style would suggest the nature of the error; but most authors have had occasion to mourn the baselessness of such hopes.[1]

Case 172. I dissent from Mr. Peirce's objections, and I, on my side, should be glad to know, (1) why he calls an apparition seen with the eyes open, and after the percipient had started up in bed and looked round, a dream; (2) how he would support his assertion that it was "practically certain that the dream would relate to the decedent," which implies, of course, that the witness could not dream of any human being except this particular friend during all the months of the friend's illness.

Case 173. Mr. Peirce's "explanation" involves, besides several assumptions, the conjunction of at least two improbabilities, — the production of a vivid dream by the mention of a name outside the cabin, and the continuance, in waking hours, of the belief that the dream had been a piece of waking experience.

Case 174. Beyond noting once more the monstrous assumption of "an antecedent probability of nine-tenths" that the person who appeared would be the object of any hallucination which the percipient might have at the time, I need only refer to my former remarks, pp. 160–1, 174–5.

Case 175. I willingly leave to the reader the decision as to whether Mr. Peirce is justified in dismissing as a dream an experience of which the percipient uses such expressions as these: "I thought I saw him there after dreaming. I arose and rested on my right elbow, looking at him in the dusky light. I am sure that as the figure disappeared I was as wide awake as now." The percipient's former purely subjective dream-experiences, which he expressly distinguishes from the present case, were, as I rightly say, "not hallucinations at all in the sense in which I throughout employ the word." Mr. Peirce's assertion that they were "hallucinations, according to the definition of the census-question," is quite without foundation; for the census-question related expressly to waking experiences.

Case 182, with the corroboration of the percipient's cousin, given in my last paper, reduces Mr. Peirce to rather desperate straits; and as the "wonderful hypnotoid sensitiveness," leading up, weeks

[1] I may note here another misprint, which occurs on p. 176, line 27. The "case which happened a few months earlier" than case 199 is No. 500.

afterwards, to an accurately-timed hallucination, is in my view as groundless an assumption as the "important suppression or falsification of the testimony," I must continue to think the case a very strong one. Our old friend, the "monstrous assumption," reappears, in a particularly monstrous form, in the supposition that the antecedent probability that the hallucinations would relate to the decedent was one-half.

Case 184. In saying that the words "a vivid impression of seeing a human being" define what we have to understand by a hallucination, for the purposes of the present argument, Mr. Peirce has made a serious error. He does not seem to have observed — what is stated in "Phantasms of the Living," Vol. II., p. 7— that the details of the hallucinations mentioned in answer to the original census-question were "a matter of subsequent inquiry." One of these details, as I have said, was whether the figure seen (or the voice heard) was recognized as that of a person known to the percipient. And I must, it seems, once more point out the obvious fact that the only hallucinations which could properly be included in my estimate are those of the same character as the coincidental group which I present as properly telepathic, — *i.e.*, they must be of the "recognized" class. It is worth noting that had I made the mistake which Mr. Peirce, it seems, would defend, of including *unrecognized* non-coincidental hallucinations in the reckoning, his own "monstrous assumption" of an immensely high probability, sometimes even of certainty, that any hallucination that befell the percipient in the coincidental cases would represent the person whom it did represent, would become more monstrous still, since it is only a minority of visual hallucinations that represent recognized figures at all.

Mr. Peirce's proof that the hallucination was determined by a state of anxiety on the part of the percipient is surely not one that he can reflect on with much satisfaction. He says: "The decedent was a child of his [the percipient's], five years old, who had been removed from his parents, and from Paris to London, on account of an outburst of small-pox." He omits to add that the removal took place in December, while the apparition did not take place till the 24th of January, and that in the course of the month's interval several letters had been received giving an excellent account of the little boy's health. More than this: the hallucination, which conveyed the impression of a happy laughing child, left the percipient saying to himself, "Thank God, little Isidore is happy as always;" and he describes the ensuing day as one of peculiar brightness and cheerfulness. The assumption that it was "antecedently practically certain that any hallucination at that time would relate to the decedent" is a robust specimen of its class.

Case 195. As to the supposed anxiety, I may simply refer to the remarks in my former paper, on p. 161. Mr. Peirce's point, that the percipient "ought to know her own imagination better than Mr. Gurney can do," has no force; for she has had no other hallucination, and therefore has no claim (such as some abnormally vivid visualizers might have) to speak with authority on the power of her imagination to conjure up fictitious sensory experiences. But of course the attribution of a sensory hallucination to "a strong imagination" would be a very natural and defensible hypothesis, even for a coincidental case, if the case stood alone; it is the ACCUMULATION of coincidental cases, of which the percipients themselves knew nothing, that justifies us in rejecting the hypothesis of a purely subjective origin for all of them. The matter is one of statistics, where the *collector* is an authority, and the *contributor*, as such, is none at all.

Case 197. I have here to admit a piece of inadvertence. When giving the additional evidence under head 16 (pp. 172–3), I did not recollect that it affected my remarks under head 8 (p. 165). The retention of those remarks is, however, of no importance, for in my summary (p. 175) I say, "As regards closeness of coincidence, the recent information as to case 197, though improving the quality of the evidence, removes it from this particular death-list."

Mr. Peirce's paragraph (p. 203), beginning "Mr. Gurney admits the coincidence of time is not proved to be within twelve hours," shows a curious misunderstanding of my meaning. I never dreamt of taking advantage of the fact that the twelve hours' limit was arbitrary, to include in a particular estimate, based on a twelve hours' limit, cases where that limit was known to have been exceeded, and I should not have thought that my remarks on page 165 could have been so interpreted. For the purpose of the estimate, the inclusion, with "due warning," of "two or three cases" where the chances are about even that the twelve hours' limit *was* or was *not* slightly exceeded, seems the more defensible in view of the large number of included cases where the coincidence was *much closer* than the said limit.

Mr. Peirce is so fond of assuming it as a certainty that the person actually represented would be the object of any hallucination that the percipient might have at the time, that we ought to be grateful for the probability of nine-tenths that he substitutes in this case, and which is, perhaps, not more than fifty times too large.

Lastly, unless Mr. Peirce could show how the words, "the coincidence cannot have been as close as Mrs. Bishop imagines," implied that Mrs. Bishop had imagined it to have been exact, he should not have labelled my perfectly true statement as a "mistake," in order to father his own upon it.

Case 199. I cannot conceive what Mr. Peirce finds *independent* of the vision to mark the day of the week on which the vision fell. The words which he quotes relate to the vision, and to nothing else.

His remark about changing the limit to thirteen years, "for the sake of including a known instance," is quite wide of the mark. Any limit of years that was selected would have included a certain number of "known instances;" and what is there "unwarrantable" in my true statement, that, had thirteen years been selected instead of twelve, "the numerical argument would not have suffered appreciably, if at all"?

Case 201. I willingly leave the case to the reader, merely drawing attention to the misleading brevity of Mr. Peirce's assertion that the percipient "suspected she might have been asleep." Her words, which he compels me to re-quote, are, "I tested myself as to whether I had been sleeping, seeing that it was ten minutes since I lay down. I said to myself what I thought I had read, began my chapter [of Kingsley's *Miscellanies*] again, and in ten minutes I had reached the same point."

Mr. Peirce says, "Mr. Gurney gives up the case, and I am not inclined to give it any weight." I concede its omission from this particular calculation, owing to the uncertainty as to the degree of closeness of the coincidence, but I continue to give it great weight.

On case 202 I have nothing to add.

Case 214. I do not understand Mr. Peirce's probability of one in one hundred, but suppose that he means it as the probability that the story of the hallucination is untrue. I do not consider his suspicions well grounded, the account of the shock, and its sequel, having every appearance of truth. If the hallucination took place, its date, owing to the consequences, would be specially well marked, and the odds against the coincidence would be enormous.

My estimate of Case 231 differs considerably from that of Mr. Peirce, who, I think the reader will agree, overshoots his mark in making it count for *less than nothing*. But, owing to the uncertainty as to twelve hours' limit, I have conceded its omission from this particular list.

Case 236. I have nothing to add beyond noting that the assumption of the antecedent probability that the hallucination would refer to the decedent as *nineteen-twentieths* is perhaps Mr. Peirce's masterpiece in that line. Even if we neglect the facts of hallucination in general (as, for instance, their tendency to take the form of "after images," and to represent objects which the percipient is in the daily habit of seeing), the above exemption would at least imply — what there is not a syllable in the account to suggest — an utterly abnormal

absorption of the percipient's mind by the thought of one particular relative.

Case 237. Mr. Peirce thinks it "important" that the mother of the percipient "thought she might have been dreaming." The mother does not say so in her own evidence, and all that her daughter says is, that she "was greatly amused at my scare, suggesting I had read too much or been dreaming." If Mr. Peirce ever has a waking hallucination while he is reading, and at once mentions it to some one in the room, I would wager a good deal that the same comment will be made; and if he is good enough to send me an account of the occurrence, I engage not to think the objection "important," even though the objector, like the mother in the case before us, should "continue to disbelieve in ghosts." If I were the "advocate" that Mr. Peirce considers me, I should certainly rely on his treatment of this case to do more for me with the jury than the best of my arguments.

Case 238. "I assume it as antecedently certain," we read, "that the hallucination would refer to her husband, whom she seems to have loved. This is the assumption the most favorable to telepathy, since he was a well man." Mr. Peirce omits to tell us how he has learned that she did not love any other "well" man, woman, or child; and by what statistics he has ascertained that a person must be loved, in order to become the object of a hallucination.

Case 240. The signification which Mr. Peirce quite unwarrantably squeezes out of a pluperfect is contrary to the fact. There had been no "reconciliation" between the percipient and the dying man; nor was she aware, at the time, of her mother's visiting him. I must continue to characterize Mr. Peirce's assumption of a practical certainty that the hallucination would relate to the decedent, as monstrous.

Case 249. In connection with this case, I would refer the reader to the remarks on mistakes of identity, and their relation to the cumulative argument in "Phantasms of the Living," Vol. II., pp. 62–63. The percipient, it will be observed, had as little doubt as to who the person was whom he had seen as if the whole figure had been in view; in that sense the recognition was perfect, which is all that the argument requires. The "monstrous assumption" in this case (an antecedent probability of one-half that the hallucination would represent the decedent, on the ground of his being a neighbor, not known to be seriously ill) is a veritable Mammoth.

Case 298. With our knowledge of the witness's character, we find it impossible to doubt that the news of the man's illness and death reached her in the way described.

Case 300. As to the case itself I have nothing to add. I wholly

dissent, however, from Mr. Peirce's view that "the reality of ghosts is put beyond doubt at once," if sailors' yarns are believed; for the ghostly incidents in such yarns could almost always be explained on the hypothesis of purely subjective hallucination or illusion.

Case 350. I do not think that I endeavored to "make much" of Mr. Peirce's mistakes in relation to the facts of this case. Nor do I even complain of his hypothesis, except so far as the statement of it implies the erroneous view that a case has no legitimate place in a cumulative argument in favor of one explanation, merely because another explanation is conceivable. Personally, I think the hypothesis that the witnesses had a hallucination, decidedly more probable than Mr. Peirce's suggestion of the pendent skull; and I cannot help thinking that *had there been no coincident death*, and no telepathic theory to confute, he would have agreed with me. Yet it must be clear that, in estimating the relative probability of the two explanations (hallucination and skull), we have nothing whatever to do with the coincidence. We ought to forget it. And even if we remember it, it will, of course, tell for, and not against, the hypothesis of hallucination; since it brings in the chance (which Mr. Peirce would admit to exist, however infinitesimal he would consider it) that there was a hallucination of telepathic origin, in addition to the chance that there was a hallucination of purely subjective origin.

Case 695. As for the "meagreness" of the story, a clear statement of all the essential facts, given without a word suggestive of adornment or exaggeration, is not evidence which a disparaging epithet will much injure. The words "told at second-hand," though true, are misleading. I have explained ("Phantasms of the Living," Vol. I., pp. 148–9) that "the evidence of a person who has been informed of the experience of the percipient, while the latter was still unaware of the corresponding event," is quite on a par with the percipient's own evidence; indeed, in some ways it is even preferable. And it is, of course, at its best when, as in this case, the information has led the witness at once to make a written note of the date, which leaves absolutely no doubt as to the coincidence. Mr. Peirce's hypothesis of anxiety, which Mrs. Teale "concealed in order not to alarm her husband," is quite gratuitous. Her husband says that she was not anxious, and not given to brooding, and the last news of her son had been reassuring. The "monstrous assumption" — of an antecedent certainty that the hallucination would relate to the son — reappears in due form.

Case 697. Mr. Peirce having surmised that the percipient had heard of the death during the day, I stated that the surmise was incorrect, as most readers of the account would perceive. He urbanely replies

that *my* testimony "goes for nothing." I will not, however, do him the injustice of supposing that he really doubts my statement to have been made on authority, — that of our informant, Mr. B.

The assumption of a high antecedent probability (one-fourth) that the hallucination could relate to the decedent — a clerk in the office of the percipient's husband, whom she had only occasionally seen, and as to whom even her husband was "in no anxiety" — is in this case ludicrous as well as monstrous; for Mr. Peirce bases it on the fact that her husband, in telling her of the young man's death, used the hackneyed phrase "sad news," which, says Mr. Peirce, "shows that her pity had been excited"! He should really be a little more consistent in his view of the emotions which beget hallucinations. A little time ago it was *conjugal love*. A woman loved her husband, and this made it certain that any hallucination of hers could represent no one but him. But now the degree of *pity* which is implied in the fact that somebody who tells one of the death of an acquaintance calls the news "sad," is found to have immense power in the same direction. And hence a dilemma: for Mr. Peirce must assume either that the loving percipient had not this degree of pity for any human being, or that the pitying percipient did not love her husband.

Case 702. "In his original account the percipient has the year wrong." This is Mr. Peirce's version of the fact that, writing in May, 1886, without referring to documents, the witness describes an event which had really occurred three years and eleven months before as having occurred "some three years since." I have explained that the percipient's mistake as to the *date* of the coincidence has no importance, since it has no relation to his evidence as to the *fact* of the coincidence. When he handed me the longer account (giving the date of the death, which proved to have coincided with his vision on June 15) he said that he was trusting to memory for the date, but that he believed he could hunt up the letter which contained it. He did so the same evening, with the result which it pleases Mr. Peirce to describe as "cooking" the story. The date, June 15, actually occurs in the portion of the letter quoted, where it is given as the day of the *funeral*, the *death* being simply stated to have occurred "on St. Barnabas' day" (June 11). Thus the mistake was not only unimportant, but extremely natural.

As to the case in Vol. I., p. 130 [misprinted 230 in Mr. Peirce's rejoinder], note, though precluded from giving it in detail, I regard it as of great value. The difference between it and fully reported cases is merely that, in respect of it, the reader is more dependent on the judgment of those who present the evidence. I have said that the narrative was of the ordinary type and unsensational in character;

and that the witness was not biassed by a credulous love of marvels appears from her remark that, though "confident of having seen the vision [of an old school-friend who died on that day at a distance], her common-sense makes her "wish to put it down to imagination."

Mr. Peirce's concluding remarks, where he repeats his heroic hypothesis as to the "millions" whom our appeal for evidence has tapped, call for no special reply. What I have to say on the important point of the value that may be attached to "unscientific observations" is said at length in "Phantasms of the Living," Vol. I., Chap. IV.

POSTSCRIPT TO MR. GURNEY'S REPLY TO PROFESSOR PEIRCE.

BY FREDERIC W. H. MYERS.

Mr. Gurney did not live to give his final revision to the above paper; and in the course of correcting the proofs an inaccuracy in his earlier "Remarks on Prof. Peirce's paper" has been observed by us, which, so far as it goes, tells in his own favor. I shall, therefore, correct it here, as my only addendum to this his latest word of controversy. I see, indeed, several arguments by which his chain of reasoning — strong as that seems to me already — might be reinforced. But I cannot say with certainty how far he would have pressed any of these arguments himself. And, on the other hand, I am absolutely sure that he would never knowingly have allowed a single sentence to stand which overstated his own case in the smallest particular.

In Proceedings, p. 161, first paragraph, Mr. Gurney states that, in his census of hallucinations, questions as to the person's bodily or mental state at the time of the experience were kept separate from the question as to the fact of the experience. This is entirely true of the *mental*, but only partially of the *bodily*, state. For the question on the census-paper was, "Have you ever, when in good health and completely awake, had a vivid impression of seeing, or being touched by, a human being, or of hearing a voice or sound which suggested a human presence, when no one was there?" Inquiries as to date, recognition, anxiety, as well as further inquiries as to health, were made subsequently. Thus, Mr. Gurney was the sole judge as to what degree of *anxiety* should exclude a case from the census; but the percipients themselves were, in the first instance, the judges as to what degree of *ill-health* should exclude a case from the census; and, consequently, Professor Peirce's objection to the inclusion in the group of evidential cases of certain cases where he thinks there was *anxiety* falls to the ground; his objection to the inclusion of

cases where there was *ill-health* has logical validity. For, so far as the *anxiety* went, the same canon was applied by Mr. Gurney to both the groups which were compared together, the evidential group and the group of miscellaneous hallucinations; and the degree of anxiety which excluded a case from the one group excluded it also from the other. But, so far as the *ill-health* went, the respondents in the miscellaneous group might conceivably have answered "No" to the first question in the census-paper, if they had seen a hallucination when slightly unwell, and might then have judged themselves by a standard of health stricter than that used by Mr. Gurney in testing cases to be admitted into the evidential group. Cases 174 and 702 should, therefore, in strictness be dropped, — not, of course, from the evidence in general, but from this particular comparison between the two groups. And, in fact, Mr. Gurney admits this on pp. 174, 175. It is plain, therefore, that his erroneous statement on p. 161 was a mere slip of expression, due, no doubt, to the fact that, in actual practice, the appraisement of *ill-health* (as well as of anxiety), in the miscellaneous group, was mainly left by the respondents to Mr. Gurney himself. If the respondents had seen a hallucination at all they usually answered "Yes," whether they had been somewhat out of health at the time of seeing it or not. This we know partly from the testimony of those who collected the answers, and partly by the evidence on the face of the answers themselves. The error above pointed out, therefore, has probably had but very slight effect on the calculation; and, in any case, it is amply met by dropping cases 174 and 702 from the group used for comparison.

I may add that Mr. Gurney by no means considered that the information which he had obtained as to hallucinations, by his census and other methods, was enough. He always intended to take a further census before long. It is to be hoped that his example, in thus substituting the laborious but fruitful methods of statistics for the vague generalities current on this subject before him, may be followed in England and elsewhere; and, in any future census, it would probably be better to leave the percipient's state of *health*, as well as of *anxiety*, for subsequent inquiries, and to make the question first asked as short and simple as possible.

SECOND REPORT ON EXPERIMENTAL PSYCHOLOGY: — UPON THE DIAGRAM-TESTS.

During the past year a large number of postal cards were distributed, each bearing the printed request: "*Please draw ten diagrams on this card, without receiving any suggestion from any other person, and add your name and address.*"

The committee has received for examination 501 postal cards with diagrams upon them. A few of the cards had more than 10 diagrams upon them, and of such cards only the first 10 diagrams on each were counted. A few cards had less than 10 diagrams.

The cards were divided into 3 sets; 1, men; 2, women; 3, without names. Each set of cards was numbered, and the diagrams on each card numbered. The tabulation was then begun according to this scheme: —

Figure — Diamonds.

Men.		Women.		No name.	
Card.	Diagram.	Card.	Diagram.	Card.	Diagram.
16	3	6	9	2	2
20	1	8	3	6	1
27	8	10	1	8	10
etc.		etc.		etc.	
Diagrams, total no.	28		44		8

The cards and original tabulations have been preserved, and are in the charge of the Secretary of the Society.

The number of cards were for men, 310; for women, 169; no name, 22, total 501. The number of figures which have been tabulated is 83. The results are given in the following table, in which the figures have been arranged according to their relative frequency. The numbers in the first column refer to the original manuscript tabulations.

Table I.

		Women.	Men.	No name.	Total.
8	1 Circles	60	140	9	209
7	2 Squares	61	105	8	174
4	3 Equilateral triangles . . .	58	95	7	160
14	4 Crosses	53	103	4	160
25	5 Letters of the alphabet . .	52	30	0	82

TABLE I. — *Continued.*

			Women.	Men.	No name.	Total.
9	6	Diamonds	28	44	8	80
50	7	Oblongs, horizontal	27	50	1	78
53	8	Inscribed circles	22	56	0	78
12	9	Stars	28	46	3	77
1	10	Faces profile to the left	21	33	7	61
14	11	Houses	19	35	2	56
52	12	Rhombi	15	41	0	56
59	13	Scrawls	14	32	7	53
30	14	Other animals and heads	12	28	8	48
33	15	Flowers	28	11	7	46
34	16	Leaves	20	25	0	45
10	17	Hexagons	13	28	1	42
13	18	Cubes	17	24	1	42
5	19	Right-angled triangles ◺	9	27	0	36
48	20	Figures of men	6	21	5	32
60	21	Scrolls	16	16	0	32
80	22	Inscribed squares	14	18	0	32
21	23	Hearts	9	20	3	32
51	24	Oblongs, vertical	15	15	1	31
49	25	Squares with crosses	16	11	3	30
16	26	Octagons	13	13	2	28
3	27	Faces, not in profile	12	14	1	27
6	28	Right-angled triangles ◿	5	16	3	24
22	29	Moons	8	15	1	24
31	30	Hour-glasses ⧖	11	8	1	20
24	31	Card spots	6	12	1	19
44	32	Spirals	4	12	1	17
76	33	Pentagons	11	5	1	17
11	34	Flags	6	8	2	16
62	35	Digits	4	12	0	16
63	36	Right-angles	3	11	2	16
32	37	Arrows	5	9	1	15
36	38	Books	3	12	0	15
37	39	Ships	5	9	0	14
39	40	Trees	3	10	1	14
77	41	Tools	6	8	0	14
54	42	✠	4	8	1	13
57	43	Bottles	4	9	0	13
41	44	Boots	6	6	0	12
18	45	Mugs	3	6	1	10
26	46	Hands	6	4	0	10
20	47	Hats	5	4	0	9
23	48	Sun	2	5	2	9
27	49	Horses	2	7	0	9
29	50	Cats	3	4	2	9
40	51	Vases	4	5	0	9

TABLE I. — *Concluded.*

		Women.	Men.	No name.	Total.
43	52 Anchors	1	8	0	9
47	53 Apples	5	3	1	9
56	54 Eyes	2	6	1	9
2	55 Faces, profile to the right .	3	5	0	8
82	56 Steps	2	4	2	8
83	57 Dishes	6	2	0	8
38	58 Branches	2	5	0	7
84	59 Signs of music	5	2	0	7
17	60 Pitchers	2	4	0	6
19	61 Chairs	3	3	0	6
42	62 Keys	2	4	0	6
61	63 Skull, and skull and cross bones	0	6	0	6
81	64 Punctuation marks . . .	3	3	0	6
28	65 Dogs	2	2	1	5
64	66 Clocks and watches . . .	4	1	0	5
68	67 Architectural plans . . .	1	3	1	5
75	68 Engines	1	4	0	5
66	69 Kites	1	3	0	4
70	70 Graves	1	3	0	4
71	71 Feathers	2	2	0	4
72	72 Spoons	1	3	0	4
79	73 Musical instruments . . .	2	2	0	4
35	74 Arms	2	1	0	3
45	75 Pears	2	1	0	3
65	76 Wheels	2	1	0	3
69	77 Candlesticks	0	2	0	2
74	78 Forks	0	2	0	2
46	79 Pineapple	0	1	0	1
55	80 Ear	0	1	0	1
58	81 Corkscrew	0	1	0	1
67	82 Bells	1	0	0	1
73	83 Knives	0	1	0	1

This table shows that there is an enormous preponderance of a few figures, a great preponderance of some others, and a certain preponderance of still others. The very simplest geometrical figures rank first, as will be seen still more strikingly if some of the diagrams which are now classed separately are put together into larger groups, but which, of course, are natural ones. Thus: there are circles, both plain, 209; and with inscribed figures, 78; of squares plain, 174; with cross lines inscribed, 30; and with other figures inscribed, 32. Of triangles, equilateral, 160; right-angled turned to the right, 36;

right-angled turned to the left, 24. Other figures bounded by four straight lines; oblongs, horizontal, 78; vertical, 31; rhombi, 56; diamonds, 80. Geometrical figures bounded by a few straight lines; hexagons, 42; cubes, 42; octagons, 28; hour-glasses, 20; pentagons, 17.

Thus we have,

Circles	287
Squares	236
Triangles	220
Four-sided figures[1]	245
Other straight-sided figures[1]	149

making of these very simple figures 1,137, or over one-fifth of the total number. If we add to these, stars 77, flags 16, and arrows 15, the total rises to 1,245, or almost one-fourth (1,250) of the whole.

The following tables, II. and III., bring out still further the character of the drawings.

TABLE II.

FIGURES DRAWN WITH STRAIGHT LINES.

Lines.	Men.	Women.	No Name.	Totals.
1	16	5	0	21
2	78	41	2	121
3	260	138	16	414
4	378	190	28	596
5	110	64	11	185
6	189	93	9	241
7	41	25	6	72
more than seven (7)	715	243	36	694

TABLE III.

GEOMETRICAL FIGURES DRAWN WITH CURVED LINES.

Lines.	Men.	Women.	No Name.	Totals.
1	199	83	10	292
2	85	71	9	165
3	38	25	1	64
4	26	35	3	64
5	12	5	1	18
6	8	2	1	11
7	2	1	1	4
more than seven (7)	26	36	1	63

[1] Cf. Table II., also Table III.

Table II. shows that 2,344 diagrams were drawn exclusively with straight lines, and 1,337 diagrams with less than six straight lines. Table III. shows that 681 diagrams were drawn exclusively with simple curved lines, and that 603 diagrams were drawn with less than six such lines. To the significance of these tables we recur later.

Next to the circles, squares, triangles, and four-sided figures, come the faces; profiles facing to the left, 61; profiles to the right, 8; other faces 27; or 96 in all.

Then follow,

Letters of the alphabet	82
Houses	56
Irregular scrawls	53

If we look at Table I., we see that, as there classified, there are 25 diagrams which are found on the cards 30 or more times. These first 25 diagrams occur in all 1,772 times, or on the average 70.9 times each.

Of the diagrams which are more or less often repeated, an interesting minority represent natural and artificial familiar objects, as can be conveniently seen by the following: —

Table IV.

Animals, etc.		Plants.		Manufactured Objects.	
Men	32	Flowers	46	Houses	56
Hands	10	Leaves	45	Books	15
Horses	9	Trees	14	Ships	14
Cats	9	Apples	9	Tools	14
Dogs	5	Branches	7	Bottles	13
Ears	1	Pears	8	Boots	12
Arms	1	Pineapples	1	Mugs	10
				Hats	9
				Vases	9
				Anchors	9
				Steps	8
				Dishes	8
				Pitchers	6
				Chairs	6
				etc.	

Another group of diagrams may be classed as professional figures, such as surveyors' instruments, accurate pictures of engines, or parts thereof; bones, sections of the spinal cord; musical instruments, architectural plans, and of such many more. On the 501

cards we find 54 diagrams which belong unquestionably under this head, but they are from only 10 cards, and those all by men. On the other hand, among the women's cards there are 4 on which the 10 diagrams make a set; 2 of these cards have the first 10 letters of the alphabet; the third has 10 hearts arranged like the pips on a playing card, but inside each heart are 4 marks; the fourth card is a man drawn in separate pieces, — the first piece is his hat, the second his head, then his neck, two arms, body, two legs, and two boots.

TABLE V.

RELATIVE PREPONDERANCE OF DIAGRAMS.

	Women.	Men.		Men.	W'n.
Squares	61	105	Circles	140	60
Equilateral triangles	58	95	Circles inscribed	56	22
Letters	52	30	Rhombi	41	15
Diamonds	28	44	Scrawls	32	14
Stars	28	46	◺	27	9
Faces to left	21	33	Men	21	6
Houses	19	35	Hearts	20	9
Flowers	28	11	◿	16	5
Leaves	20	25	Spirals	12	4
Cubes	17	24	Digits	12	4
Scrolls	16	16	Right angles	11	3
Inscribed squares	14	18	Books	12	3
Oblongs	15	15	Trees	10	3
Squares with crosses	16	11			
Octagons	13	13			
Faces not in profile	12	14			
Hour-glasses	11	8			
Pentagons	11	5			
Flags	6	8			
Tools	6	8			
Boots	6	6			
Hands	6	4			

Further insight into the peculiarities of these diagrams is gained by comparing the women and men. This cannot be done as accurately as desirable, because in some of the cards the names are given with the initials only, and when the persons were not known to the committee the cards had to be assumed to be from women or men according to the character of the handwriting. There is, therefore, a certain amount of error. But, of course, this error tends only to

mask the differences between men and women, since some of the women are tabulated with the men, and *vice versa*. It will be remembered that the number of men, 310, is nearly double that of women, 169; hence if the preponderances were perfectly regular in each sex, the men's cards ought to show nearly twice as many of a given diagram as the women's; but this is by no means the case; on the contrary, as shown by Table V., women's repetitions greatly preponderate; yet there are curious exceptions, which cannot be considered accidental, — thus circles and right-angled triangles, under both the heads in which they appear, are on the men's side. On the other hand, that gentlemen preponderate with hearts, and ladies with hands, perhaps may seem to many a natural consequence of our social conditions. The general difference is, that there is much less variety among women than among men.

If the cards are examined, the great majority are found to have ten *different* diagrams upon them, the respondents apparently having assumed that the ten diagrams ought to be unlike one another. Hence it is evident that if we wish to measure the relative preponderance of the diagrams we shall reach the most accurate results by tabulating the number of cards on which the various diagrams occur, because most persons have thought that after they had drawn a given figure on their card they ought not to draw it again, and though it may have recurred to their mind and predominated there, they have not allowed — would not allow — their hand to put it on the card. In the following table the diagrams are arranged in order according to the number of cards on which they occur. The figures in the first column refer to the original manuscript tabulations of the committee.

TABLE VI.

No.	Diagram.	Men.	Women.	No Name.	Total.
8	Circles	135	60	7	202
7	Squares	100	60	8	168
4	Equilateral triangles	92	54	7	153
15	Crosses	80	40	4	124
9	Diamonds	44	27	8	79
50	Oblongs, horizontal	50	27	1	78
14	Stars	43	19	3	65
53	Circles with inscribed figures .	47	17	0	64
14	Houses	33	19	2	54
52	Rhombus	36	15	0	51
1	Profiles to left	28	16	3	47

TABLE VI. — *Continued.*

No.	Diagram.	Men.	Women.	No name.	Total.
10	Hexagons	28	12	1	41
13	Cubes	23	17	1	41
25	Letters of alphabet	20	20	0	40
30	Other animals and heads	22	12	5	39
34	Leaves	21	16	0	37
5	Right-angled triangle 	25	9	0	34
51	Oblongs, vertical	15	15	1	31
33	Flowers	10	17	3	30
49	Squares with crosses	11	15	3	29
60	Scrolls	16	13	0	29
16	Octagons	13	13	2	28
80	Squares with inscribed figures	15	11	0	26
21	Hearts	11	9	3	23
6	Right-angled triangles	15	5	3	23
59	Scrawls	16	4	2	22
22	Moons	13	7	1	21
48	Figures of men	15	4	2	21
31	Hour-glasses	8	11	1	20
3	Faces not in profile	10	7	1	18
76	Pentagons	5	11	1	17
44	Spirals	12	4	1	17
24	Card spots	12	4	1	17
11	Flags	8	6	2	16
63	Right angles	11	3	2	16
36	Books	12	3	0	15
32	Arrows	9	5	1	15
62		8	4	1	13
54	Bottles	8	4	0	12
62	Digits	8	4	0	12
39	Trees	9	3	0	12
37	Ships	8	3	0	11
41	Boots	6	5	0	11
18	Mugs	7	2	1	10
26	Hands	4	6	0	10
40	Vases	6	4	0	10
20	Hats	4	5	0	9
23	Sun	5	2	2	9
27	Horses and horses' heads	7	2	0	9
29	Cats and cats' heads	4	3	2	9
43	Anchors	8	1	0	9
47	Apples	3	5	1	9
56	Eyes	6	2	1	9
77	Tools	5	4	0	9
2	Profiles to right	5	3	0	8
83	Dishes	2	6	0	8

TABLE VI. — *Concluded.*

No.	Diagram.	Men.	Women.	No name.	Total.
38	Branches	5	2	0	7
82	Steps	4	2	1	7
17	Pitchers	4	2	0	6
42	Keys	4	2	0	6
61	Skulls, or skull and cross bones	6	0	0	6
84	Signs of music	2	4	0	6
81	Punctuation marks	3	2	0	5
75	Engines	4	1	0	5
71	Feathers	3	2	0	5
68	Architectural plans	3	1	1	5
64	Watches and clocks	4	1	0	5
28	Dogs and dogs' heads	2	2	1	5
19	Chairs	2	3	0	5
66	Kites	3	1	0	4
70	Graves	3	1	0	4
72	Spoons	3	1	0	4
79	Musical instruments	2	2	0	4
65	Wheels	1	2	0	3
45	Pears	1	2	0	3
74	Forks	2	0	0	2
60	Candlesticks	2	0	0	2
35	Arms	1	1	0	2
73	Knives	1	0	0	1
67	Bells	0	1	0	1
58	Corkscrews	1	0	0	1
55	Ears	1	0	0	1
46	Pineapples	1	0	0	1

There is one other manner in which we have sought to ascertain the order of precedence of the diagrams. The diagrams on each card have been numbered, beginning at the upper left hand corner, then across the card, then down and across again from left to right, following the succession natural in writing. The numbering, therefore, presumably corresponds approximately to the actual order in which the diagrams were drawn. The average of all these is, for instance, in the case of plain circles 3.9, which is therefore the average place of a plain circle, when it is drawn as one of the ten diagrams. The average places of diagrams 1–59, inclusive of Table I., are given in the following table. The figures in the first column refer to the original manuscript tabulations.

TABLE VII.

	Figure.	Place.		Figure.	Place.
4	Equilateral triangles .	2.6	25	Letters of alphabet .	5.7
7	Squares	3.2	37	Ships	5.7
6	Right-angled triangles ◿	3.8	33	Flowers	5.8
8	Circles	3.9	27	Horses	5.8
5	Right-angled triangles ◺	4.1	48	Figures of men . . .	5.8
3	Faces not in profile .	4.4	51	Oblongs, vertical . .	5.9
2	Faces, profile to right	4.5	62	Digits	6.
9	Diamonds	4.6	38	Branches	6.
50	Oblongs, horizontal .	4.6	47	Apples	6.3
1	Faces, profile to left .	4.7	40	Vases	6.3
34	Leaves	5.0	30	Other animals and heads	6.4
12	Stars	5.0	36	Books	6.4
52	Rhombi	5.0	24	Card spots	6.4
10	Hexagons	5.0	14	Houses	6.5
83	Dishes	5.1	43	Anchors	6.6
15	Crosses	5.2	80	Inscribed squares . .	6.6
84	Signs of music . . .	5.3	59	Scrawls	6.6
77	Tools	5.3	54	✣	6.7
20	Hats	5.4	39	Trees	6.8
76	Pentagons	5.5	18	Mugs	6.8
53	Inscribed circles . .	5.5	26	Hands	6.8
82	Steps	5.5	60	Scrolls	6.9
13	Cubes	5.6	57	Bottles	6.9
23	Suns	5.6	22	Moons	7.
11	Flags	5.6	41	Boots	7.
49	Squares with crosses .	5.6	44	Spirals	7.1
21	Hearts	5.7	32	Arrows	7.1
16	Octagons	5.7	63	Right angles . . .	7.6
31	Hour-glasses ⧖ . .	5.7	29	Cats	7.8
56	Eyes	5.7			

I have now presented the data, which have been derived from the diagrams. I have next to lay before you the psychological deductions which appear to me warranted by those data, and finally to point out the bearing of those deductions on certain psychical experiments.

It is evident that the essential question is, what are the factors which lead to certain figures or classes of figures appearing so often, and the factors which produce the variety of figures which occur only a few times or once. We have a problem of visualization, — the mind is called upon to supply an optical image, and naturally offers

first that which is most accessible; sometimes that which is first offered is accepted at once, or again the decision hesitates, several images are offered, then a choice is made and one selected. There are two causes which undoubtedly lead a minority of persons to have special visual images stand prominently first, — to press to the fore on every occasion. The *first* cause alluded to is a mental trick,—the habitual occupation with some special figure, which accidentally and unconsciously is adopted by the mind. Such personal diagrams belong to certain individuals, — one might almost say the individual belongs to the diagram, so domineering is it in its incessant recurrence. A perfect example of this is afforded by one of our correspondents. Miss N. writes, "she has observed for years that the first form ($\mathcal{D}$) curiously possesses her, without her having the slightest explanation of the cause. Her papers are covered with it. The way she makes it is not as she writes $\mathcal{D}$. Then the circular stroke is always up; in the former case it is always down, and the interior straight line is always added after the curve." Later she adds, "My nephew has a special feeling about the letter *D*. My nephew attributes his (and my) feeling to the fact that $\mathcal{D}$ is the only letter whose curve in writing is made upwards and, so to speak, backwards, which gave him a great deal of trouble as a child, and he thinks it probably did *me!*" And again she adds, "I found yesterday that another nephew of mine has always been in the habit of making $\mathcal{P}$'s uniformly with the double stroke. He adds, as I feel, 'It looks so much better.' But it is sad to see the curve shrinking with the descending generations." Such tricks are very likely to be acquired, as we so often remark in the conversation of others, if not of ourselves, — the "Well's" and "Ah's," "Don't you know's," and other stop-gap interjections. So, too, it is probable that the diagram-trick is much more common than we are aware of, and that it accounts for a minority of the first figures drawn on the cards.

The second cause above alluded to is the sustained attention of the mind to certain objects constantly encountered in a person's regular daily occupation. A painter recalls his palette; a naturalist his butterfly; a physician his skull; a college student his bicycle; a member of this society his book; and so on, seriously and indefinitely. When the profession involves incessant consideration of special forms, then the images may always be lurking in the mind, on the watch, as it were, to come forward, and if there is the least demand for a visual image they press into notice. Pre-occupation so intense is rare; but among the five hundred cards, there are three on which every diagram indicates extreme and persistent attention to professional images.

A considerable number of the diagrams were, we may safely assume, suggested by the objects around the persons when they were making the diagrams, or some association of ideas, or by the recollection of objects or figures with which they had been specially or even only casually occupied shortly before. Data bearing on this point are given in Table IV. The image in these cases came to the mind from the outside; but the great majority of the diagrams are of such a character that we need not hesitate to designate them as thrown out from the mind, or as *ejective*. The ejective class of images claims our special attention.

The large majority of the cards exhibit very little or no real individuality. They are, of course, every one different from every other; but there is general uniformity, which is brought out with startling emphasis by Table VI. There we learn that 40% of the persons have drawn circles; 34% squares; 31% equilateral triangles; 25% crosses; 16% diamonds; etc. In fact, there are scarcely any cards with figures contained on no other card; by far the majority of the cards have several figures which are found more or less frequently on other cards.

With the exception of a very few, the diagrams are all simple in character. A glance at Table I. suffices to show that this is the case, and it is still more forcibly demonstrated by Tables II. and III. The persons drawing have evidently drawn as a rule what was easiest. In this manner we must account for the prevalence of faces seen in profile to the left, of left-handed spirals, of cubes and houses with the perspective lines running to the right. If any one will try making the diagrams just mentioned, he will, at least if right-handed, find it easier to make them as described than in the reverse positions.

We are all trained in the faith in individualism, and we are induced in numerous ways and almost incessantly to assign the highest value to the individual, and to the cultivation of individually distinctive qualities. We are also far more adept in perceiving differences than in recognizing resemblances; indeed, it is well known that ability to recognize resemblance, when it is masked, is one of the most distinctive traits of mental superiority and of genius itself. Two potent influences are confluent to make us exaggerate the differences between man and man, and they are abetted by each person's feeling that he is different from his neighbors. The consequence is that we too often and too easily forget our similarity, and forget that it stretches over trifling habits as well as over the great and little modes of thought. We feel, and for the most part willingly acknowledge, the likeness of our natures, but our sentiments and ideas we are over-inclined to consider original. Such tests as the drawing

of the diagrams thrust home the conviction that even in trifles we differ but little. The images and notions which pass across the consciousness of each individual are almost all common property; they are comparable to coins, — every one is a separate entity, but yet the stamp is the same. Our thoughts are in large measure owned by the community; we are in mental matters all pure communists.

Such tests as the diagrams, on which this report is based, demonstrate the slightness of our real individual distinction and separation. The similarity is so great that the same visual images arise in many of us with approximately the same readiness.

We come here to a domain of psychology which has been but little and inadequately studied, namely, the frequency and readiness with which ideas recur. In a previous report in the Proceedings (*ante*, pp. 86) I have shown that even in so indifferent a matter as the ten digits, there are unconscious preferences of the mind, or, in other words, that the notions or images of certain digits come forward oftener and more readily than of others; and I have also shown, *ante*, pp. 90–91, that the order of relative frequency is similar for different persons. It is probable that all ideas possess each its special degree of readiness of appearing in consciousness, and that the degree of readiness is approximately the same for a great many persons. This similarity probably also prevails in regard to the majority of ideas.

This aspect of our mental processes puts the problem of thought-transference in a somewhat different light from that in which we have been asked to view it. It is evident that if two persons are requested to think of some one thing of a class, such as a letter of the alphabet, a playing-card, a baptismal name, there is by no means an equal chance of their selecting any one; on the contrary, there is not only the probability that they will think of a special one first, but there is a chance of their both thinking of the same one, for the relative frequency or preponderance of one idea or image out of a set has been shown to be similar for a number of people. In order to prove the reality of thought-transference, it must be demonstrated that the observed coincidence of thoughts can *not* be explained by the law of relative frequency.

Let us suppose by way of illustration that two persons make an experiment in thought-transference with diagrams. The agent draws a circle; now, four persons out of ten are likely to draw a circle (see Table VI.), and to draw it near the beginning of a series of diagrams; instead, therefore, of the chances of the percipient's drawing a circle being almost infinitely small, they are very great. The trial is proceeded with; the circle having been drawn, it is probable that the next figure will be different, as our cards show: the agent

draws a square; again the percipient's unconscious chances are very great. And so on with a considerable series of diagrams. In this manner thought-transference might be simulated, and a proof of its reality obtained, which would seem overwhelming so long as the law of relative frequency is disregarded as an explanation.

In the first report of the English Society for Psychical Research (Vol. 1, Part I.) there occur several expressions which show that the existence of the law of relative frequency of ideas was not known to the committee reporting. For example, p. 23, they say, "The chances against success in the case of *any* one card are, *of course*, 51 to 1," — the Italics are ours. On the contrary, the chances vary according to the card; and if the card is not drawn at random from a full pack, but selected by some person thinking of it, the chances in favor of success are very much greater than 1 to 51. A similar criticism is applicable to the remark on p. 26, *l. c.*: "In the case of letters of the alphabet, of cards, and of numbers of two figures, the chances against success on a first trial would naturally be 25 to 1, 51 to 1, and 89 to 1, respectively." In the third report on thought-transference, *l. c.*, Part III., especially p. 173, similar statements are repeated, and it is added concerning the reproduction of drawings by Mr. Smith, when Mr. Blackburn acted as agent, "Here obviously an incalculable number of trials might be made, at any rate in the case of the more random and eccentric figures, before pure guess-work would hit upon a resemblance as near as that obtained in almost every case by Mr. G. A. Smith." We have to remember that "*pure* guess-work" is precisely what we are not dealing with. In Mr. Schmoll's article in the same Proceedings, Part XI., on the reproduction of diagrams by thought-transference, occurs the following sentence, p. 336: "We have, therefore, been able to convince ourselves that the agents, concentrating their looks on the given object, projected on the mental eye of the percipient a picture more or less resembling it, and we take it as incontrovertible that the above results could not have been achieved by conscious or unconscious guessing."

If we examine the drawings given in the various articles above referred to, we notice at once that with the exception of a single series, those with Mr. G. A. Smith as percipient, the figures drawn by both the agents and percipients are in greater part just such as our diagram tests have shown to be the ones likely to be drawn. The authors of the articles in question having fundamentally misconceived the nature of the chances, of course fail to offer the necessary proof that the proportion of coincidences was greater than chance would account for. Until this is done it appears premature to accept these experiments as valid proofs of thought-transference.

There still are left the experiments with Mr. Smith and Mr. Blackburn. If we examine the diagrams reproduced in the Proceedings of the English Society, Part II., pp. 83–97, and Part III., pp. 175–215, we observe among them also a considerable proportion of the figures which are most likely to be drawn, so that, even under the assumption that everything was perfectly fair, the evidence is much less strong than the English committee have represented it. There remains to be considered the possibility of a code arranged between Mr. Blackburn and Mr. Smith. The English committee in their third report express themselves (Proceedings S. P. R., Part III., pp. 164, 165) very decidedly in regard to the possibility of a code. They have written: "Let our readers who may be familiar with the Morse or any other code of signals try in some such way to convey a description of some of our drawings to a friend who is blind-folded and has not seen the original; we venture to assert that, even if audible signs were allowed, several minutes at least would be required to convey the notion of the figures correctly. It is probably no exaggeration to say that several scores, if not hundreds, of precise signs would be required to convey an idea as exact as that implied in many of Mr. Smith's representations." In the light of our present information this opinion must be renounced, and we must say instead that two or three signs, which might be variously combined, as in the Morse alphabet, would suffice to convey in a short time the precise ideas required; and it must be added that very ample opportunity for such signalling was afforded in nearly all the Smith-Blackburn experiments. If the conditions as described in the third report of the English Society are considered, it will be evident at once that in at least a portion of the experiments sensory impressions could have been received by Mr. Smith from Mr. Blackburn, and of course any sort of impression could be utilized in a signalling code. If Messrs. Blackburn and Smith had observed that there are, say fifty diagrams which people are likely to draw, a code could have been easily arranged for the former to signal to the latter which one or two of the diagrams had been drawn. If, further, the code include signals for straight lines, for semicircular curves, for right, left, up and down, or below and above, it would not be very difficult nor require long for a couple of expert collusionists to accomplish the thought-transference of almost any of the diagrams in the series given in the pages cited. I do not bring any accusation against the two gentlemen who achieved the remarkable successes reported by the English committee; I merely point out that the hypothesis of fraud still remains tenable, and that unless it is met adequately, persons of cautious judgment must consider that the explanation of the success of Mr. Smith in the

reproduction of drawings is more probably fraud than supersensuous thought-transference.

If this view is adopted, the general conclusion is unavoidable that none of the experiments heretofore published afford conclusive evidence of thought-transference.

The accompanying plate gives reproductions of the principal types of diagrams. The figures are all fac-similes of actual drawings on the cards.

CHARLES SEDGWICK MINOT.

NOTE TO THE FOREGOING REPORT.

As one of the members of the "Committee on Experimental Psychology" I feel that I ought to disclaim agreement with the full breadth of Dr. Minot's conclusions. His painstaking study of the diagrams sent in by our associates has given a more definite numerical form to the already well-known fact that simple geometrical figures, letters, faces, houses, and scrawls are the most likely things both to be drawn and guessed in thought-transference experiments where improvised drawings are used. But he seems to me greatly to exaggerate the importance of this diagram-habit when he considers that the absence of special provisions against it in the English Society's experiments constitutes a very formidable objection to their value as proofs of thought-transference.

Our readers will not have forgotten that only a small number of the experiments recorded in the English Society's Proceedings were made with diagrams at all. Where diagrams were used, it is true that their *elements* were almost always the familiar ones above mentioned. With so few elements a code of signals is much less difficult than with more; and Dr. Minot consequently infers that where whole series of diagrams were rightly guessed, this may well have been because the agent secretly conveyed information to the percipient by such a code.

This wholesale right guessing of diagrams seemed to have occurred in at least five series of experiments. (I omit the two series contributed by Herren Dessoir and Schmoll, as the success in them was inferior to that in the other series.) Three of these series are not mentioned by Dr. Minot at all. In the series with Miss E. and Miss R., reported by Mr. Guthrie (pp. 31 ff. of Vol. II. of the London Society's Proceedings), the successful agents were investigators of honorable repute who were singly in the room with the percipient when the guessing was done, so that if there were cheating it could perfectly well have gone on without a "code." In the experiments

with Miss R., as recorded by Prof. Lodge (*ibid.* p. 194), the spectators and agents seem also to have been gentlemen themselves bent on research. In those reported by Mr. J. W. Smith (*ibid.* p. 207), with his sister, the same seems to have been the case.

But in these three series the success was less continuous and striking than in the two series which Dr. Minot alone mentions, namely, those in which Mr. Blackburn was agent and Mr. G. A. Smith percipient. In the first of these series (Vol. I., p. 78), contact was allowed, so that it is admitted in the report that tactile signals might conceivably have been made. In almost all the drawings of the second series (Vol. I., p. 161), however, of which the success was, if anything, even more remarkable, there was no contact between agent and percipient; and although the committee admit that the possibility of *audible* signals was not absolutely excluded, yet they seem to have been keenly alert to detect them. "The material for possible signs," they say, "appears to be reduced to shuffling on the carpet, coughing, and modes of breathing. Anything distinctly unusual in any of these directions must have been inevitably noticed; and since our attention during this part of the experiment was of course concentrated on the relation between Mr. B. and Mr. S., we are at a loss to conceive how any signalling, sufficient in amount to convey the required ideas, could have passed undetected. Furthermore, it must be observed that the reproductions were not made in a tentative, hesitant manner, as if waiting for signals, but deliberately and continuously, as if copying a drawing that is seen. Moreover, in almost every instance the *proportions* of the different parts of the original figure were reproduced more accurately than were its more easily describable details. However, with the view of removing all doubts, . . . we on one occasion stopped Mr. Smith's ears with putty, then tied a bandage round his eyes and ears, then fastened a bolster-case over the head, and over all threw a blanket over his entire head and trunk. Fig. 22 was now drawn by one of us and shown outside the room to Mr. Blackburn, who, on his return, sat behind Mr. Smith, and in no contact with him whatever, and as perfectly still as it is possible for a human being to sit who is not concentrating his attention on keeping motionless to the exclusion of every other object. In a few minutes Mr. Smith took up the pencil and gave the successive reproductions shown," which are most striking copies of the original complicated "scrawl."

Dr. Minot says of this series of experiments that in it "ample opportunity for signalling was afforded," and that "persons of cautious judgment must consider that the explanation of the success of Mr. Smith is more probably fraud than supersensuous thought-transfer-

ence." It seems to me here that Dr. Minot must have been less studious of the details of the English reports than of his own postal cards with their diagrams, and that he cannot have sufficiently discriminated between the possibility *in abstracto* of framing a code of signals for such drawings and the ease *in concreto* of using such a code. The ease in this instance can hardly have been great. I cannot agree, therefore, that the revelation of the diagram-habit has appreciably weakened the evidence for thought-transference actually to be found in the English Society's reports. To most of that evidence the existence of such a habit is wholly irrelevant; and where it is pertinent, fraud based on its use seems so unlikely, *if the reports are faithful*, that vague suspicions of unfaithful reporting and bad observation seem to me carry more real sceptical weight with them than Dr. Minot's more definitely formulated charge.

The experiments of the English Society, like all possible experiments of the sort, are exposed to many vague suspicions. The true warrant for their credibility is less to be found in the increasingly minute description of precautions in the reports (which would only make the reading of the latter more tiresome), than in the reader's preconceptions as to the likelihood of the phenomena and the competence of the observers. Where the phenomena are usual, any observer will pass for competent; but his competency will be suspected just in proportion as what he tells of grows more strange. The *great* weakness of the case for thought-transference is that the accounts of it are so rare. Why don't the apparent cases come in faster, now that so many of us are on the watch? It is true that in strict logic those who believe in thought-transference ought to be no more puzzled by this lack of new cases than those who believe in fraud. Fraud we know to be a *vera causa*, which, like all such, should recur with a certain statistical regularity. If as real a thing as fraud can thus remit for a time its effects, so may a more doubtful thing like thought-transference, if it really exist, do the same. But whilst no coercive conclusion can yet be drawn, it seems to me that the *exceedingly* strong presumption in favor of thought-transference which the English reports establish — I understand that the word "thought-transference" implies no positive theory whatever as to how the knowledge is conveyed from the agent's to the percipient's mind — is not appreciably shaken by Dr. Minot's critical remarks. This I feel in duty bound to say; for whilst additional proofs are waited for, questions get prematurely closed and forgotten; and in this case that seems to me a consummation which one ought to try as long as possible to postpone.

WILLIAM JAMES.

REPORT OF THE COMMITTEE ON MEDIUMISTIC PHENOMENA.

Your committee desires to report a moderate progress in the investigations pertaining to its work. During the year the committee, as such, has undertaken the careful examination of the results obtained by one well-known trance medium who is reported to have given to many prudent sitters names and communications of such accuracy and fulness that it is supposed that such results could only be reached by some occult agency, or by some mental process which is not exactly recognized as yet. The committee was of the opinion that the reality of such phenomena could probably be satisfactorily determined by a series of sittings held with suitable sitters under the personal supervision of a member of the committee, and stenographically reported. In this plan we were aided very materially by the generous coöperation of the medium, who expressed herself ready and willing to act with us in our work. Thus far we have been able to have only eight or ten sittings in which the desired conditions were reasonably fulfilled. The results thus obtained are not of such a character as to warrant any very decided judgment as to the nature of the phenomena under examination, but they throw some light on the questions involved. We are of the opinion that an extension of the investigation would be very desirable, provided such amounts of money could be placed at our disposal as would enable us to obtain the full reports of a large number of sittings with this medium and perhaps with others as well.

The method we have employed, which seemed to us at the time the only one of any promise, has some difficulties, not all of which could be readily foreseen.

In the first place, the method is necessarily expensive, both in time and in money. The members of the committee are mostly busy men, but they have been generous in giving their own time to the necessary superintendence of sittings, and to the no less necessary revision of the reports; we have not, however, had the money which such an investigation requires. Before the work was entered upon, various persons expressed great personal interest in having just such an investigation made; but when, relying upon this deep interest, we really undertook the task, we saw only a very limited materialization of such an interest in the form of cash. One of these persons was a

bright exception, and has aided the committee by a liberal gift of money, and in other ways. We have also had a moderate amount of money from the Council of the Society, and a smaller contribution from another member, and some vague promises from others who became interested in the question at a later time. Good stenographic reports are expensive; poor ones are worse than useless.

Then, too, the phenomena with which we are concerned appear to be of a very delicate nature. It would seem that not merely the physical condition of the medium is of importance, but that the personality, or frame of mind of the persons present (sitter or committee member), has a marked effect on the sitting or on the trance conditions. On this account several sitters were altogether unsuccessful and some four or five sittings had to be abandoned. Two members of the committee also proved to be a hindrance to the manifestations (weakening the power of the medium, it was said, and making her tired), and their services had to be dispensed with. These difficulties are mentioned merely in explanation and not in a complaining or captious spirit. In any scientific experiment there are certain conditions which must be fulfilled; these will necessarily vary with the character of the investigation, and the successful investigator is the one who recognizes the legitimate conditions and varies them to obtain his result. That the character of the surroundings, the temperament, disposition, and frame of mind of the persons present may not be important elements in every trance or similar manifestation, your committee is not at present prepared to say. It may also be that the very desire to investigate, with its inevitable suspension of judgment or active doubt, is of itself a hindrance to success in obtaining good results in this field, just as the chairman of the Committee on Thought-transference has suggested concerning the special work of that committee. In spite of such difficulties we are of the opinion that an investigation such as we have begun is of real value, and recommend that it be continued.

Individual members of the committee have also visited other mediums of varied powers and have witnessed occult manifestations with a view to determining the desirability of bringing them to the attention of the committee. No less than five such persons of considerable reputation have recently been publicly exposed or are "under a cloud." So that at least seven materializing or etherealizing mediums (nearly every one of which had been highly recommended to our special attention) have come to grief here in Boston during the past two or three years. Such a state of things hardly tends to encourage your committee in the active pursuit of this class of phenomena; but we are still ready to examine even these phe-

nomena on the receipt of tangible experiences on the part of trustworthy persons, provided we are permitted to impose such conditions as seem to us reasonable and necessary.

There are also ways in which the members of the society can aid the committee, besides giving us liberal contributions of money. We are in possession of a large number of names of persons whose rare gifts are dignified by various long or mysterious names, and have been commended to our examination by those who have seen them displayed. As yet, we have not found ourselves able to test the reality of these psychometric, clairvoyant, and similar powers. We shall be glad to have any competent members of the society assist us in forming an estimate of such cases, with a view to giving them, ultimately, a more detailed, and perhaps a more guarded, examination should they prove worthy of serious attention. The expense of such work need not be great, nor would any considerable expenditure of time be required. We should, however, wish to have it done under our general supervision, and with due regard to certain precautions and rules which we should be glad to communicate to any intending investigator.

JOSEPH W. WARREN,
Chairman.

SOME EXPERIMENTS IN THOUGHT-TRANSFERENCE.

This account is not presented either as evidence for or as evidence against the theory of telepathy, nor indeed of any theory. Certain results having been obtained which could not be accounted for on the hypothesis of pure chance, we have applied whatever tests have occurred to us, and the whole is offered merely as so much evidence bearing on the subject.

The experiments were performed in Nov., 1886. Throughout, the same two persons acted as agent and percipient, — Mrs. J. F. Brown and Nellie Gallagher, a domestic lately come from the county of Northumberland in New Brunswick.

Exclusive of some miscellaneous sets, which will be referred to later, the experiments consist of 3,000 guesses of the numbers from 0 to 9 or from 1 to 10, the normal probability of each separate guess being right being one in ten. They are arranged in sets of 100 guesses each, and the sets numbered from 1 to 30. The first 20 sets are made up as follows: The column at the left, in heavy type (see pp. 330–4), represents the numbers thought of by the agent, and the

horizontal row, opposite each of these numbers, the ten guesses of that number by the percipient. The left-hand column in each set was made up, before the guessing on that set commenced, by shuffling and drawing off, one after another, ten playing-cards running from ace to ten, the ten standing for zero. This was done out of sight of the agent, and usually, if not always, in her absence.

The agent fixes her mind on the digit at the head of the column, the percipient guesses which one it is, and the agent records the guess in the upper space in the next column; the next number is thought of and the guess recorded in the next space of the second column, and so on down the line. Now, the agent reverses. The number at the foot of the column is guessed again, then the one next above, and so on to the top. To get the order of the percipient's guesses, therefore, we run down the first column, up the second, down the third, up the fourth, and so on. This method of procedure has been explained to the percipient beforehand, and if she keeps count she will know when the agent repeats the number at the foot or head of the column.

The agent sits at one side of a table and the percipient at the opposite side facing her. The paper containing the guessing order, which the percipient has never seen, is in the agent's lap, out of sight from the opposite side of the table, and there is no mirror in the room to cause a reflection. A strip of paper with an opening large enough for one number to appear is placed over the agent's column, and this strip is moved down or up as the case may be, so that at any particular time only the number then thought of is in sight. For the first two or three sets some comments were made by the agent while the guessing was in progress, and several times the percipient was told when the guess was right. But this was soon discontinued — the agent being cautioned against it — and was not done at all after the first two or three sets. It apparently made no difference in the result. After some ten sets were guessed, the precise time not having been recorded, the percipient's back was turned so that she could not see the agent, and for a few sets, somewhere in the second ten, the percipient was blindfolded. This she did not like, and it was not done any more.

For the third 1,000 guesses, 40 playing-cards were taken, ace to ten in each of the four suits. These were well shuffled by the agent and a card drawn. The percipient, whose back was turned, then guessed the number of pips on the card. The number guessed was recorded by the agent in the first column, and then the right number in the second column opposite. For the first set of 100 guesses in this group the cards were shuffled after every guess. And for this set the

percipient was told to name the suit if she felt any impression in that direction, and when she did so it was recorded, the real suit of the card held being noted each time. Afterwards all idea of the suit was dropped, as it was thought it might lead to confusion. In this set the percipient named the suit 27 times, 11 times being right; and it is a noticeable fact that in each of these 27 cases, where the suit was named, the value of the card was given correctly. For the next set the card at the top of the pack was turned and guessed, then placed at the bottom of the pack, the next one turned, and so on till the 100 guesses had been made.

The remaining eight sets were done in the way last described, except that the cards were re-shuffled after each column of 25 guesses had been recorded.

The method of procedure being explained, it remains to examine the results obtained.

Tables which follow show the number of times each digit was called by the percipient in each set, and the number of correct guesses, also the totals for each separate set, and for each 1,000 guesses. Thus, in the first set 1 was guessed 14 times, 2 of these guesses being right; 2 was guessed 12 times, 4 being right. In the first set of 100 guesses, 20 were right; in the second set, 13. Out of the first 1,000 guesses, the percipient said 1, 107 times, 18 of these 107 guesses being right; 2, 82 times, 7 being right. The number of correct guesses to the 100 varies from 10 in the 8th, to 28 in the 19th, 21st, and 28th sets. Thus the proportion never falls below what chance calls for, but rises to nearly three times that figure. In the first 1,000 there are 175 right instead of 100, in the second 190, and in the third 219, making a total of 584 right out of 3,000. This steady preponderance of right guesses is proof positive of some influence or influences other than chance.

Number habits are found to some extent. Thus in each 1,000 guesses, 0 or 10 is below the average in frequency, while 1 is above. In the whole series *8's* predominate. There are 387—*8's* and but 223—*10's* or *0's*. Yet here the proportion of right guesses is pretty constant. 584 out of 3,000 is a percentage of 19.46. The percentage of *1's* is 19.43, of *0's* and *10's* it is 19.72, and of *8's* 17.31.

As we find number habits, so also there are temporary tendencies, changing from time to time. Thus in the first 10 sets fours and fives are guessed oftener than any other numbers, fives slightly predominating; in the second 10, fours and fives are about 10 per cent. below the average in frequency; and in the third 10, they are still less frequent. These shifting tendencies serve to balance each other, so

that in the entire series we find 297 fours, three less than one-tenth of 3,000, and 302 fives. We have seen that there are more correct guesses in the second 1,000 than in the first, more in the third than in the second; and among the fours and fives the proportion increases also.

In the first 1,000 guesses, four and five are guessed in succession 59 times; in the second 1,000, 17 times; and in the third 1,000, only 8 times.

		1st right.	2d right.	Both right.	Both wrong.
1st 1,000	59	4	10	7	38
2d 1,000	17	4	2	0	11
3d 1,000	8	5	1	0	2
3,000	84	13	13	7	51

These number habits and shifting inclinations, so far as observed, do not seem to have had any especial influence upon the general results.

It was found that in a good many cases the percipient was not satisfied with the guess first given, and changed it to something else. Now, on the theory of thought-transference, if a wrong guess was given and then an impression came a little late, there would be the tendency to change the guess from wrong to right. But, on the other hand, if a right guess was made, the tendency would be not to change it, but to leave it as it was; and this is just what took place.

In the first ten sets there are 10 cases where the percipient guessed wrong and then changed, making it wrong again; 16 cases where the change was from wrong to right, and only 1 from right to wrong; in the next ten sets there are 26 from wrong to wrong, 16 from wrong to right, and 2 from right to wrong. In the last ten, 20 from wrong to wrong, 25 from wrong to right, and *none* from right to wrong; making a total of 56 wrong to wrong, 57 wrong to right, and 3 right to wrong. But this is not all. There are some cases where the percipient changed more than once; for instance, where she first said 3, changed to 8, and again to 7. There are 14 of these cases, in 11 of which the number finally settled on was right. Adding these to the

single changes, we have a total of 130, 68 of which ended right. It is easy enough to understand how, when the percipient was facing the agent, the expression of the latter's countenance might have conveyed the idea that the guess was right or wrong, or that a movement of the lips, in mentally repeating over the number thought of to keep it strongly in mind, might consciously or unconsciously have been observed. But it should be noticed that it is where the percipient's back was turned that these changes were the most numerous, and where the proportion of changes from wrong to right, and also the proportion of correct guesses to the whole number guessed, is the greatest.

Another noticeable fact about these changes is the prominent part played by the 4's and the 5's, and the frequency with which these digits are associated. This appears in a marked degree in the miscellaneous column. Also of the 116 single changes, 17 cases are of changes from 5 to 4 or 4 to 5. In 10 of these 17 cases the digit last given was correct, but in no instance throughout the series was a 4 or a 5 given correctly and then changed to something else. Turning to the tables which give the general totals, we find that 4's and 5's are guessed right much oftener than any other digits. While the percentage of correct guesses to the whole number guessed is 19.46, the percentage of 5's is 24, and of 4's, 35. And this increased percentage, especially in the case of the 4's, extends pretty generally throughout the sets. In 25 sets out of the 30, the percentage of correct 4's is above the general average.

Subtracting from 297 (the number of times the percipient says 4) 106 (the number of times 4 is guessed correctly) leaves 191, which is the number of times 4 is guessed when some other number is right. One-ninth of 191, say 21, is the number of times the right number should be 5 according to chance. Five is really the number thought of 35 times. Similarly 4 should be the number thought of, where 5 is guessed, in 25 cases. It is so in 42 cases.

Now, the thought naturally occurs, if, as has been shown to be the case, for some reason 4[1] and 5 are more readily guessed than the other digits, 4 apt to be guessed for 5 and 5 for 4, what would be the result if in some of the first 20 sets, 4 and 5 should come next to each other in the agent's column? This is found to be the case in two sets, the 5th and 10th. In the 5th set, in the horizontal line opposite 5, there are two 5's and two 4's; opposite the 4, one 4 and four 5's. Thus three times out of 20, 4 or 5 is guessed right, and six times more the digit most readily associated with it is given. But the 10th set is far more

[1] It may be worth while to call the attention of the reader to the fact that the numbers *four* and *five* (and only these) begin, when *spoken*, with the same sound, —*f*.

remarkable. Here 5 is guessed right seven times out of 10, and 4 nine times; once 4 is given for 5, twice 4 is called and changed to 5, twice 5 is changed to 4, once 4 to 5 and back again to 4, once 5 to 4, back to 5, then to 4 again. In the set just before the 9th, 5 is the seventh digit in the agent's column and 4 the ninth, they being separated by a 9. In this set 5 is guessed right six times, and 4 six times. In the 19th set, in the horizontal line opposite 4, we find 6–9–1, and then seven 4's in succession, the line just above and just below containing neither a 4 nor a 5; and there are only three other 4's in the set, of which two are in the 5 line, making but ten 4's in all. In this same set there are five cases of changes, in every one of which, the number last given is correct. In only one of the five cases, however, are 4 and 5 the digits concerned.

In each of the first 20 sets the agent repeats the digit at the foot of the column five times, and the one at the head four times, making nine times in all for each set, and 180 times for the twenty sets.

At the points above noted the percipient in her guesses repeats but seven times, and in but two out of the seven is the digit repeated the same as that repeated by the agent. This shows conclusively that what little idea the percipient may have had, consciously or unconsciously, as to when the foot or top of the column was reached, did not have any appreciable effect upon the general results. Now, take a case like that in the 19th set, where in the horizontal line opposite 4 in the agent's column there are seven 4's, representing seven guesses of that digit by the percipient. Did the percipient after making the first correct guess get an inkling that 4 was right, and then repeat the guess at intervals of ten guesses thereafter, in consequence of this intimation, and perhaps of others like it? The last computation has an important bearing on this matter, and it may be tested in another way. We will ascertain the number of cases in the first 20 sets in which the same digit is found three or more times among the percipient's guesses in the same horizontal line, and the number of these cases in which the guesses were right.

3	times	in	the	same	line,	107	cases	. .	21, or 19.6 per cent. right.
4	"	"	"	35	"	. .	14, or 40	"	"
5	"	"	"	5	"	. .	3, or 60	"	"
6	"	"	"	5	"	. .	all		"
7	"	"	"	2	"	. .	all		"
9	"	"	"	1	"	. .	all		"

Thus there are 8 cases where the same digit is found 6 or more times, and in each of these cases the digit is the same as that in the agent's column opposite. It is a significant fact that in 7 cases

out of the 8 the digit was either a 4 or a 5, and it should also be noticed that, in the third group of sets, — 21st to 30th, — where no such opportunity occurred, the proportion of correct guesses is greater than in the first group or the second, and that if we leave out all 4's and 5's, there remain 2,401 guesses, of which 404 are right, instead of 240, as chance calls for.

As might be expected, there are cases where the percipient repeats when the agent does not. Now, on the theory of thought-transference, if a right guess is given, and the agent does not repeat, the percipient should not; but if the percipient happens to call the number that the agent is to think of next, the tendency should be for the percipient to call the same number again. So in these cases of repetition by the percipient, on the theory of thought-transference, the second guess should be right much oftener than the first. And this is just what happens. In the first 10 sets there are 10 such cases: right the first time, 0; right the second time, 6. In the second 10 sets there are 12 cases: right the first time, 2; right the second time, 3. In the third 10 there are 60 cases: right the first time, 1; right the second time, 16.

Suppose the percipient happens to call the number that is to be thought of, not the next time, but the second time following, and then happens to repeat the call. Now, the agent thinks of this same number, and if a telepathic message is now conveyed the percipient should repeat again. So, where the same number is called three times in succession, the guess should be right the third time rather than the second or the first. In the last 10 sets there are seven such cases: right the first time, 0; right the second time, 1; right the third time, 3.

In each of the first two groups of 10 sets the agent repeats 90 times. In the first group the percipient guesses right the first time in 14 of these cases, and the second time in 20; in the second group it is 14 and 14. In the third group of 10 sets the agent repeats 71 times; the percipient is right the first time, 12; right the second time, 5. Total for the 30 sets: right the first time, 40; right the second time, 39. So the dwelling on any particular number by the agent does not seem to have any effect on the percipient's guessing. To test this further, 3 extra sets of 100 guesses were tried, the percipient not having any intimation that there was anything unusual about them. In the first set the agent thought of 4 all the time, in the second, of 8, and in the third, of 2. The number of correct guesses was 14, 16, and 23, respectively. In the last of these, after 10 guesses had been made, and no comments whatever by the agent, the percipient said, "You haven't got any high

numbers in this square." The reply was, "Go on." With the exception of two 8's, there was no guess higher than 5 in the whole set.

This concludes the analysis, but there is one thing more that may, perhaps, have a bearing. The guesses were recorded by the agent, and it has since been found that she has the tendency to misplace numbers that come near each other. For instance, in reading a column of figures, if there is a 5 and then an 8, she is apt to get the 8 first. Suppose now that one of the last ten sets is being guessed. The agent turns an eight and the percipient says 5. Now, the agent should record the guess, 5, and then the right number, 8; but in consequence of the tendency above noted she may write 8 first, then look at the card in her hand and put down 8 again, thus making an agreement where none in reality exists. If it is one of the first 20 sets, the agent looks at a digit in the left-hand column, which we will say is 8; the percipient guesses 5, but the agent, who has concentrated her attention on 8, writes 8 instead of 5. The agent states that she found herself doing this but a very few times, that she was extremely careful, and does not think that mistakes enough of this kind could have been made to materially affect the result.

As was stated at the outset, this account is not presented as an argument for telepathy. We have never been convinced that one mind can influence another in this way, but, on the contrary, have considered the evidence in its favor to be far from strong. We have accordingly tried hard to find some other explanation of the results here presented, but have not as yet succeeded except as already noted.

JOHN F. BROWN,
MRS. JOHN F. BROWN.

1st Set.

2	2	6	5	2	1	2	1	6	2	8
9	5	7	1	6	8	9	5	9	8	6
0	0	4	8	5	7	9	9	1	9	0
3	9	5	6	8	5	8	3	2	3	1
7	5	1	9	1	7	0	7	9	5	4
5	3	2	1	2	1	1	3	7	4	5
1	2	3	0	4	0	4	1	1	2	9
6	9	0	5	0	6	5	0	1	3	3
4	1	6	4	9	9	9	4	5	7	2
8	5	7	3	7	8	3	2	6	6	8

2d Set.

8	2	9	5	5	3	4	6	2	6	4
0	9	3	1	6	8	5	3	4	8	3
2	5	2	4	4	9	9	8	9	3	7
7	7	8	9	1	4	0	0	7	9	9
4	0	5	6	2	2	3	5	4	0	0
3	8	0	8	0	1	5	9	2	5	1
1	1	1	0	3	0	6	3	3	4	6
6	4	6	1	7	5	8	4	6	6	8
9	2	4	3	8	8	1	6	8	2	8
5	8	9	4	6	9	4	5	1	5	5

3d Set.

0	2	1	4	3	1	5	9	9	5	2
1	6	2	9	1	8	4	7	2	4	4
8	5	9	8	9	6	6	2	0	8	9
5	5	7	5	5	4	8	0	4	2	3
3	0	2	3	8	9	1	8	8	1	5
9	9	8	6	2	1	0	4	5	9	6
6	2	1	7	6	8	3	7	6	4	8
4	6	0	0	4	3	5	2	6	3	2
2	3	9	4	2	9	7	5	0	5	3
7	2	5	2	7.4	4	6	9	1	9	8

4th Set.

3	5	4	2	2	1	5	1	4	3	9
7	1	1	5	7	8	4	3	5	1	3
0	6	0	0	0	4	0	0	0	6	1
8	9	8	8	9	5	2	3.3	2	9	0
2	0	7	7	5	0	3	4	6	5	4
6	2	3	5	3	7	9	6	7	0	2
9	5	9	6	0	6	4	9	8	9	3
5	9	2	1	1	9	7	5	5	8	8
1	9	6	8	6	8	8	2	3	2	9
4	8	4	5	4	4	1	6	4	1	6

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5th Set.

6	6	1	8	1	8	8	8	1	6	4
1	1	2	1	4	4,1	1	6	4	2	6
3	4	9	4	8	3	3	1	5	0	8
5	8	5	3	1	5	4	9	8	9	4
4	9	4	9	2	0	5	5	1	5	5
9	0	3	4	6	2	9	3	7	3	3
8	5	6	1	4	9	8	4	9	2	9
2	4	1	6	3	1	0	7	5	1	1
7	6	9	9	1	3	1	1	3	6	7
0	8	0	7	0	5	6	0	6	5	2

6th Set.

6	2	3	0	6	5	8	6	6	7	6
2	6	6	1	1	3	5	4	3	9	7
1	4	1	5	2	9	2	5	1	3	1
9	1	2	4	9	2	7	0	5	5	5
4	0	3	9	4	0	6	9	0	4	4
7	3	6	4,7	2	1	8	2	9	1	6
3	5	9	8	5	5	3	7	3	0	5
5	8	5	5	8	8	0	1	4	6	0
0	9	4	4	3	2	1	0	6	2	3
8	4	2	1	0	7	4	8	8	4	0

7th Set.

9	3	6	9	7	9	1	9	8	2	3
5	6	4	0	2	5	2	5	5	7	9
0	2	1	7	5	4	7	3	9	1	0
2	0	3	5	6	8	3	6	1	2	1
8	4	8	3	7	9	4	8	6	3	5
3	9	5	9	0	7	1	2	3	5	6
4	8	4	5	9	5	0	3	4	4	8
1	7	6	2	6	1	5	4	5	6	3
7	9	1	0	4	0	6	7	9	8	0
6	5	3	8	1	3	4	5	2	7*	9

8th Set.

4	2	5	7	3	4	5	4	5	4	0
1	6	9	6	5	8	6	2	0	1	2
0	5	5	2	1	1	0	1	1	6	5
8	4	4	8	2	7	1	0	5	7	3
5	8	0	4	6	4	4	9	4	6	2
2	3	1	6	7	9	5	4	9	8	7
9	0	2	0	0	0	6	5	8*	8	6
7	8	6	5	5	6	7	7	2	9	5
3	1	5	9	3	3	9	6	4	0	4
6	9	4	8	1	2	8*	1	5	1	2*

* Note sequences. See also sets 9 and 16.

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9th Set.

1	3	*1*	6	*1*	7	*1*	8	*4*	3	*0*
6	4	*8*	4	*0*	5	*2*	5	*6*	5	*5*
0	6	*3*	3	*4*	6	*3*	9	*0*	4	*4*
3	8	*4*	2	*3*	8	*7*	8	*1*	5	*3*
8	0	*5*	5	*6*	4	*0*	6	*8*	6	*3,8*
2	1	*6*	8	*1*	5	*4*	1	*4*	9	*4*
5	5	*7*	7	*9,5*	1	*3*	4,5	*5*	5,5	*4,5*
9	3	*0*	5	*5,8*	3	*7,8*	5,9	*6*	0	*3*
4	7	*0*	4	*4*	4	*4*	4	*3*	4	*9*
7	4	*9*	3	*0*	6	*0*	5,8	*7*	5	*8*

10th Set.

2	3	*0*	0	*0*	8	*8*	6	*8*	6	*8*
9	1	*6*	4	*1*	7	*7*	3	*0*	2	*6*
5	0,5	*5*	5	*7,5*	4	*5*	4,5	*1*	4,5	*5*
4	6	*4*	4	*4,5* / *4*	5,4 / 5,4	*5,4*	4	*4*	4	*5,4*
7	6,5	*1*	6	*8*	1	*3*	6	*5*	6	*1*
0	5	*5,3*	7	*6*	0	*5*	8	*3*	3,5	*3*
3	1	*3,4*	8	*4*	3	*8*	9	*7*	6	*4*
1	0	*5*	5,4	*5*	4	*5*	0	*4,9*	3,1	*5*
6	3	*8*	8	*1*	5	*4,5*	3	*6*	0	*7*
8	4	*6*	3	*2*	3	*6*	7	*8*	8	*2*

11th Set.

0	3	*9*	2	*9*	3	*6,8*	1	*3*	1	*0*
3	8	*0*	7	*1,4*	5	*2*	3	*4*	9	*6,5*
8	1	*3*	6	*7*	5,5	*9*	4	*0*	8	*4*
1	7	*8*	3	*5*	5,5	*3*	0	*6*	4	*1*
6	8	*5*	5	*8*	8	*8*	1	*7*	5	*3*
7	0	*1*	6	*6*	3	*6*	8	*9*	3	*6*
4	2	*4*	3,4	*4*	4	*4*	4	*2*	8	*8*
9	9	*5*	6	*8*	0	*3*	6	*8*	4,0	*9*
5	6	*7*	8	*2*	5	*0*	4	*2*	1	*1*
2	5	*8*	3	*0*	8	*1*	9	*3*	3,0	*2*

12th Set.

7	3	*9*	7	*0*	7	*8*	3	*4*	8	*1*
4	4	*3*	3	*4*	5	*5*	4	*2*	3,0	*9*
1	0	*1*	1	*6*	3	*2*	4	*3*	5	*8*
6	6	*7*	8	*5*	8	*6*	8	*8*	9	*7*
0	5	*8*	0	*6*	6	*7*	3	*7*	0	*6*
5	1	*4,5*	5,3 / 5	*2*	1	*5*	1	*8*	2	*8*
3	2	*6*	2	*1*	0	*0*	7	*6*	1	*2*
8	9	*0*	8	*8*	7	*5,4*	0,0	*0*	8	*7*
9	8	*1*	4	*3*	6	*8*	9	*5,4*	7	*4*
2	7	*2*	9	*7*	2	*4*	1,4	*6*	3	*6*

13th Set.

3	8	6	9	8	1	7	3	9	3	3
0	6	0	3	8	0	8	2	6	8	0
8	5	1	2	6	7	6	1	5	6	9
9	4	8	7	5	6	2	0	6	3	8
4	4	2	5	2	4	1	7,6	9,8	7	3
2	5	9	4,7	9	7	5	4	0	4	1
1	1	5	0	8	3	2	2	7	8	2
5	6	4	3	2	1	8	3	2	3	3
6	0	3	8	6	8	6	9	6	8	0
7	8	2	9	7	9	5	5	8	7	5

14th Set.

9	8	8	9	2	3	6	5	8	7	5
4	3	1	3	7	1	1	4	4	1	6
0	7	6	0	9	0	2	7	2	3	8
7	6	5	1	6	8	0	3	6	0	1
8	5	8	6	8	6	9	1	0	5	0
1	1	1	2	1	2	8	0	1	4	3
3	0	7	9	3	5	5	9	9	9	4
6	8	3	5	8	8	3	8	5	6	8
5	4,6	0	3	7	9	4	5	3	3	5
2	9	1	4	6	1	7	1	7	2	7

15th Set.

1	3	2	0	8	9	3	0	1	0	2
5	0	8	0	4	0	5	9	5	4	1
3	8	1	6	6,5	7	9	1	8	5	6
2	7	5	7	1	5	4	7	2	8	5
7	9	3	8	2	3	7	8	6	7	8
8	1	6	5	7	1	8	9	5	6	7
6	3	7	9	8	9	3	1	3	2	9
0	8	9	4	5	0	0	8	3,1	7	8
4	6	0	1	1	4	1	4	0	4	4
9	2	5	2	6	6	5	6	8	5	3

16th Set.

2	7	1	4	7	5	2	1	2	9	1
7	8	7	8	3	9	0	4,1	2	6	2
1	6	3	7	7	6	5	6	5	7	3
4	4,5	1	5	4	4*	3	8	4	8	5
9	1	8	3	9	3	8	9	7	9	4
3	0	0	2	0	9*	6†	0	8	3	6
6	9	6	0	8	6	9	5	6	4	7
0	5	3	1	4,7	3	8	4	7	5	9
5	2	4	5	3	5*	3,7	3	0	2	4
8	1	7	8	6	1	8	2	1	1,9	8

* Called right. † Called wrong.

17th Set.

7	1	1	6,7	9	6	0	8	8	9	1
1	7	3	8	8	2	1	7	1	6	0
4	4	8	5,4	7	7,1	3	5,9	4	4	2
0	3	9	9,6	3	0	8	1	2	0	3
8	8	7	8	4	3	9	0	9	5	9,5
5	7	5	1	5	2	5	5	5	9	5
9	1	6	0	8	0	7	9	9	2	8
3	9	4	7	2	6	8	3	7	9,0	2
6	3	0	†5	9	7	4	4	8	4	6,7
2	2	1	4	7	4	2	7	4	3	9

* Both called wrong.
† Said to be right.

18th Set.

4	3	2	9	4	8	2	8	1	5	2
0	8	0	7,5 6,0	7,0	7	8	7	1,0	9	0
5	1	4	9,8 7	5	4	1	3	9	7	5
9	7	3	8	2	9,8	9	0	0	2	8,1
3	3	7	9,8	0	3	4	1	3	3	1
7	1	9	1	4	2	0	4	7	0	6
8	2	8	9,2	2	7	3	7,8	8	1	8
6	0	2	8	3	9	6	6	5	8	7
1	8	9	9	4	1	8	9,8 5	9	9	3
2	3	6	7	8	2	1	1	0	5	1

19th Set.

2	1	0	8	3	1	2	3	2	1	2
6	8	3	4	7	2	7	5	9	9,8 6	8
8	3	1	8	9	0	9	0	7,8	5	3
3	1	0	5	8	8	8	4,8	1	9	6
7	0	7	3	3	3	3	1	3	8	8
4	6	9	1	4	4	4	4	4	4	4
0	3	8	0	8,7 0	0	0	8	8	6	0
1	7	1	2	9	8	8	9	8	7	1
5	9	4	5	3	9	4	5	0	5	5
9	8	8	7	9	*7	3	6	2	9	0

20th Set.

9	1	8	8	1	5	9	1	3	8	8
4	5	4	4	4	3	2	8	0	4	1
7	3	9	3	8	4	9	7	2	3	2
8	8	3	0	3	8	0	8	9	8	3
2	9	0	1	7	9	4	0	5	0	7
1	1	1	5	0	6,2 1	3	3	1	9	6
3	0	8	9	5	0	8	2	4	5	9
5	8	5	4	3	9	7	1	3	8	5
6	7	1	0	1	7	0	8	1	0	5
0	6	2	2,9	7	8	8	7	9,0	3	2

* Called wrong.

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21st Set.

P	A	P	A	P	A	P	A
6	1s	3	8h	8	3h	5h	5h
8	9h	5h	5h	8	7c	8	9h
4s	4c	8	6s	9	6c	3	6d
8	5h	8, 8, 7c	7c	1	2s	1	10c
8	7c	9	8d	3h	3s	7	2h
5	4c	6	9d	6	8d	8	5s
6	10	6h	6d	9	7d	6	1s
8c	8d	7	8h	9	7s	8	1h
9	7s	5	4s	8	3c	3	7c
8	3d	9	7d	5	2c	1s	1s
4	4s	6	9h	5h	5h	7	2d
3	5d	3	4s	4	2c	8	9c
8	9s	8s	8c	7h	7c	3h	3c
2	3h	4h	4h	9	6h	7d	7d
9	7s	5	3c	8, 8, 9	6d	1h	1h
8c	8d	7	5s	2	7c	2c	2s
5s	5c	8	1c	8	3h	1	7c
8	6c	9	10d	8	7d	9	7s
9	6s	3	4s	5, 4-h, s	4s	5c*	5c
8	9d	1	3h	2	5h	6	7c
8	9c	5	2h	3	6s	4h	4h
8	7d	5c	5d	7	3	7	9c
8h	6c	8	1s	6	1s	7h	7s
4c	4s	5c	5h	5	9c	9	5h
1h	1s	9	3c	1	6d	3	5h

* "Hot hearts."

22d Set.

P	A	P	A	P	A	P	A
1	3	3	8	7	8	2	6
9	8	6	10	9	9	8	9
5	1	1	4	1	1	1, 7	7
9	7	3	10	7	10	5	5
4	4	7	1	7	2	3	3
1	3	2	8	3	9	2	8
6	2	2	6	8	6	9	1
5	5	8	3	2	6	7	7
1	5	9	9	4	5	4	4
7	3	6	7	3	10	3	3
8	8	3	4	3, 4	4	5	2
7	9	2	6	1	2	5	5
3	1	1	9	1	1	6	5
6	10	3	7	3	7	3	3
5	2	4	5	1	2	3	3
6	9	9	3	3	3	2	9
10	6	2	3	3	10	3	1
4	6	3	1	5	4	9	10
3	5	2	7	9	10	1	2
3	10	4, 5, 4	4	3	3	7	9
1	4	5	3	1	6	3	6
7, 3	2	2	2	3	3	2	6
3	1	7	5	1	9	5	5
9	7	6	5	10	7	3	10
6	2	2	3	5	4	7	4

Google

23d Set.

P	A	P	A	P	A	P	A
1	2	4	3	1	3	8	9
4	5	1	1	5	4	2	4
7	10	5	10	8	5	7	8
6	3	7	10	7	8	9	5
4	2	2	6	1	1	7	1
4	4	9	7	3	10	8	8
7	1	5	4	5	2	9	9
8	6	2	7	8	9	7	6
8	1	4	2	4	4	4	2
5	5	8	8	2	2	5	5
9	7	10	5	8	5	8	8
8	10	8	5	3	6	2	2
1	5	4	2	8	8	1	6
3	7	6	9	10	9	8	6
8	9	2	8	4	4	10	1
8	1	4	5	3	8	8	1
2	2	6	6	4	2	9, 7	7
5	4	1	4	7	7	8	3
6	8	8	2	5	4	5	5
7	3	7	4	10	2	9	9
1	8	1	5	8	4	8	3
9	8	2, 3	6	8	1	1	8
5	4	2	8	2	9	8	10
10	6	3	9	6	9	1	1
1	10	7	8	3	8	9	7

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24th Set.

P	A	P	A	P	A	P	A
9	8	9	10	5	4	9	8
10	6	8	5	1	1	8	5
10	7	4	1	8	5	3	6
3	8	9	7	9	9	1	1
9	7	4	4	1	1	4	4
8	4	1	1	6	10	9, 3	3
1	10	3	5	1	2	2	6
2	10	6	9	6	1	8, 7 or 9	7
1	2	8	9	1	9	8	9
1	1	4	5	7	9	1	2
1	6	8	10	2	6	9	9
8	9	6	6	3	7	7	7
4	4	8	6	4	4	8	8
7	1	9	8	1	2	9	4
8	7	6	3	3	3	8	5
9	4	9	5	8	3	3	5
8	3	8	8	8	8	9	7
1	2	3	6	9	6	8, 3	3
1	5	1	1	9	10	2	10
4	8	4	4	7	10	8	6
9	2	1	7	8	4	4	5
8	9	8	5	6	7	9	6
10	3	3	8	8	5	10	1
1	8	9	2	9	10	1	4
2	8	9	6	8	7	6	3

Google

25th Set.

P	A	P	A	P	A	P	A
8	6	5	6	7	7	9	8
5	4	6	8	5	4	3	7
3	9	10, 9	9	10	8	4	5
10	10	2	9	2	2	6	3
6	9	4	1	1	3	3	4
7	5	2	4	1	1	1	6
8	7	9	3	4	4	9	6
9	1	5	1	9	8	7	7
9	7	8	3	7, 6	5	6	4
1	6	10	7	5	5	1	9
3	10	9	2	3	4	8	1
1	3	1	3	1	9	9	7
2	2	7	5	9	1	3	3
1	5	5	2	5, 4	7	9	3
7	7	7	7	1	4	10	10
4	2	3	4	4	5	2	8
3	9	4	4	1	10	8	7
6	8	9	8	3	1	5, 4	4
3	10	9	9	9	9	3	4
4	4	10	9	5	9	6	9
9	3	1	1	5	2	8, 9	9
6	3	5	4	1	8	3	5
2	1	3	5	9	8	1	1
3, 5	1	2	4	4	3	2	2
1	5	3	1	7	2	9	10

Google

26th Set.

P	A	P	A	P	A	P	A
7	5	1	2	1	7	9	6
1	3	3	8	2	5	6	4
4	4	9	7	3	10	9	7
9	10	10	9	1	6	3	1
2	2	3	4	7	9	4	6
7	1	5	10	4	4	4	1
1	6	4, 8	6	2	5	8	8
2	6	9	10	1	9	9	9
1	7	3	7	7	8	6	1
3	1	8	8	1	5	10	9
2	2	1	9	1	2	7	10
1	1	10	6	7	2	9	7
2	2	8	6	9	8	2	1
5	4	8	9	5	8	5	7
7	9	7	4	9	9	4	9
3	1	1	7	10	1	2	6
2	7	5	5	4	9	9	3
9	8	1	8	7	4	4	4
3	5	9	3	1	6	5	3
7	10	2	5	1	6	8	2
8	3	7	10	2	3	7	3
7	5	4	1	7	1	8	4
1	9	5	2	3	10	5	8
10	9	3	4	8	5	5	6
2	5	7	5	1, 9	2	10	6

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27th Set.

P	A	P	A	P	A	P	A
7	3	7	6	6	5	7	5
2	2	4	2	9	3	1	10
6	4	8	10	10	7	7	6
9	3	9	7	8	3	10	3
8	7	7	10	1	7	8	5
6	1	8	7	9	6	8	8
8	8	3	1	8	8	6, 7	1
9	9	4	4	3	10	4	2
7	9	6	3	7	3	3	9
8	3	9	5	1	9	9, 7	10
1	3	2	5	2	2	3	5
9	4	9, 7	7	3	10	1	8
5	4	1	1	1	9	9	3
9	5	2	6	4	4	7	9
2	10	9	2	1	8	8	10
6	5	3	6	1	9	4	2
9	3	9	1	10	1	3	10
1	8	8	9	6	7	5	4
6	6	2, 5	5	9	10	5	4
9	9	2	7	3	8	9	7
2	10	8	7	1	6	3	3
1	6	1	1	9	3	5	2
3	1	3	2	7	4	8	5
1	9	7	2	8	4	1	1
3	2	5	4	9	9	3	5

Google

28th Set.

P	A	P	A	P	A	P	A
1	10	2	3	3	9	8	8
4	4	4	4	8	6	7	2
3	3	5	3	8	9	3	1
1	2	2	5	8	10	4	4
1	5	1	8	7	8	3	10
1	1	7	7	1, 3	5	7, 6	6
7	5	6	9	4	1	7	7
1	4	8	7	8	10	8, 3	3
3	6	10	10	9	8	2	6
9	5	4	2	8	6	8	7
1	6	3	8	8	3	5	5
2	2	1	9	1	10	1	2
9	10	1	8	2	2	3	1
7	7	1	1	8	10	7	7
8	8	4	2	8	6	9	3
9	9	7	3	1	4	1, 2	2
9	10	1	10	5	3	9	3
8	6	9	9	1	1	7	8
8	1	8	1	8	8	1	7
2	3	3	4	7	7	1	1
3	6	10	8	6	6	3, 5	10
7	4	7	7	1	5	9	6
5	9	8	1	1	5	1	5
8	7	2	3	4	2	4	8
1	1	4	2	6	5	7	2

Google

29th Set.

P	A	P	A	P	A	P	A
7	10	6	8	3	4	9	2
8	9	7	10	1	5	3	1
1	2	3	2	5	5	2	8
3, 4	8	7	6	7	4	3	10
7	4	5	4	1, 7	7	3	8
3	3	5	2	3	4	3	8
2	10	7	6	9	9	7	7
1	5	7	2	1	9	10	6
5, 4	3	1, 7	7	2	4	4	4
8	10	2	6	6	6	1	8
7	7	3	5	3, 2	2	7	9
8	8	6	9	4	1	1	2
1	9	2	6	2	1	3	3
4	4	1, 3	5	3	9	7	7
7	8	4	4	7	3	9	1
8	1	7	10	9	3	4	4
3	9	7	1	2	6	8	9
2	8	2	1	2	7	8	6
5	1	7	8	3	2	7	2
2	1	2	6	3	3	9	1
7	7	1	10	7	1	1	8
3	3	5	5	2	5	5	2
6	1	2	10	7	7	3	5
2	5	7	9	10	10	1	9
4	4	8	8	9	2	6	5

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30th Set.

P	A	P	A	P	A	P	A
10	4	7	2	8	2	9	10
1	10	9	3	7	3	6	7
1	2	7	7	5	1	5	4
4	8	5, 4	7	2	2	3	6
4	5	1	1	1, 7	5	10	9
8	6	2	4	7, 8	9	8	4
4	2	3	9	7	8	5	2
9	5	8	10	8, 1	1	8	10
7	6	7	10	7	5	6	1
9	6	10	9	6	1	2	6
1	5	8	3	2	6	7	9
1	8	8, 1	1	7	7	6	9
5	4	9	7	9	9	8, 7	7
3	9	4	3	9, 8	8	10	2
3	5	10	5	5	5	1	1
9	6	4	4	8	3	10	10
1	1	10	9	1, 2	2	9	8
2	7	7	4	4, 3	7	8	5
6	10	7	10	9	8	7	5
4, 5	8	4	2	1, 8	8	4	8
3	4	7	9	7	1	9, 1	1
8	8	7	4	9	10	2, 3	3
9, 7, 3	3	3	3	9	3	7	7
1	1	1	7	1	8	6	4
2	9	1	10	1	6	6	7

Google

	1	2	3	4	5	6	7	8	9	0	
1st Set.	14^{2}	12^{4}	9^{2}	7^{2}	13^{1}	9^{1}	8^{2}	8^{2}	12^{2}	8^{2}	100^{20}
2d " .	9^{2}	8^{1}	12^{1}	13^{1}	12^{3}	11^{3}	4^{2}	11^{0}	11^{0}	9^{0}	100^{13}
3d " .	8^{1}	14^{1}	8^{1}	12^{1}	12^{3}	10^{2}	5^{0}	11^{2}	13^{3}	7^{0}	100^{16}
4th " .	10^{0}	9^{0}	9^{1}	11^{4}	12^{2}	10^{1}	6^{1}	10^{3}	12^{3}	11^{6}	100^{21}
5th " .	18^{4}	6^{0}	10^{2}	12^{1}	11^{2}	11^{3}	4^{1}	10^{1}	11^{1}	7^{3}	100^{17}
6th " .	11^{3}	10^{0}	10^{3}	12^{3}	13^{2}	11^{4}	6^{1}	8^{2}	8^{1}	11^{1}	100^{19}
7th " .	9^{1}	8^{1}	12^{1}	10^{3}	14^{3}	10^{0}	9^{1}	8^{2}	12^{3}	8^{1}	100^{1}
8th " .	11^{1}	10^{0}	6^{2}	13^{3}	15^{0}	12^{0}	7^{2}	8^{1}	8^{0}	10^{1}	100^{10}
9th ● .	8^{0}	2^{0}	13^{2}	18^{6}	16^{6}	13^{1}	6^{1}	9^{1}	5^{1}	10^{1}	100^{22}
10th " .	9^{1}	8^{0}	11^{1}	17^{2}	16^{7}	15^{2}	7^{1}	12^{2}	2^{0}	8^{1}	100^{24}
1st 1000	107^{16}	82^{7}	100^{13}	125^{33}	134^{29}	112^{16}	62^{13}	95^{16}	94^{15}	89^{16}	1000^{175}

	1	2	3	4	5	6	7	8	9	0	
11th Set	9^{1}	7^{1}	13^{1}	12^{3}	10^{1}	10^{3}	5^{0}	17^{3}	8^{2}	9^{1}	100^{15}
12th " .	9^{2}	9^{2}	9^{0}	11^{3}	8^{3}	12^{2}	12^{3}	16^{4}	6^{1}	8^{2}	100^{23}
13th " .	7^{1}	12^{1}	12^{2}	6^{2}	10^{0}	13^{3}	8^{2}	16^{0}	8^{0}	8^{3}	100^{15}
14th " .	14^{4}	6^{1}	12^{1}	6^{2}	11^{2}	11^{1}	9^{0}	13^{2}	9^{1}	9^{2}	100^{18}
15th " .	12^{1}	7^{1}	9^{0}	8^{4}	13^{3}	9^{0}	10^{2}	13^{1}	9^{0}	10^{2}	100^{19}
16th " .	9^{0}	8^{2}	11^{1}	10^{4}	10^{2}	10^{3}	13^{2}	12^{3}	9^{3}	8^{0}	100^{20}
17th " .	10^{2}	9^{2}	9^{1}	12^{4}	9^{3}	5^{0}	13^{1}	12^{2}	12^{2}	9^{2}	100^{22}
18th " .	12^{1}	12^{1}	12^{3}	7^{1}	5^{2}	4^{2}	11^{1}	15^{4}	10^{1}	12^{3}	100^{26}
19th " .	10^{2}	6^{3}	14^{1}	10^{2}	7^{4}	5^{1}	7^{1}	18^{3}	11^{2}	12^{3}	100^{24}
20th " .	18^{4}	6^{0}	13^{0}	8^{4}	9^{2}	1^{0}	8^{1}	18^{4}	11^{1}	13^{1}	100^{17}
2d 1000	105^{16}	82^{14}	114^{13}	90^{27}	92^{24}	80^{13}	96^{23}	150^{34}	93^{13}	98^{25}	1000^{199}

	1	2	3	4	5	6	7	8	9	0	
21st Set	8^{3}	4^{1}	14^{2}	7^{6}	13^{7}	10^{2}	10^{4}	20^{3}	14^{9}	0^{0}	100^{46}
22d " .	13^{7}	12^{1}	16^{5}	7^{4}	10^{4}	8^{0}	11^{2}	12^{4}	9^{3}	2^{0}	100^{49}
23d " .	12^{3}	9^{3}	8^{0}	11^{3}	10^{3}	5^{1}	12^{3}	21^{4}	7^{3}	5^{0}	100^{51}
24th " .	18^{6}	5^{0}	10^{3}	9^{3}	1^{0}	7^{1}	5^{2}	22^{2}	19^{2}	4^{0}	100^{55}
25th " .	15^{3}	8^{3}	11^{1}	10^{4}	10^{1}	8^{0}	7^{4}	8^{0}	18^{4}	5^{2}	100^{55}
26th " .	16^{1}	12^{2}	10^{0}	8^{3}	9^{1}	2^{0}	15^{0}	9^{2}	13^{3}	6^{3}	100^{59}
27th " .	15^{8}	7^{2}	12^{1}	5^{2}	6^{1}	8^{1}	13^{1}	14^{4}	17^{6}	3^{0}	100^{59}
28th " .	21^{6}	8^{3}	11^{2}	9^{3}	5^{1}	4^{1}	13^{6}	18^{3}	9^{3}	2^{1}	100^{60}
29th " .	10^{0}	16^{1}	17^{4}	8^{4}	6^{2}	5^{1}	23^{7}	7^{2}	6^{1}	2^{1}	100^{64}
30th " .	15^{7}	7^{2}	10^{3}	8^{1}	6^{1}	7^{0}	18^{4}	11^{2}	11^{1}	7^{1}	100^{63}
3d 1000	145^{85}	88^{19}	119^{18}	82^{35}	76^{23}	64^{8}	127^{32}	142^{47}	123^{38}	36^{6}	1000^{319}
3000	355^{89}	252^{49}	333^{47}	297^{105}	302^{74}	256^{36}	285^{96}	387^{97}	310^{49}	228^{56}	3000^{894}

Changes.

	W. to W.	W. to E.	E. to W.	Miscellaneous.	Total.
1st Set .	0	0	0		0
2d " .	0	0	0		0
3d " .	0	0	1		1
4th " .	0	1	0		1
5th " .	0	1	0		1
6th " .	0	1	0		1
7th " .	0	0	0		0
8th " .	0	0	0		0
9th " .	4	5	0		9
10th " .	6	8	0	One case $\frac{4,5,6}{5,6,5,4,5}\frac{5}{4}$ being right.	16
10 Sets .	10	16	1		29

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Changes.

	W. to W.	W. to R.	R. to W.	Miscellaneous.	Total.
11th Set .	6	2	0		8
12th " .	4	2	0	8, 8, 8, — 8 being right.	7
13th " .	2	1	0		3
14th " .	1	0	0		1
15th " .	2	0	0		2
16th " .	3	1	0	4, 4, 4, — 4 being right.	5
17th " .	5	2	1		8
18th " .	2	4	1	7, 8, 8, 0, — 0 being right. 8, 8, 7, — 8 " 1, 0, 8, 8, — 1 "	10
19th " .	0	3	0	8, 7, 0, — 8 being right. 8, 8, 8, — 8 "	5
20th " .	1	1	0	6, 8, 1, — 1 being right.	3
10 Sets .	26	16	2		32

Changes.

	W. to W.	W. to R.	R. to W.	Miscellaneous.	Total.
21st Set .	0	1	0	8, 8, 7, — 7 being right. 8, 8, 9, — 8 "	3
22d " .	1	2	0	4, 4, 4, — 4 being right.	4
23d " .	1	1	0		2
24th " .	0	3*	0	* In one of the 3 cases. 8, 7 or 9, — 7 being right.	3
25th " .	3	3	0		6
26th " .	2	0	0		2
27th " .	2	2	0		4
28th " .	2	3	0		5
29th " .	3	3	0		6
30th " .	6	7	0	9, 7, 8, — 8 being right.	14
10 Sets .	20	25	0		49

30 Sets .	56	57	3	14, — 11 of which ended right.	130 †

† which 68 ended right, 62 wrong.

Google

Repetitions in Horizontal Lines.

	3 times	4 times	5 times	6 times	7 times	8 times	9 times
1st Set . .	3^{0}	1^{1}	0	0	0	0	0
2d " . .	7^{1}	0	0	0	0	0	0
3d " . .	4^{1}	0	0	0	0	0	0
4th " . .	4^{2}	1^{1}	0	1^{1}	0	0	0
5th " . .	4^{1}	5^{1}	0	0	0	0	0
6th " . .	6^{2}	2^{1}	0	0	0	0	0
7th " . .	5^{2}	0	0	0	0	0	0
8th " . .	6^{1}	3^{0}	0	0	0	0	0
9th " . .	6^{1}	2^{0}	0	2^{2}	0	0	0
10th " . .	5^{0}	2^{0}	0	0	1^{1}	0	1^{1}
11th " . .	2^{0}	2^{0}	0	1^{1}	0	0	0
12th " . .	6^{2}	2^{1}	0	0	0	0	0
13th " . .	8^{2}	1^{0}	0	0	0	0	0
14th " . .	5^{0}	3^{1}	1^{0}	0	0	0	0
15th " . .	11^{0}	1^{1}	0	0	0	0	0
16th " . .	6^{0}	2^{1}	0	0	0	0	0
17th " . .	4^{0}	1^{1}	0	1^{1}	0	0	0
18th " . .	3^{0}	2^{1}	2^{2}	0	0	0	0
19th " . .	6^{1}	1^{1}	2^{1}	0	1^{1}	0	0
20th " . .	6^{0}	4^{2}	0	0	0	0	0
20 Sets . .	107_{e}^{21}	35_{e}^{16}	5_{e}^{3}	5_{f}^{3}	2_{f}^{2}	0	1_{e}^{1}

e. 20 cases where the digit is either 4 or 5.
f. 4 " " " " "
2. 12 " " " " "
4. 6 " " " " "

e. 0 cases where the digit is either 4 or 5.
f. 1 " " " " [2.6; 2.6.]
f. 2 " " " " [1.5; 1.5.]
[4.]

Google

Extra Sets.

4	2	1	0	2	5	4	3, 4	2	1	3
4	1	3	2	0	4	1	1	4	3	5
4	7	6	4	1	7	2	3	6	5	9
4	9	7	5	9	5	3	1	7	8	7
4	8	4	7	5	9	0	9	9	7	2
4	3	9	9	8	8	9	5	8	4	4
4	4	5	8	4	6	7	4	0	8	5
4	2	1	2	3	4	5	3	1	9	9
4	0	0	3, 4	5, 9	2	1	2	2	0	0
4	5	7	3	6	3	2	9	4	2	1

1	2	3	4	5	6	7	8	9	0	
11	13	11	14	11	4	9	6	13	8	100

8	3	9	2	6	8	8	0	8	3	7
8	8	8	0	7	2	7	6	6	9	1
8	2	5	1	9	8	9	5	7	1	2
8	0	9	8	0	1	6	4	1	6	4
8	9	1	6	1	9	3	1	0	5	3
8	4	3	0	2	0	5	8	5	4	5
8	6	2	2	5	8	2	9	8	8	0
8	0	9	8	8	7	8	3	3	9	1
8	3	7	1	6	8	6	2	6	6	9
8	5	8	4	3	1	9	5	7	2	8

1	2	3	4	5	6	7	8	9	0	
11	10	10	5	9	11	7	16	12	9	100

2	2	4	2	8	5	3	1	3	2	3
2	5	1	4	2	1	2	0	1	4	2
2	4, 5	3	3, 5	3	0	4	4	5	0	5
2	1	5	3	4	2	5	3	2	1	2
2	0	0	5	2	4	3	2	3	3	3
2	3	1	1	0	2	0	3, 5	0	2	0
2	5	2	0, 5	1	5	1	1	4	1	1
2	4	4	0	3	3	3	3, 5	5	0	2
2	2	3	4½	5	1	4, 5	0	2, 1	2	5
2	1	1	5	4	2	2, 3	1	2	3	4

1	2	3	4	5	6	7	8	9	0	
18	25	18	12	15	0	0	2	0	12	100

REPORT OF THE COMMITTEE ON PHANTASMS AND PRESENTIMENTS.

We who collect narratives from many sources are usually supposed to be very much at the mercy of our informants. We shall reach, most people say, either no results at all, or only such results as popular prejudices and superstitions already support in advance. When the English society first asked for stories of the sort that this committee is now studying, critics declared that such a call for ghosts, dreams, and vain imaginations took down every barrier which science usually puts between itself and pure superstition. To ask every man to tell what was in his head about his presentiments, and his other wild fancies, was at best, even if, *per impossibile*, such fancies had any basis, very like asking mankind at large to write down their views on electricity or on medicine. If there was any scientific explanation for all these visions, surely this could not be the way to get at the truth of the matter.

In beginning a report to the society on the present occasion, I am glad to be able to declare that a study of a good many stories, such as have come to hand in the work of your committee, convinces me that this method of work does *not* leave us at the mercy of our correspondents, and is neither essentially unscientific nor necessarily unfruitful. The principal positive generalization that I shall offer in this paper is, namely, one which not a single one of our correspondents has had in mind, although many of them will be found to bear unconscious witness to its truth. And this generalization, such as it is, has no standing as a popular superstition; and, as a psychological doctrine, has some genuine novelty. From this point of view I regard our method of research as in this case well justified by the event, and I am hereby well encouraged to continue the work. Moreover, whilst a large number of our cases are not as yet certainly capable of being brought under any established laws, new or old, still, even these cases are not generally what the objectors to the methods of the English society expected to find as the results of a request for stories about apparitions and presentiments. That is, our stories bear in general the marks of being not mere products of folk-lore, or of systematic superstition, but rather expressions of genuine experience, — of experience which our correspondents do indeed often misinterpret, but which is, in most cases, the fresh, live product of real mental processes, and *not* the manufactured tale of popular legend. Superstitious creations are, indeed, found amongst

our narratives; fanciful and credulous people, influenced by systematic and unenlightened conceptions, derived from some lower form of popular faith, occasionally do give us their confidences; but even such people are, as I find to my delight, very commonly people whose interpretation of their experience is not nearly so prominent in their stories as is their real inner experience itself, in all its freshness, its abnormity, and its consequent instructiveness. For abnormal experiences also, the products of over-excitement and of mental disease, may be, when studied by the comparative method, even more instructive to the student of psychology than are the reports of perfectly commonplace folk. And in *our* comparative study we have been also aided by large numbers of people who are neither commonplace nor superstitious.

The *comparative method*, — that, as I need hardly say to intelligent students of facts of this kind, is the key to all useful examination of such narratives. Your correspondents may tell you what they will themselves; they cannot know or predict what shall appear when many stories, from independent sources, are put together. What mere folk-lore consciously or unconsciously creates, and what genuine inner experience actually supplies, come to be thus quite easily distinguishable when you look at narratives of the same group in large collections. Where your classification does not depend on the intentions of any of your individual correspondents, but on characteristics that are common to many of their separate stories, you can get by your analysis the unconscious testimony, so to speak, of all the many persons. And this unconscious testimony is, in large part, what we shall have to depend upon for results in this class of evidence. Hence the justification of our methods, of our public requests for stories, and of our whole undertaking.

Yet in this report I want to give much more than the still very incomplete scientific results of the inquiry as thus far prosecuted. Even at the risk of seeming to heap up mere anecdotes, I want to give some notion of the variety of our material. Where no results are apparent, where the tales cited either illustrate well-known classes of psychological facts, or, on the other hand, stand alone as inexplicable curiosities of mental life, I hope that the society will understand why I repeat them here. Old classes of facts, such, for instance, as purely subjective hallucinations, are, nevertheless, to-day in much need of fresh examination and illustration. I want to show that by our method we can hope ere long to furnish further material for the comparative scientific study of such known classes of facts. Novel facts, even if our scrutiny of them is still very incomplete, ought to be mentioned, so as to give members of the society

an idea of what novelties are reaching us. In short, I think it due to the society to make this paper not only a statement of one or two probable general results that I think we have reached, but also, to a certain extent, a collection of specimens of our material, — a little cabinet of curiosities, if you will, not meant solely to mark definite additions to general knowledge, but in part intended to illustrate the variety of our sources, and the fresh interest of our letters. I propose to show, at all events, that if this research is soon to cease, it should not do so because of the lack of promising material; and that, if the members of the society want the research to continue, they can easily find, in the wealth of the ripened harvest, a reason for sending out further laborers into the standing corn.

My illustrative facts will differ much both in intrinsic value and in interest for the curious. I shall begin with the less interesting types of cases, and shall gradually come to those which may be supposed to throw some possible light on the reality of telepathy. First of all I shall speak of the cases that possess only a subjective interest, as illustrating curious events of the inner life of some people. I refer, of course, to subjective hallucinations, such as lack discoverable objective reference. Secondly, I shall describe a few experiences that are probably to be explained as instances of what is generally called "unconscious cerebration." Thirdly, I shall give a part of the evidence for what I have called the principal result of this paper, viz., the evidence for the existence of a not generally recognized species of mental experience, — a species which simulates presentiment, but which is not presentiment. I mentioned in an earlier informal report to this society, not published in the Proceedings, the possible existence of this species of unreal presentiments; but only now have I evidence well in hand. Having disposed of all these classes of cases, I shall come at last to the seemingly telepathic coincidences now in our hands, and shall give, as fairly as possible, the exact evidence that we have for these coincidences, and an estimate of their value. The way may seem long, and only the possible amusement that some may find in the occasionally rather surprising originality of statement in the stories can beguile its dulness. But in any case these stories may serve, for better or for worse, as documents illustrating the psychology of the American people.

I. — Subjective Hallucinations of Familiar Type.

Not a few of our correspondents tell us of hallucinations, and of remarkable dream impressions, which indeed lack any possible verification, and suggest no objective test, but which are in themselves

good examples of what may occur to perfectly sane and reasonable people. Few persons who do not inquire into the matter know what remarkable hallucinations of the sane are on record, and how plastic and vivid some of these purely subjective experiences are. Unreflective people, in fact, do not observe the obvious truth that a thing is not real merely because it is vividly present to my senses when I am quite awake and apparently quite well. Only that is objective whose existence can be tested from without, either by the fact that other people see it, or by the fact that it gives some otherwise externally verifiable sign of its reality. Yet some of our correspondents, in telling us about vivid hallucinations, add that the hallucination must have been somehow a real thing, because, says one, "I was not in the least expecting it," or because, as another remarks, "It lasted some time;" or because, as is very commonly stated, "I was quite awake at the time," or "quite well." Now, all these tests are, of course, meaningless in the light of the fact that such hallucinations, leaving no trace of their reality on earth, and vanishing into the dreamland whence they came, are known to occur, not, to be sure, frequently, but sporadically, in the lives of tolerably sound and wide-awake people. Of course one cannot question that such appearances are, in proper connections, important pathological symptoms, but they surely do sometimes come to persons who, at the time, seem to themselves to be fairly or quite well. In fact, as is well known, one of our society's blanks asks particularly for reports of experiences of this sort. I will here give one or two of the communications illustrating these subjective hallucinations, merely adding that I feel convinced, in respect of all the cases reported in this paper, that they are reported by sincere people. The conviction is based either upon our official knowledge of the people, or upon a proper examination of second-hand evidence as to their character. In the later classes of cases discussed herein, my conviction needs, of course, to be founded on a closer scrutiny than it is necessary to give to the evidence for these earlier subjective cases, whose type is well known, and whose value is mainly illustrative.

[1] (*From C. H. W.*)

BALTIMORE, Dec. 18, 1887.

To the American Society for Psychical Research: —

In answer to question VIII., let me say that I had a very remarkable experience.

In the year of 1872 or '73 I was listening to a lecture on geology, in the Boston Natural History Hall. Suddenly a human face appeared before me of a young lady who had died three or four years before. She lived in Newton, and was only known to me by having seen her occasionally on the street in Newton. I had never been introduced to her, and

had probably heard of her death and never thought of her again until her face appeared about six feet in front of me at a lecture in which I was much interested, and which could not have lifted my mind to thoughts spiritual, as they were way down in the tertiary period. It affected me so deeply that I kept it to myself for about three years. I then happened to make a wedding-call on a young lady who lived next door to the one of my dream. I related it to her. In a few weeks she died, and I was one of her pall-bearers. A celebrated bank president, who now resides in Canada, officiated also in the same capacity, and I believe he carried several thousand dollars of the officiating clergyman with him to that haven.

Very truly yours, etc.

The hallucination and the narrative are a trifle droll, and no one will lay any stress on the coincidences, which amuse the author as much as they do ourselves. The misfortune with the case is the lapse of time since the event. To test the accuracy of our informant's memory, we sent him a question blank, to which we received the following replies: —

BALTIMORE, Dec. 27, 1887.

DEAR SIR, — Your letter, with circular G, at hand. In answer to questions: —

1. *Q.* Is the experience which you narrate the only one of the kind which you have had in your life?
   A. Yes, it is the only experience of the kind.
2. *Q.* Did you see the *face alone*?
   A. To the best of my recollection, I saw the whole head.
3. *Q.* Did you recognize the face clearly at the time?
   A. Yes.
4. *Q.* Was there anything peculiar about the appearance?
   A. No; she looked natural.
5. *Q.* Did the face shut out your sight of other objects behind it?
   A. Of course.
6. *Q.* What position did the face occupy in space, high or low, etc.?
   A. High. I first saw her, I think, while looking at the clock.
7. *Q.* Was the face seen by any other person than yourself?
   A. I think not. I was sitting in one of the back seats in the lecture-room, and I don't think any one else was sitting at an angle at which she could be seen.

The same informant has had one comparatively insignificant dream experience, which he narrates to us; but he seems to have been otherwise quite free from such visitations, an instance of a quasi-presentiment, which he sends us, having no importance. He declares himself to be of a phlegmatic temperament, free from superstition, and adds that he has never been mesmerized, although he has submitted to experiments for that purpose.

Our next case is from a Southern lady, — C. B. Here are two

hallucinations, one of the well-known type of hallucinations on the borderland of sleep, the other a day-illusion, generated as a sort of reflex by an appropriate sense-impression under peculiar circumstances. About the writer's intelligence and temperament I have none but internal evidence, but that is favorable.

[2] APRIL 8, 1886.

RICHARD HODGSON, *Secretary Society for Psychical Research* : —

DEAR SIR, — I have become very much interested in the work of your society, and would like to submit some strange personal experiences; only requesting that, if you see fit to publish the following, my name and residence be withheld.

A few years ago I was visiting a friend living in the country, thirty miles from the nearest town. The family was small, — only the doctor, his wife, my friend, and myself. One night S. and I had gone to our room about eleven o'clock, and after retiring had talked quite a while, till S. said she was going to sleep, and, turning over, was soon in dreamland. The room was large, and lighted by four windows, through which the moonlight poured in brightly. The door was closed, but not fastened, and was almost opposite the bed. For nearly an hour I lay looking out over the orchard and garden, when suddenly I became conscious of a presence in the room, and, turning, saw the door was open, and standing in the middle of the room was a figure clothed in black, with a heavy veil concealing the face and figure. It advanced slowly to the foot of the bed, which so terrified me that I hastily drew the sheet over my face, and began to shake S., and whisper to her that there was somebody in the room. It was fully ten minutes before she wakened to understand, and then our strange visitor had gone. Of course she said I was dreaming; but the open door was unaccountable, and I had not even closed my eyes, and the moonlight was too bright for me to have mistaken any object for something supernatural.

The following winter I was in New Orleans, and went one Sunday with my sister to Trinity Church to hear Dr. (now Bishop) Hugh Miller Thompson. The church being crowded, a single row of seats had been placed in the aisle next the windows. My sister took a chair just behind mine, the one in front of me being vacant. During the Litany, at the clause, "from sudden death," a hand was laid on my prayer-book. It was a large, well-shaped, white hand, evidently a man's, with nails well-cared for. This I took in at a glance, and before I had time to speculate on the subject it was gone. I questioned my sister, but she had seen nothing. The aisle was too broad for any one to reach across, and no one had passed down the aisle after service had begun; so it could not have been human.

In answer to further inquiries, this correspondent tells us that the hand in question was not a hand that she could recognize as belonging to any known person, and adds that she knows of no connection between this experience and any previous or subsequent events. Her sister, who was with her in church, confirms her view that the

apparition in question could not have been the hand of any real person.

I have numerous other sporadic hallucinations that have been reported, and in the supplement to this report will be found further material. I cite these cases here mainly for a reason previously suggested, viz., although the existence of hallucinations in health and in disease is well recognized, still the comparative study of their forms and conditions is yet in its infancy. Some recent writers, such as Kandinsky, of St. Petersburg, have lately been defining afresh and prosecuting such a study, and it is much to be desired as a contribution to psychology. Now, surely a committee like our own might hope, in time, to add valuable material to the mass. Of course I have no illusions about the small scientific value of any such limited collection of reported hallucinations as we now have. What I suggest is, however, that we may yet, if we continue, have a large and important collection of these interesting phenomena. The effort is worth making.

II. — Instances of Recognized Sorts of Unconscious Cerebration.

Text-books of mental science have for many years contained mention of the interesting cases where people by the aid of dreams have recalled forgotten facts, have found lost articles, or have solved problems that they had vainly attempted in their waking life. It is not surprising, therefore, that we should receive a good many fresh instances of this sort. Their type is not new, and their general explanation is sufficiently well known, although that general explanation is not yet very satisfactory to such minds as want to understand the specific laws of mental life. In general, then, it is known that much of our mental life is not in our own personal consciousness from minute to minute, and may never get into our clear consciousness at all. How this unconscious mental life is related to our consciousness we do not very well know. We only know the relation is genuine, close, and constant, affecting our whole conscious life. Now, in certain cases, what one can no longer consciously make out to himself by any effort is still somehow clear to what we may call his unconscious self, and the curious conditions of dream-life may therefore suddenly supply, as a free gift to the conscious person, results that no amount of conscious toil can give him, but that this unconscious self has elaborated. This is still the best account, very vague indeed though it be, of the mental processes that are illustrated by the following among our cases.

The first case, or rather set of cases, which I quote under this head will be seen to have a somewhat puzzling character, and probably not all the instances in question belong to this particular type; yet I cite them all here, first, because the source from which they come makes them especially noteworthy, and, secondly, because the instances that suggest any other explanation than pure coincidence *may* be cases of our unconscious cerebration type. In quoting I give the letters of our well-known correspondent almost in full, omitting only a few sentences of no importance here: —

[3] (*From Prof. Coleman Sellers.*)

3301 Baring St., Philadelphia, Pa., Feb. 10, 1888.

. . . About Mr. Wilson[1] I will tell you a curious circumstance. Some years ago, before I had met him, I was one evening on my way to a meeting of the Photographic Society. I stood at a corner waiting for a car; I saw a dark-haired man waiting also. We got in the first car, and sitting on opposite sides of the car we looked at each other. I, impressed with a desire to speak, crossed to him and said, "Is your name Wilson?" "Yes," he replied. "Is your name Sellers?" I then said, "But I thought you had light hair," and he said, "I thought you had dark hair."

That was the beginning of a long friendship, now nearly twenty-five years' standing. . . .

Wilson and I may have seen pictures of each other, but neither could remember having done so. I have no doubt, however, but that was the way we came to know each other.

Another letter, dated Philadelphia, Feb. 14, 1888, continues, in answer to questions, thus: —

In regard to the meeting with him (Mr. Wilson) it was as I stated, with the exception that I had been informed that he was coming to the city, and yet I did not know that he had come. I admit nothing out of the common in the event. I can explain it in many ways. There may have been a family likeness, and I knew his father. All admissions being made, the coincidence was a good one, as it influenced two persons.

Now let me tell you another case. Business called me to Altoona, Pa. I was to go up at night. I noticed a very good-looking man walking in the station, waiting for the gate to open. We entered the same sleeping-car. Our berths were near to each other. It was bright moonlight, and as we passed the park he asked me some questions about West Philadelphia, and finding that I resided there he questioned me about the religious denominations there. I could give him little information, but I mentioned having heard a great Unitarian preacher speak in Chicago. He then told me many anecdotes about this man, who had been, if I mistake not, a blacksmith at one time. We went to bed, and in the morning we were both up before my reaching Altoona. We chatted, and during the talk he

[1] The President of the Franklin Institute. [Note by J. R.]

said, "I was at the seaside once, and met a very bright German who was there with his microscope — " — "Yes, I know," said I, "it was Carl Meinerth, of Newburyport, Mass." He looked at me with wonder, and admitted that I was right, and asked me why I had named him. I could give no reason, for I know many bright Germans who are microscopists. He was so astonished that he could not speak, and at that moment we reached Altoona. I said good-by and we parted, neither knowing the other.

While at the hotel in Altoona I wrote to Meinerth, and told him the story, and, describing the man, asked if he could tell me his name. When I reached home I found a letter from Meinerth enclosing the picture of the man, and saying that he had written to ask who I was, and our letters crossed. That is, Meinerth wrote to me before receiving my letter to him. The man was an Episcopal divine, living in the West, who had come to Philadelphia to look at the church that had given him a call. This led to a long correspondence, that was continued for some years, but now I cannot recall his name. I cannot consider this in any other light than pure chance. During the war of the Revolution my grandfather was called home from his place in the army to make paper moulds that were needed, he being the only one in America who could make them. It was an act of Congress that recalled him, and after that the government had him employed in many ways besides fighting. He continued to make paper moulds and other work of that kind, under the firm name of Nathan and David Sellers, later Sellers & Pennock. My father invented a machine to lay paper moulds, and was working at it in the city after his father had retired from business to his country-place in Delaware county. The machine did not work well, and both of them were bothered over the failure. One night my father dreamed that an old man came to see him and said, "If you want that machine to work you must turn it upside down." Father was astonished, for he saw at once that it would be better to have the mould below, and not above, the laying machinery. He called for his horses, and, taking my mother with him, drove out to Mill Bank. As he came near the house he was surprised to see his father waiting for him, saying, as he drove up to my father, "Coleman, I am glad thee has come. I expected thee, for I have had a dream and want to tell thee about it." Upon comparing notes the dreams were the same and at the same moment. My ancestors were Quakers, but of course grandfather's joining the army lost him his place in the society, and his son had no birthright, but in the family they both used the language of Quakers.

I have given this story as it was given to me; but at the same time, with the most implicit faith in the veracity of all connected with it, I cannot but think that perhaps it has been exaggerated, and I have very little interest in such stories unless they happen under my eyes.

I met James Russell Lowell in London, and presented a letter from his predecessor, Mr. Welsh. I was received with open arms, he saying, "I am so glad to see you; all my early recollections of residence in Pennsylvania are connected with your family, and I remember many interesting things about your ancestors. There was a very pleasant old gentleman, one Nathan Sellers, who told me that when your ancestor was about leaving England for America, in 1682, he dreamed about seeing a very singular person, who showed him land that he advised his taking up.

When he reached Philadelphia he recognized the person of the dream in the land agent of William Penn, who showed him the land that he had dreamed of. Part of that land I yet hold." It seemed odd to go to London to meet a man unknown to me, who should tell me so many things about my people.

I could tell you many other things of this kind, and many relating to my own inventions, which seem remarkable, if I did not fully understand the value of unconscious cerebration.

In a letter dated Feb. 24, 1888, Professor Sellers gives us further information about his experiences of unconscious cerebration: —

In reply to one of your recent letters I would say that the story of my father's dream cannot be obtained from any of the parties concerned, as all have died. My father died in 1834, and his father a few years before that. I have written to my older brothers, asking them to say what they have heard about the dream.

Our brain works after we have striven to give it rest. In regard to inventions, I have many times worked for many hours to obtain a result much desired, and, having failed to devise what would be satisfactory, have given it up for the time, and been surprised with the solution coming to me when my mind has been directed to other subjects.

This has happened so often that I am no longer surprised at it. It is what happens to us continually when, failing to recall the name of a person, we give up thinking of it, certain that it will come to us when we least expect it. See Dr. Holmes in his "Mechanism of Thought and Morals."

Our minds receive impressions from all sounds and all objects we see in the most heedless manner. Some persons have the power to recall these impressions easier than others; to all they come when not expected.

I have more than once been startled from my sleep by an impression that an error had been made by one of my draughtsmen in his work, and when I see his drawing after, I find that it is as I have dreamed. In this case I must have seen the error without heeding it, and my brain, after a while at seeming rest, has, during its unconscious cerebration, called my attention to the fact; once when we were making the large planing-machine for the Russian government, a machine to be used on the bed-plates of the large steam-engines used in ships-of-war, the slotting attachment was to be operated by a large screw of quick pitch, which would require some restraining device to prevent its reaction from the weight of the part lifted. I gave one of my men the idea and asked him to make a drawing.

That night I was impressed with the notion that the idea was not original, but had been patented, and, to avoid complication, I tried to think of some other way to do what was wanted. I told the man, the next day, that he would have to think of some other method, as that was patented, I felt sure. He looked surprised, and when he found I was in earnest he went to the patent-drawing drawer and showed me my patent for the invention, taken out some years before. You see I was right, but mistaken in regard to the fellow who had made the invention.

The following is added by Prof. Sellers in a letter of Dec. 20, 1888: —

> As another example of the unconscious mental work that has with me so often accomplished good results, I will give you a recent example. I called to see the agent of the Remington Typewriter and asked him why they did not place on the instrument a means of "racking back" after the manner of the spacing-key, which will cause the sheet to advance without letters being formed. He said such a thing would be good, but he did not know how it could be done, and asked me if I knew of any way of doing that kind of "racking back." I replied that I *did not know* how to accomplish it, but, as I thought it would be a good thing for me, I intended to make the attachment to my machine. I left him, giving little thought to the subject, and went home — reaching my house in about forty minutes — and as I was entering the front gate I was astonished by a flash of thought coming to me with the full and perfect invention so well worked out that the next day I made the required attachment, and am now at the present time using it as needs be in writing this letter. This is one of the many examples of thought going on after it is once started; and sometimes the mind, if not forced, will do work more rapidly for the want of attention. I have so much confidence in this kind of mind-work that I am used to trusting to it many times when I want to reach any desired conclusion requiring invention.

Ancestral stories of any sort can have, of course, as such, very little historical worth, and I give the family stories communicated by our correspondent merely because they are in the context with Prof. Sellers' own personal experiences. A natural explanation in case of the incident of the microscopist is, of course, that Prof. Sellers had really had some previous knowledge of his travelling acquaintance, and was merely unable consciously to recall where and when he had met him. This amnesia happened to be interrupted in respect of the one matter of the acquaintance with the microscopist. The coincident forgetfulness of both the travellers is, after all, not so astonishing. Travelling on sleeping-cars is probably peculiarly favorable to forgetfulness, and if one may judge by the people whom one usually sees in the smoking-room at the beginning of night journeys, most of the cerebration that occurs in Pullman cars is probably of the unconscious type.

Unconscious cerebration is well known to have frequent reference, in some people, to estimates of time. A good case of this sort comes to us from a trustworthy source. A correspondent in Providence, R.I., writes, "The only personal experience which I have had that would be of any interest was a dream, in which I saw an enormous flaming clock-dial with the hands standing at twenty minutes past two; awaking immediately I struck a match, and upon looking at

my watch found it was a few seconds past twenty minutes past two." But phenomena of just this sort, *i.e.*, unconscious but correct reckoning of time, are not known to science merely through hearsay, but can be, and have been, verified experimentally in the study of hypnotic patients.

Of the finding of lost articles through dreams I have three fairly good cases to report here. Unfortunately only one of them depends upon the memory of more than a single person. But partly in view of the known reality of the class in question, partly because I feel pretty sure of the general correctness of these instances, and finally, because the stories are all told *con amore*, I report all three. Of course what seems to have happened in each case is, that the loser of something valuable, though unable to pay conscious attention to the place of the lost article, had actually seen it in its hiding-place. This knowledge of the lost article was then restored by the unconscious activity to the personal consciousness of the loser during a dream.

The first case comes to us from a lady (M. B.) to whom we had applied for an account of another and more remarkable experience, which she was unable, however, to relate to us at present. As a compensation she gave us this less important experience, of whose incidents she feels very sure: —

[4] A number of years ago I was invited to visit a friend who lived at a large and beautiful country-seat on the Hudson. Shortly after my arrival I started, with a number of other guests, to make a tour of the very extensive grounds. We walked for an hour or more, and very thoroughly explored the place. Upon my return to the house I discovered that I had lost a gold cuff-stud, that I valued for association's sake. I merely remembered that I wore it when we started out, and did not think of or notice it again until my return, when it was missing. As it was quite dark, it seemed useless to search for it, especially as it was the season of autumn and the ground was covered with dead leaves. That night I dreamed that I saw a withered grape-vine clinging to a wall, and with a pile of dead leaves at the base. Underneath the leaves, in my dream, I distinctly saw my stud gleaming. The following morning I asked the friends with whom I had been walking the previous afternoon if *they* remembered seeing any such wall and vine, as *I* did not. They replied that they could not recall anything answering the description. I did *not* tell them *why* I asked, as I felt somewhat ashamed of the dream, but during the morning I made some excuse to go out on the grounds alone. I walked hither and thither, and after a long time I suddenly came upon the wall and vine *exactly as they looked in my dream*. I had *not the slightest recollection* of *seeing* them; or passing by them on the previous day. The dead leaves at the base were lying heaped up, *as in my dream*. I approached cautiously, feeling rather uncomfortable and decidedly silly, and pushed them aside. I had scattered a large number of the leaves when a gleam of gold struck my

eye, and there lay the stud, *exactly* as *in* my *dream*. My friends refused to believe when I told them, and vowed there was some trick about it, but as I had not told *any one* the *particulars* of the dream, that was impossible, and the matter will always be somewhat "uncanny" in my memory.

The next case depends upon a memory of many years' standing, and, were it not for the cleverness and the freedom from superstition which the narrator shows, I should lay no stress upon the incident. But pretty plainly something of the sort did occur to our correspondent, although, after twenty-five years, memory is a poor guide, and obviously his story has been often told by him: —

[5] (*From C. H. H., C.E. and Surveyor.*)

California, Dec. 26, 1887.

Seeing an invitation, or request, in the "New York Herald" from any and all parties in reference to Dreams or *Hallucinations*, — is not the latter a rather harsh term?

I don't think there is a particle of foolishness in my composition; at least, I hope not. I don't say this boastingly, but treating the present subject. In former days I have endeavored to investigate spiritualism and other so-called supernatural phenomena, but failed to find anything that, in my opinion, would be beneficial to the human family, and am unusually free from superstition. I would wish the above to read, failed to find in spiritualism anything beneficial, but other phenomena I think worthy the most profound investigation. With this preface I will state my dream: —

Upwards of twenty-five years ago I was residing on the banks of the Delaware river, in Sullivan co., State of New York. Before I left home my only sister had presented me with a gold ring and told me to never lose it. In a beautiful little grove near the bank of said river a lot of us young folks had fixed up a scup, or swing, among the trees, and we indulged in that pastime to that extent that the land immediately under the swing became so lively that my foot would make a deep impression. One beautiful moonlight night, after getting tired of swinging, I had seen my best girl home, as in duty bound, and was returning along towards morning, as usual, when I missed my ring. It gave me quite a shock when I made that discovery; the first impression I had was, there I've lost that ring, but it must be found, and that I would find it. Went home and searched round my room and went to bed. Had a hazy sort of dream about the ring, but nothing definite. Got up early and searched before breakfast. After breakfast followed the direction we had taken the night before to the swing, and from there to the young lady's home; but found it not. In fact, I searched diligently all day, and went to bed thinking very seriously of the ring. Along towards morning had a very impressive dream. I saw the ring covered by a little ridge of sand, between two footprints under the swing. That dream was so vivid that on awaking I could see the road, buildings, fences, trees, swing, and sand, with the footprints therein the same as in the dream, and as soon as it was light enough to see I started for that swing, not attempting to look for it on the way. On arriving at the swing I walked deliberately into the sand until I reached the before-

mentioned ridge, between said footprints, and with the toe of my boot removed a little sand from the top of the ridge, and out rolled the ring. The birds were singing overhead in the trees, the river was rushing on its way to the sea, a train of cars on the York and Erie R.R. across the river passed along. I banged my head several times with my fist, to make sure I was not still in the land of dreams; no, I was there, standing in the sand, and there laid the ring. There was no hallucination about that, but a good, square, honest, useful dream. I picked up the ring and went home, and ate more for breakfast than I had in the last twenty-four hours, and I kept up an awful thinking, and am thinking yet. I would state I was about nineteen years of age at that time, enjoyed perfect health, and thought I knew more than all creation; but don't think so now. My sister was also living at that time.

Several years after the above I had another dream, and the last one; but this has been so long that I will close for this time to see what you think of it, and whether the second will be of interest to you, and will merely remark that I have endeavored to work this dream business up to a practical use in the years gone by; but it has been a total failure, so far, — can't concentrate the mind with that *intenseness* that seems to be necessary with me to bring forth dreams.

Any one used to narratives recognizes at once that this story, as I have suggested, has grown not a little with years, and I am not sure of more than that it has a probable foundation in fact, and is no doubt sincerely told.

The third case to be quoted in this connection has a better basis, and is more critically told: —

The narrator is a Southern gentleman, Col. A. v. S., of Texas.

[6] DECEMBER 15, 1887.

In the "New York Herald" of Dec. 11th inst. I have noticed your interview, in which you say that you request any person having some unusual experience, such as an exceptionally vivid dream, etc., etc., should address you. The following seems to me a very extraordinary dream, for the truth of which I pledge you my word of honor.

About five years ago I lived with my four children, one boy and three girls, on a farm in Massachusetts. This only son, at the age of about fourteen years, lost his life in an accident, about six months previous to this narration. The youngest of my girls was the pet sister of his since her birth. My wife had died some six years previous to this story; being motherless, made these children unusually affectionate toward each other. One day I had occasion to buy for my girls each a very small lady's knife, about two and a half inches long. A few days afterwards the girls received company from our neighbors' girls, some five or six of them. My youngest one, some eight or nine years old, was so delighted with this, her first knife, that she carried it with her at all times. During the afternoon the children strolled to the large barn, filled with hay, and at once set to climbing the mow to play, and jumping on the hay. During the excitement of the play my little girl lost her knife. This terrible loss nearly broke her

heart, and all hands set to work to find the lost treasure, but without success. This finally broke up the party in gloominess. In spite of my greatest efforts to pacify the child with all sorts of promises, she went to bed weeping. During the night the child dreamed that her dead dear, beloved brother came to her, taking her by the hand, saying, "Come, my darling, I will show you where your little knife is," and, leading her to the barn, climbing the mow, showed her the knife, marking the place. The dream was so life-like that she awoke, joyfully telling her sister that her brother had been here, and showing her where she would find her knife. Both girls hastily dressed, and running to the barn, the little girl, assisted by her sister, got on top of the hay, and walked direct to the spot indicated by her brother, and found the knife on top of the hay. The whole party said that they all looked there many times the day before, and insisted that the knife was not there then.

This, I think, is a very remarkable dream.

Yours, etc.

In answer to a request for further confirmation, our correspondent writes, under date of December 29, 1887: —

Yours of Dec. 22 inst. to hand. According to your request I will give the statement of my girls. The little dreamer says: —

"I have a very vivid recollection of my dream up to this day. I could to-day walk every step that I walked in my dream with brother. I cannot recollect at what time of the night I had my dream. I don't think I ever was awake during the night, but, on awaking in the morning, I had the feeling that I was sure I could go and get the knife. I told my sisters. They at first laughed at my dream, but I insisted that brother had shown me the knife, and I could not have peace in my mind until I went to the barn to get it. One sister went with me. On reaching the hay, I told her to let me go ahead, and walked direct to the spot without hesitating a moment, and picked up my knife!"

She never had any other similar experience, and no other similar experience happened in my family. The sister who went along with her says: —

"As we got up and were dressing, sister told me she knew where her knife was; that brother took her out to the barn during the night and showed it to her. I laughed and tried to persuade her that this was only a dream, but she said that she was so sure of seeing the knife that she would show it to me. She said that brother took her by the hand, and led her to the place, talking to her all the way, and tried to quiet her. She would not give peace until I went along. On getting on top of the hay she walked direct to the spot, saying, 'Here brother picked the knife up out of the hay,' and at once said, 'and oh, here it is,' picking up the knife. We had been looking this place all over, again and again, the previous evening."

The case calls for no special comment, except a remark that its details are now probably somewhat too vivid in the minds of the family,

who have often talked the matter over, and have often told the story. Yet there can be no error as to the main fact, of the finding of the knife through a dream that depended upon an unconscious memory of where the knife had been lost.

I close this study of cases of unconscious cerebration with an instance of a decidedly different sort. As the society knows, we have done what we could to collect cases of unrealized presentiments, as well as of realized ones. And we have at hand, from a very obliging correspondent (one of our own members), a rather amusing instance where an unconscious mental process led him to dream of a calamity as happening to a friend in Europe, whose intention to visit Italy, where the dream placed the scene of the calamity, had even been forgotten by his conscious self. The dream, by good fortune, proved to be entirely without connection with fact. I give the case because it illustrates so well what we desire our friends to do for us in all this inquiry. Note, namely, the kindness and the forethought of our correspondent in making an exact note of his dream at once. Here is the statement of W. S.: —

[7] Boston, Feb. 19, 1888.

In the latter days of March, 1887, we bade farewell to an elderly friend who was soon to sail for several months' travel in Europe. From this time until the night of my dream I think I did not hear her name mentioned, nor do I remember that I ever thought of her.

On the morning of May 12, 1887, I, not being accustomed to dream, awoke my wife suddenly (about 6.45 A.M.) and asked, "Did you tell me that Mrs. R. was dead?" — "Why, no. What Mrs. R.?" she answered. "But surely some one has said so, or did I dream it?" I asked, now fully awake, and continued, "Professor A. (somewhat doubtful about the person) came to me with a cablegram, which read, 'Mrs. R. dropped dead on the steps of a building in Rome.'"

My wife asked that I should get up at once, write down my dream, with the date and hour, which I did.

This autumn my wife called on Mrs. R., who had returned, told her my dream, and asked if she could recall what happened on May 12. (I had known that Mrs. R. intended to visit Italy, sailing as she did by the Italian line, but I had entirely forgotten it.) As it happened, Mrs. R. kept a journal through the summer, and it read, "May 12, arrived at Venice in the best of health and spirits."

An officer of the society has added, from his own knowledge of the persons, the following statement: —

A few days after this dream occurred Mrs. S. mentioned it to me, referring to Mr. S. for corroboration. He told me the story as written above, with this exception; he said, "A curious thing was that I never even heard that Mrs. R. was going to Rome."

> I said nothing about it at the time, but mentally noted the fact that he had heard that she was going to Italy, for I was also at the house of Mrs. R. on the evening when Mr. and Mrs. S. bade Mrs. R. farewell. Mr., Mrs. S., and I, all left at the same time and walked up the street together.
>
> Mrs. S. exclaimed that she envied Mrs. R. more than any woman in Boston. When Mr. S. asked why, she replied, "Because she is going to Rome (?) or Italy (?)." I don't remember which place she named.

This case, viewed quite impersonally and scientifically, arouses, of course, certain — shall I dare to say? — but no, I do not mean that — my pen was about in its insensibility to write regrets. The case was so well noted, the presentiment was so demonstrable! If it had only been a kindly presentiment, leaving Mrs. R. an immense fortune, or declaring that she had just discovered for us the real truth about telepathy, and if the dream so well noted had then only been verified, both our friends and ourselves would have rejoiced together, science would have advanced appreciably, and nobody would have been hurt. Meanwhile, as it is, let us use this occasion once more to beg all our friends and correspondents to make instant note of their dreams, hallucinations, and presentiments, with mention of day, hour, and precise content. I will not trouble the society with further cases of this sort, although I have more than one on hand.

III. — Pseudo-Presentiments.

I now come to a class of facts whose very existence has not heretofore been generally recognized, and I think that the discovery of their existence among the people at large is an important result of the investigations of our committee. This result, in fact, is the one that I referred to in the beginning of this paper as an example of the value of a comparative method of study in matters of this sort. The society has already heard, in the before-mentioned preliminary and unpublished report of my own, the hypothesis for which I now undertake to give further evidence in the present report. This hypothesis is, *that in certain people, under certain exciting circumstances, there occur what I shall henceforth call* PSEUDO-PRESENTIMENTS, *i.e., more or less instantaneous and irresistible hallucinations of memory, which make it seem to one that something which now excites or astonishes him has been prefigured in a recent dream, or in the form of some other warning*, although this seeming is wholly unfounded, and although the supposed prophecy really succeeds its own fulfilment. On the subject of these pseudo-presentiments I some time since wrote a letter, which was published in last April's number of *Mind*. I shall here quote the argument of this letter in so far as

it is relevant, in order to introduce the present study. After classifying supposed telepathic cases in three groups, and disposing of two of them, my letter went on: —

"The *third* class of cases consists of *stories of recent date*, told by people of good character, and of generally sound memory, whose 'telepathic' experiences have been sporadic, and who are *not* themselves open to the charge of being systematically or superstitiously imaginative. That such stories are comparatively frequent, and that they cannot be dismissed as mere folk-lore, or as mere superstition, or as mere fraud, Mr. Gurney's book has pretty clearly shown. Now, my hypothesis concerns not all of these stories, but a very large proportion of them. I ask myself, 'Why should people who have no interest in believing in telepathy, who are themselves often despisers of the whole idea, and also haters of all superstitions, whose own personal honesty is undoubted, and whose memory is generally good, — why should such people suddenly believe and relate that at some very recent time, just before an affliction, or at the moment of a calamity, they knew, or were warned by dream or presentiment, of the distant and, for them, otherwise unknowable fact of the affliction or calamity in question? Why should such tales be told at once, or very soon after the accident, and before the *ordinary* errors of imaginative memory could have time to distort the facts? Why should the experiences be sporadic for such people, so as to be almost wholly isolated in their lives, and so as not especially to affect their beliefs thenceforth?' And I answer these questions hypothetically, by suggesting that in such cases we probably have to do with a not yet recognized type of *instantaneous hallucination of memory, consisting in the fancy, at the very moment of some exciting experience, that one has* EXPECTED *it before its coming*. Such an hallucination might, of course, be as irresistible as a delusion of the senses often is. Two or more persons among those concerned in any case might be equally subject to it, and then their stories might corroborate each other. On the other hand, as some peculiar state of health or some peculiarly painful excitement might be required for its appearance in any one person, a given sane and sound individual might plod on for years without any 'telepathic' experiences, and then at the very moment when he heard of his brother's death might with a sudden assurance exclaim: 'How strange! I dreamt of receiving this news only last night, and have been oppressed in mind by the presentiment all day.' Members of the same family would be especially apt to be similarly subject to this form of illusion, and then the same news would show them all the same mirage of memory with startling results in the way of 'telepathic' evidence. As for mere supplemen-

tary corroboration, taking the well-known shape of a friend's assurance that 'he believes the story to be true as it is told, for the people directly concerned assured him of its truth from the very first,' all that would be forthcoming in a very few weeks, and with the best intentions on the part of all concerned.

"The illusion of double memory in one familiar type, viz., in case of the feeling that one 'has been here before,' is universally recognized. This newly suggested form of instantaneous hallucination is *à priori* just as probable as that old and well-recognized form. Its existence, however, is hard to verify, because while the double memory of the first and well-known type at once corrects itself through the sane knowledge that we are *not* living our lives twice over, the illusion of the second kind might persist as long as you please, either in the form of a general belief in presentiments, or else merely in the shape of an isolated 'telepathic' experience that one looks back upon. Even so diplopia is self-correcting for a normal consciousness; but a projected hallucination of vision is not so self-correcting. Such might also be the case with the two illusions of memory.

"But, of course, to verify this hypothesis, even remotely, requires more than such *à priori* suggestions. And it has occurred to me that the best course would be to ask whether any such hallucination of memory as my hypothesis demands is ever observed among the actually insane in asylum practice. I have consulted the literature to this end, and for some time had little success. Krafft-Ebing (*Lehrbuch der Psychiatrie*, 2d ed., II. 146) mentions one case where a patient suffering from Primäre Verrücktheit was accustomed to say that, as he fell asleep at night, he sometimes heard voices telling him what he was to dream that night, and he dreamt accordingly. This looks like our desired form of hallucination of memory. But only recently, and very opportunely, have I met with two cases, fully described, in the *Archiv f. Psychiatrie* (XVIII., 397), by Prof. Emil Kraepelin. Kraepelin himself had already distinguished the very class of hallucinations of memory of which I was in search. He speaks of it (l. c., p. 395) as represented by a 'small group of observations.' He classifies the cases as those where the patient, with perfect consciousness of his real surroundings, regards these surroundings as in some respect familiar or expected, because a supposed previous warning has given him notice of what was to come. Kraepelin adds that he himself has sought in vain through the literature for any previous account of such hallucinations. Of the two cases the first is less marked. A servant girl, twenty years of age, is taken ill, first with hallucinations and general excitement, and these pass over into what Krafft-Ebing has called Erotomania,

i.e., innocent love-madness of the Elaine or Ophelia type. The actual lover had in this case been a soldier. In her madness the girl converts him into a prince, and expects a wonderful future. In the asylum she declares, from time to time, when a new event attracts her notice, that her lover not long since predicted it to her. So a change of physicians in the asylum has been prophesied to her. And, in particular, when she is sent away to another place, she remembers at once precisely how her lover had predicted this event also, and in what words. The second case, which Kraepelin regards as 'quite classical,' is one of Primäre Verrücktheit. A young commercial traveller, who from childhood up had been eccentric, ill-tempered, and foppish, devoted to fine toilets and to money-spending, but otherwise free from vices, first makes himself impossible in business by continual quarrels, and then begins to discover that he is a person of consequence, whose life is the object of great consideration on the part of both friends and enemies. The *Fliegende Blätter* publishes paragraphs about him; the journal *Ueber Land und Meer* makes caricatures of him. At last he reads in the newspapers that he is a promising pretender to the throne, and so he reaches the asylum. He appears at first very cool and rational, and evades discussion of all delicate subjects. But at length he begins to confide to the physician his curious observation that nearly all the patients in the asylum are known to him from previous experience or from warnings. In fact, he heard in conversation some time before he reached the asylum all the details concerning everybody there, and concerning the management of the establishment. Characteristic is his assertion, given in Kraepelin's words (p. 399), that when he heard these things spoken of before he came, the matter did not especially attract his attention. But when he saw the various things and people, these reminded him ere long, he said, of the previous conversations. Such assurances from the patient were not in this case occasional incidents, but soon became fixed features of the illness. The asylum, so the patient said, had once been described in detail in the *Fliegende Blätter*. The chapel also appeared well known to him from previous descriptions. The news of the day was sometimes a matter not so much of direct presentiment to him as of curious and imperfect coincidence with long past conversations. Thus, a murder being committed in Munich, he remembers, after hearing of it, how he had not long since been asked about that very street where the murder was committed. In short, his abnormal memory gave him, in the form of somewhat slowly formed, but always irresistible, hallucinations, all our own best-known types of reported presentiments. Meanwhile he possessed an actually very good memory for real events. In addi-

tion to the delusions of memory, the same patient had elaborate systematic delusions, which included among other things the discovery that a great quantity of what he read in the papers had been really composed by himself.

"Had I not been in search of evidence of the possibility of this form of hallucination, I should probably not have read Kraepelin's article, at least at the present time. I hardly need add that I find in his discussion no effort to draw analogies with sane presentiments of the type discussed in 'Phantasms of the Living.' The fact, however, mentioned by Kraepelin (l. c., p. 428), that our so well-known hallucination of the ordinary double-memory consciousness appears almost exclusively among the sane, encourages me to suppose that this new form of double memory, once verified as an existing fact among the insane, may be found to be an incident of normal life sufficiently frequent to explain a large number of 'telepathic' incidents. At all events, if there is any fair chance of such an explanation for stories that are not based upon purely documentary evidence, nearly the whole mass of narrative facts in the 'Phantasms of the Living' will have to be reviewed with this hypothesis in mind.

"The foregoing suggestion, as soon as formulated, seems so simple and commonplace that I should not have ventured to bring it forward here had I found Messrs. Gurney and Myers apparently well aware of the force of such a consideration. I have looked in vain in 'Phantasms of the Living,' as well as in Mr. Gurney's reply to Professor Preyer, for evidence of any consciousness of this hypothesis. I need not say that the value of the collection of stories in 'Phantasms of the Living' is in no wise affected for scientific purposes by the discovery that these stories may prove rather the existence of a typical hallucination of the human memory, than the reality of 'telepathic' communication between mind and mind. If it is the truth as such, that we want to 'bag,' it is not ours to decide whether the truth shall turn out to be a wild goose or some other fowl."

The new evidence that I have to present upon the subject of my letter to *Mind* is varied, and, as it seems to me, fairly convincing as to the actual existence of pseudo-presentiments. Of course, in classing for this one purpose, as belonging to one group with Kraepelin's insane cases, a large number of the experiences of some of our best and most-honored correspondents, I fear no misunderstandings. What occurs as a regularly repeated phenomenon in an insane case can occur sporadically and rarely in perfectly sane life. This we all realize, and every hallucination, yes, even every mere dream, is an instance of a state in sane life that more or less exactly

resembles symptoms such as persist through the whole course of certain forms of insanity. These pseudo-presentiments do, then, as I maintain, occur sporadically among the sane, even as they occurred persistently in Kraepelin's young patient.

I begin the evidence with a comparatively insignificant, but still suggestive, case. Possibly here is a mere coincidence: —

[8] (*From J. R., Boston, Mass.*)

On the night of April 17, 1888, I had a (for me) quite vivid dream, in which I caused a guitar to fall and break, injuring in particular the head, which was so broken as to show almost the whole of the white tuning-pins.

On the following morning about 9.30, while in a horse-car near Hollis street, a passenger in going out stumbled against a violin case held by a lady, which fell to the floor, and, opening, threw out a violin, stringless, and with the head broken off.

The foregoing may be, however, no coincidence, but an instance of a curious incident attracting the narrator's attention, and thereupon producing a sort of secondary image of itself, — a psychical mirage in the form of a seemingly remembered dream, which had very probably never taken place at all. But if the hypothesis is barely possible in this instance, how about its value when, as in the following case, that which I suppose to be a pseudo-presentiment is a repeated experience, and has curious, characteristic relations to other dreamy fantasies. Here is the statement of our informant: —

[9] (*From E. C. P., Cambridge, Mass.*)

I, E. C. P., of Harvard College, Cambridge, Mass., do hereby declare: — I have been in situations and experienced certain incidents of actual occurrence which, at the time, startled me vividly, upon recollecting that previous to occurrence of said situation, or experiencing of certain incidents, I had previously had a mental vision of some future time in which said situation or experiencing of incidents would be realities. I can recollect distinctly three such coincidences.

I have in mind now very often a scene, always alike, in which I seem to be standing with a female figure alone upon a lofty mountain top watching the sun rise. I have clearly had this scene in my mind at least four times, always exactly the same as to details.

Our correspondent supplied us with an outline sketch of his romantic phantom trysting-place, and, in answer to further inquiries, added an account of one of his fulfilled presentiments: —

There lingers in my mind an obscure recollection (truthful even if hazy) of a dining-table with certain people enjoying a meal at it, and some

turn that the conversation took that sent the laugh around the table. Suddenly, some remark caused me to stop laughing suddenly, and I repeated to myself the words, and added (out loud I think, though it may have been to myself), "Why, those are the very words!"

There came to me a distinct recollection that I had foreseen the dining-room with its occupants; had been conscious that there was merriment, and heard the words before which were then, in reality, uttered, with the identical tenor of voice and shade of inflection.

I think the foreseeing was one particular time when I was in the United States, the realization I think almost surely was in Bermuda.

I think I can make myself plain by saying that I distinctly remember this foreseeing and realizing to have actually occurred, and to have had mental recognition, but all knowledge of definite time or place has gone from me.

MAY 22, 1888.

This dim recollection suggests the well-known reminiscence in Tennyson's "Maud": "Viziers nodding together in some Arabian night." But the very defects of the narrative constitute, to speak not very paradoxically, its merits. Here is plainly a subjective experience, of no historical importance whatever, because it is far too dreamy. Yet just that makes it instructive. It is almost, but not quite, an ordinary case of doubleness of memory, — the vague feeling, "I have been here before," which so many people report and know. Yet the *not quite*, shows us that we are on the borderland of another kind of experience. Our correspondent feels not exactly, "I have seen and heard this all before;" but he rather feels, "I have been warned of this before — warned in the United States of what now occurs in Bermuda." Here we are on the boundary line between the pseudo-presentiment proper and that ordinary double vision of memory from which one must of course carefully distinguish our new form of typical hallucination. In the next case that I shall cite we have crossed the boundary line, and are dealing with a pair of most beautiful pseudo-presentiments. They belong, to be sure, so many years back in time that, were it not for the person from whom they come, and for the evidence that one of the supposed presentiments was mentioned a good many years since, nearer to the time when it was experienced, I should hardly venture to use them as evidence. A well-known gentleman of a suburban community has, namely, a reminiscence concerning Mr. Lowell's Commemoration Ode, and another concerning President Lincoln's speech at Gettysburg, both of which, with the comments of Mr. Lowell himself in a letter to Prof. Wm. James, I am able to quote here. The position of our informant, Mr. W., leaves

no question as to his general good judgment and his integrity, and what he remembers is this: —

[10] My dear Mr. James, — I passed the night before commemoration day on a lounge in Hollis 21, the room of my college chum H., who had been tutor since our graduation, three years before. I woke (somewhat early, I should say) saying to myself these words: "And what they dare to dream of dare to die for." I was enough awake to notice the appropriateness of the words to the occasion, but was sleepy enough to wonder whether they really expressed a lofty thought, or were lofty only in sound. Before I had made up my mind I dropped to sleep again.

In the afternoon I was in about the middle of the tent. Mr. Lowell stood under Hollis, at nearly the same table. I heard very distinctly as he read "Those love her best." I felt that something was coming which was familiar, and as he ended the line I felt that I could repeat the next one, and I did so, ahead of him. But as we proceeded I was confounded with the fact that apparently my line would not rhyme with his. As I said "die for," he said "do." I spent some minutes in trying to determine whether I liked his sentiment or mine the most.

That is all. After twenty-one years, details are dim. Some years ago, just before Mr. Lowell sailed for England, I sent him a statement, more detailed probably than this; but no doubt it became carbonic acid and water before he left the house.

I do not know that I have any further contribution to make to the facts which you are collecting. On the day of Mr. Lincoln's address at Gettysburg I was walking at about the time when, as I supposed, the exercises were taking place. Remembering this I tried to invent such a speech as Mr. Lincoln, or I in his place, would probably deliver. I was astonished the next morning to find that I had duplicated his address, from the third or fourth sentence to the end; and to the passage "It is for us the living rather to be dedicated" I had given almost exactly the words.

But I am vain enough to think that this coincidence is to be explained in a different way from the other.

Hoping that these reminiscences may be amusing to your society,

I am very truly yours,

Here follows the letter of Mr. Lowell, who was asked what he could contribute to a possible use of this experience for the purpose of illustrating telepathy: —

17th Feb., 1888.

Dear Dr. James: — My Commemoration Ode was very rapidly written, and came to me unexpectedly, for I had told Child, who was one of the committee (I suppose), that he must look for nothing from me. I sat up all the night before the ceremony, writing and copying out what I had written during the day. I think most of it was composed on that last day. I have no doubt the verse quoted by Mr. W. came to me in a flash, but

whether during that last night or not I cannot say. Perhaps my MS. would show, if I had kept it, or if anybody else has. Child will remember my taking him apart under an elm, between Massachusetts and the Law School, that morning, that I might read him a part of the Ode, "to see if it would do," for 'twas so fresh that I knew not, having probably not even had time to read it over. It was such a new thing in more senses than one.

I recollect Mr. W.'s letter, and think it was substantially like that to you. I did not burn it, I am sure, and 'twill, no doubt, turn up somewhere in my haystack of letters when I am "up back of the meetin'-house," as Yankees used to say while there were any Yankees left.

But what he says about the Gettysburg address waters my interest in what he had told me about the verse in my Ode. Had I known of his talent beforehand I might have saved myself a very killing piece of work. That one day's labor *mi fece magro*. I believe I lost ten pounds of flesh, which it took me weeks to pick up again. *Vaya* for a single verse, but so much of Lincoln's incomparable English? Fancy must come in for a share in the miracle. A man who has heard so many speeches as I, can, alas, make a pretty good forecast of what is coming; but I trust that Mr. W. has not been exposed to such trials.

There is one painful suggestion in the fact of Mr. W.'s anticipation, which I hardly venture to speak of. Was the verse already *da?* Did I steal it? Not to my knowledge; but perhaps it might be well to set a literary detective on my trail.

I return the letter.

Faithfully yours,

J. R. LOWELL.

An experience as old as this one is no very satisfactory evidence, of course, but still it seems, after all, tolerably clear that, at the two times in question, our correspondent, a literary student himself, and one much interested in the study of style, was so deeply struck by these two passages that they produced in his mind, in this irresistible fashion, memory hallucinations similar to those which Kraepelin's paranoiac patient so regularly had. Notice the similarity in detail. Kraepelin's patient recognizes as his own product whatever he finds to be of interest in the newspapers that he reads. Our informant, in these two cases, where his literary interest was excited in an especially passionate way, recognized as passages before known to him, and as even composed by him, the very words that had so much excited his interest. That this was a case of prophecy after the fact no one can easily doubt. The puzzle would be to see how so sincere an impression could arise. Our hypothesis partially explains this fact by the excitement of the moment when our correspondent first heard or read the passages in question, and by the general law that makes pseudo-presentiments likely to happen.

But for the purpose of demonstrating the existence of a still un-

recognized class of mental facts recent instances are peculiarly valuable. My next case is one related but a week after the events in question, which occurred in December of last year. Of course, if pseudo-presentiments exist, they may easily be created or reinforced by dreams. In the case now to be reported, a man had heard a gruesome bit of bad news. My theory is, that he dreamt about it when next he slept, and then, by an instantaneous and irresistible hallucination of memory, projected the dream backwards so as to make it seem prophetic, or at least telepathic. The informant is a member of Harvard University, whose statement was taken down and signed.

[11] (*From F. C. W.*)

One week from to-night (Friday, Dec. 9) I had a vivid dream. I was in a store with a friend, selecting a pistol. My friend was purchasing the pistol with the intention of committing suicide. I seemed to favor my friend's project, and was busy helping him pick out a suitable one. I can see the store, the pistols, and all, very vividly now. The picture has fixed itself in my mind.

The following night, my friend, G. Z., shot himself in a New York hotel.

I did not mention the dream to any one, thinking it of no consequence. The shooting was a great shock to me, as I had no suspicion of such a thing.

(Signed) F. C. W.

The gentleman from whom we received the case adds: —

He (*i.e.*, F. C. W.) saw Mr. Z. for a few minutes Wednesday night, but there was no conversation that would in any way suggest pistols or suicide. He does not recognize the store, though he can form a vivid picture of it. In the dream it seemed as if it were a New York shop.

This is correct.

(Signed) F. C. W.

From Mr. F. C. W. we have received this further statement: —

As was said before, the shop seemed to be in New York. It was deep and narrow, and we were at the further end of it. Crosby's, on the corner of Washington and Avon streets, Boston, is the kind of shop, save that it was not on a corner, and was dark at the further end, there being only front windows. The shop-keeper was short and round, with gray side-whiskers and bald head. He stood behind counter, two-thirds down the store, on left. My friend received the pistols across the glass case (which was full of them), from the man, and passed them to me for inspection. I was standing some four feet away from the counter, and nearer the end of the shop. We decided upon one, — a very handsome make, — and took it. We were, seemingly, selecting it for suicidal purposes.

(Signed) F. C. W.

In a third statement F. C. W. further assures us of the coincidence by saying, "I was certainly dreaming of Mr. Z., as his face was the most vivid part of the whole picture."

I think that there can be no doubt that the dream actually occurred, only, in all probability, it followed the news of the suicide. That we are here dealing with no exaggeration of the ordinary sort, with no myth-making of the kind so customary when people have often repeated a tale for the benefit of their friends, is sufficiently clear from the freshness and the elaborate detail of the story in their combination.

My next case has the advantage not only of being very recent in date, but also of coming from one of our best-known correspondents, a lady of this city, whose accuracy is undoubted except as to the fact of what I suppose to be the irresistible pseudo-presentiment itself, which of course her own judgment could not be expected to correct, as she did not know it to be possible; as usual in these reports, I give no name: —

[12] Boston, March 26, 1888.

I have long intended complying with your request to write out the following experience, but time has prevented.

On the morning of July 6, 1887, I wakened about 5 A.M. from a singularly profound sleep, and with a feeling of wonderful freshness and elasticity, as if unconscious of a body at all. I had fallen asleep about 4 P.M. the previous afternoon. For some days the heat had been intense, and I had had very little sleep, so on the previous afternoon I had thrown myself down for a little sleep before dinner, telling my maid not to let me be disturbed by any call, and thus my slumber had been prolonged till the following morning, and I wakened in a kind of semi-bewilderment, and looked out in the gray dawn, hardly knowing whether I was in the to-day or the yesterday. I recalled the vivid dream from which I wakened, to this effect. In the dream I was reading aloud to a friend, Miss N., a letter just received from another friend, Miss T. This letter was, in my dream, written on the Fourth of July (two days previous), and bore playful inscriptions of the national flag, and related to the health of the mother of the writer, and to a new poem that the writer had just produced. The entire subject-matter of the letter was perfectly clear in my mind. On rising I went to my parlor, where lay untouched the mail of the previous evening. In it was a letter from my friend Miss T., of the identical date (July 4), and the identical subject-matter of the dream, even to the playful illustrations of the stars and stripes.

My theory is, that in this unusually profound sleep my spirit looked out of the body, and was so far released as to read this letter with the spiritual sight. I wakened with an indescribable feeling of having been abroad, so to speak, and was conscious of an exceptional elasticity and freshness of feeling.

The letter in question I believe I gave to you at the time.

Our correspondent's hypothesis is not ours, but what we find to be of especial importance is her account of her condition at the moment. She wakes from the long sleep uncommonly sensitive, impressionable, active-minded. She opens the friend's letter, and at once (such is our hypothesis) the feeling comes over her, "Why, I just dreamed all this before I woke!"

But next I come to a statement that, if there were no other evidence, would by itself suffice to show how the ordinary vague experience of double memory does, in some cases, take forms which give it the character of a pseudo-presentiment. I quote in full the letter of one who proves in this connection a very helpful correspondent, Mr. T. L. D., of New York city: —

[13] I was very pleased [he says, under date of Dec. 13, 1887] to read the article . . . in "Herald" of last Sunday, and think it very interesting, especially to me. I am rather a sceptic in the belief in dreams, etc.; but it seems strange that I almost invariably have dreams before anything unusual happens, indeed so much so that after the occurrence of these dreams I always look for something unusual. What I wish more particularly to bring under your notice is the prevalence of what I call recurrent ideas. Formerly it was continually happening to me, but not so now. I will endeavor in some shape to describe what I mean, but the real facts as regards myself I could not possibly put into language. Sometimes, when in a room, something would be going on of which I had a most vivid recollection of having occurred before, and I could always tell what was going to happen next, which has been fully carried out in precisely the manner I had realized. I could have no control under the circumstances, but only knew exactly what is next going to happen. Now, I am a fairly educated man, not at all given to superstition, but it has often and often unsettled and upset my mind for days when this has happened. Even in the daytime these ideas frequently come to me. Perhaps in the course of your deliberations you may possibly assign some reason for same; and apologizing for trouble,

Yours, etc.

P.S. — I am now salesman in one of N.Y.'s largest chemical houses. Age, 35. These things most frequently occurred between the ages of 22–30.

Here our correspondent, for a term of years, found pseudo-presentiments a constantly disturbing factor in his busy and practical life, and so strong was the experience as frequently to "unsettle and upset" his mind for days together, *i.e.*, the phenomenon was attended with vexatious confusions of consciousness, or was, in other words, a very mildly pathological condition. As he approaches middle life

this condition vanishes from waking life, but his dreams are still often full of it.[1]

Can there be any doubt, then, that the pseudo-presentiment is a *vera causa*, accounting for many otherwise incomprehensible experiences? The final section of this paper will, indeed, show plainly enough that I have no desire to use this hypothesis beyond its own field, and that I am very far indeed from imagining it to be a settlement of the question of telepathy. But this society is not here to settle the affairs of the universe overnight, and if anybody either puts arbitrary limits *à priori* to the hypotheses that shall here be propounded, or, on the other hand, tries to settle any question either by a vague guess, or by a sneer, or by anything but a square looking of facts in the face, we all know what to do with him. My present hypothesis only undertakes to look certain facts in the face; the facts that do not belong to its province rest or soar in their own regions, and it plods along in its humble way in its appointed path.

What it can do, however, I must exemplify by cases that still more fully establish its rights to existence. For this further study I have here eight cases, each involving either one narrative, or a group of narratives. All of these cases I regard as coming from sincere persons, and all of them suggest to my mind more strongly the hypothesis of pseudo-presentiment than they do any other. They are not all of them cases of first rank, by any means. Lapse of time or inexactness of statement has left much room in some of them for other sources of error to creep in. Others are again decidedly good cases. I give them for what they are worth. In addition to these cases, however, I have material which has come to us from two distinctly insane persons, neither of whom, however, was at the time of writing under asylum treatment. Both of these persons are capable of very fluent and moderately coherent statement, and both of them, in the course of their elaborate account of inner life, have supplied us with unconscious testimony to the existence, in their own cases, of typical pseudo-presentiments. I consider their contributions to this branch of the investigation as a useful addition to Kraepelin's material, although, of course, all that these subjects can give us on paper is not nearly as valuable as even very brief clinical observations of an expert might prove, and that even as to this minor matter of their psychology. I proceed first to the normal cases.

A series of narratives begin this list, all coming from a lady, C. W.

[1] In Westphal's *Allgemeine Psychopathologie*, p. 130, the phenomenon of the ordinary "doubleness of memory" is described as often accompanied by this feeling, "*as if one could predict what is about to happen next.*" In Westphal's observations, however, this feeling remains always "*nur dunkele Ahnung*," and never acquires the importance attributed to it by our correspondent.

E., who is vouched for by a very well-known and competent member of the society, as a person with whom he is well acquainted, "and who is incapable of conscious misstatement or inaccuracy." All of her experiences, when taken in connection with her own very clear and straightforward replies to our questions, seem to me sincere and well-remembered. Only they are all of them, as I think, pseudo-presentiments. An exciting event occurs, and the lady unconsciously projects a presentiment of it into the past. She is most likely to do this when she is in a poor state of health, or is otherwise over-sensitive.

[14] FEBRUARY 4, 1888.

(*a.*) In Chicago, about December, 1869, I dreamed that an engine ran into a heavy stone wall in a dark place, causing great commotion and throwing down the wall. I told my dream at the breakfast-table, because it seemed so real to me. A few moments after I told it a member of the family read from the newspaper that in the night a steam fire-engine, in passing through the tunnel, ran into the wall, causing a serious break, so that it would be obliged to be closed for repairs.

(*b.*) In Worcester, July, 1874, I dreamed that a friend was dangerously ill, and that her brother was extremely anxious about her. Her brother and I seemed to be spending much time in the horse-cars hunting for nurses. I wrote my sister of the dream, I was so impressed with its vividness.

In October the lady called upon my sister and me, and told us that she was dangerously ill in July, and that her brother was quite worn out with anxiety.

I was not at all intimate with the family, nor had they been in my thoughts previous to the dream.

(*c.*) In Chicago, 1879, I had a disturbing dream of sailors in distress at sea. The sea was tempestuous, and the sailors were hanging to the rigging calling piteously for help. I told the dream at breakfast, and while I was telling it we saw the lifeboat rushing through the avenue. We ran to the back windows, from which we saw a schooner and the men hanging to the rigging as in my dream.

(*d.*) In Chicago, January, 1884, about four o'clock in the morning, I awoke from a very vivid dream of a vessel at sea. At first, everything seemed bright and pleasant. Then a man came to me and said that the captain, whose name I thought was Moonshine, had mistaken the course of the vessel, and that we were in danger. In a few moments we were all in the water among rocks. I told my dream because I was impressed with its intense reality. In a few hours we read of the loss of the "City of Columbus" among the rocks, and in bright moonlight, at the hour I had dreamed of the wreck.

In answer to the questions suggested by these statements the lady says: —

I suppose it will be no unexpected disappointment to the Society for Psychical Research to learn that I am unable to answer their questions satisfactorily, but I will do the best I can.

I think that people who hear the accounts of dreams, and also know of the events in connection with them, are often so absorbed in the events as to forget the dreams, particularly if they are contemptuous of, or have no interest in, what is mysterious. I will reply to the questions in the order that they were given to me: —

1. Is the contemporary account of the engine accident still in your possession? No.

2. Can accounts be obtained from any other members of the family to whom you mentioned your dream before the account was read? No.

3. Had any member of the family read the account in the newspaper before you had your dream? No; the dream happened in the night, also the accident, and I spoke of the dream at breakfast.

DREAM OF 1879.

1. Did the room in which you dreamed look over the sea, and if so were the blinds up or down? (Answer.) My room looked south. The lake was east and the wreck north-east, a block north and two blocks east. I could see the lake from my window, but not the wreck.

2. Could you have seen the ship before when you were wide awake, and had the dream afterwards? (Answer.) No.

3. Can you obtain accounts from any other members of your family to whom you mentioned your dream at breakfast? (Answer.) No.

Of the dream of 1874 we find, after inquiry, that it is impossible to get any account that amounts to confirmation from any source but the narrator's own memory.

DREAM OF 1884.

1. Can accounts of the dream of 1884 be obtained from any persons to whom you told it before you heard of its corroboration? (Answer.) Possibly. The friends I was visiting are in Paris, and I have not been able to hear from them for some months, on account of illness in their family.

2. Had any member of your family read of the loss of the vessel before you told your dream? (Answer.) No; I dreamed at four A.M., — the hour the vessel was wrecked, — and told it that morning at breakfast, and the telegram of the news did not reach Chicago for some hours later.

3. Could it have been possible that you yourself could have read of the loss of the vessel before you had your dream? (Answer.) No.

4. How long before your dream was the ship lost? (Answer.) At the very same hour.

GENERAL QUESTIONS.

1. Have you any explanation to offer concerning the periodical occurrence of these dreams, which seem to have been separated by intervals of five years? (Answer.) No.

2. Were you in good health at the time of these dreams?

Have you any objection to stating your age?

(Answer.) At the time of the first dream I was in perfect health, and very active in mind and body. I was under much excitement, in a gay life.

At the time of the second dream I was a great invalid. In the evening I had seen a boy thrown from a carriage and dangerously hurt. At the time of the third dream I was in fairly good health. At the time of the fourth dream I was in a peculiarly excitable condition, preceding a serious illness of congestion of the brain from blood-poisoning. My age is thirty-seven.

3. Are you in the habit of dreaming? (Answer.) Yes.

4. Are these the only incidents in your experience where the dreams correspond with the real facts? (Answer.) Yes.

I have no doubt the society will have less respect for my dreams on account of the nervous conditions I confess to; but I think nervous people are more receptive, and often more acute, than those who are not nervous. I always hear more, and am more acutely conscious, at such times than when in rugged health. I felt that the dreams were unusual before I knew of the corresponding facts.

Narratives (*a*), (*c*), and (*d*) in this statement most strongly suggest the hypothesis of pseudo-presentiment. Narrative (*b*) may be an ordinary error of memory, in view of the length of time that had elapsed between the illness and the announcement of the news to our informant, as well as in view of the impossibility of getting in this case the much-needed confirmation of the letter that is supposed to have been written. Our correspondent's "nervous conditions" have an obvious bearing on the theory that these were all pseudo-presentiments.

Next in order I give a case that belongs to a long-past period; yet the vividness of the memory of the coincidence in question is hard to explain, in case of a person free from systematic superstitions, unless we suppose that we are here dealing with a pseudo-presentiment; granting the substantial accuracy of our correspondent's account of his experience, the hypothesis of a pseudo-presentiment is simply irresistible: —

[15] (*From M. V. F.*)

Providence, R.I., Dec. 12, 1887.

In response to the article on Psychical Research in the "Herald" of to-day, I write you of a dream of mine and its connecting circumstances.

With as little detail as possible it is as follows: I dreamed of being in a ship-yard and climbing the rigging of a vessel still on the ways, and was accompanied by some person entirely unknown to me, nor bearing the slightest resemblance to any one whom I had ever seen.

The dream was forgotten, apparently, in a few days. Some time after-

ward, certainly two years, my school-class had occasion, in connection with certain studies, to visit a large factory.

In a lower class, just entered the school, was a young man with whom I had become quite intimate, and his request to go with us to the factory was readily granted.

Having finished our tour of inspection, my friend suggested that he and I should take a tramp into the country, which we started to do, passing on the way a marine railway in which a large schooner was being repaired.

Never having seen a ship hauled up on the dry dock, in fact never having been in a ship-yard before, we left our intended road and entered the yard, where he (not I) proposed climbing on shipboard and into the rigging.

Not until we were in a certain position in the rigging and he had made a joking remark, accompanied by a peculiar expression of countenance, did the circumstances of the dream occur to me. And then when I saw it work itself out, even in the minutest details, after two years' duration, it seemed to me rather curious.

More recent is a case which I transcribe from the letter of a lady in Boston, a person of well-known family and position, whom we shall call Mrs. X.: —

[16] Boston, July 15, 1887.

. . . It was last December. I knew Mrs. J. was very ill, and either one or two nights before she died I dreamt that I received a letter, directed to Mrs. X., —— street. On opening it I read the first few lines, beginning with a name (not my own first name, but I forget now what it was), and mourning the loss of a mutual friend; in my dream I knew the letter was meant for Mrs. Q. X. [*i.e.*, not for our correspondent, but for a lady of the same family name, with whom our correspondent is not personally acquainted, and who lives on another street], and that it was from Mrs. Y., in Paris [whom our correspondent knows, but only slightly], on the subject of Mrs. J.'s death. Next morning I remembered the dream perfectly, and the words as much as I had read of the letter. Then came the news of Mrs. J.'s death, after which I confidently expected the letter, which arrived a fortnight later, directed to Mrs. X., —— street; and when I opened it, it began in exactly the words I read in my dream. I sent it to Mrs. Q. X. [for whom, of course, it had been meant] . . . and she said it was her letter, and from Mrs. Y. I cannot offer any explanation of my dream.

In answer to further inquiries, our correspondent can give no precise dates, but remains confident about the relative order of events as described in her first letter. Asked whether she mentioned her dream to any one before its fulfilment, Mrs. X. replies: —

I did not mention my dream to any one, except my husband, who has forgotten all about it, and two other people, about a month later, I think.

Our correspondent adds that her "memory is very bad," and that

she can tell us nothing further. But she seems to be free from any systematic craving for wonders, and I have no doubt that the experience was a typical pseudo-presentiment, which had its origin at the moment when she opened the misdirected letter.

I shall put next what I take to be a pseudo-presentiment, relating to a boating accident. It may, however, be a mere coincidence.

[17] (*From F. G., C——, Minnesota.*)

For the benefit of your society I will state the following facts: —

A number of years ago the writer was in a boat alone, on a lake in this State. It was a beautiful day in May. Your correspondent was looking over the side of the boat down among the roots of the water-lilies, which at that season had not yet commenced to grow. Suddenly a feeling of impending evil, and a feeling that death was near, came over the occupant of the boat. It appeared to be an impression on the mind; nothing was seen or heard. The impression was very vivid; can scarcely be described in words. The next day the writer heard that a very near relative of his came very near death, by drowning, at the very hour the singular impression was made upon his mind in the boat. The person who came nearly being drowned was upset in a boat on a river many miles from the occupant of the boat on the lake.

The writer is not superstitious. Never had such an experience before or since. Might it not be the mind has some way of taking note of events sometimes, in other manner than through the usual sensory nerves?

I have another experience that I might relate, but it relates to altogether a different branch of psychical research; but I have already said enough about what is now a very obscure subject, but which I hope some day may be made plain to everybody, that is, so far as God sees fit to let the mind of mortal take cognizance of what we can't see with our eyes or hear with our ears.

The experience is plainly sporadic, and I will not dispute the possibility of using it to illustrate telepathy. To my mind it looks much more like a pseudo-presentiment than even like a coincidence. I am unable to know more of the narrator than his own statement shows.

The case which follows would have no value, in view of its very great age, were it not for the peculiar detail of the narrative. If it is remembered with approximate accuracy, it is unquestionably a pseudo-presentiment. Our correspondent's second narrative is of a different sort, and is given here only as throwing light on the general course of her experience. Without confirmation, a story of 1864, of the sort here told, can neither be explained nor criticised. It lacks the points of detail which make the earlier narrative valuable.

[18] (*From Mrs. J. W. B.*)

March 26, 1888.

I shall try to give you a correct account of the dream concerning which you inquire, and trust I shall not seem verbose. Perhaps it is in order for me to state that my memory — except where figures are in question — has always been better than the average. I distinctly remember the dream and attendant circumstances, but can come no nearer the date than that it was in the summer of 1855.

I was then a young wife; my friend, Miss H., a girl seventeen. My relations with all her family were of an intimate and affectionate character. The death of her mother, five years previous to the time of which I write, was the deepest grief of my girlhood. Several months before the dream, while her father was in the West, where he expected to be for a year or more, some [circumstances which do not affect the narrative] led to the removal of Miss H. and her young brother to Providence, R.I. They were all originally from that place, and the young people were in charge of relatives of their father. An elder brother had settled in Providence, and I did not think any of them likely to return to Louisville. One night, about a year after this change of residence, I dreamed that I was sitting sewing in my room, which opened into a hall. I heard, I thought, a knock on the door,— a timid, tentative sort of a knock; went to the door, opened it, and saw standing there Miss H., in a gray dress, her head hanging down, and her face half-hidden by what was then called a corded sun-bonnet, made of pale yellow — buff — cambric. She lifted her head with a demure smile at my surprise, as her features were disclosed. She was very small, below the average stature of woman, while I am tall. I either wakened at this point, or went off into another dream.

The bonnet would perhaps be "curious" now, but was not so then, and may still be found in some rural districts.

This is a rough sketch. [Our correspondent here adds sketch.] A shade bonnet, that a lady would not wear when calling, but might put on when about to *drop in* on a near neighbor. The front was stiffened by cords stitched close together, and all edges were ruffled.

When I arose next morning I recalled all the details of the dream, but thought no more of it until in the afternoon, as I sat alone in my room sewing, I heard the same sort of knock at the door. I opened it, and saw my friend standing there in the dress and attitude of the dream.

The explanation of the visit was simple enough. The father had returned from the West, and notified the children to meet him here. They had arrived on the day previous and taken rooms in my neighborhood. As we had not then heard of thought-transference, we did not know how to look for a solution of the affair of the dream. I *now* suppose she was planning the visit, probably picturing in her mind her appearance and my surprise, and her thought was reflected on my mind, shaping the dream. Miss H. has long been dead. You will, of course, understand that the names and some of the circumstances connected with the story must be private.

I was once strongly impressed by an experience of my waking hours, but that sort of thing is usually dismissed with the easy verdict of "coincidence."

In the summer of 1864 a dear and intimate friend, Mrs. S., was spending two or three weeks with me. On this occasion she had gone to spend a long day with Mrs. C., to whom she was much attached, and whose society she always enjoyed. She had gone early in the forenoon, intending to remain until after tea. A certain matter had occurred which I was anxious to discuss with Mrs. S. confidentially. After the children had gone to school, and the house was quiet, I fell to thinking of the affair and longing for Mrs. S. I felt that I could hardly be patient till evening, and also that then there would be little opportunity for the long private talk I wanted. I, not very wisely, kept thinking and wishing until about eleven o'clock, when Mrs. S. appeared, and with a somewhat excited manner explained that she had for some time been so strongly impressed by a feeling that she *must* return, and had become so uncomfortable and distrait at last that she made some lame excuse to Mrs. C., and asked that lady to let a servant bring her home.

I should state that Mrs. S. has been entirely blind from her childhood. Her son, then a little boy, was her usual guide, but he had gone to school, expecting to join her at Mrs. C.'s in the afternoon. She is a lady of delicate sensibilities, and would not have done anything that seemed like a bit of caprice, or made even a slight trouble for her friend, except under very strong stress of feeling. When I related to her my morning's experience, she quietly said, "I see it all now; you *drew* me back here."

Thank you for the circulars. I am deeply interested in psychical research, though only as an uninstructed outsider. I trust you will not find this tedious, and that you will excuse the irregularity of the handwriting.

A lady who has frequently coöperated with us, and who has been one of our best friends in this research, has obtained for us, from a Miss C., for whose character she vouches, the following, which further illustrates my hypothesis. I give the relevant portions of two statements, one given by Miss C. herself to our correspondent, the other an answer reported by our correspondent to a further question that was communicated to Miss C.: —

[19] FIRST STATEMENT.

(*By Miss C.*)

On the morning of Friday, April 22, 1887, I had the following dream: —

I thought I was walking up the steps to my aunt's house, when some one met me and told me that my aunt was ill, but that it was impossible at that time to say what was the matter with her, but it would be decided very soon. I went to the steps again in an hour or two, and then was told (I think by the doctor) that there was no doubt now, — it was pneumonia. On the afternoon of that day we heard that my aunt had been taken ill the day before, and that the trouble was nearly akin to pneumonia; it was acute bronchitis, of which she died on the Monday following. I ought, perhaps, to state that my aunt was a particularly vigorous woman, and very seldom ill; also that she was particularly dear to us all.

SECOND STATEMENT.

(*Reported by our correspondent.*)

Mr. Hodgson asks a question, which Miss C. thus answers: Her own younger sister came home from town, and began to say, "Aunt G. is ill —" — "Stop!" said the elder sister. "Before you say another word let me tell a singular dream which I have had," and she related her dream in the words of the preceding statement. She is as conscientious as her handwriting looks, and has doubtless weighed every word before recording it.

At every turn in this study one comes upon new evidence of the liveliness of our typical hallucination: "Aunt G. is ill —" — "Stop! let me tell you of a singular dream." The news and the dream *may* have been a mere coincidence; but the chances are that the news produced the dream, or rather the pseudo-reminiscence of it.

The mysterious importance which has seemingly been attached to a pseudo-presentiment by a person of decided intelligence, who reports her experience in the next case on my list, makes me all the more convinced of the practical value of the discovery that there are such things as constitute our new class of mental phenomena. How much that sincere people have found mysterious in their lives, and that unsympathetic people have laughed at as mere superstition, becomes thus familiar, and, in one sense, obvious. In order to show how much attention these now so comparatively simple phenomena have attracted, and do attract, amongst people who do not understand their nature, I therefore quote almost in full the correspondence of our informant in so far as it relates to her own case. She reports an experience of some one else, which I also regard as a pseudo-presentiment, but which I am unable to discuss at present. Our correspondent consents freely to the use of her name, and, although we have not any personal acquaintance with her, I regard her narrative as very satisfactory: —

[20] [FIRST LETTER.]

(*From Mary H. Watkins.*)

NOVEMBER 14, 1887.

MR. HODGSON, *Secretary American Society Psychical Research:*

DEAR SIR, — In the year 1868 I had an intensely vivid dream of the drowning of some one dear to me, and awoke in tears. That afternoon, on my return from school, I was told that my brother had been drowned that morning by the burning of the steamer "Sea-Bird," on Lake Michigan. According to all accounts, my dream and his death must have taken place at nearly the same time.

It has always been mysterious and unaccountable to all who have heard of it. If you will send me Blank G, I will try to send you a clear narrative of the dream. Very respectfully,

MARY H. WATKINS.

380 CONGRESS ST., E. DETROIT MICH.

[Second Letter.]

380 Congress St.,
E. Detroit, Mich., Nov. 21, 1887.

Mr. Richard Hodgson: —

Dear Sir,— Enclosed you will find an account of the dream about which I wrote to you. At the time I sent for Blank G, I supposed it was one that I should fill with my statement. I shall, however, try to fill it as requested, although with the little time at my disposal I shall not be able to do so very soon.

In regard to the action of one mind on another, I would say that I think that I have sometimes, when very anxious that a pupil should acquit himself well, caused him to know what was required by willing him to do so. I cannot do it at all times, or with all pupils, nor have I given the subject attention enough to know the conditions under which my mind has this power over others. The fact I cannot doubt.

Hoping that I may some time be able to give the society some interesting data, I am Very sincerely yours,

MARY H. WATKINS.

STATEMENT APPENDED.

A Singular Dream.

I was living in Ypsilanti, and was in my usual health and good spirits, when I had the following remarkable dream: —

Between six and seven o'clock on the morning of the ninth of April, 1868, I dreamed that I was standing on the shore of a large lake or sea, with a wall extending for some distance along the bank between myself and the edge of the water. Suddenly I became conscious that people were hurrying around the nearest end of the wall, and knew that something had happened. But when I attempted to follow the crowd, I could not move; I was powerless under the terrible realization that some one dear to me, I knew not who, lay drowned on the other side.

Just then I awoke, weeping bitterly. All that morning I was oppressed by a feeling of impending evil, a feeling that I struggled unsuccessfully to throw off, as having its source in the unreal experience of a few hours previous.

On my return from school that noon I found the household in a state of great agitation, caused by the receipt of a despatch from a friend in Chicago, saying that the "Sea-Bird" had burned on Lake Michigan that morning; that Steve, my brother, was among her passengers, and was supposed to have perished. As my mother broke the sad tidings to me she hastened to add, "But we do not think that Steve is lost, for he is a splendid swimmer, and always self-possessed."

"Oh, but he is lost — he is drowned! I know it! And that is why I had that terrible dream." And I could receive no consolation.

I then related my dream, and the intensity of my belief in the truth of it so affected the rest of the family that I think their loss of hope dated from the telling of my tale. A few sorrowful days, and the uncertainty was ended, — my dream was a reality.

Our rector, the Rev. John A. Wilson, was desirous of finding a cause for my sleeping vision, and thought that it probably lay in the association of ideas; but upon questioning me he was unable to find anything in support of his theory, and confessed that it was indeed "very strange."

My brother cared more for me than for any one else in the world, and when he realized that his hours were numbered, his thoughts would naturally turn to me. And that in this case, at least, mind was stronger than matter, I have always believed.

MARY H. WATKINS.

DETROIT, MICH.

[THIRD LETTER.]

(*From Mary H. Watkins.*)

380 CONGRESS ST.,
E. DETROIT, MICH., Nov. 30, 1887.

Mr. RICHARD HODGSON: —

DEAR SIR, — Yours of the 25th was duly received. In regard to the statement appended to my account, I would say that it was made by my sister.[1] The Rev. John A. Wilson died several years ago. I am sorry that you cannot correspond with him concerning the dream, as I think he was much impressed by it at the time.

As you know nothing about me save what I have written, I think that I may take the liberty of referring you to Messrs. Bela Hubbard and S. M. Cutcheon of this place, Prof. W. H. Payne of the Michigan University, and Prof. F. A. Gully of the A. and M. College of Miss., in case you may wish to assure yourself of the trustworthiness of any statement that I make. I am teaching in the public schools, the building in which I am being the Barston School.

I do not know whether the scene of the dream corresponded with any place on the shore of Lake Michigan or not. The disaster occurred between Milwaukee and Chicago, and it was owing to the intense cold of the water that my brother lost his life.

I have no objections to the use of my name, and shall be glad to answer any questions that may arise, as I am very much interested in your work, and shall do all I can to further it. I am making slow progress in filling of Blank G, as I have but little time at my disposal. I do not despair, however, of eventually getting the report from a number of people.

Yours truly,
(MISS) MARY H. WATKINS.

[ENCLOSURES.]

I have known Mary H. Watkins for many years, and have always found her not only perfectly truthful, but more than ordinarily exact in her statements.

The dream relating to the death of a brother by drowning was told me years ago.

CAROLINE CROSMAN,
Principal Barston School.

DETROIT, MICH., Dec. 1, 1887.

[1] These words refer to the second "enclosure" appended below.

The foregoing account of the strange dream is the same that I heard at the time of the calamity which it foreshadowed.

SARAH B. STEVENS.
(*Sister of Miss Watkins.*)

I pass without further comment to the last case of this class which I shall use in the body of the present report. A supplement will contain some further illustrative material. The closing case is one that may possibly be regarded as almost too good a story; but at all events it is plausible, and, if accurately remembered, it illustrates most perfectly our type. It happens, moreover, to be quite amusing.

[21] [STATEMENT OF A. V. H.]

NEW YORK, Dec. 8, 1887.

I have touched lightly upon psychological phenomena, studied a little here, and read a little there, so that I am not absolutely ignorant upon the subject, but I am perplexed as to the following: —

One night in June, 1886, I retired at half-past eleven. I awoke at three o'clock, but fell asleep in fifteen minutes. At once I was in Japan, at what appeared to be a dramatic representation. At a distance of perhaps ten feet from me, on my right hand, were three young women chatting. I noticed one very closely. Her face was of a very light yellowish hue; her hair was very yellow; strangest of all were her eyes, — they were perfectly round, the white of the eye showing very little; they were purple in color, and they were without pupils, — the iris appeared to have grown all over the eye. This young lady separated herself from her companions, and I followed. We came to a bridge over a small gully; as she reached the centre of the bridge she stopped and leaned over the hand-rail, which instantly broke, and she fell into the gully. I awoke a few minutes before eight o'clock, with the face and peculiar eyes still before me. I lived in Thirty-first street then, near Eighth avenue. After breakfast I got an Eighth-avenue car, to go down town. At Twenty-second street the car stopped to let a gentleman get off; he was lame and moved slowly. The driver became impatient. Unknown to the driver or conductor a young lady was waiting to get on the car, on the same side the gentleman was leaving. As soon as the gentleman was off the car, the conductor pulled the bell-strap, and the same instant the young lady attempted to mount the step. I stood upon the platform and saw her face distinctly. It was the young woman I had seen in the dream of the night before, absolutely the same in every feature except the color of the skin. At the instant she put her foot upon the step the car started quickly and she was thrown violently to the pavement. Several people went to her aid, and the car continued its way.

I had never known her or anybody resembling her. I had completely forgotten the incident when, as I was dozing upon the sofa, I fell asleep, and in a moment I saw the young woman again; this time in her own home, sitting in an easy-chair, and her husband standing by a grate-fire, holding a little girl on his shoulder. Her eyes were exactly like those of

her mother, whom she greatly resembled. I have never seen this young woman except that one instant when she was thrown from the car. I have searched diligently, but I cannot find a trace of her. Perhaps I shall hear further from you.

I have promised to make some mention of the contributions of our two insane correspondents to the data of my hypothesis. I am at present without any means of getting direct advice from those who know them as to the precise nature of their maladies, since neither is under treatment, and both communicate with us in confidence, so that I may not print their names. But the elaborate statements that they make in giving the committee the benefit of their newer insight furnish us, of course, with much internal evidence as to their condition. One of them is a systematic subject, who has long been developing a scheme of delusions of a well-known type. He was originally in business; but ill-health, and, still more, the persecutions of certain people, particularly of a very malignant woman, have more and more separated him from his kind. Meanwhile, however, there are compensations. Symbolic visions have revealed to him that a great future as a spiritual teacher is before him; only he must first pass through much "darkness." The "darkness," which seems to be a painful confusion of judgment joined with moodiness, and even with occasional temporary dementia, but which plainly never takes the form of true melancholia, does not deprive him of frequent spiritual revelations, nor yet of continual growth in his systematic delusions. Persecutions still beset him; but his relations with his spiritual environment are growing constantly more elaborate. A band of nine spirits have recently entered into intimate relations with him. These "protect him from evil;" they are sharply distinguished from one another by the special feeling of the sort of "magnetism" that each one excites in him when it is present; and their names are known. Our correspondent is meanwhile, as it seems, comparatively uninfluenced by mediums or clairvoyants; he has found it worse than useless to consult them, and his experiences are strictly his own. In short, if one may venture to judge him by his manuscript, he is a fairly well-developed paranoiac. He gives us his recent biography at great length, and with fair coherency. Every page of it is full of illustrations of his type of disease. His sincerity and industry are meanwhile as obvious as his prolixity. He seems to have had occasional pseudo-presentiments from the first. How far his experiences of this general type are sufficiently well-related to be capable of identification as what I here call pseudo-presentiments, is hard to say, of course; yet I feel tolerably sure, from internal evidence, that at least

the following was experienced, in the form of a pseudo-presentiment, very much as the story tells it: —

At one time, during the period of his "persecution" by his malignant enemy, a woman whom we may call L. T. Z., our informant remembers that he rose one morning and said to an acquaintance, "That woman" (meaning L. T. Z.) "will come to see me to-day." He "named the particular kind of business, and the lawyer she would want me to go with her to see." The acquaintance replied, "*That* woman will never come here to see you." For the bitter enmity between the two was well known. But

> about 9 A.M. I was called, and told, "a lady wished to see me in the parlor." — "Yes," I replied, "it is Mrs. Z." It was, and she wanted me to go to the same lawyer's office, and about the same business that I had named. I was about *one-half mile*[1] from where Mrs. Z. lived, and did not know she was in the city.

When taken in connection with other experiences of presentiments narrated in this correspondent's lengthy paper, the evidence to my mind is considerable, that in his case our typical hallucination of memory, whereby the present, in many specific details, is projected back into the past as a prophecy, coexists with the vaguer and more frequently observed belief, natural to his disease, that the present has been in its outlines symbolically foreshadowed in visions.

The other case of insane type is one that needs further consideration; and I have reason to hope that without misusing any confidences we shall receive a fuller account of the symptoms and of the disease of this subject, and that, too, from a competent source. Meanwhile our correspondent, who reveals no *system* of delusions, and who is, on the whole, in a cheerful, mildly exalted, unsteady but very active state of mind when he writes, begins his letter to Mr. Hodgson in a very characteristic way.

> I have never had such a dream as you speak of [he says, in answer to our committee's request for coöperation], but I have powerful impressions.
>
> For instance, my brother brought your letter up from the post-office this noon. I looked out at the window and saw him coming, and *knew at once* that your letter was in his pocket. This is a common occurrence with me. To know whom I am going to meet before I go out anywhere is also quite common.

Our correspondent later gives other instances, but some of these are so closely connected with expressions of his generally exalted

[1] Italics in original.

sense of his own powers, that one cannot easily tell where the pseudo-presentiment ends, and where an ordinary delusion of power takes its place, and creates the very facts that shall have been predicted by the presentiment which he recounts.

The indications given by these two cases suggest strongly that Kraepelin's observations of our pseudo-presentiments in insane patients ought to be easily verifiable in asylum practice, and I look hopefully for further light to the coöperation of the specialists in insanity when once their attention has been directed to the existence of this curious class of mental facts.

I have little doubt but, now that pseudo-presentiments may be regarded as genuine and not infrequent human experiences, a further study will throw great light on their connection with other mental processes. Theoretically speaking, they may possibly stand in normal people for what one might call momentary spasms of the activity of apperception. A sensitive or weary person, in an excitable state, is surprised by a noteworthy, perhaps very painful, event. There follows the effort, as one says, to "realize" the thing, to recognize it as familiar, to give it its place in the mental home which it has so confused by its invasion. As one to whom a stranger has accidentally bowed on the street momentarily tries to believe that he does, after all, recognize the stranger, so one surprised by a calamity, even in the midst of the shock of it, still dumbly tries to believe that things were always so with him. "Just my luck!" cries one man at such a moment. "Yes, I always knew it would turn out so," says another. These are only half sincere ways of meeting the strange experience. They are conventional resources; they produce in general no hallucinations; we know them to be falsehoods even while we utter them. But sometimes, under the quick strain, or soon after the surprise, during the hours of weakness and suffering, the stunned consciousness gives way under its strain, and a sort of cramp of recognition takes place. We *must* recognize this intolerably new thing. "Well, then," our unconscious memory-building process seems to declare, "we *will* remember it despite its novelty." And so the pseudo-presentiment enters consciousness, possibly to remain there forever in the form of the memory of some more or less fantastic presentiment. In abnormal cases this, which is ordinarily a mere spasm, may become a more or less regularly recurrent process.[1]

[1] I feel, of course, that the theoretical half explanation here indicated for pseudo-presentiments has value only as a provisional and also very vague suggestion, and I beg in advance the indulgence of critical students for my boldness in attempting any such account at the present stage. But it is not well in science for facts to be alone, if they can find even temporary partners. Only, of course, their provisional marriages, like Adam's first union with Lilith, may soon have to be followed by divorce.

IV. — Coincidences.

The whole value of this research into narratives of Phantasms and Presentiments is popularly supposed to centre about the discovery of coincidences of what are now commonly known as the "telepathic" sort. I hope that I have sufficiently shown, in what precedes, how significant our research may be, and what new light it may throw upon obscure matters, quite apart from any true connection between its facts and Telepathy. But still I now have coincidences to describe, coincidences which are dependent for their reality upon the memory of more than one person, and which are of a sort that, in case they should prove sufficiently numerous, well-established, and detailed, would demand from us either an acceptance of the hypothesis of Telepathy as the true hypothesis, or the invention of some still more novel mode of explanation, or, finally, an entire abandonment of the facts in question as wholly inexplicable. The coincidences of this sort actually on hand, after the sifting out by Mr. Hodgson and myself of a very great number of less significant cases, and after the separation of all that probably represent pseudo-presentiments, may be said to be numerous enough, sufficiently well-established, and sufficiently detailed, to require serious attention, and to justify in great measure the trouble that has been taken to bring them together. They warrant as yet, in my opinion, no final inferences, but perhaps some of the members, on considering certain of these cases, may find me too stubborn a sceptic. To this accusation I can only respond that stubborn sceptics make the best converts; and that whenever Telepathy, this capricious Undine of recent discussion, really gets her head above water, and takes to dry land, as a creature of immortal soul and of mortal steadfastness of purpose, I shall be the most devoted of her knights. As it is I can only fish for her in deep water, and therefore I have to spread my nets with great care, and take heed lest she rend them altogether and whirl away with a foamy shake of her tail.

Meanwhile the success of our investigation of the pseudo-presentiments encourages me to hope that the comparative method will, in time, enable us to get definite results in this field also, whereby I do not mean to imply that these results must be telepathic, nor that they must be opposed to telepathy.

In reporting our coincidences I shall here begin with the best of the group, namely, three cases of the sort that I call "documentary," *i.e.*, cases where a significant part of the testimony is in a document or in documents accessible to us. These I shall call Sub-Class A of our coincidences. Then I shall mention, as Sub-Class B, non-docu-

mentary cases of a comparatively high degree of value. Under Sub-Class C, I shall finally mention a few cases of less value, in some of which there may, indeed, be a telepathic coincidence, but either the coincidence is too slight, or the evidence is too inconclusive, to make the cases as important for present purposes as those in Sub-Class B.

Sub-Class A.

Coincidences supported not merely by memory, but by any sort of documents, are extremely rare in these researches. Hence the high relative value of the three cases now to be presented. One was reported to the society in my earlier informal statement. A second was also once read to the society when the principal letters were first received, but now it is fortified by interviews with one of the persons concerned, and by two brief but valuable documents which our secretary has seen and copied. The third case is now for the first time reported.

The first of these "documentary cases" came to us, along with much other valuable material, from a professor in a Western college, whose name we need not give, but who is well known to Rev. Edward Everett Hale. From the latter we have the best assurances as to our correspondent's high character. The experience in question did not happen to our correspondent himself, but to family connections of his, from whom he obtained for us the documentary evidence. The narrative may be introduced by a few words of explanation: In the latter part of February, 1886, a very severe snow-storm visited England and the British Provinces. It was especially inconvenient in the North, and long blockades on the northern railways were the result. In the "Boston Advertiser" of Tuesday, March 2, I find a despatch from Halifax, reporting that "the storm in northern New Brunswick is the worst known for many years," the snow being fifteen feet at one place. "The special train" (continues the despatch) "which should have arrived here Saturday noon" (February 27) "is not likely to reach Halifax till Wednesday." "Another heavy snow-storm is now raging along the entire line of the Intercolonial, accompanied by a gale of wind. No American mails have been received since last Thursday" (February 25). This item, which I have hunted up in the news of the day, will form a sufficient basis for understanding the letter which follows. A gentleman, Mr. J. T., a connection of our Western correspondent, was at this time in New Brunswick, on business for a Montreal house. Wednesday, March 3, he wrote a letter dated St. John, N.B., and written on the paper of the Hotel Dufferin. I have had

a part of the original in my hands. The letter is addressed to his wife.

[22] I have not heard of you for an age. The train that should have been here on Friday last has not arrived yet. I had a very strange dream on Tuesday night. I have never been in Ottawa in my life, and yet I was there, in Mr. E.'s house. Mrs. E., Miss E., and the little girls were in great trouble because Mr. E. was ill. I had to go and tell my brother [Mr. E.'s son-in-law], and, strange to say, he was down a coal-mine.

When I got down to him I told him that Mr. E. was dead. But in trying to get out we could not do it. We climbed and climbed, but always fell back. I felt tired out when I awoke next morning, and I cannot account for the dream in any way.

This fragment, obtained for us, after much trouble and delay, by the kindness of our correspondent, from the family of Mr. J. T., bears his special certificate that it is authentic, and that it was written at the time in question. There is no postmark or envelope accompanying the document, but I think that we now cannot doubt its genuineness, nor can we doubt that the writer, when he wrote these words, could have had no ordinary information of the actual death of the Mr. E. of whom he speaks. This death, according to our Western correspondent, had actually occurred at New York City at midnight, on Tuesday, February 23, one week before the dream.[1] The delay of the mails, the substance of the "Advertiser" despatch of March 2, and the tone of the letter itself, seem to make it very improbable, in any case, that Mr. J. T. could have had any intimation of the death of Mr. E., or any special cause for anxiety about him before the occurrence of the dream. As to the circumstances of Mr. E.'s death, they were as follows, according to our correspondent: —

[1] The coincidence *may* have been much closer. The letter quoted says "Tuesday night," not specifying the date. Was Tuesday, February 23, meant, or the night *immediately* preceding the date of the letter? On this point we have the following further correspondence: —

JANUARY 22, 1888.

RICHARD HODGSON, ESQ.: —

MY DEAR SIR, — . . . I enclose a slip which puts a new aspect on the dream of my brother-in-law. You will remember that I promised to inquire and, if possible, obtain from him definite information of the date of the dream; whether on the day of Mr. E.'s death, or, as the letter, looked at on its face, seemed to imply, a week afterwards. Mr. T. sent me word, as you will see, that it occurred on the very night. This, of course, renders needless all proof that there had been no communication between Montreal and the town where he then was.

The note is in the handwriting of Mrs. C.'s mother, who is in Montreal, and has been staying at his house. I requested her to inquire, as he himself is so busy and so much away from home that it was not likely that I should get an early answer from himself.

Yours truly,

E. W. C.

ENCLOSED STATEMENT OF MRS. T., MOTHER OF J. T.

John says he dreamed that dream the very night Mr. E. died. He told me of one he had some time since, — that he went to hell. Horrible, was it not?

Early in February, 1886, a gentleman, Mr. E., living at Ottawa (a connection of my family by marriage, and with whom I was well acquainted), went from home on business. He was at the time suffering from a severe cold. While in New York he became worse, and was finally seized with pneumonia, and taken to a private ward in one of the hospitals in that city. His situation became critical, and the physician in attendance, or his daughter, who was with him, telegraphed to his relations at Ottawa. Later an improvement set in and more favorable accounts were despatched. Suddenly, however, and before any of the rest of his family could reach him, he became worse, sank rapidly, and died about midnight on the 23d of February. This was on Tuesday. He had then been unconscious for some hours.

Mr. J. T., also connected with Mr. E.'s family, but having no close connection with himself, was at the time somewhere in New Brunswick on business for his firm in Montreal, which had no transactions with Mr. E.

In confirmation of this account our correspondent has sent us a letter from his wife's mother to his wife, dated February 28, and giving an account of the facts. From the original letter we have the following copied extract; the original letter was seen in June, 1887, by Mr. Hodgson and myself: —

. . . The events of this week have been such a shock — I have not recovered from it — poor Mr. E. dying there all alone! His daughter was there three hours before his death, but he was insensible; she thought he returned the pressure of her hand, but it is doubtful. . . . Your brother and his wife had come in on Wednesday morning to make purchases. Then the telegram came telling of his death; they had not heard of his illness, only of his having a cold. Of course it put other business aside, and W. had to make arrangements for the funeral, and everything devolved on him. Mrs. E. came in from Ottawa. I did not hear anything till Thursday, when B. came up to tell us — it was all so hurried.

. . . . . .

. . . Pneumonia had caused paralysis of the heart, which caused his sudden death. They had telegraphed that he was very ill, and they feared the result; then, again, that he was better, and they hoped danger was past; then in a few hours that he was gone. In less than two days he was brought to Montreal and buried — so very hurried.

In addition, we have the following, written in a letter from the wife of Mr. J. T. to a member of the family. The original of this letter also has been in our hands.

. . . I expect J. home about the middle of next month. What a strange dream J. had about Mr. E.'s death! He last saw him a few days after Christmas, when they both called to see us. I will answer your questions about the dream as far as I can; I fortunately kept J.'s letters telling about his dream, as I thought it very remarkable. For several days before, and *exactly* a week after Mr. E.'s death, there were heavy snowstorms in N.B., so that J. did not see a Montreal paper or hear from me

in that time; *eleven* trains were snowed up on the line together. This explains why he did not hear from me.

I will copy what he says in his letter of Wednesday, the 3d of March, from St. John, N.B. [Then follows the extract already given.]

In answer to questions Mrs. J. T. has assured us in writing, (1) that her husband had heard *nothing* of Mr. E. for a long time, and did not know where he was, and (2) that she herself heard of Mr. E.'s death on Thursday, the 25th, and at once wrote to her husband, but that he did not get this or any further letter from her before Thursday, March 4. The coincidence is remarkable, and is excellently established. As to the closeness of the coincidence, the dream either occurred (as is possible) at the time of the death or else (as I think likely) a few days later, while in any case *no* news of the actual death could have passed; and it was a dream of serious illness, with a sense of something mysterious and dark connected with the matter, and in the course of it the impression arises that Mr. E. is dead. Seldom, however, is the fact of a coincidence so well proved by the data at hand; and seldom, indeed, is a correspondent more courteous, laborious, and obliging than our informant has been in getting us the evidence for this case, and for others of which he has written us.[1]

The second case comes from a gentleman of this city, who has put us under no small obligations by his various communications. We know him now by frequent interviews, and there can be no doubt of his high character and general good judgment. His own account of an experience which he remembers is next given; we shall call him M., and his companion in the curious experience related we shall call N.

[23] Boston, Nov. 16, 1886.

Prof. Royce: —

Dear Sir, — Some years ago, perhaps eight or nine, while in a city of Rhode Island on business, my house being then, as now, in Boston, I received news which was most unexpected and distressing to me, affecting me so seriously that I retired to my room at the hotel, a large square room, and threw myself upon my bed, face downward, remaining there a long time in great mental distress. The acuteness of the feeling after a time abating, I left the room. I returned next day to Boston, and the day after that received a short letter from the person whose statement I enclose herewith, and dated at the town in western New York from which her enclosed letter comes. The note begged me to tell her without delay what

[1] The family of the wife of our correspondent, E. W. C., have had numerous more or less well-remembered experiences of this sort amongst the various brothers and sisters. I feel it well to add, therefore, to this particular case, that all of this family are apparently good dreamers, and that they seem to me to have often been subject to pseudo-presentiments of a vivid sort.

was the matter with me "on Friday, at 2 o'clock," — the very day and hour when I was affected as I have described.

This lady was a somewhat familiar acquaintance and friend, but I had not heard from her for many months previous to this note, and I do not know that any thought of her had come into my mind for a long time. I should still further add that the news which had so distressed me had not the slightest connection with her.

I wrote at once, stating that she was right as to her impression (she said in her letter that she was sure I was in very great trouble at the time mentioned), and expressed my surprise at the whole affair.

Twice since that time she has written to me, giving me some impression in regard to my condition or situation, both referring to cases of illness or suffering of some kind, and both times her impressions have proved correct enough to be considered remarkable, yet not so exact in detail or distinctness as the first time. I feel confident that I have her original letter, but have not been able to command the time necessary to find it.

I will add that the lady has told me that her vivid impression about me was only one of ten or twelve experiences of like sort near that time in relation to other people, and that in every case her impression proved correct. She was recovering then from a long and nearly mortal illness, malarial fever contracted in Italy, and was for a long time in most delicate and precarious condition. As her restoration to health progressed she tells me she found herself less and less susceptible to impressions of the sort described.

(Signed) M.

P.S. — The three occurrences above detailed comprise all the experiences of this sort which I have had in my life.

The accompanying statement from N. reads as follows, — N. is a physician by profession, and writes from New York State; we have not interviewed her personally: —

[Postmarked Aug. 16, 1886.]

Prof. Royce, — In the convalescence from a malarial fever during which great hyperæsthesia of brain had obtained, but no hallucinations or false perceptions, I was sitting alone in my room looking out of the window. My thoughts were of indifferent trivialities; after a time my mind seemed to become absolutely vacant; my eyes felt fixed, the air seemed to grow white. I could see objects about me, but it was a terrible effort of *will* to perceive anything. I then felt great and painful sense as of sympathy with some one suffering, who or where I did not know. After a little time I knew with whom, but how I knew I cannot tell; for it seemed some time after this knowledge of personality that I saw distinctly, in my brain, *not* before my eyes, a large, square room, evidently in a hotel, and saw the person of whom I had been conscious, lying face downward on the bed in the throes of mental and physical anguish. I felt rather than heard sobs and grieving, and felt conscious of the nature of the grief subjectively; its objective cause was not transmitted to me. Extreme exhaustion followed the experience, which lasted forty minutes intensely, and then very slowly wore away. Let me note: —

1st. I had not thought of the person for some time and there was no reminder in the room.

2d. The experience was remembered with more vividness than that seen in the normal way, while the contrary is true of dreams.

3d. The natural order of perception was reversed, *i.e.*, the emotion came first, the sense of a personality second, the vision or perception of the person third.

I should be glad to have a theory given of this reverse in the natural order of perception.

Respectfully,

N.

The letters that passed between the persons at the time of this singular experience have probably been preserved, but are now lost in a mass of old letters, but may yet be found. Meanwhile we have used every urgency to get our friend to discover any correspondence bearing upon these experiences; but he is a very busy man, and only lately have letters bearing, *not* upon this first experience, but upon one of the later ones, come to hand. The originals of these letters have been seen by Mr. Hodgson. I quote, however, next in order, an explanatory letter from M. to myself: —

Boston, Dec. 6, 1888.

Prof. J. Royce, *20 Lowell street, Cambridge, Mass.*: —

My dear Sir, — At suggestion of Mr. Richard Hodgson, I write you in regard to the experience I once reported to you, viz., with M. of New York. Mr. Hodgson especially wants me to send you details of the second and third experiences reported. It is at present, I am very sorry to say, quite impossible for me, on account of pressure of business duties, to undertake another search for letters received from N. at the time of the experiences mentioned. I think that they are in existence, but it would take much time to find them. My recollection of the three experiences is that the first was far more pronounced and distinct in its details, and that the second and third were yet sufficiently so to be called somewhat remarkable and worthy of notice. There was *less* definiteness about them as to time, etc., and the last was least definite. It may be worthy of note that, as Dr. N. gradually recovered her health, her impressionability in this manner seemed to decrease, and I understand that of late years, being in good health, she has had no experiences of the kind.

This is my recollection of our last words on the subject. The second and third experiences referred to, on her part, had *sufficient* cause in my own condition, if my condition (of suffering and trouble) may be considered the cause, though it should also be said that in that sense the cause of the first experience was much more pronounced.

With great regret that I cannot at this time give you additional data, I am,

Yours very truly,

M.

And now follow the two letters, — one is a very brief note, — as follows: —

(*Copy. June 6, 1887. R. H.*)

DOCTOR'S OFFICE.

If I don't hear from you to-morrow I shall write you a letter!!
I am anxious about you.

N.

JULY 24. [Year not given.]

The answer runs as follows: —

(*Copy made June 6, 1887. R. Hodgson.*)

BOSTON, July 26, 1883.

What clairvoyant vision again told you of me Monday and Tuesday and Wednesday? Was it as vivid and real as the other time? It had, at least, a very closely related cause.

It is past 1 A.M., but I will not go to bed till I have sent you a word. A letter will follow very soon. For two days I have been thinking of the way you wrote to me that time, and I should have written to you within twenty-four hours if I had not received the note from you. Please write to me as you proposed. This is only to tell you that I am alive and not ill, but tired, tired! Tell me of yourself. I have had a hard three months in the West, eighteen to twenty hours a day, scarce a respite — I am not ill; I am sure I am not, but I am *worked out*. I couldn't get to —— or write.

I used the telegraph even with my sisters.

I hope for a letter and will surely send you one.

Yours,

M.

Pending the discovery of the documentary evidence for the first instance, I need only remark that the coincidence as reported is, by reason of the remarkable definiteness of the remembered experience, the most promising of the coincidences that have come into our hands in cases where the evidence is nearly as good as here. *If* there is here no entirely unsuspected source of error, this case may be considered, therefore, even in the present incomplete state of the evidence, as in the highest degree noteworthy. And if many such cases come to light in the course of our inquiries, they may have a bearing on the hypothesis of telepathy whose significance we can now only faintly conjecture. The trouble is that such cases are so rare, and the links of the chain are so hard to piece together into perfect completeness.

The third of our documentary cases is, I think, a case of an unquestionable coincidence. Only here the coincidence has far less significance than in the former case, because, after all, it is not so uncommon to dream of death as happening to one busy in a mine.

Our informant is a Mrs. N. W. C. H., with whom Mr. Hodgson has had several interviews. She has had some other experiences of coincidences of a type that might be telepathic. But after a discussion with Mr. Hodgson she wrote to him as follows: —

[24] Perhaps you remember when you asked me if I ever had other dreams which coincided with real events, I told you I once dreamed that Wm. T. H. was dead, and that the same night he was in a mine where he had on exhibition a diamond drill, and was thrown down several feet on to one of two working engines which ran the drill. The injuries which he received did not prove to be serious, though when he was taken up it was thought he was dead, and he remained unconscious some time.

You then asked if I had letters which were received at the time, relating to either dream. I said I did not think I had. I was about five minutes too late to mail the account of the first dream and paper with mother's signature to you by the morning mail, and curiously, to me, before the next mail left I accidentally came across Wm. T. H.'s letter to me, in reply to one from me to him, telling him of the dream I had about him, and I hastily enclosed it to you. If you look at it again you will see it to be from him to me, not to my mother. Perhaps he addressed to "Dear N.," as he often used to do.

He is living.

Yours respectfully,

N. W. C. H.

The original of the letter mentioned above is in our hands, and it is sufficient by itself to establish the fact of a certain coincidence. Unfortunately we have not received permission to publish it, the exact closeness of the coincidence between dream and event not yet having been ascertained. (See p. 527 forlater statements.)

Sub-Class B.

A decidedly interesting coincidence dependent upon the observation and memory of several people is reported to us by our friend Dr. S. L. Abbot. The coincidence occurred in his own practice. He originally wrote an account of it to Dr. Bowditch, and has since been at considerable trouble to get the statements that are printed here along with his letter. We hoped at the outset, and we hope still, for assistance in our work from physicians, whose practice must give them many opportunities of learning what would interest us. It is not too often that our hope has been realized, and we feel very strong gratitude to busy men who can thus keep our inquiry in mind. All the names except Dr. Abbot's are represented in the following by initials: Mrs. E. D. was the patient, M. B. was her nurse, Miss E. A. P. is the sister of Mrs. E. D.: —

[25] (*From Dr. S. L. Abbot.*)

Boston, May 15, 1886.

Dear Dr. Bowditch:—

The story which I told you is as follows:—

A few weeks since I was in attendance on Mrs. D., who was quite ill. One evening at dessert we happened to have some very nice ice-cream which our cook had compounded, and Mrs. Abbot said she should like to send some to Mrs. D. if I thought it would do her no harm. I told her that at that hour of the day I did not think it prudent for her to eat it, and it was not sent. The next morning I said to Mrs. D., during my professional call, "Mrs. D., you don't know what I saved you from last evening."—"Why, what was that?" was the reply.—"Some delicious ice cream," was my answer, "which Mrs. Abbot wanted to send you, but I wouldn't let her." She then said that when she awoke from her first nap the night before, between seven and eight o'clock, she said to her nurse, "I think I'll have a little of my ice-cream." The nurse was puzzled, and asked her what she said, and she repeated her remark. The nurse thought she was a little flighty, perhaps, and turned the subject by saying it was about time for her to take her cough-pill, which she proceeded to give her. After she had taken it Mrs. D. said, "And now I'll have my ice-cream."—"What ice-cream?" said the nurse.—"Why, that ice-cream *over there*, in a glass," pointing across the room,—"the ice-cream that Mrs. Abbot sent me!" And Mrs. D. added, in telling me the story, "I was so disappointed in finding there was none for me that I couldn't help crying." I will only add that neither Mrs. Abbot nor myself had suggested to her at any time the idea of sending her any ice-cream.[1]

S. L. ABBOT.

November 28, 1888.

I hereby certify that the above statement is true.

(Signed) E. D.
M. B.

I hereby declare that the occurrence certified to by Mrs. D. and Mrs. B. was reported to me by them on the morning following, and I believe that their statement is true.

(Signed) E. A. P.

December 10, 1888.

We dined at six o'clock, and it was probably towards seven P.M. that Mrs. Abbot made the remark about the ice-cream.

S. L. ABBOT.

The conditions are not such as to make the discovered coincidence, with any degree of probability, a mistaken reminiscence on Dr. A.'s

[1] In a conversation with me on Jan 3d, 1889, Dr. Abbot stated that he thought that about four years before this incident occurred, Mrs. Abbot had sent Mrs. D. some ice-cream, but that Mrs. Abbot had entirely forgotten it.—R. H.

part, produced by his patient's own inquiry as to the ice-cream, and I think the case as it stands a very good coincidence.

From physicians come also the two following cases, Nos. 26 and 27 on the list of this paper. They speak for themselves, and I give the full evidence without comment. Each is a noteworthy coincidence, each is well established so far as observation and memory can establish such things, and, of course, neither alone is enough to put us on the right track in the search for any explanation of the causes of such complex events. In Case 26, documents appear, but not as establishing the date of the supposed telepathic experience, only as establishing the reality of the events with which the experience seemed to have some connection.

[26] [First Letter.]

(*Experience of Mrs. W. H. X.*)

Philadelphia, Oct. 13, 1888.

Richard Hodgson, Esq.: —

Dear Sir, — . . . Dr. X. gave me the enclosed account of his wife's experience. It seems, to me, interesting from the coincidence of the dates pointing to the probability of "mental telepathy" between the writer of the letters in France and Mrs. X. in Philadelphia.

Permission is given to publish this account, *not using the name.*

Yours truly,

G. M.

Statement of Dr. X., of Philadelphia, enclosed with first letter, and written October, 1888: —

On the evening of the 29th of June, 1888, my wife became hysterical for the first time, to my knowledge, during seven years' marriage. She had a paroxysm of weeping, almost violent, fearing some unknown disaster to some member of her family in France. This lasted about half an hour. On the 7th of July there was a similar nervous attack.

A letter, bearing date of the 29th of June, announced the serious sudden illness (apoplexy), already of several days' duration, of her father, and another announced his demise on the 6th July.

Statement of Mrs. X., November, 1888: —

I made no note of time or date of my experience as above noted, and had forgotten it until shown your questions and note by my husband. I certainly remember that I had the experience about the time stated. The extracts from the letters are correct.

[S. X.]

[Second Letter.]

(*From Dr. X. to Mr. Hodgson.*)

November 17, 1888.

Mr. Richard Hodgson, *Sec'y American Society for Psychical Research* : —

My dear Sir, — I must apologize for not replying at once to yours of the 18th ult. It reached me when I was exceedingly busy, and a necessary delay degenerated to carelessness. Besides this, my wife had a similar nervous attack on the 28th of September, and was very sure that something unpleasant had happened to her sister. I desired to await a letter. This came about two weeks ago (from the sister), and there was no mention of anything untoward. Up to this time (the arrival of said letter) I had not spoken to my wife of any relation between her nervous spells of last summer (which I attribute to overwork indoors, and nervous exhaustion) and the sickness and death of her father. I consider that the case is purely coincidence, although not prepared to deny all influence of telepathy.

I have answered the questions as fully as I think will meet your requirements, and my only objection to sending letters is that they are concerned with family matters, and such I always consider sacred.

For the benefit of those who wish to see a *certain* telepathy in the case, as well as in the interest of impartial judgment, I ought to state that between the two letters mentioned there was received another, written on the 6th July, and mailed before 3 P.M., the same day, stating that my father-in-law was dying. This letter was received on the morning of the 16th of July.

(Signed) [Dr. X.]

Enclosed answers of Dr. X. to questions : —

1. *Q.* Did your wife have any similar experience before marriage?

A. No.

2. *Q.* At what time in the evening, on the 29th of June, did the experience occur to your wife?

A. About 9 P.M.

3. *Q.* Can you ascertain at what time the letter was being written?

A. It was written before 3 P.M., that being the hour stamped on the envelope.

4. Have you any objection to our seeing the letter of the 29th of June, and taking a copy of the passage having relation to the case?

A. Yes. The passages are, "Le pauvre père est très malade. . . . Le médecin dit qu'il n'ira pas plus loin qu'un ou deux jours."

5. *Q.* At what time on the 7th of July did your wife have her second experience?

A. About 10 P.M. It might have been as early as 8, — not earlier.

6. *Q.* At what time did her father die on the 6th of July?

A. About 6 P.M. (See question 10.)

7. *Q.* Had your wife any reason to be apprehensive as regards the state of health of any member of her family in France?

A. No.

8. *Q.* At what date was the letter of the 29th of June received?

A. The morning of the 10th of July.

9. *Q.* At what date was the letter announcing the death received?

A. The morning of the 28th of July. It was written (date of letter) on the 10th, but posted on the 17th.

10. *Q.* Can we see the letter announcing the death, and take copy of passage referring to it?

A. No. The passage is, "Papa est mort le 6 juillet, a 6h du soir." (Letter from my wife's sister.)

11. *Q.* Can your wife kindly, herself, write out a brief statement of her experiences, or confirm the account given by yourself, a copy of which I enclose for her signature?

12. *Q.* Were you yourself present at both her experiences?

A. Yes.

13. *Q.* Were any memoranda made of your wife's experiences on the days of their occurrence, and, if so, can we see them?

A. The only memoranda made are small lead-pencil marks opposite the dates on a calendar. These marks were not made until after the letter announcing the death of my father-in-law was received. I am sure they are correct, for the occurrence was fresh in my memory. I would have forgotten them by this time.

Further answers to subsequent inquiries, together with other supplementary statements received, show that the nervous attacks of this lady have continued at intervals since the time above mentioned, but leave us in no doubt of the coincidence between the first two attacks and the events in France, as set forth above. The hypothesis of chance coincidence is, of course, very plausible in this case.

[27] [First Letter.]

(*From W. O. S.*)

Albany, New York, Sept. 10, 1888.

Mr. Richard Hodgson, *5 Boylston place, Boston, Mass.:* —

Dear Sir, — I had a personal experience during the past week which would, I think, be of interest to your *Committee on Apparitions*, and I send it as I understand you wish to collect as many accounts as possible.

I am not a subscriber to your society, and would like to know a little more of its scope and aims. I have been aware of its existence through an advertisement which I clipped from a paper, and through friends who are subscribers.

Yours truly,

W. O. S.

[Statement: For Committee on Apparitions.]

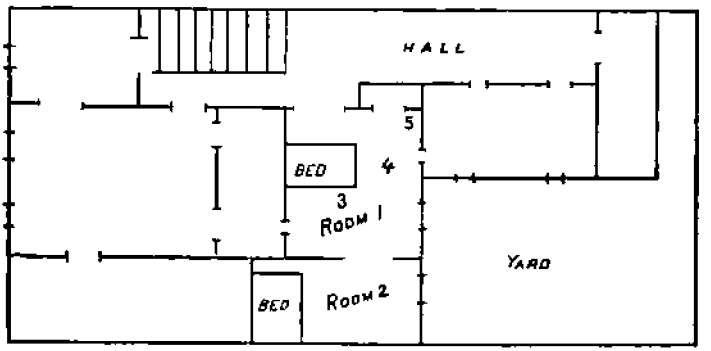
(*Mem. from W. O. S., M.D., Albany, N. Y., Sept.* 10, '88.)

I am a physician, have been in practice about eleven years; am in excellent health, do not use intoxicants, tobacco, drugs, or strong tea or

coffee. Am not subject (in the least) to dreams, and have never been a believer in apparitions, etc.

On Monday last, Sept. 3, 1888, I went to bed about 11 P.M., after my day's work. Had supper, a light one, about 7 P.M.; made calls after supper.

My bedroom is on the second floor of a city block house, and I keep all my doors locked except the one leading to my wife's room, next to mine, opening into mine by a wide sliding door, always left wide open at night. The following diagram will illustrate the relation of the rooms.



I occupy room 1 and my wife room 2. Her room has but one window, and a door opening only into my room. My room has three doors (all bolted at night) and one window. Both windows in our rooms have heavy green shades, which are drawn nearly to the bottom of the window at night, shutting out early daylight. No artificial lights command the windows, and the moonlight very seldom.

I undressed and went to bed about 11, and soon was asleep. In the neighborhood of 4 A.M. I was awakened by a strong light in my face. I awoke and thought I saw my wife standing at Fig. 3, as she was to rise at 5.30 to take an early train. The light was so bright and pervading that I spoke, but got no answer. As I spoke, the figure retreated to Fig. 4, and as gradually faded to a spot at Fig. 5. The noiseless shifting of the light made me think it was a servant in the hall and the light was thrown through the keyhole as she moved. That could not be, as some clothing covered the keyhole. I then thought a burglar must be in the room, as the light settled near a large safe in my room. Thereupon I called loudly to my wife, and sprang to light a light. As I called her name she suddenly awoke, and called out, "What is that bright light in your room?" I lit the gas and searched (there had been no light in either room). Everything was undisturbed.

My wife left on the early train. I attended to my work as usual. At noon, when I reached home, the servant who answers the door informed me that a man had been to my office to see about a certificate for a young lady who had died suddenly early that morning from a hemorrhage from the lungs. She died about 1 o'clock — the figure I saw about 4 o'clock. There was but little resemblance between the two, as far as I noticed,

except height and figure. The faces were not unlike, except that the apparition seemed considerably older. I had seen the young lady the evening before, but, although much interested in the case, did not consider it immediately serious. She had been in excellent health up to within two days of her death. At first she spit a little blood, from a strain. When she was taken with the severe hemorrhage, and choked to death, she called for help and for me.

This is the first experience of the kind I have ever had, or personally have known about. It was very clear — the figure or apparition — at first, but rapidly faded. My wife remarked the light before I had spoken anything except her name. When I awake I am wide awake in an instant, as I am accustomed to answer a telephone in the hall and my office-bell at night.

[Second Letter.]

(*From W. O. S.*)

Albany, N.Y., Sept. 29, 1888.

Dear Sir, — I enclose my wife's statement, as requested. The parents of the young lady who died are ignorant and superstitious, and I can get no statement (signed) out of them. I have no objection to publication.

Yours truly,

W. O. S.

Sec. A. S. P. R.

(*Letter from Mrs. W. O. S.*)

Albany, Sept. 27, 1888.

Dear Sir, — On the morning of Sept. 4 I was suddenly awakened out of a sound sleep by my husband's calling to me from an adjoining room. Before I answered him I was struck with the fact that although the green shade to his window was drawn down, his room seemed flooded by a soft yellow light, while my chamber, with the window on same side as his, and with the shade drawn up, was dark. The first thing I said was, "What is that light?" He replied he didn't know. I then got up and went into his room, which was still quite light. The light faded away in a moment or two. The shade was down all the time. When I went back to my room I saw that it was a few moments after four.

Very truly,

F. S. [wife of W. O. S.]

[Third Letter.]

(*From Mrs. W. O. S.*)

Mr. Hodgson: —

Dear Sir, — Your note of Oct. 11 is at hand. In reply I would say, in regard to the light in my husband's room, that it seemed to me to be perhaps more in the corner between his window and my door, although it was faintly distributed through the room. When I first saw the light (lying in bed) it was brilliant, but I only commanded a view of the corner of his room, between his window and my door. When I reached the door the light had begun to fade, though it seemed brighter in the door-way where I stood than elsewhere. My husband seemed greatly perplexed, and said,

"How strange! I thought surely there was a woman in my room." I said, "Did you think it was I?" He said, "At first, of course, I thought so, but when I rubbed my eyes I saw it was not. It looked some like Mrs. B——" (another patient of his, — not the girl who died that night). He, moreover, said that the figure never seemed to look directly at him, but towards the wall beyond his bed; and that the figure seemed clothed in white, or something very light. That was all he said, except that later, when he knew the girl was dead, and I asked him if the figure at all resembled her, he said, "Yes, it did look like her, only older."

Respectfully,

MRS. W. O. S.

Oct. 16, '83.

The case is interesting, as being very well reported, and as leaving us in no doubt about the reality of this odd experience. The conditions do not make any detailed explanation of the occurrence at all plausible, although many possible causes for the experience may suggest themselves to our readers. We will offer no conjectures at present.

The next case is one of a decidedly puzzling sort, to which our attention was attracted by the following item from a Philadelphia newspaper, which was going the rounds of the press: —

[28] A CASE OF REAL CLAIRVOYANCE.

WHILE LYING SICK IN BED A WOMAN SEES A MURDER AND A SUICIDE.

A most remarkable case of clairvoyance is the absorbing topic among the residents of South Camden, and is perplexing the wise people of that city.

The case is that of Mrs. Annie Field, of 805 Broadway, who died a few days ago, and who was a very highly respected and estimable lady.

One day, while sick, she made inquiry, during a few moments of consciousness, relative to the health of Turner Berry, a well-known business man in that locality, and who had been seen that morning in excellent health. An hour or two afterward a little daughter of Mr. Berry called at the Fields' residence, and said her father had been taken very ill. On the following day Mrs. Field rose up suddenly from her stupor and, in apparently great agony of mind, declared that a well-to-do brother-in-law, residing in Pennsylvania, was way up among the Pennsylvania forests, seriously ill, and his family were greatly agitated over his disappearance, and could not find him. A day or two later a letter came confirming this.

The most mysterious case in connection with Mrs. Field's clairvoyance, however, was that in connection with the murder of Amelia Walker by Michael Finnigan, and the latter's suicide.

On the night of the murder Mrs. Field suddenly sprang up in bed, after having been in a stupor for a long time, and in terror cried out: "See that man and woman and the carriage at the City Hall; see the confusion; let me get near the man; let me get near him!" The old lady was with

difficulty quieted, and then she broke out again, declaring that a terrible thing was happening, and the man was causing them trouble. Then, in a very weakened condition, the old lady fell back in her bed.

On the following morning, Mr. Field began to read the account of the murder to his daughters, when one of them seized the paper from his hand, and was shocked to discover that the facts were identical with those their mother had seen in her stupor. Two days later Mrs. Field died.

In answer to our inquiries we have come into possession of the following correspondence relating to Mrs. Field's experience: —

[First Letter.]

(From the late Mrs. Field's son-in-law.)

Camden, N.J., May 1, 1888.

Richard Hodgson, Esq.: —

Dear Sir, — Yours of March 20 and April 21 were duly received. . . . I shall endeavor to narrate the incidents of the last illness of Mrs. Anne J. Field, to which the "Evening Telegraph" of March 6 alluded as "manifestation of clairvoyant power." Should you desire a more systematic paper, please forward the form used in such instances.

Mrs. Anne J. Field, æt. fifty-four, was a woman of unusual intelligence, possessing all the characteristics of the pure English woman of higher birth, and no trace of superstition, save that found in a strict adherence to the traditions and doctrines of the High Church of England.

On the 15th of February Mrs. Field contracted a cold, which culminated in pneumonia with typhoid fever. Five days later the suspicions of her physician were aroused by a marked symptom (the patient also steadily growing weaker with the pneumonia and fever conquered), and an examination revealed undoubted evidence of Bright's disease suffusing the body with its fatal poison, — influencing the mind to the extent of a tendency to reflection upon vanished possibilities.

Upon the evening of the murder and suicide near our City Hall, Mrs. Field lay, probably in a semi-comatose condition, though apparently awake, as her eyes were open, with nothing unusual to attract attention in her occasional remarks, when suddenly she raised herself in her bed, exclaiming, "Help! He's killing her — won't some one go to her assistance?" She then recited to her daughter, in close attendance upon her through her illness, a long story, detailing a walk that evening upon the avenue upon which the City Hall is situated, stating that, while there, a sorrel horse, pulling a light carriage or buggy, in which a quarrelling pair of human beings were seen, passed her, and shortly after stopped. It was then the quarrel became fatally warm, as Mrs. Field, at this juncture, startled her daughter with her outcry.

This is a succinct description of this incident, which was laughed at as a mere dream, and accounted for by the theory that her hearing, unnaturally quickened by disease, had caught a conversation relating to the occurrence carried on in the street outside, appropriating it to her use as a personal adventure. To offset this, however, is the fact that some years previously Mrs. Field's entire left side had been paralyzed, and her brain, eye, ear,

and arm of that side rendered almost useless, and at the time of this occurrence she was at least fourteen feet from a closed window. Her daughter, a young woman of unusually quick perception, at that time thoroughly wide awake, and six feet (or more) closer to the windows of the room, heard nothing in allusion to the matter, — in fact, nothing save the tramp of the pedestrians to and fro.

There was no attempt at description, either of personage or mode of murder, but a plain, unvarnished tale of a supposed stroll, aimless as could possibly be in comparative midwinter, and the single descriptive attempt comprised in the allusion to the sorrel horse walking out of the city, *via* the avenue on which the City Hall stands.

Mr. Turner Berry, of Camden, alluded to in the publication, was an acquaintance of Mrs. Field, who had been in ill-health for a long time, though for a short while previous to this occasion had sufficiently recovered to resume his outdoor habits, and was noticed upon the street a few hours before the following: —

On the morning of the City-Hall tragedy, Mrs. Field, in the course of a desultory conversation, remarked that she would like to know how Mr. Berry was "getting on," as he was "again very ill and in bed," — a remark which occasioned a smile, and the assurance that she was wrong, as he had been recently seen on the street. She insisted, however, that he was seriously indisposed, and was indulged in her belief as a mere harmless whim. Toward evening a daughter of Mr. Berry called, by advice of her mother, to inquire about the condition of Mrs. Field, informing her hostess that her father was again critically ill, having been compelled to retire from public gaze that A.M.

This covers this case of "*manifestation*," I believe.

My little pet dog, left alone during business hours, by reason of my wife's (*Miss Field's*) attendance upon her mother some distance away, and my absence in Philadelphia, betrayed signs of loneliness, evinced by depression of spirits and loss of appetite, crouching in a corner of a lounge, and barely returning my salutations at night. During another conversation, at about the same time as the above-mentioned, Mrs. Field questioned her daughter about her home affairs, woman-like, suddenly alluding to the "poor little dog sitting in the corner," frightened. Upon my visit that evening, after the customary inquiries, I endeavored to change the current of thought by the sportsmanlike allusion to the invalid dog sitting in the corner of the lounge at home, and was astonished to learn that it had been "divined" correctly, save in regard to location, although the corner of the lounge was as near as could be in the corner of the room.

In the absence of knowledge of your wants, this is the best I can do for you at present, beyond assuring you of the truth of everything herein contained.

I have not read, or even seen, the publication in the "Evening Telegraph," and but two elsewhere, one of about ten lines in a "Sunday World" (New York), and a twenty-liner in the "Evening Call" (Philadelphia), of March 7, evidently a condensation of the original; hence you have the story as I know it, in full, without embellishment of any kind, or concealment of any kind on the other hand.

Hoping this will prove satisfactory to you, or at least for the present, I

tender you freely any service in my power to give you. My delay was due to pressure of other matters, but you will pardon this tardy reply, but unintentional discourtesy.

Very truly yours,

EMILE G. TRAUBEL,
638 Royden st.,
CAMDEN, N.J.

For family of MRS. FIELD (dec'd Feb. 24, 1888).

[*Appended Statement.*]

It may be necessary to add that the events detailed occurred within a period of twenty-four hours, beginning with the allusion to Mr. Berry (1), the dog (2), and the *trip to Murderland* (3).

[ENDORSEMENT ON FIRST LETTER.]

I have examined the foregoing and subscribe to its correctness in every detail.

Respectfully,

MRS. HELEN ESTELLE TRAUBEL
[NÉE FIELD].

[SECOND LETTER.]

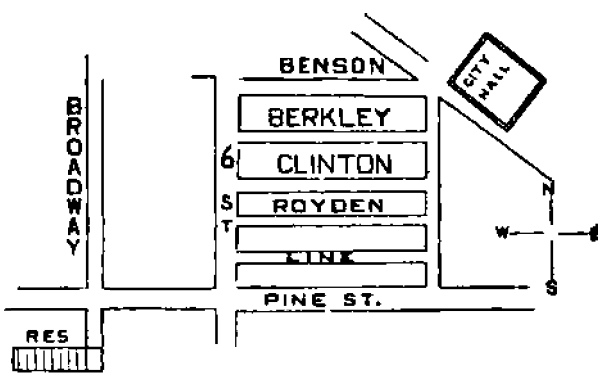
CAMDEN, N.J., May 16, 1888.

RICHARD HODGSON, ESQ., *Boston, Mass.* : —

DEAR SIR, — If you will send me a copy of my communication of first, I will secure the statement of my wife regarding correctness of contents, over her signature. [See above.]

I have *not* preserved a copy of any paper containing an account of the "*Walker-Finnegan*" murder, but will try to secure one for you, if desired.

A rough calculation of the bee-line distance of Mrs. Field from the scene of the murder would give at least 2,500 feet, perhaps 3,500, about eight "blocks" distant, north to east.



I will not vouch for these figures, as I have no means at hand for securing measurements, but will assure you that the strongly outlined blocks are not within "speaking distance."

Until you have Mrs. Traubel's version of these occurrences at her mother's bedside, I think it advisable for me to avoid further attempt at description. You will receive, I think, full reply to your second, third, and fourth queries embodied in yours of 11th inst. when we receive the copy of my last.

Please do not quote me as endorsing any form of spiritualism because of my writing replies to your favors; courtesy demanded my action, and I am, moreover, quite interested in mystery unravelling, so much so at least as a plain matter-of-fact person of no scientific knowledge can be.

If successful, will send you a paper containing description of murder.

Respectfully yours,

E. G. TRAUBEL,
633 Royden street,
CAMDEN, N.J.

[THIRD LETTER.]

CAMDEN, N.J., June 4, 1888.

RICHARD HODGSON, ESQ., *Boston, Mass.*: —

DEAR SIR, — Demands compelling attention have prevented my replying to yours of 23d ult. until to-day.

I enclose your "typewritten" copy of communication of May 1, upon which you will find (on back of fifth page) the statement of Mrs. Traubel (Miss Field) over her signature; it testifies to the correctness of the narrative of the letter, which will, I hope, add to your confidence. [The endorsement in question has been printed above, with Letter 1.]

It is impossible to go further into detail; the parties who "heard and saw" are afraid of their memories, and unwilling to add to the story though fully able to corroborate my compilation of events, which, it is claimed, covers the ground quite fully.

I am compelled to depend upon accident for a copy of a paper containing an account of the murder alluded to. It appears that the publishers destroy all papers unused a few weeks after publication (fourteen days in some instances), and as I applied six weeks after, was not supplied; March 1-May. How would it answer to request one of the papers, say "The Record," to give, in its correspondent's column, a brief account of the occurrence?

This would prove the fact of the murder, without extended description. If acceptable, I will make the request upon advisement. No Philadelphia Daily will part with a filed copy of their publication.

Should further service, as indicated above, be desired, please feel at liberty to demand it.

Very respectfully,

EMILE G. TRAUBEL,
633 Royden street.

[FOURTH LETTER.]

PHILADELPHIA, June 15, 1888.

DEAR MR. HODGSON, — I send you the story you desire. It is written hurriedly, but is accurate. It happened, as you see, in Camden, just across from Philadelphia.

. . . . . .

Very respectfully yours,

H. M. WATTS.

Copy of the appended statement, with account of the murder: —

At half-past eight o'clock, on the evening of Wednesday, February 28, within a stone's-throw of the City Hall of Camden, N.J., opposite Philadelphia, Michael Finnegan, a dissolute character, aged about thirty-five years, shot and fatally wounded Amelia Walker, another worthless creature and faithless wife, and then sent a bullet through his own brain. His death was instantaneous, but the woman was taken to Cooper Hospital, where she lived until 11.17 o'clock without recovering consciousness. The murder and suicide took place in a lonely part of the town, as the Camden City Hall is out in the suburbs. An old lady living at 436 Trenton Avenue gave the alarm to the police. The police took the body of the murderer to the morgue, and the woman to the hospital. On searching around, they found a horse and buggy, which had conveyed the disreputable pair from Philadelphia to the fatal spot. Woolford Hughes, a switchman at Haddin Avenue, was the only witness. He saw the flash of the pistol and heard the report. He saw a man leaning over the dashboard of the buggy; soon after he heard another shot, but he went on his way. It is supposed that, after shooting his companion, the murderer started to drive off, but, being overcome with remorse, walked back to her body and killed himself.

The murderer had blond hair and a sandy mustache. The woman was about twenty-four, plump and good-looking. The police traced them across the river, and it was finally discovered that the brother of the murderer lived at 713 South Third street, Philadelphia. He identified the body of his brother, and the woman as "Amelia." Frank Tapping, of 814 South Sixth street, Philadelphia, identified the body as that of Amelia Walker, who, with her husband, a huckster, had lodged at his house. Both persons were low, disreputable, and depraved.

The story in brief is this: On Wednesday, at two o'clock, the man and woman started from McCauley's livery-stable, on Griscom street, Philadelphia. They drove away, having a whiskey-bottle with them. They crossed on ferry-boat Beverly to Camden, and finally brought up at the City Hall region at half-past eight o'clock.

The murderer was a politician of a low type in the fourth ward of Philadelphia.

[Fifth Letter.]

Philadelphia, June 23, 1886.

Dear Mr. Hodgson, — Replying to your first question I answer that the account I sent you was obtained from the file of "The Press" for February 23 and 24. As I would not mutilate the file, I was unable to send you the printed account; but the facts sent I can vouch for as being taken from the two reports in the paper of the dates mentioned. . . .

Yours respectfully,

H. M. WATTS.

This is all the information at present on hand as to this interesting case. The courtesy of Mr. and Mrs. Traubel in taking such trouble in our behalf must be warmly acknowledged. Without

more specific statements, however, as to the precise circumstances of Mrs. Field's experiences, statements depending upon a fuller report of the separate memories of all who heard her mention these experiences, or who knew of the circumstances at the time, we are still unable to decide upon the value of the remarkable coincidences reported. We hope that by means of interviews we may yet succeed in substituting for the general summary of the family's recollection, as Mr. and Mrs. Traubel have given this summary, the more specific recollections referred to. For the present one must simply suspend judgment upon the final significance of the case, although it is a promising case.

Sub-Class C.

The cases which I finally give in this sub-class are by no means worthless, although they vary in value, and one or two are interesting mainly as mere curiosities of our collection.

[29] (*For the American Psychical Society.*)

One Monday, last winter, I called on Rev. and Mrs. X. During the call our conversation turned on their previous evening's visit with one of the Baptists' visiting ministers, and eventually we talked of dreams.

I remarked that I dreamed nearly a whole novel the previous night. On inquiry I told the dream as follows: —

The story was laid in ancient Greece. It appeared that a young man, a member of the nobility, was visiting on the mainland, and received a command from his father, who lived on an island of the Greek Archipelago, to return home. During his visit he became acquainted with a beautiful young girl of a lower station in society. A love affair sprang up between them, and on his preparing to return, she resolved to run away and accompany him. Before doing so, she visited the temple and procured a charm of the priest. She received three Greek words, two of which I saw plainly and recalled after I awoke; the other one I had great difficulty in seeing, and could not distinguish or recall it. It seemed a matter of great perplexity that I could not do so.

Eventually the girl arrived in the boat, where a servant and a friend of her lover had already arrived. Her lover had not.

Here the story ended. I awoke presently, but the next morning could not recall the Greek words, although my mind retained a vivid impression and desire to do so.

Mrs. X. asked me a few questions, and then said, "I have something connected with that to tell you." But some company calling just then, her narrative was deferred until a later visit, when she told the story she has written out.

I will add that it is no unusual thing for me to read books of history, poetry, etc., when asleep. The books read are never those I have seen while awake. I have often recalled one or two stanzas of poetry which were well constructed. I never write them down and soon forget them.

On a previous occasion Mrs. X. had mentioned dreaming that she entered the room in which I sat reading so intently, that she entered the room, came and stood beside me, and then left the room apparently without my being aware of her presence.

To which I replied, "I was reading a very interesting book until very late last night."

These coincidences suggest a theory of dreams briefly stated thus: —

The sleeper being in the percipient state, receives as dreams, through thought-transference, real events or thoughts of one or more active agents who may be near or far away.

This will account for the foreign elements, complex images, and incongruities of dreams.

Respectfully,

(Signed) ERNEST HOLLENBECK.

DAVISON, MICH., May 5, 1888.

(*For the American Society of Psychical Research.*)

In compliance with your request I make the following statement: —

On the afternoon of Jan. 29, 1888, in studying the lesson for the following Sunday, I came upon the Greek *kurion*, *oikos*, which words were contracted into *kuroik* and *kuriake;* hence *kirk* and *church*.[1] Before I finished the lesson Mr. F., our State missionary, arrived. I went at once to prepare tea; but *kurion*, *kuroik*, and *kuriake* were constantly recurring to my mind, but I could not recall *oikos*, though I was frequently conscious of an almost involuntary effort to do so. I attended evening service, and afterwards Mr. F., my husband, and I conversed on "Psychical Research" until one o'clock. Before we parted that night Mr. F. showed us his wife's picture, and related an instance in which he apparently obtained a mental impression from her when at quite a distance away. This occurred during the early part of their acquaintance, and led him to speak of their courtship and marriage. He also informed us that she was in Kansas, and that he intended going after her soon.

After nine o'clock, very frequently, I may almost say constantly, I thought of Mr. Hollenbeck. I knew that he was deeply interested in the subject under discussion, and I tried to impress our guest's experience and opinions on my mind in order to repeat to him, and I remarked to Mr. F. that had I known that he had made a study of such matters I should have invited Mr. Hollenbeck to be present.

I was interested during the whole time, but that did not prevent my mind from wandering after the last word. The book containing it lay upon a table near me. Once I was about to take it up to satisfy myself, but the thought that Mr. F. might think that I was weary of the discussion prevented me. The book was still upon the table with my S.S. Quarterly laid between the leaves, marking the place where *oikos* was to be found, when, on the afternoon of the following day, Mr. Hollenbeck called and related his dream and asserted that the missing Greek word annoyed him.

[1] It is hardly necessary to remark that our correspondent's Greek compounds and her etymology have a sort of Chautauquan quality (if we may be pardoned the word), for which we must decline to be responsible.

I asked if he had read Greek lately; he replied that he had not even thought of it, and did not know why he should dream of it.

Owing to the presence of uninterested persons I did not then refer to my experience of the preceding night. I did not see Mr. Hollenbeck in some days, and when I did he still had a clear remembrance of the dream, but could not recall any of the Greek.

Respectfully,

(Signed) [Mrs. X.]

The coincidence is extremely slight, but my mention of it here may remind some correspondent of similar and possibly more important experiences.

The next case is interesting, but needs no further comment, except, possibly, the remark that if telepathy were as well established as it is still questionable, we should regard this as a probable illustration of the process. Meanwhile, the case is still problematic.

[30] (*From Mrs. C. L. C.*)

Washington, Nov. 1, 1887.

Prof. H. P. Bowditch: —

Dear Sir, — A paragraph relating to your Psychical Society, which I read in the paper last evening, induces me to send you an experience of my own, which I think may interest you, bearing, as it does, upon the curious influence of mind upon mind.

Some years ago, when my children were young, I was sleeping in the room with them, they in one bed, and I in another. I went to sleep as usual. I dreamed a fearful dream. I thought that, with my oldest child, I had taken passage on a steamer, and was crossing a wide expanse of water. My boy had left me, to play about the boat, when I suddenly heard the most piercing shrieks, and recognized his voice. Filled with agonizing apprehensions, I made my way to the engine-room, from which the sounds proceeded, and was met by an old servant, who told me that, the fuel having given out, they had cut up my boy and fed his body to the flames.

I awoke, shivering as in an ague, stone-cold perspiration bedewing my whole body. I immediately became conscious of stifled moans proceeding from the opposite bed. I sprang from mine, and, running across the room, found that my eldest boy was struggling with nightmare, making inarticulate sounds, in a vain effort to speak. I shook and called him two or three times before I succeeded in breaking the spell, when he cried out, in tones of the utmost anguish, "Mamma! Mamma! *I dreamed they were cutting me up for kindling-wood.*" I slept no more that night; the dream had been too vivid.

I have told this experience of mine several times; sometimes to sympathetic, oftener to scoffing, listeners, who declared that the boy must have *uttered* the words in his sleep, thereby giving rise to my dream. But that is impossible, because I found him struggling in vain to speak. His painful moans would have accounted for my having a painful dream of him; but what except the sympathy of mind with mind could have

caused us to have the *same* dreams, for I am never known to talk in my sleep, and therefore no exclamation of mine could have caused *his* dream?

How do you account for it? I am of an exceedingly anxious temperament where those whom I love are concerned; and my boy is of a quick, merry, active temper, imaginative and impressionable, and, like most *men*, impatient at the thought of suffering, either in his own person or that of others.

Hoping the incident may prove of some value in aiding your researches, I am,

Very truly yours,

C. L. C.

(*From Mrs. C. L. C.*)

GEORGETOWN, April 7, '88.

MR. HODGSON: —

DEAR SIR, — I have delayed returning blank G, hoping to send it well filled, but the indifference of friends and my own forgetfulness have proved obstacles. Some seem to be afraid that they are to be entrapped in some way; others fear being thought superstitious; and others, again, pronounce it sheer nonsense. I am much interested myself in any study of the laws of mental action.

You requested that I would give you more nearly the ages of my son and self at the time the dream occurred, of which I wrote you. I was not over thirty-six, and he could not have been more than ten. I told the dream, on the same day, to my mother and the family generally. Whether they remember it I cannot say, but shall see them soon, and will forward any statement to that effect that you care to have.

At the time of the dream my son and self were both in ordinary, though not rude, health, and he is of a sensitive, impressionable temperament, while I was, and had been for many months, undergoing great mental strain, owing to troubles it is needless to mention.

(Signed) C. L. C.

Of the next case I can also say little, except that, on the one hand, it may be an instance of a mere coincidence, while, on the other hand, notwithstanding the sincerity of our correspondents, there *may* be here only a pseudo-presentiment, since Mary B. may somehow have learned the contents of the telegrams before she mentioned her dream. Errors of memory on the part of all concerned would then account for the rest, without in any wise making doubtful the general trustworthiness of the people in question. For slight errors of memory are, after all, so easy.

[31] (*From Miss A.*)

NEW YORK, April 27, 1888.

R. HODGSON: —

DEAR SIR, — A curious coincidence occurred this morning which I report immediately.

A young woman in our household, North Irish by birth, Mary B., said

early this morning that she had had a bad dream in the night. Her mistress, an elderly lady and an invalid, in whose room Mary B. sleeps, complained of being very restless in the early part of the night, and of having unpleasant dreams, but she slept soundly later on. Mary B. then got to sleep too, when her dream occurred. She says she saw distinctly the sister of her mistress — whom she has not seen in a year, and then only in a passing sort of way — standing on the threshold of the door, in a long black gown and her hands folded in front of her. Mary B. related this as soon as she rose in the morning to a member of the family, and said impressively, "I am sure something is going to happen." A half-hour later, the door-bell rang and the messenger handed in a telegram, which was brought up to me directly. (Mary B. was then upstairs and knew nothing of it for some hours after.) The telegram stated that Mrs. D. of ——— had been taken suddenly ill and was not expected to live. This was the lady (the sister of her mistress) whom Mary B. had seen in the night. . . .

(Signed)

[Miss A.]

May 2d, 1888.

Mr. R. Hodgson: —

Dear Sir, — Yours of the 1st inst. has been received, and I note that you request further statement concerning the curious dream coincidence I reported on April 27th.

First. Inquiries made of Mary B.'s mistress evince nothing definite of the precise nature of the bad dreams she had on the night of April 26th before 12 o'clock. She could remember nothing clearly about them, even on the following morning, beyond the very strong impression they had made of a nightmare character. She retains still a vivid recollection of the disagreeable and painful nature of the dreams, and speaks of them with reluctance when questioned.

Mary B. says that between 11 and 12 o'clock she noticed how restless her mistress was, and that she moaned in her sleep; this made her anxious and wakeful. About 12 o'clock her mistress awoke and then complained to Mary of having had bad dreams, but did not state what they were about, nor did she name her sister at all. Indeed, Mary B. declares that her mistress had not spoken to her of her sister in many weeks, not since the great storm of March 12th, when she was worried about her sister being snowed up in the country. Mary B. says, "I fell asleep and dreamed about 2 o'clock, for the dream was so sharp that it woke me up, and I thought some one was standing in the room. When I looked again I thought I saw Mrs. D. standing in the doorway in a long black dress and her hands in front of her, waiting to come in. It was so sharp that I was frightened, got up and went to the door, because I thought some one might have come down from upstairs. I could not get to sleep again. Mistress was then sleeping quietly and slept well till morning."

Second. The person to whom Mary B. related the dream was Miss C., a member of the family who is the first up and downstairs in the morning. The first telegram announcing the sudden illness of Mrs. D. was delivered about 8 A.M. Another, about 2 P.M., warned us that there was no hope, and a third, about 6 P.M. (April 27th), announced the death. The tele-

grams, I find, have not been kept, but I could get copies of them from the telegraph office, probably.

Mrs. D. was over seventy years of age and had been in delicate health since January first, but her doctors thought she might live, with care, many months, and in the strength of their opinion her son had left the country for several weeks. The disease that carried her off developed very rapidly and unexpectedly. Her sister (Mary B.'s mistress) knew nothing of her being worse till the telegram came. She had not been especially anxious about her latterly, as she had a very cheerful letter concerning her condition on April 25th, and thought her sister was better.

Miss B. has had repeatedly dreams of this nature, which have been followed by death or illness of the person she has dreamed of. About four months ago, she had a similar dream concerning her father, an old man in Ireland, the news of whose death arrived about a fortnight after. She seems to have something of the Scotch second-sight. These dreams make a very strong impression on her, and she relates them in the morning after having dreamed them.

I will send the telegrams when I get a copy of them. Hoping this will prove satisfactory.

(Signed)

[Miss A.]

Mrs. D. was wholly unconscious for twelve hours preceding her death, and partially so for twenty-four hours previous.

May 4th, 1888.

Mr. R. Hodgson: —

Dear Sir, — I enclose the statements of Mary B., as desired, taken down from her lips and read over to her, to which she has added her signature. Miss C. has written her own account.

The copies of the telegrams are enclosed, but the first one, thus worded, "Mother has become suddenly worse," the man has omitted to send. This was the one that was delivered about 8 A.M. on the morning of the 27th. The other two were delivered at about 2 P.M. and 6 P.M.

Mary B.'s other dream experiences are not sufficiently clear as to detail (having occurred some four and six months ago) to be worth very much now. A good deal concerning the exact time and circumstances is no longer fresh in her memory, nor in ours. Mary B. could be seen by any of your committee who may be in New York, to whom she could relate her experiences.

(Signed)

[Miss A.]

The notices of Mrs. D.'s death can also be found in the New York papers of April 28th, 29th, and 30th.

ON THE NIGHT OF APRIL 26TH, 1888.

"Mistress had been quite restless like and uneasy in sleep, and moaning a little before 12 o'clock. When she woke a little after, she said she had 'such an unpleasant dream,' but she did not say anything at all about what it was. When I fell asleep I had a sharp dream of Mrs. D. standing

at the sitting-room door, facing me and waiting to come in, in a long black gown; the long, long train of it took my attention first; her hands folded across her in front. I thought it was really so, and got such a fright, because I thought Mrs. D. was really standing there. I felt that she was either dead or dying, and said to Miss C. in the morning, 'There is going to be a death in the family, I am sure.' I did not know she was ill, or any telegram received till about 4 o'clock on April 27th."

(Signed)

[MARY B.]

Mary adds that she is a "very sharp dreamer," and that before hearing of her father's death, some months ago, she dreamt that he came here to the house, and she saw him distinctly before her. The news of his death came about a fortnight later.

[Miss A.]

On the morning of April 27th, Mary B. told me she had a vivid dream in the night, of Mrs. D., whom she saw standing at the sitting-room door. It made such a strong impression that she waked, and thought some one was actually in the room. Mary B. knew nothing of the receipt of the telegrams till evening.

(Signed)

[Miss C.]

[SECOND TELEGRAM.]

April 27, 1888.

Prepare your mother for the worst.

[THIRD TELEGRAM.]

April 27, 1888.

Aunt died this morning. Tell Miss ———.

October 28, 1888.

Called this evening at Miss A.'s. She was away. I saw Miss C., and she affirmed that Mary B. told her of the dream immediately on her arrival downstairs in the morning, at about 9 A.M., and before any telegram arrived.

R. HODGSON.

Miss A.'s. October 30, 1888.

Miss C. says that she usually goes downstairs between 8 and 9, and as soon as she went down on the morning in question, "Mary B. told me of her dream, and seemed much impressed by it." She thinks the telegram came about 10 o'clock, — and heard about it at the time.

R. HODGSON.

Miss A.'s. October 30, 1888.

About half an hour after I told Miss C. about it, the telegram came. Mrs. D. had been ill through the winter, but was better. I told Miss C. somewhere about 9.30 or 10 o'clock in the morning.

[Mary B., in reply to my questions. — R. H.]

OCTOBER 30, 1888.

Mary B. appears to be a thoroughly honest, but emotional girl, with strong faith in a certain class of dreams perhaps amounting to superstition; but I see no reason to doubt the main facts of her story, which she repeated to me substantially as previously sent by Miss A.

R. HODGSON.

In a letter of November 14, 1888, Miss A. writes: —

The first letter I wrote, containing the account of the experience, was previous to the last telegram announcing the death.

NOVEMBER 16.

MR. HODGSON: —

DEAR SIR, — . . . Mrs. D. was Mrs. E.'s [Mary B.'s mistress] sister, and a circumstance which makes the case more curious, is that all through Mrs. D.'s illness she had been very anxious to see her sister, but her physicians were opposed to her making the journey. Early in April she seemed (Mrs. D.) rather better, and the desire was so strong to come to New York that the doctors consented, and all preparations made and the day set for starting; but when the day arrived it was very stormy, and the journey had to be postponed. Mrs. D. was never sufficiently well after that to make the attempt to leave home. It was about a year since the sisters had met, and they were the two survivors of a very large family, and always very devoted to each other.

. . . . . .

(Signed)

[MISS A.]

We have also obtained the following statements concerning the dream of Mary B. mentioned by Miss A. in her letter of May 2, 1888. No record was made as to the date of the dream at the time.

[32] OCTOBER 30, 1888.

My father had been ailing, but was better. My mother was dead. I dreamed on January 6th that my father came and called me. I recognized his voice. I saw my mother's grave opened right up, and my father was there, and I thought it was he opened it up; and then my father disappeared in the grave alongside of my mother. I told Miss C. in the morning, and said I should hear bad news. Father died the same night, January 6, 1888.

I have had other dreams much the same, but don't remember them now very well. The dreams are different from ordinary dreams. They always wake me up in a fright, and leave a disturbing impression afterwards. I generally wake up very warm when I have a dream like that. The experiences are always dreams.

(Signed)

[MARY B.]

[1] It should be remarked that this statement adds decidedly to the interest and to the possible value of this case.

October 30, 1888.

I recollect Mary B.'s telling me of her dream the next morning, and saying she thought bad news would come.

(Signed)

[Miss C.]

I close this series of cases with the following very curious incident, which, at all events, will supply some of our readers with an excellent story for use in late evening gatherings. I should add that the narrator is known to us as a man of general good sense and of integrity. Nevertheless, whatever be the explanation of the tale, your committee feels itself unable to hope that it will, after all, very seriously revolutionize any one's views about either telepathy or immortality.

[33] (*From Mr. F. G.*)

Boston, January 11, 1888.

Secretary American Society for Psychical Research, Boston, Mass.: —

Sir, — Replying to the recently published request of your society for actual occurrences of psychical phenomena, I respectfully submit the following remarkable occurrence to the consideration of your distinguished society, with the assurance that the event made a more powerful impression on my mind than the combined incidents of my whole life. I have never mentioned it outside of my family and a few intimate friends, knowing well that few would believe it, or else ascribe it to some disordered state of my mind at the time, but I well know I never was in better health or possessed a clearer head and mind than at the time it occurred.

In 1867, my only sister, a young lady of eighteen years, died suddenly of cholera, in St. Louis, Mo. My attachment for her was very strong, and the blow a severe one to me. A year or so after her death, the writer became a commercial traveller, and it was in 1876 while on one of my Western trips that the event occurred.

I had "drummed" the city of St. Joseph, Mo., and had gone to my room at the Pacific House to send in my orders, which were unusually large ones, so that I was in a very happy frame of mind indeed. My thoughts, of course, were about these orders, knowing how pleased my house would be at my success. I had not been thinking of my late sister, or in any manner reflecting on the past. The hour was high noon, and the sun was shining cheerfully into my room. While busily smoking a cigar, and writing out my orders, I suddenly became conscious that some one was sitting on my left, with one arm resting on the table. Quick as a flash I turned and distinctly saw the form of my dead sister, and for a brief second or so looked her squarely in the face; and so sure was I that it was she, that I sprang forward in delight, calling her by name, and, as I did so, the apparition instantly vanished. Naturally I was startled and dumbfounded, almost doubting my senses; but the cigar in my mouth, and pen in hand, with the ink still moist on my letter, I satisfied myself I had not been dreaming and was wide awake. I was near enough to touch her, had it been a physical possibility, and noted her features, expression, and details of dress, etc. She appeared as if alive. Her eyes looked

kindly and perfectly natural into mine. Her skin was so life-like that I could see the glow or moisture on its surface, and, on the whole, there was no change in her appearance, otherwise than when alive.

Now comes the most remarkable *confirmation* of my statement, which cannot be doubted by those who know what I state actually occurred. This visitation, or whatever you may call it, so impressed me that I took the next train home, and in the presence of my parents and others I related what had occurred. My father, a man of rare good sense and very practical, was inclined to ridicule me, as he saw how earnestly I believed what I stated; but he, too, was amazed when later on I told them of a bright red line or *scratch* on the right-hand side of my sister's face, which I distinctly had seen. When I mentioned this, my mother rose trembling to her feet and nearly fainted away, and as soon as she sufficiently recovered her self-possession, with tears streaming down her face, she exclaimed that I had indeed seen my sister, as no living mortal but herself was aware of that scratch, which she had accidentally made while doing some little act of kindness after my sister's death. She said she well remembered how pained she was to think she should have, unintentionally, marred the features of her dead daughter, and that unknown to all, how she had carefully obliterated all traces of the slight scratch with the aid of powder, etc., and that she had never mentioned it to a human being, from that day to this. In proof, neither my father nor any of our family had detected it, and positively were unaware of the incident, yet *I saw the scratch as bright as if just made*. So strangely impressed was my mother that even after she had retired to rest, she got up and dressed, came to me and told me *she knew* at least that I had seen my sister. A few weeks later my mother died, happy in her belief she would rejoin her favorite daughter in a better world.

I submit this in all earnestness, but request *that my name should be omitted*, should it become public, or given to the press, which you are at liberty to do if you should so desire.

Very truly,

(Signed) [F. G.]

Could any one ask for stronger proof of supernatural visitation than this?

Boston, January 14, 1888.

Mr. Richard Hodgson, *Secretary A. S. P. R., Boston:* —

Dear Sir, — Thanks for your favor 13th and circulars, all of which are at hand.

Will follow your suggestion and write my father and others who were present when I explained the apparition, and on receipt of their replies will forward same to you.

I will add here that there was nothing of a spiritual or ghostly nature in either the form or dress of my sister. She appearing perfectly natural, and dressed in clothing that she usually wore in life, and which was familiar to me. From her position at the table, I could only see her *from the waist up*, and her appearance and everything she wore is indelibly photographed in my mind. I even had time to notice the collar and little

breastpin she wore, as well as the comb in her hair, after the style then worn by young ladies. The dress had no particular association for me or my mother, no more so than others she was in the habit of wearing; but *to-day, while I have forgotten all her other dresses, pins, and combs*, I could go to her trunk (which we have just as she left it) and pick out the very dress and ornaments she wore when she appeared to me, so well do I remember it.

You are correct in understanding that I returned home earlier than I had intended, as it had such an effect on me that I could hardly think of any other matter; in fact, I abandoned a trip that I had barely commenced, and, ordinarily, would have remained on the road a month longer.

I will also add that about ten days *before my mother died* she in all seriousness told me that if it was His will, or in her power, to appear to me after her death, she would surely do so, just as my sister had done; but I have never had a similar experience. But I can swear to this fact, that notwithstanding my life of constant travel in Europe and America, my mind has so frequently been full of thoughts of both my mother and sister, and *at such odd and unusual times*, as to half convince me that even after their death they were exerting a more powerful influence over me than when they were on earth, through some subtle unknown agency.

The members of our family are all strong-willed, positive, and naturally of a sceptical mind, with an inclination to go into "cause and effect" and investigate before believing; and none of us are in the least superstitious, believing only what we can comprehend or what seems natural. I have no doubt that many intelligent people have had a similar experience, but through fear of ridicule, or being considered of a morbid mind, have kept it secret. It seems natural for us to make light of these alleged visitations, or whatever they are; but no mortal man could convince me, or any one who has had a similar experience, that we did not see just what we *know* we saw, and still not be superstitious, merely being unable to account for it. I have often said to myself, "I wonder what the feelings of another would be, if he had, when wide awake and in his right senses, seen what I saw with wide open eyes in broad daylight?" If it was a common occurrence, I am sure it would set people to thinking. I never expect to convince others; in fact, I don't blame them for doubting. Had it occurred to another instead of myself, I would ascribe it to some freak of memory, or morbid state of mind. Had it occurred at night, I would have doubted my own senses, but remember this was at noon, in broad daylight, when I was smoking, writing, and full of business.

We all know, or are pretty well satisfied, that there is such a thing as "thought-transference," and if the soul is immortal it would not seem unreasonable to think such a connection might continue after death; but the learned men who are associated with you are better able to solve such problems than the writer, if such a thing is possible to do.

A few years ago I read the account of an eminent Englishman having had a similar experience, but cannot recall his name. In his case, a brother professor of his (an intimate associate long dead) appeared to him while he was at his desk writing, and he published the facts. Possibly your society has the account of it. His experience is valuable, from the fact of his high position and learning, and I am sorry I cannot recall his name and profession.

Am afraid I have written too much in the matter, but was anxious to give you all the points I could.

Very truly,

(Signed) [F. G.]

BOSTON, JAN. 23, 1888.

MR. RICHARD HODGSON, *Secy. A.S.P.R., City:* —

DEAR SIR, — Thanks for your very interesting letter, duly received last week. As per your request, I enclose a letter from my father which is indorsed by my brother, confirming the statement I made to them of the apparition I had seen. I will add that my father is one of the oldest and most respected citizens of St. Louis, Mo., a retired merchant, whose winter residence is at ——, Ills., a few miles out by rail. He is now seventy years of age, but a remarkably well-preserved gentleman in body and mind, and a very learned man, as well. As I informed you, he is slow to believe things that reason cannot explain. My brother, who indorses the statement, has resided in Boston for twelve years, doing business on —— street, as per letter-head above, and the last man in the world to take stock in statements without good proof. The others who were present (including my mother) are now dead, or were then so young as to now have but a dim remembrance of the matter.

You will note that my father refers to the "scratch," and it was this that puzzled all, even himself, and which we have never been able to account for, further than that in some mysterious way I had actually seen my sister *nine years after death*, and had particularly noticed and described to my parents and family this bright red scratch, and which, beyond all doubt in our minds, was unknown to a soul save my mother, who had accidentally caused it.

When I made my statement, all, of course, listened and were interested; but the matter would probably have passed with comments that it was a freak of memory, had not I asked about the scratch, and the instant I mentioned it, my mother was aroused as if she had received an electric shock, as she had kept it secret from all, and *she alone* was able to explain it. My mother was a sincere Christian lady, who was for twenty-five years superintendent of a large infant class in her church, the Southern Methodist, and a directress in many charitable institutions, and was highly educated. No lady at the time stood higher in the city of St. Louis, and she was, besides, a woman of rare good sense.

I mention these points to give you an insight into the character and standing of those whose testimony, in such a case, is necessary.

Very truly,

(Signed) [F. G.]

(*From Mr. H. G.*)

——, ILLS., JANUARY 20, 1888.

DEAR F., — Yours of 16th inst. is received. In reply to your questions relating to your having seen our Annie, while at St. Joseph, Mo., I will state that I well remember the statement you made to family on your return home. I remember of your stating how she looked in ordinary home dress, and particularly about the scratch (or red spot) on her face, which

you could not account for, but which was fully explained by your mother. The spot was made while adjusting something about her head while in the casket, and covered with powder. All who heard you relate the phenomenal sight thought it was true. You well know how sceptical I am about things which reason cannot explain.

The transference of thought may be a possibility; I will think of it. As to soul or spirit leaving the body while living and visiting departed and living persons, I cannot believe. If the breath of life gives us a soul and keeps us in existence, how can the body exist while the spirit is absent from the body?

Apparitions, dreams, ghosts, and such are unknowable. I am a know-nothing.

Very cold; all well; no news.

Affectionately,

(Signed) [H. G. (father).]

I was present at the time and indorse the above.

(Signed) [K. G. (brother).]

In closing this hasty account of the work of your committee, I feel called upon to say something in general as to the worth of the undertakings of the society, in so far as we have had anything to do with them. I need not remind you that mine is the most expensive of your committees. Nearly the whole work of collecting our facts, and of corresponding with our friends and with our other informants, has fallen upon the shoulders of the one paid officer of the society, our able and devoted secretary, Mr. Hodgson, and our committee alone has employed nearly all of his time, as well as the time of his clerical aid. If our results are meagre, however, you must blame us for the fact, for he has done all that he could. In giving my own account of my stewardship, I confess that I stand before you much in the position of the unjust steward, after all; for even now, at the close of this stage of our work, when, perhaps, one who has so little to show you may be easily accused of having wasted your substance, I do even worse than that, and, as you see, when people come to me saying that they have accounts of telepathy, I say to more than one of them, "Take thy bill, and write 'pseudo-presentiment.'" That is sad, I confess; but I did not make these results, they have been brought upon me by fate; and I hope that the truth has had its own share in their production.

Yet, after all, what you want to know is whether this work looks to me worth continuing; and I say, yes, by all means it ought to go on. We have shown, by our study of the pseudo-presentiments, that results, even if they are not always startling, can really be

obtained. We have shown that the collecting of stories is not idle play, that a true comparative method can be applied to them, and that this our research must, if continued, throw light on the dark things of mental life. Light, the light of truth, is what you want to have thrown. Is it not well worth while to continue our efforts?

As for telepathy, you see how near it often seems to us in our inquiry, and yet how skilfully it again and again eludes our pursuit. It may be a fact. If so, it simply cannot resist a careful and patient search, pursued by varied methods such as this society has tried to use. It may be a delusion. If so, however, some of the classes of the facts which we now have in hand need, most cryingly need, a rigid explanation by some other means than we yet have invented. May not that means be discoverable a little further on? Ought we not to look then this little further? A cruel mistress telepathy indeed is, if, after all, she does somehow exist.

> Room after room
> I hunt the house through
> We inhabit together,
> Heart, fear nothing, for heart, thou shalt find her,
> Next time, herself! — not the trouble behind her.
>
> . . . . . .
>
> Yet the day wears
> And door succeeds door;
> I try the fresh fortune —
> Range the whole house from the wing to the centre.
> Still the same chance! she goes out as I enter.
> Spend my whole day in the quest — who cares?
> But 'tis twilight you see, — with such suites to explore,
> Such closets to search, such alcoves to importune!

In short, to cease this profaning of Browning, and to turn elsewhere for figures, "Phillida flouts me." Perhaps, however, the society may find in this report internal evidence that it is the chairman of your committee who is the unfaithful one. Be it so! In the slightly adapted words of an old song, "If of herself she will not exist, nothing can make her" — you remember the rest of the rhyme. I confess it does often seem to me, on second thoughts, that the world without telepathy would be after all a very tolerable kind of place to live in, in view of all the other psychological curiosities that there are in it. Shall we not then agree upon so much, and pursue our labors with joy?

But seriously, my genuine interest in this research, and, as I have no doubt, your interest too, is to search out God's truth in these

obscurer realms. We need not fancy the truth to be in itself obscure, because the realms are still so. We need not add mysteries to things to make them more charming. The spiritual existence of this world, full of God's thoughts and ideals, is not more spiritual because we cannot read some of the thoughts, nor as yet glow with the realization of all the ideals. What we all want is more knowledge, and more enthusiasm. If this society offers to any of us a means whereby we can get either, for Heaven's sake let us not miss the opportunity! The world needs not our romances to make it romantic; it is too full already of horror and of joy, of humor and of sacredness, for anything of that sort. When we know it best we shall find it most awful — and most charming. We come back, then, from all emotional tests of the worth of a work of this kind once more to the simple, matter-of-fact test: Is this thing likely to throw any light on human life? I have tried to give you a mere fragment of the work, whereby you may somehow judge it. If we think that it does promise to throw any light on human life, let us not only be unwilling, but deeply afraid, to withhold from it our proper encouragement.

JOSIAH ROYCE.

APPENDIX

TO THE

REPORT ON PHANTASMS AND PRESENTIMENTS.

The following cases are quoted as additional specimens of the material supplied to the Committee on Phantasms and Presentiments. Comments upon most of these cases will be found on pp. 516–526.

[34] 1.

Our attention was first drawn to this case by the following account, which appeared in the Oil City "Derrick" (Oil City, Pa.), Dec. 12, 1887: —

A STRANGE CASE

GEORGE FRY HAS A PRESENTIMENT OF HIS BROTHER'S DEATH IN MICHIGAN.

Depot-master George Fry, whose brother Gideon died at Big Rapids, Mich., Sunday night, December 4, had a strange presentiment of his death. On Monday morning, Mr. Fry received a telegram, announcing the death of his brother, but giving no further information; and in the afternoon, in conversation with a "Derrick" reporter, said, "I wrote a letter to Gid last night, and just as I had finished it I glanced up and noticed the clock had stopped. I got up and wound the clock, and pulled out my watch to set it by. It was 15 minutes to 10; I set the clock, and just as I started it, I heard the words, 'I'm gone! I'm gone!' It was Gid's voice, and it seemed to come out of the clock. I heard it as distinctly as I ever heard anything in my life. It startled me, and I related the occurrence to my family. I am no Spiritualist, but I believe that must have been the time, and those the last words of brother Gid." Yesterday, Mr. Fry showed the "Derrick" a letter from Big Rapids, giving an account of his brother's last moments. The letter stated that Gideon died at 15 minutes of 10 Sunday night, December 4, and his last words were, "I'm gone! I'm gone!" the identical time and words as related to the reporter Monday last. "Please explain it to me, will you?" said Mr. Fry.

In a later account Mr. Fry is described as saying: —

"I do not pretend to account for this extraordinary circumstance, but I relate the facts exactly as they occurred. I am not a Spiritualist, and never had any such experience before. The clock that stopped belonged to brother Gid. He left it at his boarding-house when he left Oil City, and afterwards wrote me to get it for him."

In reply to our inquiries, Mr. Fry wrote as follows: —

2.

106 SYCAMORE ST.,
OIL CITY, PA., July 9, 1888.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — The account of my experience in regard to my brother's death is true; that is, the way the Oil City or Pittsburgh papers had it.

I have not received any circulars concerning your society as yet. Hoping this will be satisfactory, I remain,

Yours respectfully,
GEO. W. FRY.

Recently we have received the following evidence in relation to the case, for which we are indebted to the kind courtesy of Mr. R. W. Criswell, Editor of the Oil City "Derrick," who adds, in a letter of Jan. 13, 1889, "I enclose you the result of investigation of the Fry case. The witnesses are all reliable."

3.

(*From R. W. Criswell, Editor of Oil City "Derrick".*)

OIL CITY, PA., JAN. 15.

The American Society of Psychical Research, Boston, has been much interested in the "Fry Case, at Oil City," and under the direction of Richard Hodgson, secretary of the society, the writer has investigated the remarkable case for publication in their Proceedings, now going through the press. The case has previously been reported in the newspapers; but in the hurried manner in which the facts were obtained, some essential points were omitted, giving the sceptical a chance to quibble. As given complete below, the case probably presents one of the most extraordinary psychical phenomena of which there is authentic record.

The case summarized is this: George Fry, of Oil City, says he heard, while at his home, what seemed to him to be the voice of his brother Gideon issue from a clock, saying, "I'm gone! I'm gone!" at precisely the same time that his brother did utter these words on his death-bed, at Big Rapids, Mich., Sunday evening, December 4, 1887.

HUNTING THE PROOF.

George Fry, who relates this incident of a presentiment of his brother's death, has been a resident of Oil City for twenty-five years. He is now about thirty-nine years of age, a member in good standing of the Second Presbyterian Church, and a man who is regarded as a good citizen in every respect. At the time of the above occurrence he was depot-master, employed by the Allegheny Valley and New York & Western Pennsylvania Railroads. With a view to the fuller investigation of the case, Mr. Fry was seen on Sunday last, and asked to restate the incident as he remembered it, for permanent record in the Proceedings of the American Society for Psychical Research. This is Mr. Fry's statement: —

"My brother Gideon and I had been much together, and were more intimate in our associations than other members of the family. I was much

attached to him. On Friday, December 2, I received a telegram from his physician, at Big Rapids, that he was ill, and could not live over twenty-four hours. I had known of his illness, but he had not been regarded in a dangerous condition. I could not leave my business to go to him, and I was greatly troubled on this account. I was thinking of him almost constantly. In church, Sunday, he was the chief subject of my prayers. Sunday evening, after church, I sat down to write him a letter, and while writing it I observed that the clock in the room — his clock, by the way — had stopped. I got up to start it, and looking at my watch saw that it had been stopped but a few minutes. I started to wind it up, and found that it had not run down. As I moved the hands around a strange light flooded the face of the clock, and the words issued from it in the voice of brother Gid, 'I'm gone! I'm gone!' The words were distinctly uttered. I was so impressed that brother Gid had died at that moment, and that these were his last words, that I hastily sealed the letter, laid it away and did not mail it. I noted the time as 9.45. I did not mention this to my family that evening, for the reason that my sister, who was in the house, was much prostrated by the telegram of Friday. Next morning, early, before going to work, I told my wife of the incident. At about 11.30 that forenoon I was handed a telegram that had been received by my brother, Daniel P. Fry, in these words only, 'Gid is dead. Come to Montague.' This was signed by my sister Lizzie, who was at Big Rapids. That afternoon I told S. W. Turner, a newspaper reporter, of the death of my brother; and also told him, but not to use in the paper, of the strange presentiment of the evening before. I had received no word of my brother's death, except the message given above, nor did I receive any more intelligence regarding it until some days later, when a letter came from my sister, giving particulars. This letter added that Gideon had died at 8.45 Sunday evening, December 4, and his last words were 'I'm gone! I'm gone!' It was at 9.45 that I had heard the voice in the clock; but the difference in time between Big Rapids and Oil City is just enough to cover this discrepancy. My sister, who was with Gideon when he died, is now at home, in Oil City, and she tells me that for some time before he died he was unconscious, and imagined that I was with him. When any one would leave the bedside he would say, 'George, don't leave me.'"

Mr. Fry stated a willingness to make affidavit to the foregoing.

Confirming Mr. Fry's Statement.

An important point in the above is, "Did Mr. Fry mention the incident of the clock to his wife Monday morning before going to work?" After seeing Mr. Fry, his wife was seen, and the following statement obtained from her: —

"Oil City, Jan. 13, 1889.

"In regard to the presentiment of Gideon P. Fry's death, Dec. 4, 1887, my husband told me, early Monday morning, Dec. 5, 1887, of the voice in the clock which he had heard the preceding evening.

"Mrs. KATE J. FRY."

S. W. Turner, to whom Mr. Fry had related the incident of the clock Monday afternoon, was next seen, and his statement obtained as follows: —

"OIL CITY, Jan. 13, 1889.

"George Fry told me about 1.30, Monday afternoon, Dec. 5, 1887, of the telegram announcing his brother's death, and at the same time told me of the voice in the clock which he said he had heard the evening before. He remarked that he would not be surprised to hear that these words, 'I'm gone! I'm gone!' were his brother Gid's last words on earth. On the Sunday following, Dec. 11, Mr. Fry reminded me of the conversation on the 5th, and showed me a letter, dated Big Rapids, and signed by his sister, giving details of his brother's death, and this letter stated that Gideon's last words were 'I'm gone! I'm gone!' I wish further to state that on the following Wednesday, December 14, by permission of Mr. Fry, and with the assistance of Thomas Judge, an *attaché* of the Western Union Telegraph Office here, I examined the files of their message, to learn what telegrams had been received regarding the death of Gideon Fry. The following was the only message received by the Western Union, relating to it: —

"'BIG RAPIDS, MICH., Dec. 5.

"'DANIEL P. FRY, — Gid is dead; come to Montague.

"'(Signed) LIZZIE THOMPSON.'

"I also investigated the files at the Postal Telegraph Office, and found nothing. The Western Union message had been received at 9.40 A.M.

"S. W. TURNER."

Mrs. W. F. Wood was seen and said, "Mr. and Mrs. Fry are members of my husband's church, and both are earnest and consistent Christians."

4.

OIL CITY, Jan. 18, 1889.

MR. RICHARD HODGSON: —

DEAR SIR, — I have your favor of the 15th, regarding original signatures in the Fry case.

I reproduce Mr. Turner's statement, and send it herewith. Mr. Turner has been much interested in the case, and wrote it originally for the "Derrick." Afterwards I investigated the case personally and wrote it up more in detail. I can't send you clippings, because we have the articles only in our files, which we can't mutilate. They do not differ from what I have sent you, except in the point regarding the unsent letter, which we did not have before. We had the fact that he wrote the letter. If this letter is still in existence I will get it, I think. Have not been able to see Mr. Fry yet. I had Mrs. Fry's statement, as forwarded to you in my article, but I have mislaid it. What I sent was a true copy of what she herself wrote and signed.

Very respectfully,

R. W. CRISWELL.

5.

OIL CITY, PA., Jan. 18, 1889.

I prepared a statement for Mr. R. W. Criswell of the Oil City "Derrick," detailing my interviews with George Fry regarding the presentiment of his brother's death in December, 1887, the substance of which statement I repeat herein: —

On the afternoon of December 5, 1887, between 1 and 2 o'clock, I met George Fry at the depot. He told me of the death the night previous of his brother Gideon, at Big Rapids, Michigan, and at the same time told me of hearing the strange voice in the clock about half-past nine Sunday night. He said the clock had stopped while he was writing a letter to his brother, and when he got up to wind it, the words seemed to issue from it, "I'm gone! I'm gone!" He said it was the voice of his brother Gideon. He said the exact time was 9.45.

On the following Sunday, the 11th, Mr. Fry reminded me of our conversation on the 5th, and showed me a letter from his sister, Lizzie Thompson, dated Big Rapids, giving particulars of the death of Gideon. This letter, which I read, said that Gideon had died at 8.45 P.M., Sunday, Dec. 4, 1887, and his last words were, "I'm gone! I'm gone!"

With the permission of Mr. Fry, I went to the telegraph offices here Wednesday, Dec. 14, and with the help of Tom Judge, of the Western Union, searched their files for copies of any messages relating to the death of Gideon Fry. Below is a copy of the only message bearing on the case: —

"BIG RAPIDS, MICH., Dec. 5.

"DANIEL P. FRY, OIL CITY, PA., — Gid is dead; come to Montague.

"LIZZIE K. THOMPSON."

This message was received in Oil City at 9.40 Monday morning, Dec. 5. No message was received at the postal telegraph office.

I have read the foregoing statement and pronounce it correct.

S. W. TURNER.

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[35] 1.

(*From Miss M. O. A.*)

WEDNESDAY.

DEAR MR. JAMES, — I send you an account of my dream, as you requested, relating simply facts, without giving any dates or names, thinking they would not be desired. If you can make any use of this account, I shall be very glad. Yours very truly,

M. O. A.

FEB. 3, '88.

A DREAM.

A strange and curious dream came to me one night last autumn, which, from the events that followed, made a deep impression upon me.

I dreamed that my mother's brother died, and I went to Brooklyn to

attend the funeral, but was intensely annoyed at arriving too late, as the service was over, and the body being carried out of the house. I saw my aunt and cousins, but could not speak to them. In the midst of this distressing scene I awoke, hearing a loud crash, as of something falling. This was a decided reality, but I could discover nothing in my room that had been disturbed.

In the morning I related my dream, and felt as though I should hear some news that day.

The noise I heard was accounted for by the falling of a weight in a tall clock which stood in the hall. Two days passed, and on the morning of the third day the paper contained a notice of my uncle's death (my *father's* brother), stating that he died on the night I had my dream. It was then too late for me to go to the funeral; for some unknown reason I had not been notified by the family, although my dream had informed me, *perhaps*, of the very hour that he died.

M. O. A.

2.

FEBRUARY 25, 1888.

MR. HODGSON:—

DEAR SIR,— I enclose the sheet with the questions you sent me in reference to my dream. I can only state the facts that you already know, adding the date. Our family names I do not wish published, though I have no objection to my name being used by the committee.

Yours very truly,

M. O. A.

FEB. 25, 1888.

1. Date of dream as nearly as possible? Sept. 2, 1887.
2. Name of mother's brother? W——.
3. Name of father's brother? A——.
4. Can you kindly obtain the statements of any persons to whom you related your dream in the morning, before any news came of the death of your father's brother? Yes, of two ladies.
5. Can you also kindly obtain the statements of any persons concerning the falling of the weight in the clock, on the night of your dream, also the night of your uncle's death? Yes.

3.

PHILADELPHIA.

My sister's dream of our uncle's death, as related by her, occurred at the time she mentions. I was visiting her at the time, and distinctly remember being told the dream, and being asked if I had heard a peculiar sound in the night. The sound I did not hear, but was present when it was discovered that the weight of the hall clock had fallen down.

My uncle's death occurred at that time, and the news of it was so late in reaching us that we were unable to attend the funeral.

ISABELLA A.

MARCH 4, 1888.

4.

Miss A. related to me the dream which she had relative to her uncle's death the morning afterward, and I also heard the noise made by the fall of the clock weight the same night.

ELIZABETH B. H.

March, 1888.

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[36] 1.

(*From Dr. William Noyes.*)

New York, April 5, 1888.

Richard Hodgson, Esq., *Boston:* —

My dear Sir, — I enclose with this the letters from my cousin, Mr. William S. H., of ———, Florida, in which he mentions his dream at the time of my mother's death. As I know you would prefer the original letters, I send these rather than a copy, and will ask you to return them after keeping them as long as you may find desirable. I enclose also a copy of the letter I sent him asking for his recollection of the dream.

Yours truly,

WILLIAM NOYES.

2.

(*Original statement by W. S. H.*)

Florida, July 24, 1887.

Dear Uncle and Cousin, — The papers sent me came duly to hand, but not looking for anything of the kind I did not see the notice of aunt's death until late last evening. I have dreamed of her several times of late, and the night of the 18th I dreamt that I was there, and saw her in her coffin. Remembering it in the morning, I did not imagine for a moment that the dream was true. There are but few people in this world whose death I shall feel more keenly than hers. . . .

Your true friend,

W. S. H.

3.

(*Letter sent to W. S. H.*)

New York, March 6, 1888.

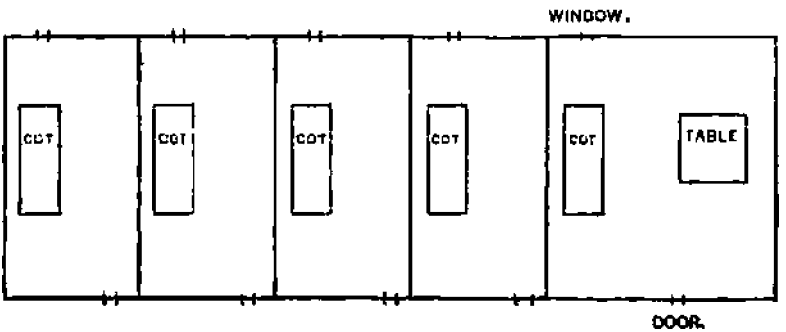
Do you remember that shortly after mother's death you wrote to father stating that you had had a dream about her? I am quite interested at present in the matter of these dreams at such times, and I would be glad to have you send me as full an account of your recollections of the dream or dreams as you can, giving dates, if possible, number of dreams, and their nature. The matter is being investigated scientifically, and I should like to know what your remembrance of the matter is.

4.

[The following letter is the reply of Mr. W. S. H. to the enquiry of which document 3 is a copy. No other intimation was given to Mr. H. of the contents of his letter of July 24, 1887, document 2.]

FLORIDA, March 18, 1888.

DEAR WILL, — . . . During the night of July 17 or 18, I cannot tell which now, I dreamt of being in Boston, and of visiting some rooms arranged as follows: —



In each room was a cot, or something of the kind, and on some of the cots were dead bodies laid out. In the largest room I found your mother laid out, after having hunted up the undertaker to get the key. He went with me to the room, and told me that the bodies were there to be prepared for burial, or to be sent away, and that Mrs. Noyes was to be prepared for removal. Two days later I received notice of her death, and later saw by the Kearsarge "Independent" that she was taken to Bradford, then got a letter giving particulars.

I knew that she was sick, and dangerously so, but supposed she would live for weeks and perhaps for months. I knew nothing of the intention to take her to N. H. This is about all that I can give you, except that I told the folks here of my dream in the morning.

You ask for no theory from me, but I will say that in my opinion a hearty supper or a little extra pressure of blood in some part of the brain would be sufficient to explain the matter satisfactorily to me. . . .

Yours truly,

W. S. H.

5.

NEW YORK, May 9, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — It occurs to me that I have not answered your letter inquiring the date of my mother's death. The letter was put among the

answered letters, and I regret to have delayed so long. Her death occurred on Saturday, July 16, 1887. For the two or three weeks preceding her death she was delirious, and I am sure never made any mention of Mr. H.

So far as I know, Mr. H. made no mention of his dream, but I will write to him on this point.

Yours truly,

WILLIAM NOYES.

6.

NEW YORK, May 19, 1888.

RICHARD HODGSON, ESQ.: —

MY DEAR SIR, — I enclose a letter that I have just received from my cousin, Mr. H. If you would like any statement from the people he mentions, I shall be glad to get it for you, although, apparently, they remember but little of the circumstances.

Yours truly,

WILLIAM NOYES.

7.

MAY 14, 1888.

DEAR WILL, — Yours of May 9th just to hand. In reply to your question about my dream, I will say: I mentioned it to the C.'s while at breakfast the morning after, and gave them quite a full account of my imaginary visit to Boston. I just now asked them if they "remember about my dreaming of Mrs. Noyes' death, and seeing her body in Boston, a few days before I got news by letter of the fact," and they remember about my speaking of it, but the particulars have partly faded from their memories. I did not restate them, as, if desired, I thought I would see how much they could remember of it. . . .

W. S. H.

8.

NEW YORK, Jan. 9, 1889.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — I have written to Mr. H., and will send you his answer[1] as soon as I receive it. I have no objection to your using my name.

My mother's remains were removed to New Hampshire (*Bradford*, Mr. H——'s home), on the Tuesday morning after her death.

Yours sincerely,

WILLIAM NOYES.

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[37] 1.

(Account of Miss B., friend of Miss F. M.)

MARCH, 1888.

In 1870 Miss F. M., a lady about thirty-five, sailed for Glasgow in the Anchor Line steamer "Cambria." She was sick during the entire passage, and was shown a great deal of attention by the captain, George Carnigan. Naturally she would wish to return by the same steamer, but found that the time of sailing did not suit her own, so she chose another,

[1] This came too late for insertion here. See *Comments*.

but always had a feeling of regret that she could not have come back with the captain who had been so kind to her. She never saw him when in port here, but on the night of Oct. 19th of the same year, while sleeping, she called out, "The ship has gone down!" A person sleeping in the same room awakened her and asked what was the matter. She was crying, and said, "The ship in which I went to England is lost. I saw it go down with all on board." In relating the incident to me last week, she said, "I can see just how the ship dived down into the water, and the waves closed over her, and I felt Captain Carnigan was lost."

As is well known, the "Cambria" sailed from New York on, I think, the 8th October, 1870, and was wrecked off Donegal Bay in a storm, October 19; so her dream took place before the news could reach New York, and was confirmed by the fact that only one person was saved.

2.

NEW YORK CITY, June 10, 1888.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — At last I have accidentally met the lady who was sleeping in the room with Miss M. at the time she had the remarkable dream concerning the shipwreck. She remembered the circumstance, and was willing that I should give you her name and address. . . .

F. E. B.

3.

NEW YORK, Oct. 17, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — I have just received your letter and will answer at once. I have been away from New York nearly all summer, and have only just returned to the city, and I must confess I had nearly forgotten about you.

I will relate the circumstances as near as I can remember them after the lapse of so many years, although at the time it made a strong impression upon my mind.

I was a young girl, and occupying the same room with Miss M. at the time, and was awakened from a sound sleep one night by cries of distress from Miss M. I immediately awoke her, and then she told me of her terrible dream, how she had seen the "Cambria" go down with all on board. The dream seemed to trouble her greatly, and she told me she could think of nothing else, the whole scene had been so vivid and real; but the strangest part of the affair was when the news came a few days afterward of the shipwreck of the "Cambria," on the very night of Miss M.'s dreadful dream. All this I remember as well as though it had happened yesterday, but I am afraid I cannot give you the exact date, and as Miss M. is now living in the West, I could not refer to her. As near as I can recollect, it happened about the 20th or 21st of October, 1872. I may be mistaken about the date, but there can be no mistake about the affair; the whole thing happened just as I have related it to you.

Yours respectfully,

A. L. S.,
New York.

4.

NEW YORK, Oct. 24, 1888.

MR. RICHARD HODGSON:—

DEAR SIR, — Yours of the 20th received. In reply I would say that Miss M. and I were living at the time at the Ladies' Christian Union, 27 North Washington Square, New York City, and if my memory serves me right I first heard of the loss of the "Cambria" through the newspaper, but am sorry to say I have no copy in my possession. I made no memorandum at the time, though I think Miss M. did so; but I think the news of the wreck was received within a week after Miss M.'s wonderful dream; and we then made the discovery that the "Cambria" was lost on the very night of her dream.

Yours respectfully,

A. L. S.

5.

OCTOBER 29, 1888.

Miss S., with whom I have had an interview to-day, is a first-rate witness; has never had any psychical experience herself, but was much impressed by the unusual distress of Miss M. on the night of the latter's experience. Her evidence is of great importance in this case.

R. HODGSON.

6.

[The steamship "Cambria," Captain Cairnaghan, was wrecked off the coast of Donegal, Ireland, on Oct. 19, 1870, and only one person, a sailor, was saved. — R. H.]

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[38] 1.

(*From Robert Boram.*)

P. O. BOX 153,

BUNKER HILL, MACOUPIN CO., ILL., Dec. 16, 1887.

GENTLEMEN, — In reply to your article in the St. Louis "Globe Democrat," headed "An Investigation of Dreams," would say I have had forewarnings by dreams of the death of two of my children, which came to pass, also of the death of an uncle in England. As I have undeniable proof of the latter, I enclose you an account, and give you full privilege to use it and my name at any time. I have always been rather sceptical on such matters until I had such positive proof brought to my notice.

Upon receipt of some of your circulars I will have pleasure in collecting some evidence for you from my friends, etc.

Respectfully,

R. BORAM.

BUNKER HILL, MACOUPIN CO., ILL.

In the year 1873 I was in good bodily health, and on one Saturday night had a dream; thought I had returned to England, and visited the scenes of

my boyhood; and, in passing a row of brick dwelling-houses, I was prompted to enter one of them (which I did without knocking), and upon a sofa I noticed a man lying down; he appeared very sick and much emaciated. I had entered the house under the impression that my father and mother lived there; but as I stood looking at the sick man I thought, It cannot be my father, for this man looks older and his cheek-bones are higher; but with these exceptions, I detected a strong family likeness. Feeling somewhat embarrassed, I approached the couch and extended my hand to the sick man, and asked him how he was. His only reply was a mournful shake of the head and feeble grasp of the hand. Turning to the man's attendant, who stood at the foot of the couch (I noticed she was shorter than my mother), I asked her how long the patient had been sick; she replied, "Some time, sir;" and I awoke. This dream produced a deep impression on my mind, and I told my wife about it, and made a note of it, and told two neighbors about it the next day.

Three weeks after, I received a letter from my father in England, telling me that his brother had died a week before, after a short but painful illness. I then for the first time recognized the man in my dream. He was older than my father, and I had not seen him since I was about nine years old. The dates corresponded with those of my dream. I was not in the habit of thinking of this man.

Elihu Flanery and James Houston, Staunton, Ill., are the men to whom I told my dream.

ROBERT BORAM.

2.

BUNKER HILL, MACOUPIN COUNTY, ILL., Dec. 26, 1887.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — Your valued favor of the 22d inst. to hand, also the circulars, for which accept my thanks. *Re* the dream I had of which I wrote you, you ask, "Did you distinguish any difference between this dream and any ordinary dreams which you may have?" *Ans.* Most decidedly. The impression left was very vivid, and I seemed under the influence of the thought, best part of the day, and I felt sure something was wrong at home. Also, I remember that the couch the man was lying on was a black horsehair covering, and the surroundings were natural as life.

Mr. James Houston, of Staunton (to whom I told it next day), turned as white as death and trembled from head to foot, as I told him about it; but as he is somewhat of a believer in such things, that did not impress me much at the time. However, when I got the letter from my father in England, I felt certain that there was more "truth than poetry" in my dream.

2. My wife is dead, and therefore I cannot get any statement from her.

3. As regards the memorandum, I believe I took it with me to England four years ago this month; it was in my diary, which I thought would prove interesting reading; and my father's letter, narrating an account of the death of his brother, has got lost. However, I got that letter on a

Saturday, and on the following Monday, when I passed by Mr. Flanery's, I called in, and told them of the letter, and reminded them of my strange dream.

You ask for other forewarnings: here is one that I had. When in England four years ago, on a visit to my father, whose name is A. W. BORAM, *8 St. George's Road, Kilburn, N. W. London*, I was lying in bed one morning about 8 o'clock, with my eyes closed and half asleep. I distinctly felt some one touch my arm and then kiss me, and I heard my daughter Jessie's voice say, "Wild goose, ship, tar." I sprang up in bed, but saw no one, and my door was locked. This dream or vision bothered me very much, but I could not solve the mystery of those apparently foolish words. Two weeks after I got a letter from Staunton, Ill., and in it my wife told me that Jessie, my eldest child, was about half dead with lung fever. It takes fourteen days to get a letter, and again I felt sure there was truth in this dream.

. . . . . .

I enclose you a statement from my daughter Florence, written in her own hand, of a vision she had. It is truthful in every particular.

ROBERT BORAM,
Bunker Hill, Ill.

Box 153.

(*From Florence Boram.*)

On or about the 8th of March, 1887, I had a peculiar vision. I was sitting holding my little brother who was suffering from the effects of swallowing a grain of corn which had lodged in his windpipe. There was no one in the room but my brother and I, when I happened to look up and saw a beautiful band of angels just over the door. One of them seemed to be leader, and held in his hand a wreath of flowers. They were all looking down upon us; they looked as though they were in a silver cloud; such a beautiful sight! In a moment they vanished. I was not at all frightened. In two days more Freddie (that was his name) died.

I was living at the time in Frederick Town, Madison Co., Mo., but I now reside in Bunker Hill, Ill.

FLORENCE BORAM.

8.

(*Statement of Elihu Flanery.*)

STAUNTON, MACOUPIN COUNTY, ILL., Jan. 1, 1888.

DEAR SIR, — I received yours on yesterday, the 31st of Dec. The dream, as well as I can remember after four or five years, is about as follows: —

Mr. Boram said he thought that he was in England, and went into a strange house. In one corner of a room was a bed on which was a man lying very sick; he thought it looked like his father, but seemed satisfied it wasn't his father. He asked him if he was very sick. He said, "Yes." He then asked the old lady at the foot of the bed how long he had been sick. She said, "About two weeks."

Mr. Boram seemed very uneasy till he got a letter from home stating the death of an uncle of his; the death occurring about the time of the dream.

Yours with respect,

ELIHU FLANERY.

4.

BUNKER HILL, ILL., Jan. 17, 1888.

R. HODGSON, ESQ.: —

DEAR SIR, — In reply to your valued favor of December 29th, would say, though deeply intersted in the furtherance of your desires, am sorry I cannot aid you as I would like to do, as I am in bed four-fifths of my time with a cough that is fast dragging me to that world that we mortals are so anxious to get a peep at while living.

Mr. Houston, whose address I gave you in Staunton, is working somewhere in Missouri, and he may not have received your letter, as his wife, *like my own*, is much averse to investigations pertaining to the spirit world, and believes all visions and materialized apparitions to be the work of (what she terms) the devil, "a black old fellow with hoofs, horns, a long tail, and the boss of the fire-work department below." So, now you can see how it is I cannot get her testimony to the fact that baby Fred came to her while she was awake and patted her cheeks, spoke to her and disappeared, after saying, "Don't cry, dear mamma. Naughty Rene, naughty May;" referring to the two children who had been quarrelling, and were the cause of her mental anxiety. When I tried to get her to put it down, she replied, "No, it will only aid a lot of Spiritualists, whose work is connected with the devil, and I will have nothing to do with it."

. . . . . .

Florence Boram did not remember if she mentioned her vision to any one before the death of her brother, except to us in the family, but she and Mrs. B. spoke of it to T. J. Sellards and Sarah Sellards and others at Fredericktown, Mo., after his death.

Trusting to have the pleasure of hearing from you from time to time, and wishing your society the success that it so justly merits, I am, dear sir,

Yours very truly,

ROBERT BORAM.

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[39] 1.

(*From Mr. Ira Sayles, 511 F Street, N.W., Washington, D.C.*)

SUNDAY EVENING, April 18, 1885.

TO MORTON PRINCE, M.D.: —

DEAR SIR, — I notice in "Science," for April 16th inst., an invitation extended to any and all knowing of any facts relative to haunted houses, apparitions, etc., to communicate such facts to the committee through some of its individual members; I therefore direct my communication to you, as secretary of the committee.

From 1852 to 1858 I was principal in an academy located at Rushford, Alleghany Co., New York. My neighbor — about twenty feet between our houses — was a lawyer by profession. His wife was a bright, intelligent lady, considerably above the ordinary run of women, still not a *highly* educated one; American born, bred, and educated.

They had one son, only child, a fairly bright boy. While at another institution I had had the boy under my charge, though not there his teacher.

In the year 1856, after having completed a fair course of study, this son, now a young man, joined another and went to Kansas. They stopped in Lawrence. As you will recollect, the whole country was then in a state of belligerent excitement over the status of the incipient State on the Slavery and Free-soil issue. As the years rolled by the excitement became more and more turbulent.

Of course, this mother, whose very life seemed wrapped up in the welfare of her boy, grew more and more anxious about him, in consequence of the political agitation then in progress. The young man wrote frequently, and always with the sanguine declarations born in young inexperience.

In the spring of 1857, one night not far from midnight, she woke her husband with a scream. He always addressed her as mother. "Mother, what is the matter?" said he. "*Why! don't you see Johnny there?* He says to me, '*Mother, they've shot me. The bullet entered right here,*' and he pointed to a hole right over his right eye." Mr. Stewart (the man's name) replied, "I don't see anything, mother. You've been dreaming." — "No, I have not been dreaming. I was as wide awake as I am now." He tried to calm her, but she wept all the rest of the night. The next morning he called me in, and they both told me of her experiences, she still maintaining that she was wide awake. They always slept with a lamp partially turned down in their room. She maintained that she both *saw her son* (Johnny) and *heard his voice*. She became more calm, however, after a few days, and, quite likely, nursed a hope that she had been the subject of a hallucination.

Two weeks afterward, however, the young man that went with young Stewart to Kansas returned. The first thing he did was to visit Mr. Stewart at his law office, and to narrate to him there, that *on a certain day, at four o'clock P.M., a Missourian shot Johnny, the ball entering his head just above his right eye*. Moreover, the day of the shooting proved to be *the very day on which Mrs. Stewart had her vision*, at night, about six hours after the shooting!

I was their nearest, most familiar, and most trusted neighbor. I never knew that before this she entertained any of the superstitions of the low. I think not. From that experience, however, she became a stanch believer in Spiritualism. I had myself, in 1856, lost a little daughter, nine years of age, and after her son's death she told me that Johnny came to her window one night, tapped on it, and she asked, "Who's there?" The reply was, "*Johnny. I have found Florett.*" That was my daughter's name.

Besides these two instances, I do not recall any other times when she professed to hear or see the dead. I have learned that she died in 1871.

Mr. Stewart was an inebriate, and though a pretty shrewd country lawyer,

always squandered money as fast as he earned it. The last I heard of him he was still living in that village, *an object of charity*. Whether or not he still retains his mental faculties, I know not.

His address was: W. A. STEWART, Rushford, Alleghany Co., N.Y.

I have given the facts of the case as they occurred. Mrs. Stewart at the time was about forty years old. Excepting her mental perturbation in consequence of the Kansas imbroglio, she was in good health, mentally and physically. She was, after the shock had passed away, as she had always been, unless, perhaps, under a slight cloud of sadness. Still, though never gay, *she was cheerful and composed.*

Very respectfully,

IRA SAYLES,

Geologist U.S. Geological Survey.

NOTE. — I sign thus that you may have as much evidence as I can offer for the trustworthiness of my statements.

2.

(From Mr. Ira Sayles, National Museum, Washington, D.C.)

FRIDAY EVENING, Feb. 17, 1888.

TO RICHARD HODGSON: —

SIR, — Yours of the 13th inst. reached my work-table this morning. In reference to your questions relative to Mrs. Stewart's vision of her son, I have simply to say I was the first person, except her husband, to whom Mrs. Stewart told her vision. She told it to me personally early the next morning about sunrise. At the time I made no written record; but the event is as fresh in mind as it could be were it but yesterday. I know whereof I speak.

Your second question asks how long I knew it before its corroboration to Mrs. Stewart. The exact number of days I cannot give; but it was between two and three weeks. I myself was the person chosen by Mr. Stewart to break the sad news to his wife. Neither he nor his law partner had the nerve to do it. I am therefore better acquainted with all the facts in the case than any other person, except only Mr. and Mrs. Stewart themselves, both of whom are dead. The fact of locating the wound in the forehead, just above the right eye, and that it was a wound made by a bullet, are the strangest parts of that strange vision. The vision or apparition said, "Mother, they've shot me. The ball went in here;" and he (it) put his finger over his right eye, and she saw the wound.

All this she told me that morning after the apparition.

Very respectfully yours,

IRA SAYLES.

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[40] 1.

BOSTON, June 25, 1887.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — In answer to your note of the 23d I would state that the name of the prisoner alluded to has passed from my recollection. He

belonged in East Boston, and was sentenced for life for an assault upon a woman. . I think he was pardoned some years ago, but am not certain about it. He had but one child, a boy about five years old, who always came with his wife to visit him. He seemed very fond of the child, always held him in his arms during the visit, and showed a good deal of feeling at parting.

The following is an account of the affair made at the time: —

The following very singular incident I can vouch for as having actually occurred. I refer to it, not to illustrate a supernatural or any other unusual agency, as I am a sceptic in such matters, but as a remarkable instance of hallucination or presentiment.

I received a message from the wife of one of our convicts, in prison for life, that their only child, a bright little boy five years old, was dead, he having accidentally fallen into the water and been drowned. I was requested to communicate to the father the death of the child, but not the cause, as the wife preferred to tell him herself when she should visit him a week or two later.

I sent for him to the guard-room, and after a few questions in regard to himself, I said I had some sad news for him. He quickly replied, "I know what it is, Mr. Warden; my boy is dead!" — "How did you hear of it?" I asked. — "Oh, I knew it was so; he was drowned, was he not, Mr. Warden?" — "But who informed you of it?" I again asked. — "No one," he replied. — "How, then, did you know he was dead, and what makes you think he was drowned?" — "Last Sunday," he said, "your little boy was in the chapel; he fell asleep, and you took him up and held him. As I looked up and caught sight of him lying in your arms, instantly the thought occurred to me that my boy was dead — drowned. In vain I tried to banish it from my mind, to think of something else, but could not; the tears came into my eyes, and it has been ringing in my ears ever since; and when you sent for me, my heart sunk within me, for I felt sure my fears were to be confirmed."

What made it more remarkable was the fact that the child was missed during the forenoon of that Sunday, but the body was not found for some days after.

The foregoing is copied from my journal, the entry made on the day of the interview, and I can assure you is strictly correct in every particular.

Very respectfully,

GIDEON HAYNES.

2.

BOSTON, June 29, 1887.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — In answer to your note of yesterday I would state that I shall go over to the prison in a few days, and will obtain the name, and all the information in regard to the pardon and present abode of the convict in question, which the authorities of the prison may be in possession of.

. . . . . .

Very respectfully,

G. HAYNES.

3.

BOSTON, July 6, 1887.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — I was at the State Prison yesterday, but, unfortunately, both the warden and clerk were absent, and I was unable to obtain the date of the pardon of the convict in question.

His name was Timothy Cronan. He was pardoned in 1873 or 1874. Mr. Darling, the officer in the guard-room to-day, occupied the same position when I had the interview with Cronan. He was present and remembers distinctly all the circumstances of the case, which were discussed by us at the time. Cronan served some ten or twelve years, and Mr. Darling has the impression that he was pardoned with the understanding that he should go to California, where he had a sister in very good circumstances. He has not been heard from at the prison since his discharge.

Very respectfully,

GIDEON HAYNES.

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[41] 1.

(*From Mrs. H. M. P.*)

Mrs. Crans' young married daughter passed away with consumption five years ago, and her husband, almost frenzied with grief, went out of business in New York, where they had spent one brief year of married life, to found a new home in the West. Not long after, Mrs. Crans had the following dream, which I have written out in nearly her own words, though the manuscript is in New York: —

"I thought I saw Charley asleep in his room in Dubuque, and watched his regular breathing. Everything was perfectly distinct; every piece of furniture, toilet, curtains, broken window-pane, etc. While looking at him, suddenly Allie floated into the room, a beautiful, radiant spirit. She looked at Charley with eyes beaming with affection, approached the bed, threw her arm over him, and kissed him upon the forehead. It was all as real as anything in life, and produced so much emotion that I awoke and arose, too much affected to sleep. The dream so impressed me that I wrote to Charley the next day telling him what I had seen.

"In due time I received a letter from Charley, crossing the one sent to him. In it he says, 'Mother Crans, I had the most life-like dream last night, almost like a vision. Ella came to me in my sleep, a lovely, angelic form, with the same old-time affection. She threw her arm over my neck and kissed me on the forehead. I started up, and she was gone.'" (This was written on the same morning with Mrs. Crans' letter.)

Again Mrs. Crans wrote to Charley, describing minutely every article of furniture, the position of the bed, etc., and found her dream to be in every respect perfectly accurate.

2.

345 West 34th Street, New York, July 14, 1888.

Mr Hodgson: —

Dear Sir, — In compliance with your request I write you again[1] the experience which I had in 1880; I think it was April 30, Friday night. We had just moved here that day from 18 West 21st street, and the second day of December previous my daughter, Mrs. Allie Kernochan, had passed away to spirit life. Her husband, who was so nearly crushed from her death, left us the following February, I think, and went to live in Central City, Dak. The night of April 30 I was very tired out from moving. No beds being up, I slept on the floor in the back-parlor of 347 West 34th street. I have two houses, 345 and 347. Mrs. B., a widow then, that I have since lost track of, but who lives somewhere, I think, in Texas, slept with me, also my daughter, a young girl. After lying down to rest, I remember of feeling a drifting sensation, of seeming almost as if I was going out of the body. My eyes were closed; soon I realized that I was, or seemed to be, going fast somewhere. All seemed dark to me; suddenly I realized that I was in a room, then I saw Charley lying in a bed asleep; then I took a look at the furniture of the room, and distinctly saw every article of furniture in the room, even to a chair at the head of the bed, which had one of the pieces broken in the back; and Charley's clothes lay on that chair, across the bottom of chair. In a moment the door opened and my spirit daughter Allie came into the room and stepped up to the bed and stooped down and kissed Charley. He seemed to at once realize her presence, and tried to hold her, but she passed right out of the room about like a feather blown by the wind; and then, after a moment, she came back again, when Charley seemed to realize that he must keep quiet if he would see her, so he lay still, and she went up to the bed and kissed him again; then she sat down on the side of the bed and unbuttoned his night-shirt collar. I saw that had a ruffle around it. She laid the collar back, and laid her head on his breast. Then Charley softly put his arms up around her, and I looked on the picture for a while, then I thought I would open my eyes, and with difficulty I got my eyes open. They seemed so heavy to me, but when I succeeded in opening them, I received a sudden shock such as if I had fallen from the ceiling to the floor. It frightened and woke up both Mrs. B. and my daughter, who asked what was the matter. Of course I told them my experience, and the following Sunday I wrote, as was always my custom, to my son-in-law, Charley, telling him of all of my experience, describing the room as I saw it furnished. It took a letter six days to go from here to Dakota, and the same length of time, of course, to come from there here; and at the end of six days judge of my surprise to receive a letter from Charley telling me thus: "O my darling mamma Crans! My God! I dreamed I saw Allie last Friday night." He then described just as I saw her; how she came into the room, and he cried, and tried to hold her, but she vanished; how he had prayed for her to return, and that she did so, and then he lay still, and how she kissed

[1] The first account sent by Mrs. C. was accidentally lost. — M. H.

him, then how she unbuttoned his nightshirt, laid back the collar, and laid her head on his breast; how he had clasped his arms around her, but awoke to find her not there. Then, at the end of the six days, when my letter reached him, and he read of my similar experience, he at once wrote me that all I had seen was correct, even to every article of furniture in the room, also as his dream had appeared to him.

I hope you can read this, I have written it so hurriedly. My cares are many, and I wrote under difficulty. Hoping it may prove of use to you,

Sincerely yours for the truth,

MRS. N. J. CRANS.

3.

345 W. 34TH STREET, NEW YORK, July 5, '88.

MR. HODGSON: —

DEAR SIR, —I found my son-in-law yesterday, and he regrets that my letter to him is among the lost; but enclosed please find a letter from him, which he was quite willing to give you. He lives out of the city now, and only comes to see us occasionally, and visited us yesterday.

. . . . . .

MRS. N. J. CRANS.

4.

NEW YORK, July 4, '88.

RICHARD HODGSON: —

DEAR SIR, — The facts written you this day by Mrs. N. J. Crans in regard to a letter written to me one Sunday morning in the year 1880, and one written by me on the same date to her, are correct in every particular. I was then living in Central City, Dakota, boarding at the American House It is impossible to give the exact date, as I have destroyed the letter, for which I regret. I think it was about the last of April, 1880.

Trusting this will meet your approval,

I remain, sir,

Very respt. yours,

C. A. KERNOCHAN,

345 W. 34th st.,

NEW YORK CITY.

---

[42] 1.

(From Mrs. P. J.)

Twelve or thirteen years ago I was spending the summer at Cape Porpoise, Maine. One evening, returning from the water's edge, just as the sun was setting, I saw a remarkable figure, under the following circumstances: —

My son, about three years old, was walking by my side, and my husband was a few paces in front of us. The way to the house, on our return, lay

across a strip of grass-covered land, then across a road, then across another strip of grass to the garden gate of the house where we were lodging. The path from the gate to the door of the house, some eighteen or twenty feet, was covered with cobble-stones. As we neared the house, after having crossed the road, I saw that the door of the house was open, and a woman, apparently, was stepping down the steps. My husband and the figure passed each other just inside the gate, and he turned slightly to look after it as it passed him.

The figure was exceedingly tall, and appeared to be that of an old woman wearing a peculiar shawl and bonnet, and an old-fashioned dress, gathered in at the waist. I turned to look after the figure as it passed me, and the figure turned, also, as though to look at me. But I saw *no face* inside the bonnet. The figure went on, and I hurried inside and asked my husband if he had seen the figure. He said, "Yes." — "What was it?" — "That was my grandmother." I had never seen his grandmother, who had died many years previously. My husband had not seen any face, and identified the figure by the peculiar appearance of the clothes which she had been in the habit of wearing; also by her figure and general bearing.

I inquired at once of Mrs. G., our landlady, since dead, who it was who came out of the house. She replied that she had been alone in the house, and that no person could have come out of the house without her seeing, as she was sitting in a window on the first floor, commanding a view of the garden walk. She had seen and heard no one but ourselves We sent a message to another woman, who lived higher up the road along which the figure had gone, but this woman, also, had seen no person, although, as she declared, she was sitting in a position commanding a view of the road. To my further surprise, I found that my child had seen no person, notwithstanding the fact that the figure had passed close beside us, and I had turned to look after it.

My husband and myself were both in good health at the time. I have never had any other experience of the kind.

MRS. P. J.

JUNE 18, 1887.

2.

The above narration is substantially correct, and as I should have related it, with exception that I had forgotten that my little son was with us. I have no doubt, however, that Mrs. J. is correct concerning the fact.

LEWIS E. J.

JUNE 21, 1887.

3.

I was with Mr. and Mrs. J. at the time of the occurrence related above; had lingered behind at the water's edge, and distinctly remember the presence of the little boy, and of his being questioned, as stated by Mrs. J.

CHARLOTTE P. H.

[43] 1.

ACCOUNT OF A SINGULAR APPEARANCE AT P.

Toward the year of 1873 we received frequent visits from the family of Mr. J. X., of P., especially from the daughters, bright young girls, with a taste for art and books.

These maidens told us much of their friend, Frank Y., a young captain in the regular army. His clever sketches, his witty notes, often came to light between the leaves of the books which they were reading; his photograph was placed in the frame of their mirror; his name and his face were thus familiar to us.

We heard of Captain Y.'s recall to the Western frontier, where he had been stationed; and afterwards of his receiving a bullet in his lungs, in some Indian skirmish, and returning to P—— on a furlough, to be nursed. At this city he stayed with a relative, who lived directly opposite Mr. X. The two families were very intimate, almost like one family.

During this state of affairs, as nearly as I can gather, in August of 1875, Mr. G. and myself went to P. for a short visit at the house of Mr. and Mrs. X. It was one of the fine old seaport houses, of brick, with stone steps and foundations, with wide halls, high ceilings, and spacious rooms; a garden like an orchard, and in front embowering elms; it still stands at the corner of C and D streets.

Here we arrived (it was still broad daylight) late on a hot midsummer afternoon, and had not greeted half the household when the bell rang for dinner. The room assigned to us was in the third story. Covered with dust from our travels, we hastened thither to make ourselves presentable for the table; and so engrossed were we in this effort as not to exchange an unnecessary word with each other.

At evening, for the sake of air, we sat in the lower hall, the younger people on the steps; friends and neighbors dropped in for a chat, and to these, in the twilight, we were introduced.

The evening over, and once more alone with Mr. G., I asked, "Did you observe that when we first arrived here we met a young officer on the stairs?"

His quick reply was, "Certainly, I remember; we both moved to let him pass. It was Captain Y., as any one might know who had seen his photograph."

This had been my own impression, and had led me to take more careful note of the young man's appearance: his handsome face, his bright, clear eyes; his military bearing and fatigue dress; he lifted his cap in passing, or touched it; his air of being at home, — all led me to look for his reappearance.

On comparing notes with my husband, we found that this expectation had been mutual, had haunted us equally during the evening, as each new stranger arrived.

The next morning at breakfast I asked of one of the family, "What has become of Captain Y.? We hoped to meet him here; thought, indeed, that we did meet him yesterday as we entered your house."

The remark made a surprising sensation. Knives and forks were dropped, pale cheeks flushed.

"Where? how? when did you meet Captain Y.? He was buried three days ago!"

So we told our simple impression of the stairway; and after breakfast, all repairing to the hall, we took the same positions, each of the family remaining where he or she had stood as we went upstairs the preceding day. Each room above and below had been occupied by some person who was near its door and listening for the guests. No stranger could have passed without observation. We questioned, Was it not the driver's assistant, who had our trunks in charge? No, that point was satisfactorily investigated.

Was the appearance really like Captain Frank Y.? Did he have such eyes, hair, dress, bearing, expression of countenance?

Yes, to the last particular.

This is all. Nothing came of the vision, nothing went from it, in the twelve years during which we have often told it in each other's presence.

Only we were sorry to learn that the fine old house brought a lower price when sold, because of our gentle ghost.

C. S. G.

JULY 9, 1887.

[Mr. G. is not living.]

2.

JANUARY 9, 1888.

DEAR MR. HODGSON, — . . . Ever since last summer I have been holding in leash a few ghosts for you, but they are elusive creatures, and sometimes perish in their chains.

It is natural that you should wish some confirmation of my strange story, and I tried to obtain one before writing Mr. Savage, if only to steady my own recollections. I have looked in vain for Mrs. X.'s reply to my request, and must have destroyed it. It was short and curt, as if the family feared notoriety from the circumstance, although I had promised the contrary. She wrote that it was "impossible for her to recall the date when we saw what appeared to be Captain Y." at her house; that they always spoke of him as Frank Y., but as to other details, she could not give them.

I will write to the cousin at whose house Captain Y. died, and keep the reply until you come.

Sincerely yours,

C. S. G.

P.S. — With this I shall mail the letter which I have written to Miss Q., the cousin of Captain Y.

C. S. G.

3.

JANUARY 13, 1888.

DEAR MR. HODGSON, — So far from objecting to your writing Mr. X., I shall be much interested to find how well his recollections tally with my

own. Yet as Miss Q., to whom I have just written, is in daily communication with his family, I think it might be well to delay your communication until I hear from her. They are both peculiar persons, and such a coincidence might make them fly off on a tangent, never to return.

The little story was talked over last summer on hotel piazzas, to the dismay of some of our friends, to whom the last year had made one name sacred.

But the wind bloweth where it listeth, and we are not responsible for the exaggerations of our neighbors.

Sincerely yours,

C. S. G.

4.

JANUARY 24, 1888.

DEAR MR. HODGSON, — I am both baffled and entertained with the difficulty of tracking my P. ghost.

Here are two letters which tell nothing. One, so little that it is not worth troubling you with. The note of Miss Q. I send you. The latter, at least, gave a clue which may be useful.

I turned to my diary of the year 1872, and found this hasty mention of the circumstance. We were returning from a journey to the White Mountains. I copy the page literally and entirely. The record begins at North Conway.

(Printed.) FRIDAY, August 23, 1872.

"Morning: Called on the P.'s: saw Mrs. W. and L.; took P.'s to drive in great wagon; invited the Echo House party, but only Mrs. C.'s boy could go, a bright little fellow; saw Mr. C., suffering, but amusing; took glorious drive; home to dine; pack; start for P., — two and a half hours, — found family on doorstep, just out from tea. As we entered, encountered the ghost of Frank Y., who died less than a week ago, and had haunted the house in life. Warm, cordial welcome, to us, *not the ghost*."

The next page begins: —

SATURDAY, August 24, 1872.

"Bright, cool day; took lovely sail in harbor, Mrs. X., Annie, Nellie Q., J. (Mr. G.), and I."

You will observe that Miss Nellie Q. spent the next morning with us in a boat. She must then be mistaken in writing that she did not hear us speak of the ghost. I distinctly remember the younger people would not let the subject rest. Mrs. X. remarked of her two daughters and Nellie: "These children had taken it in their heads that they believed in nothing, not even their own souls, but I notice they devoutly believe in Captain Y.'s ghost."

But sixteen years give room for much forgetting, and from a later record in the same diary I discover that, not long after, the father of Miss Nellie Q. suddenly died; the second death in her home during that year, and the death of friends, as you may know, makes dreadful havoc with our memory.

I wrote to another P. friend asking if she could not gather up some floating tradition of the story. Her reply is full of a recent bereavement of her own, and only thus alludes to my request: "I remember hearing of the ghost story, but can't tell you how. I will, if you wish, ask Mrs. X."

This friend has had some remarkable psychical experiences, which I will make her tell you when she visits me.

There seems now nothing to prevent your writing Mrs. X., and I shall be glad if you do so.

Very sincerely yours,

C. S. G.

I have written still another letter to one who was a guest that year, '72; it is not time for a reply.

C. S. G.

5.

P———, January 19.

My dear Mrs. G., — I fear you have been thinking me very neglectful of your note. Owing to misdirection it only reached me a few days ago.

I will try and answer your questions, but cannot do it to much purpose, I think, as I have very few facts.

Captain Y. died in the summer of '72, but I do not know the date. He was young, but neither handsome nor accomplished; as to popularity, I don't think it was marked either way.

I recollect that you and Mr. G. visited Mr. X. after Captain Y.'s death, but whether days or weeks after I do not recollect. I remember hearing talk about the occurrence you mention about that time, but only indirectly, as I am quite sure that I did not hear either you or Mr. G. speak of it.

I am sorry to have kept you waiting so long for an answer.

Mother joins me in kind regards.

Believe me yours very truly,

(Signed) [Miss Q.]

6.

P———, Jan. 30, '88.

To R. Hodgson, Esq.: —

My dear Sir, — Your note of the 26th reached me Saturday evening.

In regard to your request, I do not think I could add anything to what Mrs. G. has probably told you, as, in answer to a letter from Mrs. G. this summer, I recalled at her desire, as far as possible, my recollections of the curious circumstance. It was long ago, and the memory of it is comparatively dim.

I should much prefer not to have our name mentioned publicly in connection with the very singular incident.

Very respectfully yours,

(Signed) [Mrs. X.]

[44]

1.

CAMBRIDGE, Oct. 10.

MY DEAR PROFESSOR, — The following tale is in your line, and can be easily investigated, as all the persons live about here.

The W.'s, who live in an old house facing the Common, just beyond Mr. G., were at Petersham, — or somewhere in that vicinity, — summering. One evening they described to those with whom they were conversing the quaint character of their home and some of its belongings.

The next morning at breakfast a Mrs. J., of Cambridgeport, said to the W.'s: —

"I dreamed of your house last night. I saw the inside, and everything was in confusion. Things were strewn around the floor, and in one of the beds were two boys. I saw their faces so plainly that I believe if I were to meet them I could identify them," or words to that effect.

That day, at mid-day, the W.'s heard that their house had been entered. A bed in the house was apparently slept in by two persons.

This is the story as I heard it told. Whether it has grown or not since it begun its travels I cannot say.

Mrs. H., corner of M——— and P——— place, can tell you about it.

Yours, etc.

A. M. D.

2.

M——— STREET, CAMBRIDGE.

MR. ROYCE: —

DEAR SIR, — In reply to your letter asking for information about a dream, I send you the name of the lady that had it, Mrs. F. H. J., ——— Street, Cambridgeport, and the Misses W., ——— street, to whom the dream was told in the morning, before they received the letter telling them their house had been entered.

I think they would be very willing to give you all the details you wish, and it will be more satisfactory to you to communicate directly with them.

Very truly yours,

E. B. H.

3.

CAMBRIDGE, Nov. 30, 1886.

PROFESSOR ROYCE: —

DEAR SIR, — The dream I will endeavor to relate as clearly as possible.

It occurred during the month of August, last summer, while we were boarding with Mrs. H., in Lunenburg, where I first met the Misses W. I am a perfectly healthy woman, and have always been sceptical as to hallucinations in any one, always before having felt the cause of the experience might be traced.

In my dream I arrived unexpectedly at the house of the Misses W. in Cambridge, where I found everything in confusion, drawers emptied and

their contents scattered about the floor, bundles unrolled, and dresses taken down from the closets. Then, as I stepped into one room, I saw some boys in bed, — three or four, I cannot distinctly remember. I saw their faces distinctly, as they sat up in bed at my approach, but the recollection of their faces has faded from me now. I could not reach the boys, for they disappearod suddenly, and I could not find them; but I thought, These cannot be the people whom the Misses W. trusted to care for their house in their absence, and I was troubled to know whether it was best to tell them when I should return to Lunenburg. This is all there was in the dream.

Thinking only to amuse them, I related my dream at the breakfast table the following morning, and I regretted doing so immediately, for anxiety showed itself in their faces, and the elder Miss W. remarked that she hoped my dream was not a forerunner of bad tidings from home. I laughed at the idea, but that morning a mail brought the letter telling them that their house had been entered, and when they went down they found almost the same confusion of which I had been a witness the night before — with everything strewn about the floor. It was a singular coincidence, surely.

Yours truly,

E. J.

My age, if desired, is twenty-nine, and my nationality is American.

E. J.

4.

7 ——— Street, Dec. 4.

Professor Josiah Royce: —

Dear Sir, — I am not quite sure whether the incident to which you allude in your note is worthy your attention or not, but I will give you the facts, that you may judge for yourself of its value.

The burglary, we suppose, took place on the night of the 17th or 18th of August, I being at the time, for the summer, in the town of Lunenburg, Mass.

Coming down to breakfast on the morning of the 17th, a lady said to me that she had had a strange dream. She thought she went to our house, finding it in the greatest confusion, everything turned upside down. As she entered one of the sleeping-rooms she saw two boys lying in the bed; but she could not see their faces, for as soon as they saw her they jumped up and ran off. I said, "I hope that does not mean that we have been visited by burglars."

I thought no more about it, till the eleven o'clock mail brought a note from the woman in charge of the house saying that it had been entered, — that everything was in great confusion, many things carried off, and she wished we would come home at once. The policeman who went over the house with her said he had never seen a house more thoroughly ransacked.

We found that in the upper attic room the bed had evidently been used, and there was, perhaps, more confusion in this room than in any other.

The lady who had the dream was Mrs. F. J., of Cambridgeport. I was

told that she had been suffering for about a year from nervous prostration, and she was evidently in a condition of great nervous excitement.

I forbore to speak to her of the occurrence, as one of the ladies in the house told me that it had made an unpleasant impression on her mind.

The whole thing seems rather curious to me, but I do not know that you will find it of any value in your investigations.

Very respectfully yours,

L. L. W.

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[45] 1.

(*From R. B. C.*)

It was in 1876, when living in Chicago, that myself and wife went to the Centennial, arriving there on the morning of July 4th. After spending a week, returned home *via* New York and Niagara Falls. My wife's friends lived near the Falls. We visited them, and while there I had the following dream: —

I thought I saw a mad dog coming up Randolph street, and saw him attack my little eight-year-old boy, seizing him on the upper arm, near the shoulder. Such was the impression made that I soon awoke, and called to my wife and told her of my dream. "Oh," she replied, "it is only one of your dreams!" I told her I never, in all my dreams, had had such a vivid dream. I could not sleep any more that night, and could not shake it off. Next day we left for home, arriving the day following, and were soon at my house. I was exceedingly glad to see my boy, but the first news I was told he had been bitten by a mad dog, a few days before, but the police had killed the dog, and the doctor thought there was no danger, as his clothing prevented the virus coming in contact with the wound; and what is most or equally remarkable, the dog seized him at the place on his arm that I saw so vividly in my dream, and it occurred the afternoon of the day before my dream.

R. B. C.,
Evanston, Ill.

Dec. 12, 1887.

2.

Evanston, Ill., Jan. 16, 1888.

Richard Hodgson, Esq.: —

Dear Sir, — Yours of 20th ult. came duly to hand. Owing to sickness have been unable to reply.

My wife will herewith enclose recollection of dream referred to. The only peculiarity in regard to it was that I was so impressed that I woke her out of a sound sleep, something I had never done before; and it preyed on my mind until I reached home. Can't say that there was any mention made in the newspapers, but presume there was. Don't remember whether I was in habit of repeating my dreams to her before this incident, but have since.

My attention was called to your society by a little article in the paper a month or more ago, headed, "Trot out your Dreams." Never having before told my dream outside the family, thought it would do no harm to give you my experience.

I have not given your other circular the attention you ask, from the fact I have been confined to my room for the past month.

Yours truly,

R. B. C.

My recollection at this late date is that my son was bitten the evening before the dream, but my wife says he was bitten about 9 A.M. of the same morning of the dream. She is doubtless correct, as she seems to have a more distinct recollection.

R. B. C.

3.

[JAN. 16, 1888.]

My recollection of MR. C. relating this dream to me is very distinct, and that he appeared much more impressed by it than I had ever before seen him by a dream. I am not positive that it was on the same morning that the boy was bitten, but my impression is that it was about 5 A.M., and he was bitten about 9 A.M. of the same morning.

MRS. A. B. C.

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[46] 1.

HEUVELTON, ST. LAWRENCE CO., NEW YORK, Jan. 19, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — In answer to an article which I clipped from the "Sun," which please find enclosed, I will say that although I cannot at the present time fully comply with the request therein contained, yet it is not uncommon with me to have very vivid impressions in regard to friends who are at a distance, and those impressions usually prove to be correct, one of which I will here briefly mention.

Some three years ago a lady friend of ours was in Florida, her husband living at the same time in New Mexico. Well, an impression came over me that she was in deep trouble, and thinking this would be a good time to test the question of mind acting upon mind, although the parties may be thousands of miles apart, I wrote at once to her stating the facts, and in due time I received her answer, stating that at the time indicated she was indeed in deep trouble, stating the cause, which I need not here mention; but the lady to whom I refer is a lady whose truth is beyond question.

I have no belief in the supernatural, but I believe that mind truly acts upon mind through the operation of nature's laws or through the laws of God as revealed in the operations of nature, and when we shall have become fully acquainted with nature's laws, we shall understand clearly how it is that mind acts upon mind, through the operation of that law in nature which causes particles of like affinity to be mutually attracted.

As it regards dreams, will state that I had an experience in that line in the summer of 1813 (I write from memory), in relation to some business affairs, which was quite unlooked for, and was at the time quite a surprise to me, involving the receipt of a letter with certain proposals, altogether unlooked for by me. Now, in the course of a few days, I received the letter from the man indicated in my dream, enclosing all the propositions indicated in my dream, to the most minute detail. I was then seventeen years of age; but whether this dream had any particular significance or not, I cannot say, although in answer to the letter which I received, I changed my plans, whether it was for the better or worse, I cannot say, but of the fact that mind acts upon mind, under certain conditions, I am quite well convinced; but in order to comprehend these things clearly, we must understand nature's laws, in so far, at least, as to enable us to see that strict justice and truth is enstamped upon all the works of God, as revealed in nature's book; but in conclusion I will say that if the foregoing interests you to the extent that you wish for details or a more comprehensive statement of these phenomena and their relation to the spiritual nature of man, I am free to give my views upon the subjects involved in these problems in nature's book, which meets us at every turn; but as I am as an atom in that grand structure which constitutes all the works of God, a unit or one, it is plain that that point to which we have arrived to-day is as a stepping-stone to raise up higher as the mind unfolds to the light of truth.

Yours truly,

ROBERT F.,
Heuvelton, N.Y., St. Lawrence Co.

MR. RICHARD HODGSON,
5 Boylston place, Boston, Mass.

2.

FEBRUARY 22, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — I have at hand a letter from you forwarded me by Mr. Robert F., of Heuvelton, N.Y., in which you express a wish for my statement of a circumstance which I understand he has communicated to you.

So far as I know, it is simply this: On the 9th of January, 1884, while at Daytona, Florida, I received news which caused me much mental suffering. A week, perhaps ten days, thereafter, I received a letter from Mr. F., in which he informed me that during the evening of January 9, he had been impressed with a sense of my presence, and was conscious of my suffering at that time.

The news which caused my trouble came to me by letter from Arizona; concerned me alone; and I had not confided in any person. Mr. F. then resided, as he now does, in Northern New York. I am not in possession of the letter which I received from Mr. F. at that time; but remember it quite well, and shall be glad to answer any questions in regard to the circumstances that you see fit to ask.

Very respectfully,

MRS. G. T. S.,
Manitou Springs, Col.

3.

MANITOU SPRINGS, March 24, 1888.

MR. R. HODGSON: —

DEAR SIR, — Your letter was duly received, and in answer would say that I do not recollect whether I told any of my friends of the case or not. The fact is, I did not give it much thought. It seemed quite natural that Mr. F. should know of my suffering, and at the same time I was among strangers, so probably I did not speak of it at all.

If there is anything further that you wish to ask, I shall be very glad to answer at my earliest convenience.

I remain,

Very respectfully,

MRS. G. T. S.,

Manitou Springs, Col.

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[47] 1.

(*From Dr. B. E.*)

BROOKLYN, April 2, 1886.

RICHARD HODGSON, LL.D.: —

MY DEAR SIR, — In the New York "Sun" of yesterday is an article copied from the Boston "Globe," giving an account of the work of the Society for Psychical Research, with which you are connected. Some instances given of the transference of impressions remind me of a case that came within my own personal knowledge.

About ten years ago my wife, who is a woman of remarkably strong will, and is prominently identified with several organized charities, woke me one night by her loud crying and wailing. It was with great difficulty that she could be pacified. She had been roused from her sleep by an *impression* that something was wrong — that some one was in distress at her childhood's home, some two hundred miles distant; nor could she be convinced that such was not the case. In due time we received intelligence that a few hours before this "impression," her adopted brother — cousin, in fact — had caught his hand in a mill, and the arm had been crushed from the wrist to the shoulder. There were ten fractures of the bones, corresponding to the number of cogs in the wheel that did the mischief. Physicians were sent for, but it was fourteen hours before any one arrived. In the meantime they had corded the arm at the shoulder as well as they could, and to sustain the boy and counteract the depression from shock, and pain, and hemorrhage, they gave brandy freely.

From the best computation we could make, it was about this hour in the night that the distress of my wife's father and mother was the greatest, as they discovered that the supply of stimulant, on which they thought the boy's life depended, was nearly exhausted. How *she* felt their *distress* I have never tried to explain; but the *facts* of the case there is no disputing. Was it a coincidence? If so, it was a singular one. We have lived together eighteen years, and never before nor since has she had such an "impression." This was not a *dream*, nor a nightmare. In the simple language of childhood, I can only say, "*It just only was.*"

In this connection, I may mention a faculty, or innate perception, or whatever you may term it, that my wife possesses to a remarkable degree. In the practice of my profession I am necessarily brought into contact with "all sorts and conditions of men" and women, many of them having a goodly outside, but secretly bad. When my wife meets a person apparently most respectable, in society or elsewhere, she at once *feels* that the person is either good or bad, as the case may be. Many times she has pronounced her judgment on persons at the first meeting, with no clue or guide except that "*feeling*" of hers, and I have never known her to judge amiss — I say "judge," but she reaches her conclusion by no process of reasoning, not even herself being aware of the process by which she reaches the inevitable conclusion.

I am a member of the New York Academy of Anthropology, and have given some attention to mesmerism, hypnotism, and the various psychical unexplained mysteries, the subject of investigation.

Very respectfully yours,

B. E., M.D.

2.

BROOKLYN, Jan. 26, 1889.

RICHARD HODGSON, *Sec. A. S. P. R.*: —

DEAR SIR, — Yours duly received. As nearly as I can now remember, I gave you a brief outline of the impressions that my wife had at the time of the injury to her brother. The *facts* were precisely as stated, but the minor incidents and minute details cannot now be accurately recalled, nor would they materially affect the value of the narrative of the case. My wife is rather averse to having her name appear publicly in such connection, still I may say that she does not strenuously object to it.

Very respectfully yours,

B. E., M.D.

3.

The account above [Doc. 1] is a true statement of my experience.

(Signed) [MRS. B. E.]

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[48] 1.

(*From Mrs. Millet.*)

MAY, 1887.

One evening, in the winter of 1884–85, I was sitting in the library of our house, No. 131 Charles street, reading some book that made me a little nervous. (I do not remember what it was.) There was no other person in the house, and I had only our dog for company. Suddenly the door-bell rang, startling me very much and increasing my nervousness. I glanced at the clock and noticed that it was *quarter-past nine*. Too late, I thought, for a social call, and I decided not to go to the door. The dog went to the head of the stairs and barked a moment, and then came back and lay down, only to get up again and go out to the stairs and bark more. The bell rang once more only, but the dog kept up his barking, at intervals, for a

long time, and as he never barked at nothing, he gave me the impression that the man who rang the bell was looking about. I became very much frightened — much more so than the occasion warranted — and *longed* for Mr. Millet's return. He came in earlier than I expected him, evidently in a hurry, and immediately said, "What is the matter?" (I do not remember his exact words; perhaps they were, "Has anything happened?" but I know that his very first remark gave me the impression that he knew something unusual had taken place.) I told him of my alarm, and then he said that as he was sitting quietly in Huntington Hall, listening to Mr. Ropes' lecture on Napoleon, it suddenly flashed into his mind that I was frightened about something. He turned and looked at the clock and saw it was *quarter-past nine*, and knowing that the lecture would be over in quarter of an hour, he thought he would stay until the end, as he was not *sure* that anything was the matter. However, he felt very uneasy all the rest of the time, and hurried out immediately on the conclusion of the lecture, took the first car that passed the door, which carried him to the end of Charles street, and ran the rest of the way home. He found a man, whom he knew, and who wanted to see him on a matter of business, waiting for him at our door (where I had inhospitably kept him), thus accounting for the dog's behavior. As we told each other our experiences, it was Mr. Millet who first mentioned the *time*, but I can distinctly recall at this moment just how the clock looked as I glanced up at it.

It was very unusual for me to be left all alone, but I am not naturally timid, and I had not the least fear of being left alone when Mr. Millet went out that evening.

E. A. MILLET.

2.

(*From Mr. Millet.*)

[Received June 13, 1887.]

On Thursday evening, March 12, 19, or 20, 1885 (as near as the date can now be fixed), I was attending a lecture by John C. Ropes, Esq., at Huntington Hall, Boston. The course was one in which I was much interested, and on that particular evening the subject held my attention very closely. Suddenly I became aware of a feeling that my wife, who was at home, was in danger or frightened. Up to that moment I had not been thinking of her. The feeling was so strong that I determined to go home (131 Charles Street), and I looked at the clock in the hall and also at my watch to see how soon the lecture would be over. It was then quarter-past nine. Knowing that only a few minutes of the lecture remained, and hesitating to disturb the audience and annoy the lecturer by leaving, I waited with considerable anxiety and impatience until the audience was dismissed, and then, with the feeling strong upon me, I hurried home as fast as possible. There I found my wife had been very much alarmed, and that when first frightened, she had looked at the clock to see how soon I would return, and saw that it was quarter-past nine. The details of her alarm are told in her own account.

J. B. MILLET.

3.

SHARON, August 24, 1887.

MY DEAR MR. HODGSON, — . . . I had a little experience the other day which may interest you. Mr. Millet was in New York and I was thinking of his expected arrival in Sharon on the next day, when it suddenly occurred to me that I would walk over as far as the hotel the next afternoon and meet him. I had never done this at any of his previous (half-dozen) visits, and it had never even occurred to me to do so. The hotel is about a third of the way to the station from where I am staying, and is quite a walk. The next morning I received a letter from Mr. Millet, written just about the time I was thinking of him, and he says in it, the very last thing of all, "Why do you not walk over to the hotel to-morrow and meet me?" . . .

Very cordially yours,

EMILY MILLET.

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[49] 1.

(*From Professor E. W. C., June, 1886.*)

Mr. J. T., already mentioned, was employed in travelling for a large wholesale firm in Montreal. He left home in February, 1880, his mother and another sister remaining behind. His route lay through the Eastern Townships, but as he did not know where he would be from day to day, he gave them no address, but told them to telegraph to him through the firm in case his presence was necessary.

Late in February his mother was taken ill with pneumonia. Miss T. was of course very anxious, but in the hurry of nursing she did not telegraph to her brother. No useful purpose would be served by recalling him. Mrs. T. became worse, and Miss T.'s responsibility was heavy, she being the only member of the family at home at the time.

One evening, tired out, she fell asleep, and slept soundly all night. On coming downstairs next morning, J. T. drove up to the door, and before there was time to say a word he cried out, "A., what is the matter? You have been calling me, 'John, John,' all night, so that I was obliged to get up and take the train home."

It is right to add that she was in the habit of calling him in this way if he was wanted suddenly in the night.

E. W. C.

JUNE, 1886.

2.

Professor C. writes, May, 1887: —

As to the third query, the account I sent of Mr. J. T.'s sudden return at the time of his mother's illness was written by Miss A. T., and consequently I could get no more from her. I doubt if I can get anything from Mr. J. T., as he is much engaged in business, and very slow to answer letters of this kind. But I will try. Could I see him, there would be little trouble.

The following is a more detailed account, written in May, 1887, by Miss A. M. T.:—

"My brother John's return home in answer to hearing me call him one night.

"My sister was frequently taken sick at night, and would need ice or something from the lower flat. My brother, a very sound sleeper, made me promise to call him on any such occasion.

"I laughed at him, saying that it was far easier for me to go myself than to wake him (he slept on the next story above). 'Try me,' said he; 'I shall hear you call always.' I tried, and at my 'John, John,' he instantly awoke, and I never found it any trouble thus to arouse him, though any one else might have called him all night and banged at his door fruitlessly.

"He went into the East Townships to travel for his firm. We were all well when he started, and he said that he should be moving about so much that he would not give me any address; if I wanted him I might let the firm know and they would telegraph him. My mother was taken sick with pneumonia; her life was despaired of, and one morning when she was at her worst, my brother suddenly appeared at 7 A.M. I called over the baluster, 'Why, John, what has brought you home?' He replied, 'You called me in the night. I heard you say "John, John, John." I am come to see what is the matter. I have left all my samples, and I took the train early this morning, for I could not bear to wait, I have been so anxious.' I then told him mother was dangerously ill. Thinking over the matter, I cannot recollect that I once consciously desired to recall my brother, never thought of writing or telegraphing him. I was wholly absorbed in taking care of my mother. His appearance was a great surprise to me. He is a rosy-cheeked, ruddy, healthy-looking man, with no morbid strain which would make one imagine him a dreamer, yet he is the one who dreamed of seeing Mr. E.'s home in Ottawa the night he died, and that Mr. E. was not there (having died away from home). All this was true, but news of it did not reach my brother for a long time, as he was snowed up in the Lower Provinces and could not get his mail.

A. M. T.

I may add that this is all my own recollection, without communication with any one else concerned. Your letter was given to me to read.

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[50] 1.

(*Sent by Professor E. W. C.*)

[1887.]

Dream of John's Baby [in] September, 1884.

My mother and sister were visiting us at Akron, in September, 1884, and we were expecting that towards the end of October we should hear that John's wife, Minette, had a baby. One morning, at the end of September, mother told me that she had dreamed that my sister had gone into her room

and said, "Minette has a fine boy." When Mr. C. came back from the college in the afternoon, he handed my sister a telegram for mother. My sister opened it, as she went into mother's room, and read, "Minette has a fine boy." The telegram had been sent off, either the evening before or very early in the morning of the day we received it. It would be easy to get the exact date of the birth of the child. I forget to a day, but it was somewhere about the twentieth of September.

KATHARINE B. C.
[Wife of Prof. E. W. C.]

2.

27 : 12 : 1887.

R. HODGSON, ESQ. : —

MY DEAR SIR, — . . . I enclose you also a statement from Mrs. C.'s mother, relating to the dream she had when *here*, of the birth of the baby in Montreal, and to the telegram announcing it. I have tried to get a copy of the latter, but the W. U. only keep their copies for six months; it was, therefore, too late.

Truly yours,

E. W. C.

3.

. . . . . .

About that dream I had. Minette's baby was timed to arrive a month from the time of its actual appearance. I dreamed one night that John told me he had a fine boy, and I told you at breakfast of it. The baby was born that day or night. John sent a telegram the very day.

I am your very loving mother,

BENEDICTA.

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[51] 1.

(*From Mrs. L. Z.*)

JUNE 6, 1887.

(*a.*) About the end of March, 1881, after recovering from severe illness, while I was yet confined to my bed, I had the following experience. I was staying at the time at 172 Benefit street, Providence, R.I.

I had been asleep and suddenly became, as it were, half awake, being conscious of some of the objects in the room. I then heard a voice as if from the room adjoining, and made an effort to see the speaker, but I found myself unable to move. Then appeared, as though in a mist, an ordinary sofa, and behind it the vague outline of a woman's figure. I did not recognize the figure, but I recognized the voice which I heard: it was the voice of my hostess, Mrs. B., who was at that time not in the house. She was saying, "I am ill and all worn out. Mrs. Z. has been so nervous, and in such a peculiar mental state, that it has quite affected my health" (or words to that effect), "but I wouldn't for the world have her know it." I then made a stronger effort to distinguish the figure, and woke com-

pletely to find myself in my room with my nurse. I inquired of the nurse who was in the other room, which was used as a sleeping-room by my child and her nurse. She said that no one was there; but I was so convinced that the voice had come from there that I insisted upon her going and looking. She went, but found no one there, and the door into the hall was latched. I then looked at the clock, which was opposite my bed. It was about 5 P.M. In the evening, about 8 P.M., Mrs. B. came up to see me, and I asked her where she had been that afternoon at 5 o'clock. She said that she had been at Mrs. G.'s (about two miles off). I said, "You were talking about me." She said, "Yes, I was," looking very much surprised. I repeated to her what I had seemed to hear her say, word for word. She was much astonished, and was very curious as to what else I had heard or seen. I told her that it was all very vague, except the appearance of the sofa, which I described in detail as being covered with a peculiar striped linen cloth, green stripes about two inches wide, alternating with pale-drab stripes, somewhat wider, which appeared to be the natural color of the unbleached linen. She said that she had spoken the words which I had heard, and that she was at the time reclining on a sofa, but she said that the sofa was covered with green velvet.

Next day Mrs. G. paid me a visit, and after hearing my story she exclaimed, "You're right. The sofa had at the time the covering which you describe; it had just been put on. There is green velvet under the covering. I suppose Mrs. B. didn't notice the cover."

(Signed) [MRS. L. Z.]

2.

JUNE 10, 1887.

(*b.*) In March or April, 1881, when I was staying at 172 Benefit street, Providence, R.I., I tried an experiment in connection with my hostess, Mrs. B., who did not, however, know anything about my experiment till afterwards. She had gone to New York to visit her sister, Mrs. S., and one evening, remembering my former strange experience with Mrs. B., I thought it possible that by giving my attention to her, something of a similar sort might happen. With this thought in my mind I gradually went to sleep. In the morning I recollected that I had dreamt as follows:

My first sensation was that of dancing at a party. I seemed to be dressed for the occasion, and in the course of my delightful swaying motion I forgot everything else until I found myself alone and gliding into a dark room. I felt at once I had entered a sick-room, and saw a suffering woman lying on a lounge with her hand over her eyes. I also saw an elderly man, and one or two other persons whom I could not clearly recollect. These persons all appeared depressed, except one, a young man, who was talking and laughing, and displaying, I remember thinking, exceptionally fine teeth. I felt that I was intruding, and left the room as quietly as possible. Returning to the dancing-room I found everything quiet. The dancing had ceased, and conversation was going on. There was a small group of persons at the farther end of the room, and I over-

heard some remarks about small-pox. The rest of my dream was too vague for me to recall.

Some days later Mrs. B. returned from New York, and I told her of my dream. That very evening, it appeared from her account, there had been a dancing-party on the same floor as that occupied by Mrs. S. Mrs. S. herself was suffering from an inflammation of the eye, and was unable herself to leave her apartments. The other members of her family were at the party, but frequently returned to Mrs. S.'s room to chat for a short time with her. I gave a description of the young man whom I had seen laughing, saying that he had very handsome teeth, and looked wonderfully like Mrs. B.'s son. She recognized him at once. Said that he had been at the party. Was an intimate friend of Mrs. S., and had been in her room during the evening. Mrs. B. also told me that she and a few others had been only that day informed that a young man who occupied an upper floor of the house was reported by his medical attendant to be suffering from small-pox, and she remembered their talking about it.

I had never been to Mrs. S.'s apartments, and knew nothing about their style of living. The whole occurrence impressed me as quite inexplicable.

(Signed) [MRS. L. Z.]

3.

(*a.* and *b.*) In the year 1881, while living in Providence, on Benefit street, No. 272, Mrs. Z. was with me, and during the winter of 1880 and the spring of 1881 she was in a peculiar mental state, and on two occasions read my thoughts and heard my voice. I remember that while I was away from the house, visiting a friend, she repeated to me on my return part of the conversation that passed between us. Once, also, on my return from a visit in New York, she described to me the house in which I had been visiting, and told me of a party I had been to, giving me all the details and even repeating part of a conversation that had been going on in the parlor. I remember distinctly on one occasion, when I returned from a visit to a friend, Mrs. Z. repeated the conversation that had passed between my friend and myself, and spoke of my lying on a lounge that had a striped covering. I said, "No, it was a green plush," but found afterwards she was right, as the summer covering had been put on.

ELIZABETH L. B.

BROOKLYN, N.Y., June, 1887.

4.

PROVIDENCE, July 12, 1887.

MR. RICHARD HODGSON: —

DEAR SIR, — When I received your note I could not at all recall the circumstances of the vision you referred to, but afterwards Mrs. B. refreshed my memory upon the subject, and I distinctly recalled it. It was as Mrs.

Z. related it to you. At the time it occurred, I remember, I thought it quite marvellous.

Sickness has prevented my writing you these few lines before.

Respectfully,

C. B. Y. G.

1.

JUNE 17, 1887.

(c.) When I was about ten years of age I was sleeping with my mother one night and woke with a start, having dreamt that two pins were in my mouth, one of which I had taken out and the other of which I concluded I must have swallowed. "O God," I cried, "I've swallowed a pin!" Sitting up in bed, and turning, I saw that mother was sitting up in bed also. She said, "What's the matter?" — "I dreamt I swallowed a pin." — "Tell me your dream." I told her part of my dream and she gave the rest of the details, saying that she had had the same dream precisely, and was awakened by the same thought, that she must have swallowed one of the pins. My mother is now dead.

(Signed) [MRS. L. Z.]

2.

JUNE 25, 1887.

(c.) I went into my wife's room one morning about twelve years ago and she said, "I was very much surprised this morning. I woke up and thought I had pins in my mouth, and I put my hand up to my mouth to convince myself that the pins were not there. L. (Mrs. Z.) woke up shortly after and thought she also had pins in her mouth, and she went through the same action of putting her hand to her mouth, and was much frightened, thinking she had swallowed some pins."

(Signed) [D. Z.]

(Father of Mrs. L. Z.)

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[52] [Written in latter part of 1887.]

1.

(*Statement of Mrs. M. L. M.*)

I had written to Mr. H. July 18, 1887, asking him to call and see me in reference to the matter of my dream of "the closet in Hotel Vine." I hoped to see him in the course of a few days, but could have no certainty of that, as he was at times called away from the city on business.

On the 19th I was called out of the office, and, before going out, I put on the door a card having these words on it, "Will return soon." I told the elevator boy, if any one called, to say I was out, but would be back shortly. I was absent about an hour. On my return I came upstairs, but did not ask the boy (through forgetfulness) if any one had called; nor did he tell me any one had done so. As I came within a short distance of the door I saw some characters written upon the card I had left, and just below the

printed words, "Will return soon," I stooped down and read, "Mr. H. has been here, and will return." As I looked, the words faded away. I entered the office, and in a very short time Mr. H. came in. I turned to him and said immediately, "You have been here before this morning? a short time ago?" He replied that he had, and said he left no name or message with the elevator boy, simply saying to him that he would call again.

He then told me that he had impressed my face upon his mind very strongly, so he could see every feature of it before him, with the intention of seeing if I would be in any way affected by it, or conscious of his approach, or would say anything to him about his visit when I saw him.

It may be said that as I was naturally expecting him, there was nothing strange in this occurrence, but I was not expecting him at that time especially, and had no idea that he had called until I saw the words (in pencil) upon the card upon the door, the elevator boy not having mentioned the fact that *any one* had called.

M. L. M.

2.

(*Statement of Mr. H.*)

I received a letter from Mrs. M., dated July 18, asking me to call upon her. While on my way to call upon her, July 19, I impressed on my mind very vividly the lineaments of her face, with the intention of learning if she would be in any way affected thereby, and if she would mention anything that would show that she had any knowledge of my visit before I saw her. When I reached the building in which she has her office, I asked the elevator boy where I should find Mrs. M.; he said, "She is out, but will return soon." I left no name, simply saying I would call again. On my return, in the course of half an hour, she was at the office, and turning, said, "You have been here before, this morning." I said that I had. She replied, "I saw it upon a card I left outside." I told her I did not come upstairs, but she persisted that, whether I came up or not, my *name* was on the card as having called, and would return.

I have been acquainted with Mrs. M. since 1879, and am well aware that she is endowed with the power of seeing persons and things, and of a consciousness of what is occurring at a distance, to a high degree. I very cheerfully bear witness to the facts to which my name is appended, as of my own personal knowledge.

J. H.

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[53] [Written in latter part of 1887.]

1.

(*Statement of Mrs. M. L. M.*)

Some months ago I had a very strong impression that Mr. H., who is an old and valued friend, was coming to my office. I was glad of it, because I had not seen him for some time, and wished to see him. I looked toward the door several times, and could not understand why he did not appear,

feeling sure he had had time to do so, from the time that had elapsed since I felt that he was *en route* for the office.

To my great surprise he did not come at all, and while thinking of him again the next day, he entered the office. This was between eleven and twelve.

"You did not expect to see me," he said. "No," I replied, "but I *did* expect you *yesterday*." Then I told him how strongly I had been impressed with the idea that he was on the way to see me, and how surprised I was that he did not appear.

He laughed, and said, "Well, I *was* on my way, but turned back when half-way here." I asked immediately at what time. He said, "In the forenoon, before twelve."

M. L. M.

2.

(*Statement of Mr. H.*)

I started to call upon Mrs. M—— one day this last spring, not having seen her for some little time, but finding it very muddy and disagreeable out, a light rain falling at the time, I turned back when about half-way there.

The next day I called, and said to her, "You did not expect to see me to-day?" — "No," was her reply, "but I *did* expect you *yesterday*. I was so sure you were coming that I could not understand why you did not appear." I asked her what time, and she said in the forenoon, between eleven and twelve o'clock, which was the time I had started, turning back when about half-way there. J. H.

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[54] 1.

(*From Mrs. F. A. B. D.*)

WISCONSIN, June 3, 1888.

. . . When in Baltimore, some years since, one evening, just after retiring in the dark, and with closed eyes, I "saw" suddenly the face of a friend, a young man, who had been a playmate in childhood, who said in the most natural manner, "I am dead." These vivid impressions always seemed bearers of truth in some sense to me, and this quite oppressed me, as his wife was a friend also. I had not long to wait, for the next day a letter came to me, saying that Fred —— was very ill, not expected to live; and following this was another, giving the news of his death on the very evening when he told me. . . .

F. A. B. D.

I would add here that I recalled the fact of writing my singular impression to my mother, as she said, "at once," and I am sure that there is no doubt of it.

2.

MR. HODGSON: —

DEAR SIR, — In compliance with your request, I would say that while writing to inform my daughter of the death of the young man — 1863 —

referred to, we received a letter from her saying she dreamed he had died the night previous to her writing, and have frequently heard her refer to similar cases, which I think is a peculiar trait of knowing things before or when they happen, which seems to be natural to her.

Respectfully yours,

Mrs. A. B.
(Mother of Mrs. F. A. B. D.)

My mother has but recently partially recovered from a severe illness and her writing is brief. Upon mentioning the subject to her, she remembered the incident as above.

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[55] (*From Mr. H. D. L.*)

S——, Me., Oct. 22, 1888.

Dear Sir, — Your letter of October 2, has reached me here. The "vision" about which you inquire was not exactly what your question implies. Such variations between the fact and the report you are, no doubt, by this time quite used to. The experience was, however, an interesting one, and I will gladly tell you about it. At my wife's request I do not mention the friend's name.

This friend was a lady to whom my wife was bound by a peculiar affection. She was known to us to be ill of a mortal disease by which she had been confined to her bed for months. She was in New York; we were in Chicago. At the time of this "vision" my wife was confined to her room by the birth of a child. The Rev. Dr. ——, my wife's friend's husband, wrote me that his wife was very much worse, and likely to die at any time; that she, knowing Mrs. L.'s condition, and wishing to save her from any shock, had directed him to write me, begging me to conceal the danger from my wife, and preparing me to receive the news of her death, which the dying woman especially adjured me not to let Mrs. L. hear of until she was, herself, perfectly well.

Several days after the receipt of the Rev. Dr. ——'s letter, Mrs. L. awoke one morning in great agitation and in tears. She had seen her friend in a dream with a wonderful light shining upon her. They had had in the dream a tender talk. Mrs. Dr. —— said, "Tell me again how happy you are," and at the close said, "Be as good and great as you are happy," and the dream closed.

That morning I received a telegram from the Rev. Dr. —— that his wife had died during the night. Mrs. L. knew nothing of the danger nor the death until more than a week later.

Whether the dream was a mere coincidence, — a chance shot, — or whether Mrs. L., as Bayard Taylor believed, really met her friend in the still watches of the night, who can tell? It was certainly not a vision of foretelling; nor was Mrs. L. aware during the vision nor in relating it that her friend was dying. But it illustrates how easily error creeps into tales of this sort, that, until corrected by my wife the other day, I have told the

story as one of a death-bed scene in a vision, in which my wife dreamed that her friend was dying and gave and received farewells, — none of which was in the dream, but which I honestly put into my account for years, because I knew that Mrs. Dr. —— had died the same night.

Truly yours,

H. D. L.

[Signed later by Mrs. L.]

J. B. L.

In a letter of Nov. 12, 1888, Mr. L. adds: —

1. The date was about March 1, 1875.
2. Mrs. L. will confirm the account by her signature.

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[56] (*From Dr. S. F. Deane.*)

Box 142,

CHARLETON, THAYER CO., NEB., Nov. 12, 1888.

RICHARD HODGSON: —

DEAR SIR, — Yours of the 7th inst. received, and to your questions will reply that I cannot give exact date, *i.e.*, day of month, as I made no record of the occurrence referred to in your letter of above date. I was washed out in 1876, and all my correspondence, consisting of business and epistolary letters, as well as copies of many letters sent, and a considerable amount of MS. of a miscellaneous character, was utterly ruined, lost; and, among the rest, the letter from my son, referred to by Mr. Tuttle.[1] I have nothing to refer to by which to substantiate my statement, and must rely for credence on its internal evidence mainly to obtain a moment's consideration. Mr. Tuttle abridged the statement made in the article published some months before in the "R. P. Journal," so that it seems necessary, for a full understanding of the matter, that I again write out an account of the occurrence, as follows: —

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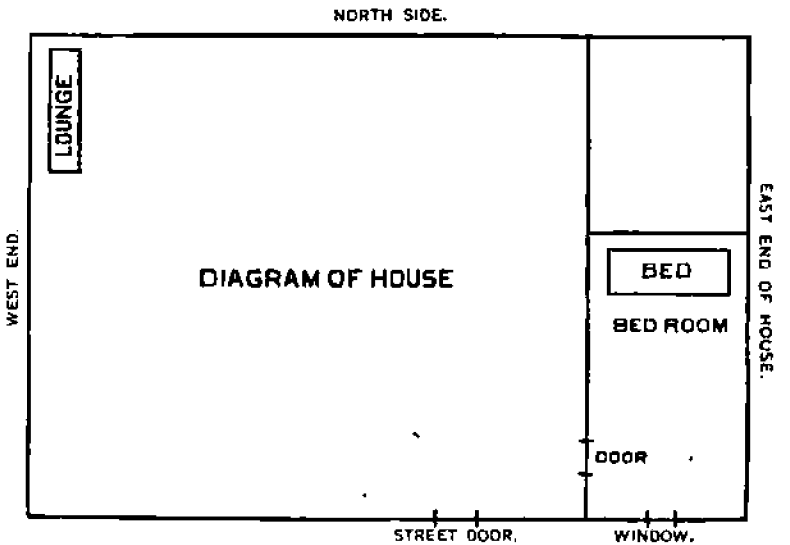
[1] Our attention was drawn to Dr. Deane's experience by the following account, given in an article by Mr. Hudson Tuttle in the "Religio-Philosophical Journal," May 12, 1888: —

S. F. Deane, M.D., of Carleton, Neb., had a remarkable experience, which he relates as follows: —

"After my arrival in Nebraska, I made my home with my daughters. At the time I left Wisconsin my wife was not well, and I hesitated to leave her. After I had been absent about three weeks, I had retired to my room, which had a door opening into the street. About 2 o'clock in the morning, while awake, with sufficient light from a partially obscured moon to see distinctly any person in the room, and fully conscious of all my surroundings, and with my face toward the door, I saw it open and a person step into the room, which I at once recognized as the exact image of my wife. She came direct across the room, knelt at my bedside, put her arms about my neck, kissed me, and said she had been very sick, but was better now. Then she said she must go and see Adelaide, and arose and passed across the room to the door to our daughter's room. She was gone a few minutes, when she again came through the open bedroom door into my room, looked at me, as much as to say good-by, passed out at the door, and was gone.

"While she was present a peculiar calmness came over me, but when she was gone a great anxiety took possession of me, and, could I have taken a train, I should have at once started for home. But I at last resolved to await a letter, which came in due time from my son. He wrote: 'Mother is quite sick, though better than night before last, when, about 2.30 or 3 o'clock in the morning, we thought for twenty or thirty minutes that she was dead. She lay insensible, pulsation ceased, or only fluttered at intervals, and respiration seemed suspended; but she rallied, and is now in a fair way to recover.' She did recover, and enjoyed a fair degree of health."

I left Darlington, Wis., March 14, 1871, for Nebraska. At the time of leaving, my wife was in poor health, but, as she never enjoyed good health, and seemed to be as well as usual at that date, I left her without feeling any unusual concern for her. I arrived in Lincoln, Neb., the 16th, and made my home with my daughter and her husband, while looking about me to become acquainted with the State and to find business. This kept me travelling most of the time, so that I was at their house only as a temporary stopping-place. At the time of my return from one of these trips, performed on foot, I was sleeping in one of the rooms, in which my location, relative to other parts of the house, can be better learned from the accompanying diagram, drawn without regard to any proportion, though



locations are correct. Soon after my arrival in Nebraska, I received a letter from Wisconsin, stating that "mother" was quite sick, but no intimation that she was in a dangerous condition, and I felt no unusual anxiety on her account. The first intimation I had of danger to her was one night while lying on the lounge at the N.W. corner of the room, head to the north. It was, probably, about 2 o'clock A.M. The moon was obscured by a veil of clouds, but not so heavily that any object in the room could be distinctly seen. I was fully awake, and in no wise disturbed mentally. I saw and recognized the various articles of furniture in the room, and noted their positions as clearly as I would have done in full daylight. Owing to the location of lounge, and its relative position to the door, I readily, and, in fact, naturally, would notice that as readily as any portion of the room and its contents. While looking at the door I saw it open, and the exact form and movement of my wife entered from the street. Her features were clearly seen and recognized. She closed the door after her, and

walked across the room directly from the door to the lounge, where she knelt down, looked me steadily in the face, — it seemed to me two or three minutes, — put her arm about my neck, kissed me, and arose to her feet, saying, as she rose, "I must go and see Adelaide," our daughter. She then turned from me, walked across the room to the bedroom, opened that door, and walked in. She was in the bedroom a few minutes when she came out, closed that door, opened the outside door, passed out, closed it, and was gone. During this time I felt as calm and as free from excitement as I ever did under any circumstances. In fact, everything appeared too real to be other than a real occurrence in every-day life, until she passed into the street. Then the idea flashed upon me, she is dead; and had I had wings I should have left for Wisconsin at once. I had read of many such occurrences where the spirit, or what was thought to be such, had appeared to friends at a distance; so that there seemed to be some reason to believe she was dead. I feel quite sure I mentioned what I had seen the night before to my daughter and her husband. Of this I am certain. I had proposed to go on another look for business the night before, and had so declared my intention; but the feeling that all was not right at home was so strong that, had there been a train going East that morning, I should certainly have started for Wisconsin; but as there was not, I resolved to wait until the next day, when I might reasonably look for a letter from Wisconsin. The expected letter came, and from that I learned that "Mother is very sick. Last night we thought she was dead. She sank away; breathing and pulsation ceased. She lay in this condition some fifteen or twenty minutes, but by rubbing and bathing with stimulants she finally rallied, and seems better to-day than at any time since she was taken sick." Now, the time mentioned in another letter corresponded with the time she apparently visited me in Nebraska, as I made subsequent inquiry of the time when she lay unconscious, and found the correspondence sufficiently near to warrant the conclusion that the time was identical, although neither of us noted the exact minute.

I have given you a true and faithful account of the occurrence as it has dwelt in memory since, and will probably be among the last occurrences that fade away from distinct recollection. It is a matter of regret that the documentary evidence has been destroyed, as I would most cheerfully have enclosed it with this letter, to show, as far as possible, that I am not what I have never countenanced, — a fraud. You can make such disposition of this narrative as its intrinsic value, as it appears to you, may warrant. I neither court nor shun publicity. I am a spiritualist from conviction on what to me is demonstration of the fact. If I am deceived, it is after many and varied experiences, both of myself and others. I might, if desired, relate some dreams, or what appeared to be such, that *seemed* to foreshadow coming events.

I will interest myself in gathering information on Schedule G, and should I be so fortunate as to gather any, will forward at once, and will cheerfully give you all the aid I can in your search into the grandest subject of this or any age, or the biggest humbug that ever cursed the earth.

I cannot believe from the knowledge I have of a few of the names of

those who appear as officers of your Society, that you will emulate the Seybert Commission. If such is your intention, it will be a matter of deep and lasting regret.

Respectfully,

S. F. DEANE, M.D.

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[57] CASE OF MR. F. H. KREBS.

1.

(Statement by Prof. William James.)

Mr. Krebs (special student) stopped after the logic lesson of Friday, November 26, and told me the facts related in his narrative.

I advised him to put them on paper, which he has thus done.

His father is said by him to be too much injured to do any writing at present.

WM. JAMES.

DEC. 1, 1886.

2.

(Statement by Mr. F. H. Krebs.)

On the afternoon of Wednesday, November 24, I was very uneasy, could not sit still, and wandered about the whole afternoon with little purpose. This uneasiness was unaccountable; but instead of wearing away it increased, and after returning to my room at about 6.45 it turned into positive fear. I fancied that there was some one continually behind me, and, although I turned my chair around several times, this feeling remained. At last I got up and went into my bedroom, looked under the bed and into the closet; finding nothing, I came back into the room and looked behind the curtains. Satisfied that there was nothing present to account for my fancy, I sat down again, when instantly the peculiar sensation recurred; and at last, finding it unbearable, I went down to a friend's room, where I remained the rest of the evening. To him I expressed my belief that this sensation was a warning sent to show me that some one of my family had been injured or killed.

While in his room that peculiar sensation ceased, and, despite my nervousness, I was in no unusual state of mind; but on returning to my room to go to bed it returned with renewed force. On the next day (the 25th), on coming to my grandfather's, I found out that the day before (the 24th), at a little past 12, my father had jumped from a moving train and been severely injured. While I do not think that this warning was direct enough to convince sceptics that I was warned of my father's mishap, I certainly consider that it is curious enough to demand attention. I have never before had the same peculiar sensation that there was some being besides myself in an apparently empty room, nor have I ever before been so frightened and startled at absolutely nothing.

(My Father's Statement.)

On questioning my father, he said that before the accident he was not

thinking of me, but that at the very moment that it happened his whole family seemed to be before him, and he saw them as distinctly as if there.

(*Chauncey Smith's Statement.*)

On questioning Smith, he said that he distinctly remembered my coming down and stating my nervousness, but as he was studying he did not pay much attention to my talk, and could not vouch for the particulars.

On the eve of the 25th I went to his room and told him how my feeling had been verified, and he did not dispute my statement of the case; therefore to me his forgetfulness is astonishing.

F. H. KREBS, Jr.

Nov. 29, 1886.

3.

(*Statement by Mr. Chauncey Smith, Jr.*)

I, the undersigned, distinctly remember that F. H. Krebs, Jr., came into my room November 24 and complained of being very nervous. I cannot remember exactly what he said, as I was studying at the time, and did not pay much attention to his talk.

On the 25th he came into my room in the evening, and made a statement that his state the evening before was the consequence of an accident that happened to his father, and that he had the night before told me that he had received a warning of some accident to some one dear to him. This I did not contradict, because I consider that it is extremely probable that he said it, and that I did not, through inattention, notice it.

CHAUNCEY SMITH, Jr.

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[58] 1.

(*From Prof. E. W. C., June, 1886.*)

About the end of 1874, Mrs. C., then living in Montreal, was feeling somewhat anxious in regard to a younger brother, with whose temporary occupation and associations she was not altogether satisfied. One night in a dream she saw him going upstairs to a garret or loft without any door, where a man and a woman were engaged in sorting and piling boxes. He was apparently going to fetch some of them, and a disagreement sprang up between him and the man, when the latter took up a piece of a broken lid and struck the former on the head two or three times. He would apparently have done more, but the woman interposed. This dream she told to her sister and to one or two other members of the family at breakfast time, but after the younger brother had left. She purposely avoided letting him know of it, lest he should become aware that he was an object of anxiety. She was laughed at, but no further notice was taken of the matter.

About 7 o'clock the same evening the brother returned from his place of business, pale, and with wounds on his head. When questioned, he said

that he had been sent upstairs to the garret for some boxes, and that he had had words with a man up there, who had picked up a rough piece of a box with nails in it, and had hit him twice on the head with it. The man would, he said, have done more if a woman had not interposed.

After the occurrence, he went to the office of an elder brother living in another part of the city, who made inquiry into the story, and found that it was true. The matter was pushed further, and not dropped until some compensation or reparation — I do not know what — had been made to the boy, so that no doubt can be entertained concerning the truth of the story.

2.

Professor C. writes, May 8, 1887: —

The account of Mrs. C.'s brother's being struck on the head was, as you suppose, by Mrs. C. On thinking over this case, the thought occurred to me that I might have the original letter in which she told me of it. The account previously sent was given from memory at the time of writing. I send you herewith this letter, or, at least, the part relating to the case. The rest is immaterial. You will observe that another minute coincidence which Mrs. C. had forgotten is hereby introduced, — the place where the injury was inflicted. The letter, as you see, just mentions the fact without going into detail.

Mrs. C. read over the statement last sent, and told me it was correct in every point. If she has time she will draw up a short narrative without communication with me, and send it with this.

3.

(*Extract from a letter by Mrs C., dated Sept. 25, 1874.*)

I was called away to dinner, and had to leave off abruptly; now my thoughts are scattered. At dinner my brother told me that a man in his store set upon him to-day, and beat him on the head with a stick. W. took the matter up, and a warrant was taken out; but listen, — at breakfast this morning we were all laughing at my dream of last night, which was, that I saw a man hitting L. [the brother] on the head with a stick. L. has a bruise on the exact place I dreamt he had. What do you make of this coincidence? The boys beg me not to dream of them.

4.

DREAM CONCERNING MY BROTHER.

[MAY, 1887.]

I did not like the position held by my youngest brother, and was sure that he did not like it for himself.

I had in my mind a vague feeling of anxiety for my brother. One night I dreamed that I saw him going up some stairs that opened at once upon a rough sort of garret.

A man was at work there, and after a few words with my brother (I do not remember whether I heard them or not, I rather knew that he and the

man were talking) the man suddenly picked up a rough piece of board lying at hand, and began to strike him on the head.

I wanted to interfere, and whether I or another woman did I cannot now remember. In the morning the man's attack was clear in my mind, also the details of stairs and garret; but there remained an indefinite impression that I had seen a shadowy woman, and that she had stopped the blows.

I related this dream to my sister as we dressed next morning, and at breakfast to those of the family who had not already left for their respective occupations. I am sure my youngest brother was not there, first, because he always took his breakfast earlier than the rest of us, his work beginning earlier; second, because I should not have thought it wise to tell the dream in his presence. Looking back now, I see my mother, my second brother, and the sister to whom I had already told the dream sitting at the table.

In the evening my youngest brother appeared at supper with a bruise on his head, and when asked to account for it, he said that he had been sent upstairs to a sort of garret for some boxes, and that he and the man at work there had had words; the man had set on him with a rough piece of wood, and had given him two or three blows before a woman, also at work there, stopped him. He had gone to one of his elder brothers, who had the man arrested, and the woman had testified that no ground had been given for the assault.

We laughed a great deal over the coincidences of my dream and the real event, and so far as I could get a description of the stairs and rough landing or garret, it agreed well with what I had myself seen.

KATHERINE B. C.

5.

HER (MRS. C.'S) DREAM OF L——.

[MAY, 1887.]

In Montreal, one morning, she awoke from a troubled sleep, said she had dreamed so uncomfortably of L.,—that the storeman had been very cruel to him; had struck him on the head. In the evening, when the lad came home with the story of the assault on him, he implored my sister most pathetically not to dream anything more about him.

(Signed) A. M. T.

Miss T. adds that "this is all my own recollection, without communication with any one else concerned."

6.

Mrs. C. adds, in a letter of Jan. 29, 1889: "In reply to your question I will make the following statements:—

"I was at that time, September, 1874, giving lessons in some of the private schools of Montreal, and, in order to meet my classes at nine or half-past nine, it was necessary for me to breakfast not later than eight. I therefore rose at or about seven every morning.

"My brother left home every morning in time to begin his work at eight

The assault took place after eight o'clock in the morning, necessarily, as his hours of work began at eight.

"I related my dream to my sister on waking, or while getting up in the morning, about seven o'clock, and I related it again at breakfast. My brother was not present, as he had left to go to his work. I am sure that I should not in any case have related it in his presence, and that my sister, who felt as I did in regard to the matter, would, on no account, have mentioned it to him. I must have related the dream to my sister while he was still in the house, and he could but have just reached his place of business when I was relating it for the second time."

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[59] 1.

(*From Prof. E. W. C., June, 1886.*)

About Christmas in the year 1866 or 1867 Mrs. C., then living at Aylburton, in Gloucestershire, England, dreamed between 1 and 2 o'clock in the morning that she saw one train running into another, alongside of the long platform at Gloucester station. So vivid was the impression, that she seemed to put her fingers into her ears to deaden the noise that would follow. Waking immediately, she told the dream to her sister who slept with her. In the dream she saw a gentleman, a teacher of music in the neighborhood, in the train or on the platform. The same evening, when at a party, and having nearly forgotten the dream, she overheard two men talking about the accident at Gloucester station during the previous night. At the party one of the first persons whom she saw was the above-mentioned music-teacher, who, by the way, was almost a stranger, being known only by sight. On inquiry she then learned that one train coming in had run into another standing at the platform, between 1 and 2 in the morning, just as she had seen in her dream, and that the teacher had been in one of the trains.

2.

(*Account by Mrs. C.*)

DREAM OF THE COLLISION AT GLOUCESTER STATION.

DECEMBER, 1866 or '67.

I dreamed that I was at a railway-station, — our nearest at Lydney, Gloucestershire, twenty miles south-west of Gloucester. I believed it was our station, but I saw the long platform of Gloucester. There was a train standing ready to start, and I knew there was to be a collision, and dreading the noise, I was relying on our Lydney ticket-porter to warn me in time so that I might shut out sight and noise. I then saw Mr. Matthews, the music-teacher, and covered my face and ears, knowing the time had come. I believe I saw the collision; I know I heard a terrific bang and woke with the shock of it. I suppose I woke my sister, for I remember telling her about it in the night; and I believe we ascertained by some means

that it was about 2 A.M., but at this distance of time I cannot be sure on this point. We heard nothing of any accident until evening, when we were on our way to a party at Lydney. Father had come home from business in the omnibus, and he sent us on to the party in its return trip. Somewhere we picked up two men; one at least was unknown to us. They talked of various things, and among others of an accident in the night at Gloucester station, which has but one long platform.

The Cheltenham train was ready to start, when another ran into it with a great shock. No one was seriously hurt. It happened between 1 and 2 A.M.

At the party we saw Mr. Matthews, and he told us that he had taken his seat in the Cheltenham train, but had got out for a minute, just before the collision occurred. We did not mention my dream to him or to any one.

KATHERINE B. C.

3.

(*Account by Miss A. M. T.*)

With regard to the accident at Gloucester station.

She (Mrs. C.) told me early one morning about 1864 or 1865, that she had dreamed that she was present at a railway accident near Gloucester. As far as I can remember her account was very circumstantial, just as that of an eye-witness of the terrible scene. We lived at Aylburton, in Gloucestershire, England, a village to which news penetrated slowly, so that I am sure it was mid-day before we heard that an accident had taken place on the line. I do remember also that we found my sister's account, and that given by those really present in the flesh, almost identical; but it is too long ago for me to recall these details other than as I state them here.

A. M. T.

4.

Mrs. C. adds, in a letter of Jan. 29, 1889, *postscript*: —

"I open my letter to tell you that, while in England last summer, I had the opportunity of talking to Mr. Matthews and his wife regarding the railway accident at Gloucester, of which I dreamed the night that it occurred, and about the time of its occurrence. He could not recall the circumstance at first, — that is, the circumstance of his being in the train. His wife, however, remembered it well, and, after talking together in his presence, he began also to remember something about it. His wife remembered that he had taken his seat in the wrong train, — there are and have always been two trains leaving that platform for different destinations at the same time. Becoming aware of his error he stepped out of the train, and had not reached the right one when the accident happened to the one he had left. Mrs. Matthews, of her own accord, recalled these details. After she had done so I related my dream, which she heard for the first time, although I had met her and Mr. Matthews the evening after the dream. But at that time I should have thought it 'silly' to tell the dream."

[60] 1.

(*From Prof. E. W. C., June, 1886.*)

In August, 1876, with a party of young men from Montreal, I went off on a camping excursion up the Ottawa river. All were, of course, in good health, and we expected to be away for a fortnight. On the second Thursday, however, after our departure, one of the party having cut his knee severely with the axe, and the wound not healing well, we set out to return. I should add that another of the party had been ill from the outset, and had caused much trouble. After a day's travel we reached the Ottawa river and took the steamer for Montreal.

On the night of Thursday, the day on which we began our return, Mrs. C., then in Montreal, dreamed that she was in our camp, and saw me with an axe in my hand, and also learned in some way that one of the party had cut his knee, and that another was in some trouble, and that the whole party had determined to come home. She also heard some one say, "We will never go camping with H. G. again. He has been sick all the time." This was actually said by more than one of us.

This dream was told to her sister on awakening. An elder brother, W. T., on coming down to breakfast the same morning, remarked: "I fear they have had some trouble up there at the camp. I have been dreaming about them all night. I dreamed that H. G. was sick, and that they are all coming home."

On our return on Saturday night we were surprised by the absence of all appearance of astonishment at our premature return, until we learned of the dream.

2.

(*Professor C. writes, in May, 1887.*)

As to the camping excursion, you ask me if we determined to return on Thursday night. I have referred to my note-book, and find that we started on our return on Thursday, about noon; so that the decision was probably made the same morning, as it was caused by an accident to one of the party who had cut his knee with the axe. The wound did not heal as I wished, and this induced us to decide to return. In this decision I probably had great part, as I was the oldest member of the party; but of the exact details I have no recollection.

Mrs. C. is confident that the dream occurred on Thursday night, but of this we have no other evidence. It is not at all unlikely that the decision to return had been made the night before, but of this I cannot be certain.

3.

(*Account of Mrs. C., May, 1887.*)

Dream of the Camp on the River Lièvre, August, 1876.

Mr. C., my brothers John, Lewis, and two or three other young men were camping on the river Lièvre for a fortnight in August, 1876. Among them

was a young man named Howard Gardner, who was one of the most enthusiastic when the party left. My brother Wallace was to have been of the party, but was detained by business.

I believe the campers were to return to town on a Monday. On the Thursday night before this Monday, I dreamed that I was at the camp and saw that things were not going well; one of the party was ill. I felt indefinitely that it was Howard Gardner. But I was sure that Howard had in some way given a great deal of trouble, and that I heard Mr. C. and John say decidedly, "We will never go camping with Howard again." Some one had cut his knee with an axe; was going about with a handkerchief round it. I thought it was Mr. C., but was sure that he was troubled and anxious about something. I felt also that they were all coming home at once, instead of pushing on to the lake. I told my sister as we dressed. At breakfast Wallace said, "Girls, they've got trouble up at the camp; I don't know what it is; I think Howard is at the bottom of it. I was there all night, and they are coming home at once."

On Saturday evening, about 6, I was dressed to make a call, when in walked John and Lewis. They were surprised that we took their coming as a matter of course. I asked for Mr. C., and they said he had gone round to see Howard, who had returned ill that morning, leaving Buckingham before their return to the town, though expressly enjoined to do nothing of the kind. He had been sick almost from the first day, and by his rashness had caused every one trouble, and Mr. C. had to take him back to Buckingham to nurse him for a few days.

Mr. C. left Howard there and returned to the camp for a few days, but they all felt too uneasy and anxious for enjoyment, and decided to come back a few days earlier than intended. Howard died within a day or two.

A young man named Goodhue had chopped his knee with an axe, and John showed us a sketch roughly made by one of the party, showing Goodhue with a handkerchief tied round his knee. This sketch is, I believe, still in existence.

KATHERINE B. C.

4.

(Account by Miss A. M. T., May 14, 1887.)

HER (MRS. C.'S) DREAM OF THE CAMPING PARTY.

Professor C. and our brothers, with some young friends, had gone on a camping expedition up the Lièvre river. We thought they must have arrived at their destination, White Fish lake, but my sister told me one morning she had dreamed that the party had been obliged to stop on their road, as one of the friends had cut his knee with a hatchet, and another of the party was sick. She had been to the camp in her dream, and gave a circumstantial account of the boys as they were at the moment of her dream, which I am sorry to say I forget. But the truth of it all was quickly verified; for a few mornings later the party of depressed campers returned, their expedition a complete failure, one of the party sick, the other badly cut with the hatchet.

A. M. T.

[61] 1.

(*From Julius Jacob.*)

NEW YORK, March 29, 1888.

DEAR SIR, — In the "World" of March 4, I read an article in regard of the American Society for Psychical Research. As I take great interest in the work you and the other members of the Society are performing, by trying to unvail the mystery of the human soul, since an occurrence at the time of my father's death happened to me, therefore I give this fact to you.

About fourteen years ago, one Sunday morning about 5 o'clock I woke up by a voice saying to me, "Julius, your father died." It was no dream. My father living that time in Milwaukee, myself here in New York. Certainly any one feels downhearted on account of such a remark. During the forenoon I received a telegraphic despatch announcing the death of my father. I knew it sooner than my step-mother, as she wrote to me that my father laid dead alongside of her when she woke about 7 o'clock. I must have been notified the very moment he died.

Thousands of such mysteries may happen without being known; how it is, it is very difficult to conceive. We know it is so, but how and why it is so we do not know. It must be a transmission of the soul, or whatever you may call it. To come a little nearer, we must try to convince ourselves that there is no space and no time in existence in the spiritual world. To conceive such ideas is very hard, even to those who have proof of it, like myself. Many proofs we have by a very reliable and remarkable man, — I refer to the Honorable Swedenborg, — by stating to the captain of a vessel, while on board, the large fire of Stockholm in progress the very same time, while being far from it. When they arrived in Stockholm the captain found everything to be true what Swedenborg told him. The very house where the fire stopped even was told.

As you do not know me, still you must admit my statement to be true, for no one would dare, or would have any reason, to make a false remark about his father's death.

Yours very respectfully,

JULIUS JACOB.

2.

NEW YORK, May 11, 1888.

DEAR SIR. — . . . I hereby send to you the answer in connection with the occurrence which happened to me at the time of my father's death.

I have the telegraphic despatch of Milwaukee, which announced the death of my father, in my possession.

I did not speak to any person before I received the despatch what happened to me the same morning, or the very time my father died. . . .

Very respectfully yours,

JULIUS JACOB.

[62] (*From Mrs. L. P. E.*)

1.

MAY 12, 1888.

In 1877, while spending a few months in Hartford, I was invited on a day in May to make a little trip from New Haven to Rockaway, — a trip requiring only the day. After reaching New Haven, where boat was to be taken, an indescribable nervous feeling came to me, making a lump in my throat, and otherwise upsetting me. When the gentleman with me escorted me to the deck of the steamer, I was so apprehensive of a *something* that I felt sure was to happen, I made up my mind to get off at the only landing-place after leaving New Haven, which was at the west end of New Haven, a pier where persons from that part of the city could embark. The specimen of the excursionists about us on the start prepared me for the downright rough element we saw awaiting the boat at the pier above named. I used all persuasive power possessed by me, and induced my companion to land, much against his will. We then spent a few hours at Savin Rock, and reached Hartford in time for tea.

The sequel is, that next day the boat, which was to have reached New Haven on the eve of the excursion day, did not get into port until forty-eight hours behind time; all hands were drunk, some had been stabbed, and a terrific storm on the Sound had seriously damaged the boat.

Since then I never neglect a nervousness born of a warning of danger ahead.

MARY M. E.

2.

JUNE 4, 1888.

RICHARD HODGSON, ESQ., *Boston, Mass.*: —

DEAR SIR, — Your favor of May 16 came duly to hand. In reply to your query as to the possibility of securing statement of my companion of the trip I outlined, I do not know where he is now, having heard nothing of or from him since 1879.

I do not know if I have had so clearly any other intimation or warning as the one referred to, but I do have peculiar "waking dreams" which would, if deftly handled, outdo even such fantastic creations as "Hyde and Jekyll." But I do not think any one could possibly doubt my experience of 1877 was a certain sort of warning. . . .

MARY M. E.

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[63] 1.

DREAMS OF MRS. H.

BROOKLINE, Jan. 23, 1888.

MR. HODGSON: —

DEAR SIR, — I enclose to you the account of four dreams which seemed to me equally pertinent, so I asked Mrs. H. to write them all. I see that

they are dated November 26; but, as a matter of fact, they came into my possession only two days ago.

It seems an interesting fact that Mrs. H.'s mother had a dream about her deceased husband which influenced her for the rest of her life. She was a Swedenborgian; this may have had something to do with the *effect* produced by that dream.

Yours truly,

ANNIE R. W.

2.

FOUR REMARKABLE DREAMS.

I.

At the request of a friend, I give the following statement in regard to four remarkable dreams, occurring at different periods of my life. My husband has aided me in preparing the statement. He well remembers my relation of the dreams when they occurred. The first occurred at the time of the departure to the other world of my husband's mother, in the year 1855. She went from Baltimore, from our house in the suburbs where she had been living with us for a few months previously, to the neighborhood of Donaldsonville, La., where her eldest son resided with his family. It was in the month of October, I think. The yellow-fever still lingered in some places, and in a few days after her arrival at her son's house she was stricken down with the fever, and passed away. My husband's brother, George, then resided with us. The news of my mother-in-law's death came by telegraph to my husband's office in Baltimore, and he brought the news out from the city. We had had no news of her sickness, nor any letter from her. This was about 1 o'clock in the day.

On the night preceding the reception of the telegram, I dreamed that George and I were sitting together, waiting for the return of my husband, in the evening, when he usually came home. I tried to light the lamp, and it went out. I then crossed the room to a window to watch for my husband's return, and I saw some one coming towards the house who I thought was he, and I turned to George to tell him he was coming, and in turning I saw a bright light in the doorway. I did not look at the light, but at George, who was staring at it, and I said, "O George! you see something?" That was all of the dream. I may add, however, that I felt afraid to look at the door.

The next morning, when all three of us sat by the fire, I told my dream. George then said, "Yes, it is mother. I did see something," and immediately he left the room. When my husband entered the door, before he had said anything about his having a telegram, George approached him and said, "Mother is dead."

II.

The second dream occurred at Wilmington, Del., in 1871 or 1872. *My* mother lived with us at the time. She had gone up to Philadelphia, and I was expecting her to return in the evening. She did not come, and I was

anxious about her. She stopped in Chester, at her son's home, half-way between Philadelphia and Wilmington.

I dreamed that I saw my mother. She appeared to be suffering some pain, and her face presented a singular appearance, which I could not describe when telling my dream the next morning. My sister, living in Philadelphia, who was with her, came down to Wilmington to explain to us the cause of my mother's delay. She had fallen off a step into a yard and dislocated her arm at the shoulder, which had been replaced by physicians with some difficulty. She was seventy years old. In falling upon her face, it became smeared with soft mud.

The dream was very distinct, and I had no doubt it was my mother.

III.

The third dream occurred in 1875, while we resided on Price's Hill, Cincinnati, O.

I dreamed that I entered a room which was most beautifully and profusely decorated with flowers. The flowers greatly attracted my attention, they were so beautiful. Afterwards, I looked through an opening and saw a number of horses and carriages.

In telling the dream to my husband, I said, "We must be going to a funeral." Some weeks afterwards, my husband, who is a clergyman, was invited to officiate at a wedding. The parties were entire strangers to us. We had never seen them or the home of the bride; but their friends, who took their meals at the same boarding-house with us, and whom we saw every day, conveyed the request to my husband. We rode with our friends in a carriage to the house of the bride's father, a florist, who resided some three miles distant from our residence, in the country. The room where the ceremony was performed was very elaborately adorned with flowers, and, as we entered it, I said to my husband, "I have seen all this before" On going out, after the ceremony, to walk in the grounds around the house, I looked to the rear of it and I saw a great number of carriages gathered, and I repeated the remark I had made about the flowers.

The dream was very vivid, and it seemed to be perfectly fulfilled; that is, the scenes were exactly reproduced.

IV.

The fourth dream occurred in Brookline, Mass., in January, 1883.

I dreamed I saw some one lying on a bed, writhing in great agony. The person seemed to be my sister or my mother. And then a young man appeared to me, who seemed very anxious to tell me something. His face was familiar, but I was not sure who it was. Then came a telegram, when, it seemed, others were present. It was addressed to my husband, but I only knew it was a call to go somewhere, and some one said, "Why do they want to take him away from us? he has been a very good pastor to us."

In the morning, while I was relating the dream to my husband, the servant came into the room and handed him a telegram. He read it,

and said to me, "It is your sister." It was written by my sister's son, living in Philadelphia, and was worded thus: —

"Mother died last night at 9 o'clock. Can you come on and attend the funeral?"

My sister had been taken suddenly ill, after rising and dressing in the morning as usual. The physicians could afford her no relief. She suffered intense pain all day, and passed away as stated. We had no previous intimation of her being ill, or that she was threatened with this attack. The news of her death, therefore, coming as it did, was a great surprise and shock.

R. B. H.

Nov. 26, 1887.

3.

Rev. W. H. H.'s replies to the following questions will be found below: —

Can a brief statement signed by Mr. H. be obtained, to the effect that he heard the dreams related before their confirmation was known? This is very important as regards the evidential value of the cases. It would be of advantage that a specific statement should be made in connection with each case, so that each case may be complete separately.

Has Mrs. H. had dreams which impressed her strongly, yet which were not verified?

Is there any peculiarity distinguishing her verified dreams from others?

Dream I., 1855.

1. Is Mr. George H. still alive, and if so, can any account be obtained from him as to the relation of the dream, etc.?

2. Did he have a dream himself, and is anything now recollected of his experience during the night of Mrs. H.'s dream?

3. Can Mr. H. write a brief statement concerning his recollections of the morning when the telegram arrived?

Dream II.

1. Can statements be obtained from any persons who heard the dream narrated in the morning?

2. Can a statement be obtained from Mrs. H.'s sister concerning both the incident and any remembrance which she may have of Mrs. H.'s dream?

3. Was there distinct reason to think that some accident had befallen Mrs. H.'s mother when she did not return to Philadelphia?

Dream III.

1. At the time Mrs. H. had her dream had it already been decided that Mr. H. should be requested to officiate at the wedding? Probably this could scarcely be ascertained now. The object of this question is to discover whether the floral scene in Mrs. H.'s dream might have been suggested telepathically, in consequence of some conversation, say, between

the bride and her friends, the mental pictures of these persons concerning the projected wedding being impressed upon the mind of the distant Mrs. H.

2. It is particularly important in this case that Mr. H. should state his recollections of the relation of the dream.

DREAM IV.

1. Can we obtain the name and address of Mrs. H.'s sister? This is merely so that the fact of the death, etc., may be independently ascertained.

2. Was the dream told to any one besides Mr. H.?

We shall be glad to have statements from Mr. H., and also from any other person who may have heard it before the telegram arrived.

3. What was the nature of the sister's illness?

4.

BROOKLINE, MASS., Feb. 13, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — Miss Annie R. W. has handed Mrs. H. and myself your letter to her of 26th ult., with accompanying list of questions, requesting us to communicate with you in relation to the subject-matter referred to in your letter. I shall endeavor to answer your interrogatories now, after consulting with Mrs. H., as far as we are able to do so.

You ask in your letter, "Does the sensitiveness to phenomena of this kind run in Mrs. H.'s family?" This may be answered somewhat affirmatively, as we know that her mother had two dreams, at different periods of her life, very similar to the ones now reported in their general character. As to Mrs. H.'s father and her brothers and sisters, we cannot speak with the same certainty.

The above statement answers the inquiry in regard to a dream of Mrs. H.'s mother. Mrs. H. was born more than thirty years before her father died.

FOUR REMARKABLE DREAMS.

I can say, with some degree of certainty, that Mrs. H. related her dreams to me before their fulfilment. In regard to the last one of the four, which is fresher in my memory, I can say this *with positive certainty*. That dream impressed me much more strongly than the others, I think.

As to the circumstances of the first dream, they are very vivid in my memory, although thirty-two years have elapsed.

Mrs. H. has had dreams which were not verified, certainly one which she now remembers, which occurred fourteen years ago.

We cannot state definitely whether Mrs. H.'s verified dreams have had a peculiarity distinguishing them from others. Three of the dreams reported have had relation to members of her family or connections. The other in Cincinnati had no such relation, as the wedding parties and the scene were unknown before

Dream I.

1. Mr. George H. died in 1886.

2. He did not relate a dream in connection with the above, nor did he say he had had a dream; but merely said, "Yes, I did see something," and then left the room.

3. I recollect somewhat distinctly the occurrences of the morning, when the telegram arrived in Baltimore at my office, which was some two miles from my house in the suburbs. I took it out at once to my home, and met my brother, who came out of the parlor and said at once, "Mother is dead." He avoided conversation because he was much distressed, as well as myself. This was about noon of the day succeeding the dream.

Dream II.

1. Mrs. H. says that she cannot say certainly whether any one but her sister, Miss R., remembers this dream. The other sister, who came from Chester to Wilmington to announce the accident, was Mrs. S., of whose death dream No. 4 speaks.

2. This query is answered by the above. Mrs. H.'s sister is living in the other world, and her testimony cannot be obtained by natural means.

3. There was no reason to think that any accident had befallen Mrs. H.'s mother.

Dream III.

1. We do not know whether the bride and groom had decided to ask Mr. H. to officiate before Mrs. H. had her dream. Our impression is to the contrary, as we think it was not ascertained positively until a few days before the wedding that the other minister would not officiate. So far as we know, the bride and groom are still living.

2. My impression is so fixed that Mrs. H. related her dream to me before it occurred, that I feel safe in saying so. At the time she related it I did not take much notice of it. Some weeks, I think, elapsed before the dream [was fulfilled]. I was not in the habit of recording such things, but I well remember that when she recognized the fulfilment of her dream and reminded me of it that I recalled the fact. I have related the dream several times to intimate friends, and there can be no doubt of the facts. My wife's recollection is perfectly clear and distinct as to all these circumstances, and there is no difference in our memory.

Dream IV.

1. Answered above in part: in full, Mrs. H.'s sister's name was Mary S., the wife of James W. S., of Philadelphia, who died before her; maiden name, R. Her death and the circumstances can be ascertained.

2. Mrs. H. thinks she told it to her sister, Miss R., now living in Norfolk, Mass., but this is doubtful. The telegram was received soon after breakfast, the servant handing it to me in my chamber, where Mrs. H. was with me; and at the time she was narrating the dream to me more fully and

circumstantially. The circumstances are perfectly clear and distinct in my mind.

Mrs. S.'s illness was very sudden, lasting only one day. She was taken in the morning and died at night. She had some disease of the stomach and bowels, symptoms of which had been manifested somewhat, but not dangerously, previously, and she seemed in her usual health the day before. She suffered great agony, and no relief could be obtained.

W. H. H.

BROOKLINE, MASS., Feb. 13, 1888.

5.

DREAM IV.

(*Statement of Miss R., sister of Mrs. H.*)

NORFOLK, MASS., Feb. 27, 1888.

MR. HODGSON: —

DEAR SIR, — I remember that Mrs. H. had a remarkable dream at the time of Mrs. S.'s death, but I have forgotten the particulars of it. . . .

Yours very truly,

C. L. R.

6.

DREAM IV.

(*Statement of Miss M. S. P.*)

As far as I recollect, Mrs. Mary S. was lying on her back for some time in great agony before she died; I was with her at the time; she suffered intensely. She had symptoms of some trouble for two or three years previously, but the exact nature of the malady was unknown until she died. She was seized suddenly with extreme pain twenty-four hours before her death. No special apprehensions had been previously entertained, and she had dined with the family as usual. Her son, Mr. Frank S., and her medical attendant, Dr. Farrington, were in the sick-room at intervals during the twenty-four hours. I believe that it was Mr. Frank S. who sent the telegram to Mrs. H. The son and Dr. Farrington are now dead.

M. S. P.

SOMERVILLE, April 20, 1888.

7.

BROOKLINE, March 20, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — I called at your residence yesterday, intending to hand you the enclosed letter [document 8] which I received last week. You will find that it corroborates the statements already given about the Cincinnati dream. Please return it to me.

Have you written to Miss P. of Philadelphia as proposed, and have you received a reply from her?

Perhaps I should explain that the gentleman spoken of as Uncle Charles in the Cincinnati letter is the friend mentioned in the narrative of the

dream as being with us at table daily, and the one who communicated the invitation.

Yours truly,

W. H. H.

8.

DREAM III.

(From Mrs. C.)

DELHI, March 10, 1888.

REV. W. H. H.: —

DEAR SIR, — Yours of February 18 was duly received, and would have been answered sooner, but I waited for an opportunity to talk with my mother on the subject of my wedding, as I thought she would remember whether anything had been said in the presence of Aunt Mary or Uncle Charles about the floral decorations of the house; and I find from her that they could not have known anything of the arrangements, as we did not know ourselves just what they would be until completed, for that part of the arrangements was left entirely to my brother-in-law, Mr. G. About two weeks before our marriage Mr. C. went to Price Hill and asked Uncle Charles to introduce him to Mr. Goddard; and ascertained that Mr. Goddard was away from the city, so it was left for a few days, until he learned to a certainty that Mr. G. [Goddard] would not be back in time; then the invitation was sent to yourself and wife.

Hoping these few lines will satisfactorily answer the questions you asked in your letter, I remain,

Yours respectfully,

ELIZABETH M. C.

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[64] 1.

(From E. M. ——.)

MARCH 4, 1888.

DR. HODGSON: —

DEAR SIR, — An article in to-day's "World" (New York) speaking of you and your peculiar work induces me to offer unsolicited a singular experience which I had some years ago.

I will say in the beginning that I am in no sense of the word a spiritualist, and that I am prompted to send the account simply to add to the number of incidents which you already have in your possession. I sign my own name, but expect you to withhold it from the public, since my home is just out of Boston.

The incident occurred while I was at a boarding-school, about eighteen miles from my home. All the members of the family were well, as I supposed, and I had no apprehensions to the contrary when I retired at night. But in a dream I saw my father laid out in his coffin; I saw my mother very distinctly, quite overcome with grief; and frightened knots of children crying, wholly unnoticed, in the corners. There were a great many

strangers about the house, and a sale seemed to be going on. I awoke terribly agitated, and should have gone home if there had been direct railroad communication between me and my home. I tried to throw off the feeling of depression all the morning; but at noon a messenger arrived in a private conveyance, and I was not surprised to learn that my father had died. As far as I could learn he died at the time the vision occurred to me. The house, when I arrived, presented the very appearance it had in my dream, except the selling, and that came a few months later.

I have never been able to think of any circumstance that would shape the dream, and I certainly had no knowledge of my father's illness, which was very sudden, and so severe that I could not be reached before he died.

At another time, while at the same school, the door-bell rang and I was seized with a fit of trembling, feeling sure that some ill news awaited me; and it was for me, for a sister had died very suddenly.

Yours respectfully,

E. M. ——.

2.

DREAM OF FATHER'S DEATH.

1. Date of experience? Early March, 1872.
2. Place of experience? Framingham, Mass.
3. Place of father's death? Stow, Mass.
4. Did you mention your dream to any other person before hearing the sad news? If so, we should like very much to receive some account of any persons to whom you mentioned it.
5. Did you mention your dream to any other person after hearing the news? Any statements by persons to whom you mentioned the dream at about the time will add, as you doubtless appreciate, to the evidential value of your experience.

Answer to 4 and 5. I mentioned my dream to no one until after my father was buried, and then only told it to my mother at the time, but have since mentioned the circumstances to several persons. I can, however, recall to mind no person whose evidence I could get to add to my own statements. At the time the dream occurred I thought it too weird and eerie to tell, except in great confidence. The memory of it has returned to me over and over again, as I have grown older and thought more seriously about the inexplicable experience of our life.

I was nineteen years at the time, so the dream can hardly be pronounced a childish fancy. I can think of no further information that will interest you.

E. M. ——.

[65] (*From Miss H.* ——.)

1.

BOSTON, Nov. 5, 1887.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — Seeing a notice from the Society for Psychical Research in the "Transcript" of this date, I am urged to send you, for what it may be worth, an experience of my own.

A dear friend, who is like my sister, is married and living in London, Canada. I was expecting to hear news from her of the birth of her child any time subsequent to August 20, but had not given her any especial thought before that time in the way of anxiety.

On the night of Aug. 17, 1887, I had a most vivid dream of her as standing by my bed, waking me, and showing me her child, saying that it weighed nine pounds and was a girl. The dream so impressed me that it was fully a day before I could shake off the impression, and on the afternoon of August 19, I received a card telling me of the birth of the little girl on the 17th, and that my friend had earnestly desired that she might be able to show it to me.

I may mention that this is the only occasion upon which I have dreamed of her since she left Boston.

The Rev. Dr. Courtney of St. Paul's Church will vouch for my veracity, I think, and the occurrence has seemed peculiar enough to warrant my relating it.

I must ask that my name be not used. Believe me,

Very truly,

(Signed) ——.

2.

NOVEMBER 25, 1887.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — Your letter of November 8 was received, and I have been waiting, hoping to give you some information which would be more satisfactory. I wrote to my friend in Canada, and in a private letter to me, she answers: —

"Baby was born Wednesday, August 17, at 6.15 P.M. May have expressed a wish that you and —— might see her; in fact, it is more than likely."

I am quite aware how perfectly unsatisfactory this is, and I have hunted all through my letters to find the one in which the mother of my friend told me she had expressed a desire to show me the baby, but of course that particular one is missing.

The child was a girl and weighed nine pounds, and my friend left Boston in September, 1886.

The only other question in your letter must also remain unanswered evidentially. My mother is rather nervous, and I did not mention my own dream for fear of arousing her fears. She was the only person to whom I should have been likely to speak. Regretting that I cannot be more definite, believe me,

Very sincerely yours,

(Signed) ——.

[66] (*From W. B. C.*)

BOSTON, May 22, 1888.

About the year 1873 or 1874, when I was at my place of business one afternoon, I became suddenly impressed with the feeling that an old shipmate of mine whom I had not seen for several years, and of whom I had not heard during this interval, was in the neighborhood. This feeling became so strong that I went out upon the sidewalk and looked up and down to see if he was not actually there. No person was visible.

On the following morning, when I arrived at my place of business, I found the very man waiting to see me. On inquiring as to what he was doing the previous afternoon, I learnt from him that, as nearly as I could ascertain, he was coming up the harbor in steamship (name unknown), and was asking a passenger about myself.

(Signed) W. B. C.

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[67] 1.

(*From Miss W.*)

JAMAICA PLAIN, Jan. 5, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — You ask me for an account of the presentiment my father had concerning an accident happening to his wife, my step-mother. I am very glad to tell you anything which may prove of interest.

My father is not living now; he died in July, 1884, seven months after this event which I am about to tell you. He was ill at the time, and for two weeks I had had nearly the entire care of him, day and night. I slept in the same room, and one night was awakened by a cry from him — no unusual thing, for he was often delirious, and talked wildly in his sleep. I heard him say, "Is she killed? Stop him!" and when I ran to his bedside, I found him trembling violently, bathed in a cold sweat, and yet seemingly awake. I tried to soothe him, but he clung to my arm repeating his cries. I said, "What is it, father? no one is killed; you are here with me." — "Oh, no! Rebecca, my wife, is hurt. Do you not see the horse running? The buggy is all broken, and Rebecca is lying there. Go to her and see if she is killed." I tried in vain to quiet him; he moaned and cried, repeating, "The horse is running and my wife is hurt." It must have been a half-hour before I could awaken him sufficiently to know he was at home and mother upstairs, safe. Then he would say, "It was so real, so real!" In the morning I asked him if he remembered his dream. He said he did, and that it seemed as though he was awake all the time. Then he said again, "I thought 'mother' was in South Middleboro' (the adjoining town), and that the horse ran away and she was thrown; but I could not see if she was alive; she lay on her face, but the horse ran away down the road, and the buggy was broken all to pieces."

I told my step-mother that father dreamed she had been hurt by the

horse running, and we both thought no more about it then. But about 10 o'clock my step-mother prepared to drive to South Middleboro', saying she would be back by 12. Father seemed rather nervous after she had gone, and when 12 o'clock came and mother had not arrived, he seemed very much troubled and begged me to watch at the window for her. An hour later a messenger appeared with the news that the horse had become frightened and had run, throwing Mrs. W. from the carriage, and that she had been taken up unconscious, and was unable to be brought home then. Inquiry showed that all had happened as my father dreamed. The next day, when she was brought home most severely cut and bruised, she told us that during all her drive she had thought of father's dream, and felt a sense of danger. That was my father's last illness, for he never recovered even enough to leave his room between January and the following July.

My step-mother is still living. Although I was barely sixteen at the time, I remember that night and the dream as though it were yesterday.

Trusting you will find this satisfactory, I am,

Most sincerely yours,

E. T. W.

2.

JAMAICA PLAIN, Jan. 18, 1888.

MR. HODGSON: —

DEAR SIR, — Pardon my delay in replying to your last letter, but I was obliged to write to Mrs. W., whose home is in Rochester, Mass., for her account of my father's dream. I enclose it in this letter.

I do not know of any other experience my father had, than the one I have told you, but I do know that his mother, my grandmother, is said to have had one or two very remarkable ones; what they were I cannot tell you, as my knowledge is limited. My brother also, in his last illness, had a presentiment quite interesting. Should you care to hear it, I will ask my sister, who was with him at the time, for the facts.

Very sincerely,

E. T. W.

3.

(*Statement by Mrs. W——.*)

Jan. 3, 1884, I left my home in North Rochester, for the South Middleboro' post-office. Previous to my leaving home, my daughter, E., told me of her father's dream; he was sick and confined to his room at the time. He cried out, as if very much frightened, there was a horse running away; then he says, "It is my horse; she has cleared herself from the buggy and running, stripping off her harness, etc." Then he looked around and says, "Where is mother?" She assured him I was lying down. I think there must have been a perfect panorama of the whole scene.

I did not drive over the road I usually travelled, on account of the ice. The road I took was smoother, and you could see a long distance, there being no obstruction. I naturally thought of the dream while driving over the distance of three miles; but when I had crossed the railroad I thought the danger was all over and ceased to feel any anxiety about it.

After being picked up and cared for, the doctor rode over to tell my husband of the accident. He told me afterwards he was not surprised, for he knew when he came in what his business was. I think it must have appeared very real to him, everything was so vivid.

R. B. W.

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[68]

(*From S. C. D.*)

In the fall of 1865, I was in the employ of an elderly gentleman who was doing a small manufacturing business in Boston. The customers of this gentleman were large jobbers doing business in New York City and in Western cities. It was the custom for the buyers of these houses to come on in December, January, and February, to make their purchases for spring trade. Such was the regularity with which these buyers came, that it could be told, almost with certainty, what month and what day in the month each one would be at our store. For instance, there was one buyer from Philadelphia who always came about the 10th of December, another from New York, about the 20th, and so on. Amongst others who came was a Mr. B., of the firm of W., B., & F., New [York] City, whose regular time was from the 3d of January to the 10th. I had entered Mr. E.'s employ the year before, and seen most of the customers once, among them Mr. B. The thing I most remembered about him was that he was a very sharp and uncompromising buyer. Mr. E. always went to New York and Philadelphia in the latter part of November or the first few days in December to invite the trade to visit him and make their purchases. On his return from this trip in 1865, he reported that Mr. B. had concluded not to come to Boston that year, but to buy his goods in New York. Early in December, I think not later than the 7th, I had the following dream: I thought that I was seated at the high desk in our office busily writing. Suddenly, from the office door, which was behind me, I heard a voice say: —

"Good-morning, E——."

I dreamed that I turned around, and there, in the doorway, stood Mr. B., of W., B., & F., having on a very glossy black-silk hat and a pair of trousers, the cloth of which was of a pattern I had never before seen. This pattern, I thought, consisted of a dark background with a large, peculiar, greenish check. I remember dreaming that he bought a very large bill of goods. I also remember the feeling of pleasure that I had while the dream was going on, and the sense of disappointment when I awoke to find that it was only a dream.

The morning after this dream I went to the office as usual. About 10 o'clock, as I was engaged in writing, and Mr. E. was reading his letters, I heard some one behind me say: —

"Good-morning, E."

I looked behind me, and saw Mr. B. standing in the doorway just as I had seen him in my dream. He had on a glossy black hat, exactly as I had seen him have on in my dream. I instantly looked at his trousers, and was surprised to see that they resembled those of my dream in every particular, the sin-

gular pattern of the cloth being very noticeable. Mr. B. bought a very large bill of goods, — much larger than he had bought the previous year.

It seems that it was only the day before that he decided to buy in Boston, and came earlier in the season than usual, on account of a business trip to the West that he was intending to take.

(Signed) S. C. D.

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[69]

(*From Judge Travis.*)

Have you, at any time during your life, but not within the past twelve years, when in good health, and completely awake, had a distinct impression of seeing or being touched by a human being, or of hearing a voice or sound which suggested a human presence when no one was there?

In answer to the above question, I make the following statement of facts: —

I was born in 1830, and was the youngest member of my father's family. A very strong attachment existed between my mother and myself. I lived at home with my father and mother, etc., until 1854, at St. John, N.B., when I went to Restigouche, where I continued to reside for a number of years, engaged in commercial pursuits. In 1856 I was engaged on the Quebec side of the Restigouche river, erecting a milling establishment for my business purposes. My father, mother, etc., then still continued living in St. John, N.B., which is distant between four and five hundred miles from Restigouche. At that time there was no railway or telegraphic communication between those places, the mails between them passing by stage three times a week; and thus, any letters mailed on a day when the mail stage did not leave either of those places, would go in the same mail with other letters mailed on the day of the stage leaving, if mailed prior to the hour for the closing of the mail on that day.

In the middle of the forenoon of a day in the summer of 1856 I was alone in a room in one of my houses connected with my business establishment, when I became mentally conscious of the presence of my father being with me. At that time both my father and mother were in perfect health, as they usually were, and, outside of the communication made to me by my father, I had no more reason to suppose that my mother was about to die than that my father or any other person was. My father communicated to me the fact of my mother's death. I had a perfect consciousness of his presence with me, and have still a perfectly vivid recollection of his using the words to me with reference to the communication by him to me of my mother's death, literally, "*We're all alone now, Jerry,*" using to me this abbreviation of my Christian name, as he had been in the habit of doing to me personally. From my earliest childhood down to that time there had never been a death in our immediate family, and the practical idea of death had never particularly affected me. I felt fairly stunned by the communication made to me by my father, which so affected me as almost to unfit me for

business for the next two weeks; and I remember well, even yet, that during those two weeks I had a feeling of misery such as no event that has ever since transpired has produced in me. The effect of the communication, in its startling reality, was most depressing to me.

At about the close of the two weeks named, I was in the post-office at Campbellton, Restigouche, N.B., where my mail-matter was then received. The post-office there was kept by James S Morse, Esq., barrister-at-law, and I was alone with him in the inner of his two offices, where he was opening the mail which had arrived from St. John. He handed me two letters, both of which were addressed to me in the writing of one of my brothers, from whom I not infrequently received letters. The letters were contained in common buff envelopes, which were then very generally used, and there was nothing on the envelopes, such as a black seal, etc., to indicate their contents. Neither had I any knowledge or information whatever either as to the illness or death of my mother, except the communication which had been mentally conveyed to me by my father. *On receiving the letters from the postmaster*, I said to him intuitively, spontaneously, "*Morse, my mother's dead!*" I *then* opened the letters, and found that they were written to me by my brother on consecutive days. The first, mailed the day before the mail left, contained the intelligence of my mother having been suddenly attacked with severe illness, and the second, written a day later, contained the news of her death.

Some four or five months later than this I drove through with my business partner, the late Hon. John McMillan, to Fredricton, N.B., on the St. John river, where we left our conveyance, and proceeded by steamer to the residence of my father, reaching there about 1 A.M. on a Sunday, and going to my father's residence. In the morning, about 8 o'clock, I met my father in the dining-room, who came forward to me, burst into tears, and said to me in the very words, neither less nor more, that I heard him use to me months before in Restigouche, "*We're all done now, Jerry!*"

I mentioned all these facts at the time to both McMillan and Morse. The former is dead. The latter, if living, must now be a very old man, and would, probably, after the lapse of so many years, scarcely remember the circumstance, as remarkable as it seems to me to have been. The last I heard of him he was then in Dalhousie, Restigouche, N.B., to which place I addressed a letter to him a couple of weeks since, in order to ascertain if he remembered these facts, but I have not heard from him in reply. He may have left that place, or he may be dead. I was married in December, 1856, and stated these facts to my wife, who is here with me; and I have frequently referred to them to others as the most remarkable and, on mere natural grounds, unexplainable incident within my knowledge. At the time of the occurrence I was in perfect health, and there was nothing at the time in my reading or train of thought to induce the startling impression that was conveyed to me by the apparent presence of my father, and by the communication he made to me.

Between the ages of sixteen and twenty-three I was largely engaged in literary pursuits, and was in the habit of writing stories, essays, poetry, etc., for different periodicals. Frequently, I would find myself in a train of

thought, when I would seem to be in some other place, and in conversation with some one or more persons. There was nothing special to induce such thoughts as would then spring up; the whole seemed to be a kind of "day-dreaming." During that period, at times almost innumerable, I have suddenly received a shock at finding the whole scene reënacted, with the minutest circumstances of persons and place, exactly as had appeared to me weeks, months, or even years before. This occurred so frequently that I scarcely engaged in a conversation without being prepared to expect that it would result in the repetition of one of the scenes which had passed through my mind previously; and it often happened, so thoroughly had the previous enactment of the scene been impressed on my mind, that when it was actually taking place I knew, verbally, exactly what was to follow, so as to be able to anticipate the very words which would be used, following those which had been used. This often occurred with reference to matters of the most trifling character; but the difficulty of furnishing any "rational" explanation of them is not the less on that account.

The following are a couple of such incidents.

From 1846 to 1853 I was engaged, in connection with the timber business in St. John, with the late Mr. M. Fisher. Edwin Fisher (late mayor of Portland, St. John) was in the office with me, and one Ezekiel Jordan was a surveyor employed in Mr. Fisher's timber ponds. One day the three of us were in conversation about the Church of Rome, when, in the midst of the conversation, I remembered that the whole scene had passed through my mind before, and that at a time when *I did not even know Ezekiel Jordan, and had never then been in the office* where the conversation was taking place. The whole thing re-presented itself to me as it had passed through my mind, with all the minutiæ of *persons and place*, at a previous period; and before Mr. Jordan uttered the words which he did, I knew he was going to say, "I have a different opinion of the mystic Babylon spoken of in Revelations from that which is generally held. *I believe that it does not refer to the Church of Rome, but to money.*" I might add that I had never before met with the statement of such a view except as it had previously passed through my mind in one of those scenes to which I have referred.

On another occasion I was going home at mid-day from Mr. Fisher's office, when I overtook a cart-load of furniture, near which was a person whom I knew well, — a Mr. Wm. A. Reynolds. As I came up to him, I said, "*Hello, William! who is moving?*" Immediately on uttering these words — in fact, in the very act of uttering them — I knew that they, with the scene before me, had passed through my mind previously, and without anything else to suggest the remainder of the conversation to me, I knew and could have repeated, by anticipation, the exact language which followed. The reply was, "I am." Almost mesmerically the next question came from me, "*Where are you moving to?*" which was followed by the somewhat singular answer, which I knew was coming, "*Into John's house. At least, they call it John's house, but I believe it belongs to your father.*" The property was one that had been purchased by my father in his own name, but which he intended to present, and subsequently did present, to my brother, Mr. John B. Travis.

Both of these incidents, although they took place about forty years ago, are as fresh in my mind as though they were but of yesterday, — probably from their special and peculiar circumstances. Legions of other cases, which during those years were constantly occurring, have passed from my mind, having reference to the most trivial circumstances that were transpiring.

I remember that it was about that time that I read[1] the work by the eminent English psychologist, Dr. Moore, "Body and Soul," where numerous as singular, and other much more remarkable, circumstances, well authenticated, are detailed; to all of which I was prepared to give my fullest assent, from the host of analogous facts of which I had had, myself, the clearest knowledge.

Have you, at any time during your life, but not within the past twelve years, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least an hour after you arose in the morning?

I have had many dreams during my life. In one of them I remember of repeating stanzas by the score of original verse, when I was quite young, and at a time when I had never written two lines of poetry in my life, and was utterly unable to do so, having frequently, and in vain, made the trial. Years after I wrote poems in great number, and some of them of considerable length; numbers of them having been published in English and Colonial periodicals.

With the exception of that dream, there are scarcely any of which I have now the slightest recollection. One, however, has stood out prominently in my recollection for over fifty years. It was utterly unlike any dream I have ever had. It was more like those strange visions which seem so real and life-like to persons suffering under the delirium often caused by small-pox in its more malignant form.

When I was somewhere about eight or ten years old, I was suffering from an attack of fever of some description. When lying in bed there appeared to me, with a distinctness as clear as though they were actually before me, two lights, each of which was held in a hand. There were two arms, hands, and candles, each arm, hand, and candle being antagonistic to the other, — one of them representing me or my champion, and the other my enemy, — the two opposing lights, as held, representing to me the embodiment of myself and the enemy, or opposition of my particular self, for time and for eternity. A fierce contest took place between these two (each endeavoring to destroy, by burning up, the other), which I watched with my whole soul absorbed in what was passing before me. The struggle to me was fearfully real and important. For a time my enemy seemed to be likely to conquer, by my opposing light consuming that of my defender or representative; but at length the result proved otherwise, and the light representing me destroyed, by completely consuming or burning up, the

[1] This was done at the suggestion of my office mate, Mr. E. Fisher, on my naming to him many of the incidents to which I have referred. I also read in the same connection "Body and Mind" and "Man and his Motives," by the same author, Dr. Moore.

other, so that nothing was left but my light and the hand and arm by which it was sustained. The contest referred to took place in the air before me, where the bitterest battle was waged. On awaking, or as it more really appeared to me at the close of the vision, I awoke and said to my mother, who was sitting near, watching by me, "*Ma, how beautiful that light seems!*" There was simply a candle burning on a table before me; but it seemed to have a beauty transcending anything I had ever before seen; the light to my eyes following so closely the vision or dream in which my welfare for time and eternity seemed to be bound up in the conflict. The dream or vision was, no doubt, caused by my fevered state, affected or influenced by the light burning before me; but throughout my whole life, the vision of my future, which seemed then to be so plainly portrayed to me, has been most strikingly realized, just as it was then impressed on my mind. During the whole of my life my course has been marked with most violent struggles. I have scarcely ever attempted anything in my life, but what I have had to contend, at every successive stage, with the most violent opposition, which I have generally looked upon as a matter of course, where others have easy and plain sailing. The end of nearly all such struggles, as a rule, has been, that, by almost superhuman exertions, the opposition has been crushed. That one dream or vision, which stood out so conspicuously, and in which I saw the opening out of my whole life, has been uppermost in my mind all my life since, and I have been thoroughly satisfied that the predictions in it have been quite fulfilled. That period, too, was important to me as the crisis in the fever, which, too, was then mastered, and I was speedily restored to health and strength, as though the series of victories over the enemy-principle of my life had already begun.

J. TRAVIS, LL.B.,

Judge of the late High Court of Justice of the Canadian N.W. Territories; Commissioner, under the Extradition Acts, etc.

[ ] 1.

(From E. F. H.)

MELROSE HIGHLANDS, Dec. 31, 1888.

MR. HODGSON: —

DEAR SIR, — I enclose a brief account of a dream that I had many years ago, and its sequel. I am aware that it is almost, if not wholly, worthless as scientific evidence unless it is corroborated. I can give the names of all persons alluded to in my little story, and will gladly do so if you wish, but I fear they will not recall the circumstances. The dates have bothered me, and I have long delayed to write you, while I have searched in vain for my diaries of those years. If I find the diaries I can send the exact dates, and will gladly do so if you care for them.

I have had several other dreams which afterwards were fulfilled, but

none so striking as this absurd one. I often dream of places, and they become in this way familiar to me, so that when I see them for the first time I instantly recognize them as places seen in dreams, though I previously did not know their location.

I have also, within two years, met a man of whom I had dreamed so plainly that his face was perfectly familiar, and the whole scene of our meeting (a room in which I was for the first time), together with his words and manner, was like part of a well-known story. I spoke of these facts at the time, and think some of those present might perhaps remember them.

The worst thing about giving positive proof in regard to my dreams is the fact that I very rarely mention them or even remember them, and so when one is fulfilled, I can only call attention to the fulfilment and say, "I dreamed all this a long time ago."

Hoping my account may be of interest if not of value,

I remain, yours truly,

E. F. H.

2.

A Singular Dream.

In the fall of 1874 (October or November) I had a dream that seemed to me very singular in its absurdity, but as I often had grotesque and unusual dreams, I did not mention it to any one, and, in fact, soon ceased to think of it myself.

The dream was this: —

I was walking up the street in Wellesley Village on my way to the house of an uncle where I had previously visited. I reached the gate, turned up the path to the front door, and rang the bell. The door was opened by one of my old playmates, a daughter of my uncle's wife by a former husband, who held out her hand to me with the somewhat peculiar greeting, "Do you like hulled corn?"

Beyond this point I have no recollection of what I dreamed, but all the foregoing is indelibly fixed in my memory, being, in truth, much more vivid than the real events that followed.

The following March (1875) I received an invitation to visit an uncle in West Roxbury, and went to Boston for that purpose. (I fixed the date by the fact that I was in Boston on Palm Sunday.) I soon met the uncle who lived at Wellesley, and accepted an invitation to visit him during my stay. Accordingly I went one day to Wellesley, which place I reached about noon. I found my uncle's house, walked up the path, rang the bell, and met face to face the identical young lady of whom I had dreamed months before. Doubtless she was glad to see me, for she smiled sweetly as we shook hands, but she said softly, "Do you like hulled corn?"

To say that I was surprised would be stating the case very mildly, but I managed to reply that I was fond of hulled corn; and then I went on to relate my curious dream and its fulfilment. This, I am certain, was the first time I had ever spoken of the matter to any one, because the dream was in itself no more strange than many that I had, and I should never have thought of it again had it not been so completely fulfilled. The narration

seemed to make little impression on my friend or on my uncle and his wife, to whom I told it later, and I dare say they all soon forgot the entire matter.

It only remains to add that the anxiety as to my liking for hulled corn arose from the fact that on that particular day it was the chief dish for lunch, and that I arrived just as lunch was served.

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[71] 1.

(*From Prof. A. B. Nelson.*)

DANVILLE, KY., Dec. 10, 1887.

MR. E. G. GARDINER, *Secretary Society Psychical Research, 12 Otis place, Boston, Mass.:* —

DEAR SIR, — I have just read a letter from Mr. Joseph James, of Westerville, O., giving an account of a dream he had that may be of interest to the Society of Psychical Research. It was written to an old servant of the family in relation to Mr. J.'s son, Rev. Jno. R. James, who was thrown from a buggy while on his way from Paris, Ky., to Millersburg, Ky., where he was to preach the Thanksgiving sermon. He was picked up unconscious, and remained so till his death, a few hours afterwards. Mr. J. dreamed the night his son died (not having heard of the accident) that he saw his son meet his (Mr. J.'s) mother in front of a beautiful cloud. He awoke immediately and roused his wife, telling her to look at the vision, but in the mean time it had vanished.

Mr. James is a gentleman of the highest integrity, whom I know well. He removed from Danville several years ago and now resides in Westerville, O. I was told last night by his son-in-law, who lives here, that another member of Mr. James' family had a similar dream the same night.

Mr. J. sometimes writes his name McJames.

Truly yours,

A. B. NELSON,
Professor Mathematics, Centre College.

2.

(*From Mr. J. McA. James.*)

WESTERVILLE, O., Dec. 28, 1887.

RICHARD HODGSON, ESQ., *Boston, Mass.:* —

DEAR SIR, — As I am well acquainted with Professor Nelson, of Danville, Ky., I will simply say I was never a strong believer in dreams or presentiments, but the dream I had the night of November 22 last, in regard to a daughter who died two years last February, and the death of my dear son who died about 12 o'clock the night of November 22 last, as above stated.

My son was located at Paris, Ky., and was pastor of the Baptist Church at that place, and was devotedly loved by all churches and people. He was

twenty-eight years, lacking three days. He had only been preaching four years and a half; was ordained four years ago; since that time he had converted and baptized five hundred and forty-seven persons. He was a devoted Christian and a thorough scholar and one of the best preachers of his age in Kentucky, and his character and standing as a man and minister of the gospel was without a blemish. Now I will give you an outline of my dream and coincidents connected with it.

My son, as before stated, lived at Paris, Ky., about two hundred and twenty miles from us. We had contemplated visiting him about Christmas, but on the night of the 22d of November, I dreamed of seeing my daughter at some distance; then, in a few moments, I saw in my dream my son and daughter meet together just in front of a beautiful bright cloud; then, in my dream, I called to my wife and said to her, "O, Margaret! look, yonder comes Johnny and Martha, coming home! Come and see, quick!" Then, in my dream, I took hold of her to show to her our dear children. Then, in my dream, when I turned and looked for them they had disappeared out of my sight. I then woke up, and the clock struck 12. The dream impressed me so I could not get it off my mind, and at 10 o'clock next morning we got a telegram that our dear boy had been thrown from a buggy and killed. Oh, that dreadful telegram, causing our poor old hearts to bleed with sorrow and grief at every pore! We pray God to help us to bear it the best we can, looking forward to the time we trust we shall meet with our dear children in that heavenly land, where we shall part no more.

Now, as to anything further: when I related my dream to my wife, at the breakfast table the morning after the dream, she said to me, "Mr. James, I don't know why it is, but the college bell disturbs me so I can hardly eat, and has ever since yesterday," saying, "it sounds like it was tolling for the death of somebody."

In about two hours after that we got that dreadful telegram, telling us of the death of our dear son, who died and passed out of my sight just as I awoke out of my dream. Whether there was anything in the dream tending to warn us of the death of our dear son or not, I shall never forget the strange dream or vision I had in regard to his death and our daughter meeting him. One thing I do know, God is able to give us visions, and tells us what he does. Now we know not, but shall know hereafter; so we will take God at his word, trusting in him, and waiting for his revelation hereafter.

As you have given me reference to Professor Nelson, of Danville, you can use this letter in any way you think best, not to change or misconstrue its true meaning. I am, dear sir,

Yours most respectfully,

J. McA. JAMES.

3.

WESTERVILLE, O., Jan. 7, 1888.

RICHARD HODGSON, ESQ., *Boston, Mass.*: —

DEAR SIR, — I cannot see how you came in possession of what occurred in our visions or dreams. As to our dreams, we only told a few of our

friends, not expecting them to be made public, although they occurred on the night of the death of our dear son, and just at the hour he passed to the spirit world, which was the 22d of November last, about 11 o'clock at night, and on getting up the next morning I related all the coincidents connected with my dream to my wife and daughter; they then made a statement to me of their own dreams, and while it seemed so strange to us all, yet but little did we think what a sad calamity had befallen our dear, precious son till we received a telegram, two hours afterwards, of his sad death. At your request my daughter will write you, giving you her own dream. Very respectfully,

J. McA. JAMES.

As to the bell disturbing me, it was as my husband stated.

MARGARET JAMES.

4.

Several nights before my brother's (Rev. J. R. James) death, in my dreams I plainly saw the hearse drive up to our door, with white horses hitched to it. This made such an impression on my mind that I repeated it the next morning at the table, and remarked to the family that "some of our family are going to die very soon." This same thing I had dreamed before my husband's (H. C. Saunders, of Danville, Ky.) death, which occurred in two days after the dream. Also dreamed the same before his mother's and my sister's death (Mrs. Jno. B. Cook, Columbus, Ky.). I suppose this is why this last dream made such an impression on my mind. On Tuesday night (November 22), the very night my brother (J. R. James) died, I dreamed of being in a strange place, dressed in deep mourning, with a heavy crape veil extending to the bottom of my dress. This I told at the table Wednesday morn (November 23), and in about one hour from that time *I* received the telegram bearing the sad news of his death. I am not one bit superstitious, and only send this thinking by so doing I may confer a favor on you. I had not only told this to my own family before his death, but had repeated it to several of the neighbors.

Very respectfully,

MRS. ELLEN JAMES SAUNDERS.

Pa, being in the city, did not receive the telegram until an hour after I did.

[Received Jan. 10, 1888.]

5.

WESTERVILLE, O., March 11, 1888.

RICHARD HODGSON, ESQ.: —

DEAR SIR, — Your letter bearing date January 12 was received, and owing to sickness in family my reply had to be postponed, and during that time by some means your letter got misplaced, and not knowing your address could not reply earlier. Have since obtained it from my father, who is now in Kansas. Hope, however, this may be in time.

My dream was told on the morning of November 23, at my father's table

in the presence of my parents and three children, Maggie Lee Saunders, eighteen years of age; Clarence, sixteen; and Annabel, thirteen, — all of whom can testify. My son is now in Kansas.

Hoping this will prove satisfactory, I am,

Very respectfully,

MRS. ELLEN SAUNDERS.

6.

Having read both of mamma's letters I can truthfully testify to what she has written.

ANNABEL SAUNDERS.

7.

Both mamma's dreams were related in my presence before we heard of the sad occurrence.

MAGGIE L. SAUNDERS.

8.

Mrs. Saunders related her dream to me several days before her brother's death (just as she wrote it to you). I am a close neighbor and was there several times, as she seemed so impressed with her dream that she became low-spirited and often said, "I am sure some of our family is going to die, as I have dreamed it several times before, and each time some near relative has been taken."

MRS. HENRY WILCOX.
MISS FANNIE WILCOX.

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[72]

(*From Mrs. A. Z.*)

DEAR SIR, — I enclose a personal incident which may have some interest in the line of your investigations. The voice I alluded to was so *strong* and *clear* that long after I could recall the sound of it. . . .

(Signed) [MRS. A. Z.]

WASHINGTON.

I am requested to tell you of a curious personal incident.

At the time I speak of I was living with my grandparents. My grandmother was not strong, and I occupied a room with her. My grandfather had for a few days been suffering from a severe pain, which the physician assured us was rheumatism. For two nights I had remained all night in his room to give him hot applications. The third night he felt quite well again, and I returned to grandmother's room. Early in the morning I was awakened by a clear, distinct *voice*, saying, "Go to grandpa, he is dying." I started from the bed, wondering who had spoken, and found myself *entirely alone*. I ran to my grandfather and found him bleeding and unable to speak. He died during the morning from an aneurism of the heart. No one had suspected any trouble but rheumatism. I retired without a shadow of anxiety regarding him. He was in a room so far away from my room

that only a loud voice could have reached me. The door was shut. My grandmother had risen early and was downstairs. In fact, no one in the house had any knowlege of his condition, nor could he have made me hear

[Feb. 3, 1889. Mrs. Z. tells me, in reply to inquiries, that the above incident occurred about 15 years ago, and that she did not recognize the voice. Besides herself and her grandfather, her two uncles, her grandmother, and a servant were in the house. She found her grandfather alone in his room. No further corroboration can be obtained. — R. H.]

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[73] 1.

(From Mr. N. X.)

New Jersey, March 4, 1888.

Sir, — The "New York World" of this morning makes reference to you, to your investigations into certain mysteries of life, and relates some peculiar facts, so far as the events or incidents may be so termed.

I am not a "spiritualist" in religious faith, and therefore do not associate the phenomena I now submit with the "unconscious cerebration" of that belief, for I was trained in, and retain much of, the hard-headed sceptic faith as to all faiths which are not of divine revelation; but the phenomena of life and the laws of nature are a legitimate study to all sectarian theocrates.

I propose to relate some inexplicable phenomena within my personal experience, in which personal friends, absolute strangers to the actors in the phenomena, were witnesses, and to ask, if your interest is excited, for some rational explanation, and you may use this communication at your discretion, suppressing my name.

Col. Jno. A. Cockerill of "The World" is a personal friend, if a reference is needed, and many more can be given to sustain my identity and integrity.

In the year 1874 my attention was first directed to psychic sympathies; that is, to the correspondence in thought existing where warm attachments lived, though vast distances separated the parties; and later reflections and experiences confirm my then crude ideas that thought in its physical structure possesses the same material characteristics that mark magnetism, electricity, and the other ethics, so to speak, of nature. On this point I will give my views later.

In the winter of 1874 a most dear friend was in Florida for her health. I had known her in childhood: she had married, was the mother of two fine sons, and at this date was a widow. Her husband was a dear friend. The closest friendly relations existed between us for years, so close that in his last illness he would permit only me to aid his wife in caring for him. Financial reverses came to him, and he begged me to counsel his widow for their mutual sakes. Love was not engendered through this counsel, and she now resides in California, striving to eliminate the pulmonic tendency from her youngest son, a lad of eighteen years. But the deepest sympathy for, and interest in, a noble woman — noble then and now

in all true womanhood — incited me, and the correspondence strengthened the friendly ties of years, which continues. So much for the *dramatis personæ*. I was ever a home-body, rarely leaving my room, books, and desk, as to me the younger men came for counsel; perhaps to smoke or chat, and otherwise find a surcease from their merrier joys.

One of these visitors was a spiritualist, as were his family, all. A man of fine and sensitive sympathetic nature, he frequented my rooms more than any of the rest. One night as we were playing "casino," he, facing the door, had a startled look, which, *knowing or surmising its cause*, made me ask, "What do you see?"— "A woman's face and bust half leaning through the door."— "Nonsense," I said, "describe her features." He did so to the life. I had seen this — apparition shall we call it? — frequently, hence I was unmoved; he was the startled one. He was an absolute stranger to the lady, had never seen her, knew not her name, history, or aught about her. I could understand the psychic action that made me materialize her face, though she was at Green Cove Springs, Florida, at that moment, as her letter to me proved; but why this visible appearance to an absolute stranger? It has ever been a mystery.

Financial reverses came to me, and my wife, residing with relatives in a remote town in South-western Virginia, died suddenly of apoplexy on a Thursday and was buried on the Saturday following. Remoteness made the telegraph useless as a summons to me, and on the Monday morning following I received two letters, — one announcing her death, and one from a lady, a school-teacher, a principal, with whom I corresponded much on the educational matters affecting her, in which she informed me that a spirit had appeared to her and desired her to inform me of her identity as my wife, and of her death.

Neither party had ever met; one was ignorant of the existence of the other. The teacher lived near the Delaware Water Gap, and I had not seen her for some years. She was a spiritualist, sixty-five years old then, and is living now.

Quære: Why this communication to an absolute stranger, by a vision, and not to me, the only party in interest? Nor have I ever had a vision of, or spiritual communication with, my deceased wife.

The sudden death of my wife, a few hours' illness, her ignorance of the existence of my correspondent, preclude all physical communications or idea of any form of material ones. Whence this phenomenon? I married again, — a woman of rare beauty, accomplished beyond the high average of accomplished women. We were orthodox in religious faith, but we read, thought upon, and discussed psychic phenomena. Before and after marriage, when she was in trouble (for she had much trouble with property, and was robbed under the garb of friendship), I have known when at my writing that she needed me, and though miles away, found on arrival that I was; and in marriage, when in town, and she at our country home, something told me to come home, and the necessities proved it. Our lives were a symphony: both devoted to flowers, we wandered all over these hills, glades, forests, after ferns, wood flowers, and they seemed to grow by the incense of her breath.

In music, painting, song, in the wide magnificence of astronomy, to the subtler mysteries of vegetable life, in the natural alembic of terrestrial laboratory, she wandered with me during the four short years of our married bliss; yet, close as was our ante-nuptial sympathy, close as were the harmonies of our married life, fearless as I am known to be as to spiritual realizations, I have never had a response to the wailing cry for her presence.

Tell me why these conditions in life, this silence of the tomb, now?

Again, and repeatedly, for my correspondence has included many brilliant women, when remote from each other by hundreds of miles, we have felt a spirit move us to write, and from sleepless beds we have risen to write the night thoughts, only to find an identity of action as to *time and theme*. . . .

I am, very truly,

(Signed) [N. X.]

2.

NEW JERSEY, March 11, 1888.

MY DEAR SIR, — In reply to your letter of the 8th inst. received yesterday, I have to state that my friend who saw the apparition is now a resident in Chicago, and there being no correspondence between us, — not from unfriendly reasons, but simply from the causes natural to a mere man of business, — I do not know his exact address, but the first time I am in town I will obtain it and send it to you. I never did attempt to learn what the lady was doing at that moment in Florida. She was there for health, and what her social or other hygienic pleasures were, to me were of little moment so long as she recovered her health.

I possess no letters from my first wife. In the wide range of correspondence, and specially in the sacredness of the family relation, I do not believe in the retention of letters for the idle to read after I am dead, hence I retain few and have an annual holocaust of "friendship's" offerings.

By the term "idle," above, I refer to the curious-eyed class which are indigenous to all families.

The school-teacher was named Miss B., of ———, N.J., where, and by which name, a letter will still reach her, although she married some two years since at the age of sixty-five: her married name I do not remember, as communication has ceased for various reasons. . . .

(Signed) [N. X.]

3.

The following letter is from Mrs. B. Y., formerly Miss B., referred to in (2): —

APRIL 6, 1888.

MR. HODGSON: —

DEAR SIR, — . . . Mr. X.'s report of my interview with his deceased wife is correct, and only one of many like experiences which have occurred to me and other members of my family.

. . . . . .

(Signed) [MRS. B. Y.]

MAY 13, 1888.

. . . . . .

I cannot recall the details of my interview with Mrs. X. I only remember that I seemed to be at her home in Virginia, and in conversation with her, in which she requested me to inform Mr. X., who was then in New York, of her sudden "transition," which I did immediately. On the same day I received a letter from him containing the same news, our letters having passed each other, and a few days after came a reply to my letter asking why her spirit came to me, an entire stranger, and not to him, a question I could not answer.

. . . . . .

(Signed) [MRS. B. Y.]

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[74]

(From Mrs. J. G. W.)

1.

FEB. 23, 1888.

MR. RICHARD HODGSON: —

DEAR SIR, — My illness proved more of a bondage than I expected. I was out yesterday for the first time, and am not yet strong enough to write out other experiences. The friend with "open vision" has been confined to her own home with a similar sickness. She is also better I hear this morning, not yet out, so I could neither see her nor write for the permission you desired. Perhaps I can next week. I have written out, perhaps with tedious definiteness, the vision that preceded the dream of the Nautilus fleet that you have. But you can select from it the points you need. It is all psychologically important to me for the quiet succession of its steps. Of course, it would be silly and superfluous to write of "tearful eyes," but they expressed by "unconscious cerebration" or something else my sympathy for the living, who *were* in desolation of grief.

The stages of that experience were well defined, — the vision of July 29, 1876, the dream of July 30, 1876, the walk of Oct. 31, 1876, the dream of Dr. Holmes.

. . . . . .

Truly yours,

(Signed) [MRS. J. G. W.]

BOSTON.

Thursday P.M. — I have just found in folding your papers that you have an account [4] of the vision of Miss X. I did not remember that, but I will now send this more definite one, as something in it may be of use. Of course I should not have written it out had I remembered telling it.

2.

On Saturday morning, July 29, 1876, as the clock was striking 4, I awoke with every mental perception keenly alive. Three or four feet from me, looking at me with intent, grave desire for me to understand something, was C—— X. I supposed that she was spending that part of her

vacation at Mt. Desert, and was intellectually interested to find her mentally projected before me with such distinctness, when I had not been especially thinking of her. I noticed the progress of the dawn, the lapsing of the waters under my windows, — everything which would naturally break the continuity of the spell; then tried to picture the faces of my children asleep in the next room, then of my husband passing that night in our own home in Boston, then I tried to mentally see other friends of strong individuality in both worlds. *Finally* I *wondered* that *every* face, whether of husband, children, or friends was obscure, as if seen through a mist or veil, compared with the face of Miss X., so steadfastly waiting for me to understand. I looked all around the room and back again several times, intellectually curious why I should see her with as much definiteness as any object in my apartment. Finally Miss X. slowly disappeared. Then I laughed softly, as one ashamed and convicted of rudeness and inhospitality to a beloved but unexpected guest, spoke aloud deprecatingly, "Why, little C——, I have driven you away, trying to see others instead of you!"

It was wonderful, but so quiet and natural that the thought of vision did not come to me. About five I rose to dress, but remembered the next day how my eyes looked in the glass as I was brushing my hair. Years afterward, seeing the picture of Joan of Arc in the Art Museum, I recognized the same look in the eyes. Through that day my eyes often filled so that I could neither see my books or sewing. When my husband arrived, about twelve hours later, he immediately looked anxious. "Mary, you are sick!" —"Oh, no, not at all!"— "You are, and needn't hide it. I never saw your eyes look so before." I laughed, saying, "Nonsense, I am perfectly well," but found my mouth quivering and my eyes filling. He noticed that, and questioned the little daughters. "Had anything happened to grieve their mother," etc. Finally he said, "I will try if a drive will freshen and restore you," and ordered the carriage. He drove us by the Preston House, frequently turning, anxious and thoughtful, and too often catching my eyes overflowing. I was constantly thinking of Miss X., but with no premonition of sickness and death. I was picturing her as well and joyous at Mt. Desert, and when passing the Preston House, pictured her summering there a year or so before. Twenty-four hours later, a lady friend came from ——— to Swampscott to inform me, by the wish of Dr. and Mrs. X., that their daughter at 4 A.M. on the 29th was heard breathing unnaturally, was found unconscious, and at 5 the breathing had ceased. It was at 4 I had awakened. It was at 5 that the spell of her spiritual presence had sufficiently left me, so that I arose and dressed.

The tearful eyes and trembling lips that kept my husband attentively observing me on the 29th and 30th were the repressed external signs of my unconscious sympathy with the anguished household. For I was *only* thinking of Miss X. as well and happy.

The night of the 30th, before the bringing of her material body, I had the dream of the Nautilus fleet. (See document 5.)

For the next three months my last thought at night and my first on awakening was for the members of the stricken household. The thought of

my heart was always to lift them out of the atmosphere of death and the atrophy of hopeless grief into a vitalizing sense of C——'s happy freedom and usefulness in the spiritual world. On the 31st of October — her birthday — (I did not record the date, but think I am accurate) I was walking down State street feeling unusually joyous, as if we were hand in hand, and thinking aloud together on very hopeful subjects. The clear, crisp atmosphere, the purity of the sky, — all seemed surcharged with her influence. Then, without abruptness, C—— seemed to say with quiet, gentle distinctness, "This is our last walk for a long time. You have helped my parents and sister to bear my apparent going away more than they know or you know. But you need not turn to them now. They do not need it longer and *all* your *strength is* now needed to support others, with quite other but gravely oppressive burdens to bear." I was not startled. The voice was internal and subjective but distinct.

I went home, and for several months after that I hardly remembered that C. or her bereaved household were ever known to me. By night and day the strain upon every faculty of my mind and every nerve of my body was all that could be endured. Since then — the morning of Oct. 31, 1876 — I have had no sensitive or assured consciousness of Miss X.'s presence or influence.

A long time after I had some very vivid dreams advising me to send the account of the Nautilus fleet to Dr. Holmes. I seemed to be told that he was passing through very depressing and lonely conditions of baffled questioning and doubt about the nature of the spiritual world, and that he would be comforted by that evidence of the sympathetic correlation of the two worlds, — the evidence that *this* world is real, only just so far as it is in correspondence with the spiritual world, that out of such harmony our realm is one of illusions and fallacies. I dreamed that it would help Dr. Holmes to *believe* the truth that our thoughts are heard by our associative spiritual friends and answered also, as spoken words are heard and answered here.

That dream had a strong hold of me. I must have told it to Dr. Holmes' *unconscious* mind, it was so forcefully real to me. Perhaps it supplied nutrition to his spiritual heart and lungs. But I never outwardly wrote or told him aught. Such persons much in the public eye are always approached and hurt and weakened by the many seeking any paltry excuse to obtrude their own paltry personality. Dr. Holmes, with his kindly courtesy, would have thought he must write, and I shrank from that draft, however brief and conventional, upon his attention.

MRS. J. G W.]

3.

In a letter of Feb. 29, 1888, Mrs. W. adds: —

Dr. and Mrs. X. were telegraphed morning of July 29 to hasten home. C. had ceased breathing at 5 A.M., and a letter from her, written on the 28th, was unread in their hands when the despatch came. They reached —— before night the same day, and sent messenger to me the next, July 30. My responsive sympathetic condition had been one of unconscious connection

with *them*, the survivors. I had no desolation for the "dead;" she "was alive" to me "forevermore."

4.

[The following is the account referred to by Mrs. W. in the postscript to (1); it was given to me in conversation with Mrs. W. shortly before the letter of February 23. — R. H.]

On July 29, 1876, I saw, as in a vision, Miss C. X., the daughter of Dr. X., of ———, standing close to me. I thought it must be some mental representation, but she looked intently at me, and the appearance did not pass away. I tried to represent my children, my husband, etc., as vividly, but failed to do so. I closed my eyes, looked up, and saw the figure fading. I did not think at all that the figure was any apparition from the other world.

My husband came home the following evening and remarked upon the sadness, as he thought, of my appearance, though I did not feel mournful in reality. We went out for a drive together, and I thought of C. X. as being at Mt. Desert. This was on Saturday. On Sunday a message came from Dr. and Mrs. X., to say that their daughter C. died on Saturday morning, suddenly. They told me afterwards that she had talked about me almost the last thing before going upstairs on Friday evening. She was heard making some unusual sound at 4 A.M. Saturday, and died at 5 A.M.; cause, heart disease.

5.

[Dream of the Nautilus Fleet.]

(*From an early account.*)

On the night of July 30, before her mortal body had been removed from its earthly home, I had a symbolic dream of our friend. . . . I saw a nautilus arise on the crest of a dark wave not far out from the shore-line of the ocean. As I thoughtfully considered it, apparently from the nervous centres of the head a tiny wand or arm of pearl seemed to rise or grow, at first quite indistinctly. Then still obscurely, something closely wrapped shaped itself at the extremity. I thought, "a pennant or banner is about to unfold." But no! Connected as if by an invisible silken filament to the top of the white wand was a pupa case. Very, *very* slowly, two soft, translucent wings, also of white, opened upward. . . . Then on the dark crest of another wave rose a smaller nautilus, not as enchanting in opaline tints, then another and another till I ceased numbering. But near or more remote from shore they rose and fell in rhythmic harmony with the lapsing waves. Presently a whole fleet lighted the gloom of the waters, for I remember no moon. But the fleet, collectively as well as individually, without voice or sound, seemed to be in recognized and subtle connection with its winged leader, the Psyche-guided nautilus. There was no

"quiring to the young-eyed cherubim,"

but after an intense hush in that luminous darkness, swelling out as if on

the great billows of an organ-harmony, a voice filled all the listening air, with these measured syllables: —

"Build thee more stately mansions, O my soul,
As the swift seasons roll!
Leave thy low-vaulted past!
Build each new temple nobler than the last,
Till thou at length art free,
Leaving thine outgrown shell by life's unresting sea!"

I had many short slumberings and awakenings before dawn, but each time I slept the picture waited for a clearer reading, the same transfigured voice lighted the darkness, a "perfect music set to noble words." As I looked out the next morning over the shadowy ocean I recognized the spoken song of salutation to *The Chambered Nautilus* as being one which some years ago brought vital delight to my mental chambers of imagery. The inner memory had long been unawakened by even an echo of its resounding harmony. It had lost what partial verbal occupancy it might once have had with me; yet in this dream came full possession of its thrilling cadences.

[Mrs. J. G. W.]

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[75]

(*From Mrs. J. G. W.*)

1.

[Feb. 23, 1888.]

Through June, 1871, I was in Germany. One afternoon I lay down upon a sofa in my chamber. Soon I was quivering as if with grief and sympathy, and essaying to restrain sobs and tears. My husband anxiously left his papers and came to minister to what seemed to him the violent chill of a sudden illness. "No, no, I am not sick. I do not know what it all means, but something is happening in Mr. P.'s family. They all are so full of grief, all are weeping. Oh, I think some one is dying there!" — "You must have dropped asleep and been dreaming. Do not be so distressed and shaken over a dream." — "No, I have not slept an instant." — "Did you see anything or anybody? Why do you say Mr. P.'s family so positively are the friends in grief? They are always well." — "No, I see nothing, I hear nothing, and yet it seems as if I did." My husband was gravely impressed that I was a true witness to a household sorrow in St. John.

The next steamer that could arrive, sailing after that date, brought us letters announcing the death of our beloved friend, Mrs. A. P., of St. John, N.B., and the papers expressing with most unusual impressiveness the deep and general sympathy of the citizens with the survivors and the common sense of grief and loss in the death of that beloved and honored woman. I had intimately known Mr. and Mrs. P. before their marriage, and had been bridesmaid at their wedding nearly twenty-six years before. The tender friendliness of all the members of our united families had been unbroken. Every few weeks or months some of them, however briefly, were in our Boston home, whenever business or pleasure called them to Massachusetts.

In 1870 we had received in Europe our summons to the festivities of their silver wedding, which hundreds of friends still sympathetically remember.

When we received the tidings of Mrs. P.'s death we had no difficulty in mutually remembering that the day of my occult sympathy was also the 24th, though neither of us had made written record.

Mr. P. and his son have now been visiting us a week or two. Last evening, just as Mr. P. was about to take the cars for St. John, I remembered this incident, and asked him if Mr. W. or myself wrote him about it from Germany, or if he remembered any corroborations. He said we did not write, but both told him of the circumstance when he came to see us on our return from Europe the next winter.

The psychological point is the quivering sympathy with the survivors taking on their states of desolation. I had two little daughters in Boston, but I positively located the *grief* as visiting Mr. P.'s family in St. John. I find Mr. P. does not want any publicity of *names*.

(Signed) [Mrs. J. G. W.]

Boston.

2.

Boston, Feb. 29, 1888.

Dear Mr. Hodgson, — Of course I will write to Mr. A. P., if you consider that the better way. But with the care you have to exercise that corroboration of testimony may not be manipulated (if that word is not *understandable* I think of none that expresses what I mean), would it not be better if you wrote to Mr. P., either briefly giving the points of my experience in Germany, and asking if they correspond with what Mr. and Mrs. W. told him in January, 1872, or else asking him for the few lines that would express his memory of the occurrence. If I said Mrs. P. died 24 June, 1871, I blundered. I was in Munich much of that month, and at the time of writing recalled that as the month.

But I was in Badenweiler, Germany, on the 24th of August, including several weeks before and afterwards; and I am quite sure, in thinking carefully, that it was in Badenweiler I had the internal consciousness of the grief in the P. family, and that it was August 24 that Mrs. P. died. Mr. P. is a man of unusual thoughtfulness and common sense; he is very shy of such experiences, still does not scoff at what he cannot understand. . . .

(Signed) [Mrs. J. G. W.]

3.

St. John, March 9, 1888.

Richard Hodgson, Esq., *Secretary American Society for Psychical Research, Boston:* —

Dear Sir, — Your favor of the 2d inst. is at hand.

My friends, Mr. and Mrs. W., were in Europe during the summer of 1871.

My wife died on the 24th of August of that year; disease, œsophagitis. She expired between 5 and 6 o'clock P.M. I had no communication

direct with my friends, I think, until they returned home to Boston. When I first saw Mrs. W. after her return, she informed me of her extraordinary experience and suffering on a certain day, which she communicated to her husband at that time, having, as she said, a most vivid and painful impression that all was not well with us here, and that we were in great affliction and distress. This was supposed to have been on the day Mrs. P departed this life. Mrs. W. will doubtless give you fuller particulars.

Respectfully yours,

(Signed) [A. P.]

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[76] *(From Mrs. J. G. W.)*

1.

[FEB. 25, 1888.]

About two years ago, a few months after the sodding of a new grave, I was returning from Forest Hills. As I sat in the back of the carriage, I saw, as it were, in the air, numberless pansies which appeared successively, and which I studied in detail as they floated in vision before me. On reaching home I found a large basket containing several hundred pansies in great variety, which had been left for me by a friend, and which included very many of the peculiar pansies which I had seen in vision on my way home.

2.

On another occasion, also, when I was returning from Forest Hills, I saw a succession of flowers called bachelors' buttons. These had special associations for me, because one who had passed to the other world had bought some on a mountain walk, one of the last ones we took together. On reaching home I found that a large dish of bachelors' buttons had been left for me by a friend, and every distinctive color that I had seen photographed in the air had its representative flower awaiting me. It was an old-fashioned flower that had bloomed in our boy-and-girl gardens.

(Signed) [MRS. J. G. W.]

COMMENTS ON THE CASES RECORDED IN THE APPENDIX TO THE REPORT OF THE COMMITTEE ON PHANTASMS AND PRESENTIMENTS.

Opinions may vary, but records will remain; and it has seemed best to add to the more formal report of the committee a large number of the cases which have reached us, reprinting their chief documents, and so setting the results of no small labor on the part of our Society's Secretary in a place where all may read. As to what these documents prove, members will probably not agree. I frankly confess that to my mind most of them are serviceable as illustrating mental processes that do not lie within the range of telepathy nor yet of clairvoyance. But others may regard the cases, especially when thus united, as of much evidential value for the hypothesis of telepathy. At all events I feel sure that the list contains a number of beautiful instances of pseudo-presentiments, as well as a number of fine illustrations of the difficulties that still beset our way in all these researches. Many of the best coincidences are remote in time, the most valuable documents have sometimes been lost, the telepathic coincidences of very recent time often relate to minor matters, and the most thrilling dreams, the best developed spiritual apparitions, have often not surrounded themselves with clouds of witnesses. Nevertheless, so full is this whole correspondence of live human nature, so rich is our material in sincerely and earnestly reported experiences, in quaint reflections on the part of correspondents, in well-meant advice given us by people of a philosophic frame of mind, in cool self-criticism on the part of our best observers, and in warm-hearted credulity on the part of not a few less cautious people, that I heartily commend the whole material to anybody who loves psychological curiosities as much as I myself do.

For the rest, my comments here, as in my report, are made on my own responsibility. If any reader finds me sceptical or unsympathetic or ignorant or credulous, I hope that he will remember that it is I who own these faults, not the Society. Another in my place might easily do the work better, and would be sure not to make the same comments. Let these comments therefore be considered, especially in this Appendix, as committing nobody but myself.

Two things I want to add yet in general, and for the benefit of less active members of the Society: First, I hope that all careful people will be good enough to attribute to the responsible officers of this Society only such opinions on serious questions as the officers make

themselves properly responsible for. The newspaper press of the country which, at the cost of no small labor, has courteously helped us so much in our researches, has also in some few cases taken a certain doubtless good-humored revenge upon us by reporting from time to time all sorts of marvels as having been vouched for by this or that officer or committee of the Society. Mr. Hodgson, who is a favorite in these respects, is made from time to time to appear in some Western-newspaper article as a very magician, and he seems to be rapidly becoming, in certain outlying districts of the land, a legendary person, — a sort of Doctor Faustus. He transports an astral body to and fro, all but raises the dead, and daily confounds Madam Blavatsky, with almost equal facility. Others, to be sure, have no such legendary distinctions. For myself I have only one or two newspaper reports to complain of, and that very slightly, in so far as these reports have attributed to me certain opinions which I have never expressed, — opinions both about individual cases and about general topics. These are small matters; but my own correspondence has contained already some evidence that, small as they are, they have puzzled and misled several persons. Hence it may be worth while, both for my own sake and for that of some other officers of the Society, to remind readers that when newspapers mention our researches, they may do so without weighing well the scientific sense of their words, or the bearing of the matter on our concerns.

The second remark here is, that if our documents prove nothing else, they prove the need of having more means at the Society's disposal for official travelling and interviewing, in connection with the careful collection of good evidence. Some members of our body have intervals of comparative leisure at their disposal, which they could use for propagating our research by means of interviews with such persons as have reported valuable experiences, were it not for the expense of such journeys. How very different might not Case 34 appear, for example, in the eyes of a cautious and sceptical reader, who should be suspicious of some hidden source of error, in case a good judge had personally interviewed all concerned, and had reported his impression, not only of their sincerity (for that need not be called for a moment in question), but of their good judgment in the matter of a critical rendering of precise details? I hope that, if this research is to continue, the Society will provide ample means to make it effective. In commenting upon the cases I shall first speak of Cases 34–48, in order, and shall then attempt a more summary classification of the remaining cases according to the categories suggested in the body of my report, treating, however, one small set of cases separately.

Case 34. — Here is a narrative which the newspapers generally

have reported as being vouched for by us. For my own part, I have never had any decided opinion about the matter at all. The sources of possible error on Mr. Fry's part are considerable. The quasi-supernatural incident of the clock depends on his own memory. So far, the whole might be a vivid pseudo-presentiment, the experience having its origin *after* the news of death came. Against this stands Mrs. Fry's corroboration. Experience, however, shows that after a few months, so simple a corroboration as this one, "My husband told me, early Monday morning, of the voice in the clock," is rather easily obtainable from any moderately uncritical and friendly member of a family, who has again and again discussed the great marvel with its original hero. More important is the reported coincidence between the words of the clock-vision, "I'm gone, I'm gone!" and the reported dying words of Mr. Fry's brother. For Mr. Fry is said to have reported these words *before* he had received anything but the telegram announcing the death, and were the vision only a pseudo-presentiment, such a coincidence would seem unlikely. However, the evidence for *this* coincidence is apparently only Mr. Fry's already well-convinced memory, the uncritical testimony of a reporter who is probably no expert in evidence, and Mr. Criswell's personal opinion that the whole is as reported.

I do not wish to seem lacking in cordiality, nor unthankful for the trouble which Mr. Criswell has so kindly taken; but it is my duty to state difficulties, and, for the moment, without fuller corroborative evidence that Mr. Fry told his vision in the reported form *before* its verification, and that the dying words were repeated by him to the reporter *before* confirmation, I must think it very possible that the real experience was a vivid, sincere, and irresistible pseudo-presentiment of the sort described in my report. Further evidence may indeed entirely alter this view. So far as I know, no member of my committee has ever "vouched for" this case.

Case 35. — The reported coincidence seems to me here somewhat unsatisfactory, owing to ordinary dangers of error which attend all reports from memory. The related experience of M. O. A., taken alone, might have been, notwithstanding the actual fall of the clock-weight, a partial pseudo-presentiment; *i.e.*, a false memory, which localized itself about a real event, namely, the fall of the weight. If the corroborative evidence, however, contains no other errors of memory, and is therefore accepted as establishing the coincidence, then the latter was doubtless caused by a more or less well-founded fear of the uncle's death. At all events, the case leaves me sceptical.

Case 36. — I see no reason to doubt the reality of the coincidence, which is, however, probably to be explained by the fact that Mr. W.

S. H. knew, as he says in Document 4, that the person of whom he dreamed was ill.

The following additional statements concerning this case have only recently come to hand: —

9.

FLORIDA, Jan. 14, 1889.

MR. WM. NOYES, *New York*: —

DEAR COUSIN, — Yours of January 9 to hand this evening. Will say in reply the C.'s are now living a little over a mile away and in a direction that I seldom go except when I go to call upon them. I will try and get down their way at an early date and see how much they remember about my dream. I do not expect to get much from them, however, as they are remarkably forgetful, and as I take little interest in dreams, I little more than mentioned the fact to them the morning after, at breakfast, and again when I got the letter announcing her death. I know nothing of the detail of your mother's removal, and would be pleased to know if there was anything about the dream, as described in a former letter, that is anywhere near the truth, outside of the mere fact of her death occurring about that time.

One of the main reasons why C. was not of sufficient use to me to remain in my employ was because he was so forgetful; but he is thoroughly honest, a Quaker in good standing, and whatever he does say can be relied upon. When I wrote you last about the matter I asked him and his wife if they remembered the circumstance and they said that they did. . . .

W. S. H.

Will go down to C.'s to-morrow night, if not too tired, and write you for next day's mail. Am glad to give you any help I can in the investigation, and regret that I haven't more facts to offer. What I have, however, are *absolute facts*, without any uncertainty about them.

WILL.

10.

FLORIDA, Jan. 25, 1889.

MR. WM. NOYES, *New York*: —

DEAR COUSIN, — I went down to C.'s the next evening after I wrote you, and he said he would make out a statement and send it to me the next morning. I waited two or three days, then sent for it, and he promised once more to send it to me. I ran across him here at the post-office to-day, and having my fountain-pen and some paper along, I got him at it, and I enclose the result. I let him make his statement without assistance on my part, and it can be relied upon. His delay was caused by the forgetfulness that I spoke of, but I hope this may come to hand in time to answer your purpose. I got quite a long letter from your father a few days ago.

Yours hastily,

W. S. H.

11.

JAN. 25, 1889.

By request of Mr. W. S. H. I will state that I fully remember of his coming to the breakfast-table one morning and relating to myself and wife the particulars of a dream he had had the previous night, in which he said he had seen his aunt, Mrs. Noyes, laid out as if dead, in a room which he also described, also other particulars which I do not recall now, but some days after he received a letter giving an account of the death of Mrs. Noyes *at the* time of his dream. We talked about it considerable at the time, but since then most of the particulars have passed from my mind.

Respectfully,

E. S. C.

CASE 37. — This reported coincidence as to the "Cambria" would be of great value for the discussion of the telepathic hypothesis, were it not for the lapse of time since the occurrence, and the consequent meagreness of the evidence. What would we not give for a hundred such coincidences, recent in time, and verified by abundant evidence?

CASE 38. — The documents in this case are well worth reading, as illustrating more than one interesting feature of our investigation. One of the corroborating witnesses remembers that he heard the dream "four or five years" ago (see Document 2, last portion). The dream, whose coincidence with the event he was to corroborate, occurred, however, in 1873. Such is the human memory! The actual experience may once more be interpreted as possibly a pseudo-presentiment. "I then for the first time recognized the man in my dream," says our correspondent, speaking of the moment when the dream was verified. The vision of Miss Florence Boram is an interesting subjective hallucination of a familiar type. Our correspondent's relation of Mrs. Boram's opinion of the work of our Society has its own charm, and should be remembered. We hope that Mr. Boram's fears of a shortening of his days may prove unfounded, and that he may long remain within the jurisdiction of our Society.

The coincidences reported in CASES 39 and 40 call for no comment beyond what every reader may make for himself.

CASE 41. — The remembered experience is extremely vivid and elaborate, and accordingly has its strong psychological interest, although, in view of the loss of the confirmatory letters, I am now unable to find this interest elsewhere than in the illustration which the case seems to me to furnish of the dangerously plastic power of memory when sufficiently affected by strong sentiment. I need not add that it is of the greatest value to everybody to learn just how far this plastic power really extends, and that the whole subject is

still in its infancy, so that every new illustration is instructive. Others may find here, of course, something far more than I do.

CASE 42. — Here is a sporadic experience of a type worth recording, although it surely suggests no theoretic connections just now, and is interesting mainly because it *is* sporadic, and is apparently not associated with any superstitious beliefs of a general sort.

Of CASE 43, much the same might be said, with the special addition that the story has, of course, not precisely suffered during "the twelve years during which we have often told it in each other's presence." However, the diary extract of 1872 establishes the essential facts. What happened may of course have been simply the presence of some unexplained but fleshly man on the stairway at the time in question. He was mistaken for another man, himself not personally known to Mrs. G. The mistake once made, the rest soon follows, and it is greatly to the credit of the coolness and good judgment of our correspondent that during as much as twelve years her ghost has been kept so modest and unassuming a being as he here appears. Ghosts twelve years old are usually much livelier than this. We are much obliged to our correspondent for her contribution.

In the interesting CASE 44, the two informants differ as to the state of the dreamer's health at the time. The dreamer regarded herself as perfectly healthy, while Miss W. thought her excited, and suffering from nervous prostration. The dreamer is sure that she herself laughed at the warning, and that Miss W. was made anxious on hearing of it. Miss W. is sure of the reverse of this relation. In view of these discrepancies there must be some doubt whether the dream was not a pseudo-presentiment, exaggerated by ordinary errors of memory into something more.

CASE 45 is almost unquestionably a pure instance of a vivid pseudo-presentiment.

CASE 46, which is printed *verb. et lit.* as we received it, contains in its first document a contribution to divine philosophy from a sincere friend, and we only hope that our readers may enjoy it as heartily as we do. The confirmation of a matter of fact in Document 2 is meanwhile of genuine and decided value. Enough more cases of this kind might truly help us far on the way towards the telepathic doctrine. Meanwhile, at all events, no one will see any room for my favorite pseudo-presentiments here. I must indeed admit an interesting coincidence as probably established.

CASES 47 and 48 are also important and probably established coincidences. In both cases the general character of our informants

gives added weight to their judgment, and plausibility to their memories.

The remaining cases will be dealt with in three groups. I follow the classification of the report, but shall make an exception as to the narratives furnished us by our correspondent Prof. E. W. C.

Prof. E. W. C.'s Cases.

The cases referred to are Nos. 49, 50, 58, 59, and 60.

The special interest of the group arises from the fact that one of the coincidences for which the evidence is documentary, namely, Case 22 in the foregoing report, comes to us from the same source, and also because all these cases, including the documentary one, represent experiences occurring in one family, — that of the wife of our correspondent. As I have remarked in the report, experiences of an apparently telepathic sort, as well as supposed forewarnings, seem characteristic of the family in question; and at the same time these experiences suggest to me, for the most part, the hypothesis of chance coincidence, or of pseudo-presentiment, or of a combination of the two. Considerable value will be given to these instances, however, in the eyes of many, by the very fact that one of the coincidences is so well established. Others, like myself, may feel, on the contrary, that the fact of such repeated dreams and presentiments relating to persons of the same family indicates a predisposition to expect remarkable events, which renders occasional coincidences less surprising. I begin the comments on these narratives by calling attention to Case 50.

Here, in the first place, a dream about an expected baby, even a month in advance, is not remarkable; and, as to the further coincidence, the possibilities were but two. Against the hypothesis of pseudo-presentiment is the corroboration of Mrs. C., to whom her own mother shall have related the experience. Opinions must differ as to the evidential value of this corroboration. Of its sincerity there is indeed not the least doubt. But the family are once for all sure that they frequently have such experiences. I think it very possible that this assurance may have had its origin in frequent pseudo-presentiments, so that I do indeed regard it as founded upon something much deeper than any ordinary "fancifulness," or "imaginative tendencies." Still, the assurance once established, there can be no question but that it would greatly influence the interpretation and memory of individual incidents.

Another effect of the same *à priori* assurance seems to me probably illustrated in Case 49. Mr. J. T. leaves home after a period during which he had been frequently awakened at night by the call of his sister to aid in the care of a patient, also his sister. During his absence the customary call at night haunts him, apparently in his dreams; and his general belief that such feelings are indicative of trouble at home makes him return just in time to find his mother ill. To my mind the indications are that he would have returned in any case, his anxiety being due to the previous illness in the family, and not to anything telepathic.

CASE 58 I regard as a pseudo-presentiment. The corroboration by Miss T. comes thirteen years after the event, and is insufficient to characterize the case. The letter of Mrs. C., dated Sept. 25, 1874, is most excellent evidence of the reality and vividness of the experience. But observe the order in which she relates the facts in this letter. The letter had been interrupted, and is continued immediately after dinner. "Now," says Mrs. C., "now my thoughts are scattered." The cause of this scattering is the brother's story, to which Mrs. C. at once *adds* the memory of her dream and of the scene at the breakfast-table in the morning. So rapid and definite a hallucination of memory as this would indeed seem antecedently improbable were it not for the numerous other cases of a similar type which we have now collected, and especially for the other instances of a closely analogous sort which are given us by CASES 59 and 60.

CASE 59 is very clearly a pseudo-presentiment. That the dream of the railway accident was related to Mrs. C.'s sister at once is an incident dependent for its accuracy only upon a long-established belief of memory. The corroboration of Miss T. may be perfectly accurate as regards the fact of Mrs. C.'s "circumstantial account," but, as Miss T. says, the whole affair is too remote in time to give the evidence as to the time when the dream was narrated any great weight. CASE 60 brings better corroboration for the coincidence; yet here, too, I fully believe that we have only a pseudo-presentiment. Here once more Mrs. C. dreamed of an accident at a distance, and is said to have narrated the dream, in advance of news, to two persons. Of these, one (again Miss T.) gives a rather imperfect corroboration, eleven years after the event. In Miss T.'s words, Mrs. C. "had been to the camp in her dream, and gave a circumstantial account of the boys, as they were at the moment of her dream, which, I am sorry to say, I forget. But the truth of it all was quickly verified." Prof. E. W. C. himself did not know of the "dream" until its "fulfilment" was known to Mrs. C. But his corroboration as given in his words, "On our return we were surprised by the absence of all appearance of astonishment at our premature return, until we learned of the dream," has, of course, a decided value; but still I think that the presumption is in favor of my own explanation.

In view of the facts brought out in this analysis, I conceive that all these family experiences, while psychologically very interesting, have a comparatively simple origin. Mrs. C.'s family contains several impressionable persons. They are apparently not at all superstitious; they are not "fantastic" people, in the common sense; they make no system out of these singular occurrences. But, in fact, after noteworthy events they occasionally experience vivid and typical pseudo-presentiments. Failing — as, of course, under ordinary circumstances, they must fail — to understand this phenomenon, they become somewhat disposed to expect similar warnings in future. Hence they are apt to lay undue stress on the anxieties which separated members of the same family so frequently experience. The same tendency may affect their dreams. Hence, finally, occasional coincidences of an undoubted sort may result. In short, one's dreams cry "wolf" till the wolf comes. In my report I have laid considerable stress upon the

documentary coincidence of Mr. J. T., but our documentary cases are so rare as to render a little rejoicing over one recovered sheep very natural.

Of the remaining cases on my list, I shall treat, first, the probab. pseudo-presentiments; secondly, the apparent coincidences.

Supplementary Pseudo-Presentiments.

As before indicated, the mere presence of a general corroboration from some sincere witness, who says, some time after the event, "I feel sure that I heard M. W. narrate the dream just as he now says he did," is not sufficient to render the hypothesis of a pseudo-presentiment as improbable as telepathy, or as true forewarning would be, especially if other circumstances of the case, such as the momentary nervous excitability of the subject, suggest strongly the possibility of an abnormal experience. Such indications, of course, exist in any case occurring on the border-land of sleep. Case 51 (*c*) seems to me an instance that would excellently illustrate our hypothesis, if, after this lapse of time, it could be well reported. As it comes to me, I very much doubt whether the mother or the daughter was the true dreamer. One wakes and says to the other, "I dreamed so and so;" and the other says, "Why, I just dreamed that, too!" Which was first on the ground I do not know.

I regard Cases 52 and 53, notwithstanding the corroboration, as probably falling in the same class. In Case 54, the corroboration of the coincidence would make our hypothesis inapplicable if the letter mentioned could be recovered. As it is not forthcoming, I have no decided opinion of the case. Case 57 is well reported, and is probably a combination of a slight coincidence with a strong after-feeling that the coincidence must have been important. Mr. Krebs feels that his friend's forgetfulness about the degree of the coincidence is "astonishing." The experience is not a typical pseudo-presentiment, but rather an instance of a more familiar phenomenon; viz., the almost irresistible exaggeration of the importance of a remembered emotion, when subsequent events give that emotion significance.

The experience reported in Case 61 seems to have belonged to our class, but I give it a place in the supplement, not so much on this account as because of the charming *naïveté* of the account. In Case 62 it is impossible to tell how far ordinary errors of memory have affected the narrative; *e.g.*, how far our correspondent's judgment of the character of her fellow-passengers on the steamer may have been responsible for the so-called warning. Still, the case may fall within our present class. In Case 63 we have four dreams reported. The first is too remote in time to have any present significance under the circumstances. The second and third are almost obviously pseudo-presentiments, and in the fourth case, notwithstanding that the corroboration rests upon a comparatively recent memory, I am disposed to accept the same explanation.

Further cases that are almost certainly of the present type I find in 64, 66, and 68 (a most typical and excellent instance, notwithstanding the lapse

of time). With CASE 69, however, we reach what not only illustrates our hypothesis, but constitutes also a very important piece of autobiographical psychology from a professional man of distinction in the Provinces. Judge Travis is an author known both in his own profession and beyond it. His account has to do mainly with experiences of a rather long-past date, but that fact itself is important, as it indicates that his typical pseudo-presentiments were confined to a period which he himself is able to limit to his youth and early manhood. The fever-delirium of childhood, which he last mentions, is of a type well known. Cases of the sort are described occasionally in the text-books.[1] Ever since that experience, our correspondent has had an unsystematized but decided tendency to regard his life as the realization of a sort of fate of which he had been warned. From the age of sixteen until the period of the experience of 1856, typical pseudo-presentiments were frequent with him, and were often very precise, clear, and irresistible. I attribute them to no ordinary form of "imagination." They were simply irresistible and instantaneous hallucinations, occurring in a state of general good health, but to a man who worked much with his brain, who was a frequent dreamer at night, and who met at every stage of his life with "violent opposition," and had to make "almost superhuman exertions." Since he reached a more settled period of life, our correspondent seems to have been fairly free from these lightly pathological phenomena. In character, while they lasted, they sometimes very strongly differed from the ordinary experiences of "double memory," in that the "previous occurrence" whereby our correspondent had been warned was localized — as in case of the events of 1856 — at some particular point in the recent past. In other cases, the pseudo-presentiments seem to have resembled more fully the ordinary "double memory" itself. They were accompanied by a feeling of "shock." They were induced, in the special case of 1856, by a painful piece of news. In other cases, the superinducing cause was slight, and the sensitive nervous state of an overworked young man of literary habits seems to have been their main condition. In short, if I had no other facts to illustrate my hypothesis than those which Judge Travis furnishes, I should be fairly sure that pseudo-presentiments are real occurrences, just as, if we had no evidence of the psychological importance of "insistent ideas" than John Bunyan's Autobiography, "Grace Abounding to the Chief of Sinners," we should be certain of their great significance.

CASE 70 contains a most charming pseudo-presentiment, which needs no further comment. I place the experiences of CASE 71 also in the present category, but with some decided doubts, owing to the comparative fulness of the corroborating memories. In CASE 76, a correspondent whose experiences, as detailed in CASES 74 and 75, have usually had much more elaboration, relates two instances of what I take to be very simple forms of typical pseudo-presentiment.

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[1] "Warfare of the good and evil principles in hallucinations," Schüle: *Klinische Psychiatrie*, p. 184. Visions of contending good and evil spirits, *ibid.*, p. 186 and elsewhere.

Remaining Cases.

My method of dealing with cases has now been so fully illustrated that I should prefer to leave the reader to judge for himself, the most part, both why the remaining cases have a genuine psychological value, and why they do not seem to me sufficient to convince any very critical observer of the reality either of telepathy or of more obscure matters. If by "emulating the Seybert Commission" the writer of the letter given in Case 56 means ridiculing anybody's faith, or suppressing evidence, as I suppose he does mean, then, while I have here no opinion to pass on the Seybert Commission, I must certainly assure our correspondent, and all other persons, that I have no such intention. I am not convinced, to be sure, of his interpretation of his own experience; but I am glad to publish his letter, and to commend it to the attention of all students of psychology. Cases 51 (*a*) and 51 (*b*) illustrate the very baffling character of some of our narratives. The corroboration is considerable; but without more time than we have yet had to give to the work of interviewing our correspondents, it is very hard to judge of the degree of erroneous memory that may have affected the accuracy of the narratives. In Case 65, one finds how easy it is to feel as if the most ordinary dream-coincidence possible were of some deeper significance. August 17, one dreams of a birth expected at any time after August 20, and dreams that the baby weighs nine pounds and is a girl. The dream is verified. I make here no supposition of pseudo-presentiment. It should be added that our correspondent herself has serious doubts whether the coincidence is of any value. But I print the case mainly because there are people who are apt to have no doubts, and to regard such cases with great wonder.

Cases 74 and 75 are from a very well known correspondent and a friend of our work, a lady of the highest character, and of the ability, which her writing clearly indicates. I regard her communications with no small interest. In Case 76, as I have already said, I see pseudo-presentiments. Of the decidedly complex phenomena of the other cases, I can offer no present explanation.

I close a long task of analysis and comparison with a strong feeling that without the constant aid of Mr. Hodgson, my work would have proved far too much for my leisure and strength. I offer him my hearty thanks.

JOSIAH ROYCE.

ADDENDA TO CASES 24, 28, 36, 56.

CASE 24. — From additional documents that have just come to hand, it would appear that the dream of Mrs. H. must have occurred a week or ten days *before* the accident which happened to Mr. W. T. H. Mr. H. wrote on Jan. 22, 1889, that he had learned the exact date of his accident, and in a letter of February 10 to Mrs. H., he states this to be Aug. 19, 1869, at 12.40 A.M. In a letter to the secretary, of Feb. 22, 1889, Mr. H. states that "the date of accident is placed beyond doubt by two independent records made by different persons on the day of its occurrence." The original document referred to on p. 401 is dated Aug. 19, 1869, and refers to Mrs. H.'s letter "of the 18th," before which date, therefore, Mrs. H.'s dream must have occurred. The case is instructive, as regards both the weakness of testimony depending on mere memory, and the difficulties that meet us in our inquiries, and we hope to obtain permission to publish all the details in a future number of the Proceedings. What at first sight gave promise of being a well-established case of actual coincidence has its chief importance now as illustrating the dangers against which we have to guard in dealing with the testimony presented to us.

CASE 28. — We learn from one of our members, Mr. George Pellew, that the city surveyor of Camden, N.J., gives 1,880 feet as the distance "by an air line from 805 Broadway to the rear entrance of City Hall." "From 805 Broadway northward to north side Washington street [which ought to have been marked on the plan, see p. 411, between Berkeley and Benson streets], eastward from Broadway to east side Seventh street and northward to rear entrance City Hall (being the route taken by one on foot) is 2,570 feet. By carriage would be a trifle less, owing to corners turned."

CASE 36. — (See, also, pp. 519, 520.) We have just received from Dr. Wm. Noyes a sketch of the room in which his mother died, and also the sketch of another room to which the body was removed. Neither sketch bears any resemblance to the sketch given by Mr. W. S. H.

CASE 56. — The following letter has been received from the son of Dr. S. F. Deane. He corroborates Dr. Deane's account as to the crisis of the wife's illness, but it will be observed that he gives the year as 1870; the year in Dr. Deane's account is 1871 — a difference which can be accounted for without assuming any extraordinary lapse of memory: —

VALPARAISO, NEB., Feb. 21, 1889.

RICHARD HODGSON, ESQ., *Boston, Mass.*: —

DEAR SIR, — Yours of January 21 was duly received, and I have neglected replying chiefly because I am not cognizant of any facts that

appear to me of material importance in the case to which you refer. I can only say that my mother was sick in Wisconsin, either in March or April, 1870, and that at one time we thought she was dying; that she rallied from this "sinking spell," and finally recovered her usual health; and also that at that time my father, Dr. S. F. Deane, was in this State.

Yours very truly,

D. M. DEANE.

ON SOME OBJECTIONS TO THE THEORY OF TELEPATHY.

Professor James, in his note to Professor Minot's Report on the Diagram Tests, speaks of the "*exceedingly* strong presumption in favor of thought-transference which the English reports establish," whereas it will be evident that Professor Minot regards that presumption as exceedingly weak. Professor James seems inclined to suggest that such a difference of view will be, in part, dependent upon the preconceptions of the reader of the English reports, "as to the likelihood of the phenomena and the competence of the observers." This is undoubtedly the case, and I think it opportune to call attention here more specifically to one important but little noticed result of the bias against Telepathy, all the more important because it is insidious. Not only do the preconceptions of the reader affect his estimate of the evidence upon its first presentation, but they affect that estimate itself of the evidence in recollection, so that what at first sight may appear to be a substantially valuable (even if inconclusive) series of experiments, is regarded after a few months' interval as entirely trifling and unsatisfactory; precautions enumerated by the experimenters are forgotten; the old theories resume their sway, and it is hard for the alleged facts to regain any attentive consideration. The bias against hasty generalization, or against a too ready belief in new causal relations, is of course a healthy one, and its advantages are obvious; but it frequently becomes morbid, and degenerates into prejudice, and the misappreciation of an opponent's views is then very easy.

I make these somewhat trite remarks because I wish to distinguish clearly between that kind of bias which leads to positive misconception and the bias which it is, perhaps, impossible to avoid when estimating the value of testimony to so-called supernormal phenomena, the justification for which, on one side or the other, must be left to the ultimate verdict from scientific exploration. Where the bias is of the latter kind only, it is well to recognize with respect the differing opinion of another concerning the value of evidence for

this or that class of phenomena; but where the bias is so extreme as to lead to an erroneous representation of that evidence, it is highly desirable that the mistakes involved should be plainly pointed out. It is hard for telepathy to get a patient hearing before the majority of scientific men, who are content, for the most part, to read the criticism which others of their number pass upon the records, rarely consulting those records for themselves at all, and still more rarely recurring to them for the purpose of estimating the validity of any fresh piece of criticism. These considerations impel me to enter the general controversy concerning telepathy, not, I need hardly say, in the hope of producing conviction, but in the hope of helping to clear the issues, — which, after all, is the main good of controversy.

And first, I shall refer briefly to some general misapprehensions which occur towards the close of Prof. G. Stanley Hall's painstaking and suggestive review (*The American Journal of Psychology*, Vol. I., No. 1) of the experiments reported in the English *Proceedings*, Professor Hall, while admitting (*op. cit.*, page 134) that there is ample evidence that "these investigations have struck the trail of something new and strange, however rare and abnormal it may be," does not accept the theory of telepathy, and after giving various reasons for his non-acceptance, with the sufficiency or insufficiency of which I am not here concerned, fortifies himself still further in his rejection by two *à priori* considerations. He writes (*op. cit.*, page 141): —

> Dr. Prince states, as is often implied in the reports, that "no established law is controverted" by the conclusion of telepathy. But the law of "isolated conductivity," formulated fully by Johannes Müller, which Helmholtz compares in importance to the law of gravity, first brought order into the field of neurology by insisting that impressions never jump from one fibre to another.

And he asks: —

> Is it likely that a neural state should jump from one brain to another, through a great interval, when intense stimuli on one nerve cannot affect another in the closest contact with it?

From which it would appear that Professor Hall supposes the conception of telepathy to involve the jumping of a neural state from one brain to another! Not only is there no warrant for Professor Hall's supposition, but explicit warnings are given against the adop-

tion of any supposition of that character as forming part of the theory of telepathy.[1]

This is an important point, and I quote a passage in illustration from a review by Mr. Podmore of the recent work by Dr. Ochorowicz, — a review to which Professor Hall refers (*op. cit.*, page 141), and which he has therefore presumably read: —

> But it may be worth while to point out that our own conception of telepathy involves, strictly speaking, no theory at all. It involves as little of pure theory as Newton's conception of the law of gravitation. What Newton did was to find the simplest general expression for the observed facts by saying that the heavenly bodies acted upon each other with a certain measurable force. He did not attempt to explain the mode of the action; he contented himself with asserting its existence, and defining its limits. And whilst succeeding astronomers have, for the most part, been content to follow his example, the science has nevertheless advanced in a steady and continuous progression. So, the conception of telepathy simply colligates the observed facts of spontaneous and experimental thought-transference, as instances of the action of one mind upon another. The nature of that action the theory does not discuss; it merely defines it negatively as being outside the normal sensory channels. (*Proceedings*, Part IX., p. 568.)

Again, Professor Hall writes (*loc. cit.*): "Even the fundamental theory of Bell has to be modified, so far as the brain is concerned, to meet the exigencies of the telepathic hypothesis. In Mr. Gurney's scheme of hallucination, centrifugal projection, or escape downward, may even be from the cortex through the basal ganglia to the peripheral organ." There are several replies to this statement: (1) It is only on an exceedingly careless reading that Mr. Gurney can be supposed to maintain that centrifugal projection may be from the cortex to the peripheral organ. Mr. Gurney urges that for many hallucinations the mode of origin may be a process in the direction from higher to lower *centres*, — *not*, however, to the *peripheral organ* (*Phantasms of the Living*, Vol. I., Chaps. X.–XII.); and I was at first at a loss to understand how the misapprehension of Prof. Hall could have arisen. But on carefully examining the chapters referred to, I find a passage the relations of which might be misconceived by any person who had not read Mr. Gurney's discussion, and who chanced to light upon the paragraph containing the passage. The statement on which I presume Professor Hall's impression to be founded occurs on the top of p. 487 (*Phantasms of the Living*,

[1] Vid. *Proceedings*, Part VI., p. 135; *Phantasms of the Living*, Vol. I., pp. 6, 7, 100–113; Vol. II., pp. 314–315.

Vol. I.), ["while, in the most complete or 'external' form of hallucinations, it is possible that by a yet further process a refluent current passes downwards to the external organ"], but is there given by Mr. Gurney, not as his own view, but as interpreting a view differing from his own. Mr. Gurney, moreover, actually takes occasion, by a note on the same page appended to the very statement, to point out objections to the view that "a refluent current passes downwards to the external organ." (2) The view which Mr. Gurney does suggest is, that simpler sorts of hallucination may "take shape at the sensory centres; but that the more elaborate and variable sorts must be traced to the higher origin, and that when the higher tracts are first concerned, the production of the hallucination is due to a downward escape of the nervous impulse to the sensory centre concerned" (*op. cit.*, Vol. I., p. xxxi). Now, as to this view, it suffices to say, that various eminent physiologists agree in supporting a form of centrifugal projection which is even more pronounced in its incompatibility with the "fundamental theory" to which Professor Hall refers, than is Mr. Gurney's view. Indeed, Professor Hall's ensuing remark, "Qualified forms of projection have been often assumed, but the matter is so complicated and so under dispute," etc., is enough to suggest that Bell's "fundamental theory" is not quite so fundamental as to be pressed into the required service of antagonism. But were even the objection valid as against Mr. Gurney's view of *hallucinations in general*, it would not be relevant as against the *telepathic hypothesis*, for (3) Telepathy does not stand or fall with any particular theory as to the initiation and development of hallucinations, and Mr. Gurney has expressly guarded himself against such a misinterpretation as that shown by Professor Hall. For example, in addition to the passages to which I have already referred in connection with the preceding objection, Mr. Gurney writes, towards the conclusion of his discussion of telepathic hallucinations: —

> I have sufficiently emphasized the difficulty of expressing the *transmission* of telepathic impressions in physical terms (pp. 110–113), and though I here suggest that the difficulty is lessened if we draw on unconscious parts of the mind, and old records of the brain, my physiological point is independent of this suggestion, and is limited to the percipient's own organism. There certain nervous changes do undoubtedly take place in correspondence with the psychical fact of the hallucination, and my object is to show that what we observe as to the psychical fact may be best accounted for on a particular view of the physical process. (*Phantasms of the Living*, Vol. I., p. 572, note.)

In brief, be the theory of Bell or the law of "isolated conductivity" as much or as little fundamental as we please to consider them, the telepathic hypothesis does not demand their overthrow; it is independent of them, and the introduction of them as objections implies a fundamental misconception of the telepathic hypothesis.

Leaving these misapprehensions of a general nature, let us now consider the more special strictures of Professor Minot in the present number of *Proceedings*. He refers in his article to No. 2 of the *Proceedings*, where he has drawn attention to the existence of the number-habit, and its importance in relation to experiments in thought-transference. I have no desire to underestimate the importance of the considerations depending upon this, though the extent of their application is very small as regards the experiments reported by the English Society, being limited to a few of the earliest ones. Professor Minot's research has shown how important it is, in experiments of this kind, to beware that our conclusions are not vitiated by ignoring the possible existence of certain habits in guessing, whatever be the class of objects chosen for experiment. And it may be owing to this research that some later experiments with numbers, recorded not in the *Proceedings*, but in *Phantasms of the Living* (Vol. I., p. 34; Vol. II., p. 653), are not open to the criticism depending on the existence of the number-habit. These experiments appear to have escaped the notice of both Professor Hall and Professor Minot.

> The following is a set of 400 trials, made in batches of 40 or 50 at a time, in June, 1886, by the Misses Wingfield, whose former experiments have been described in Vol. I., p. 34.
>
> The ninety numbers which contained two digits were inscribed on ninety slips of paper,[1] and placed in a bowl. Miss M. Wingfield, sitting six feet behind the percipient, drew a slip at random and fixed her attention on the number which it bore; Miss K. Wingfield made a guess at the number, and the real number and the guess made were at once recorded in the table. The slip of paper was then replaced, the contents of the bowl shuffled, and another draw made at haphazard. The most probable number of right guesses for accident to bring about in the 400 trials was 4. The actual number of completely right guesses was 27; in 21 other cases the two right digits were given in reverse order; and in 162 others, one of the digits was given rightly in its right place. The probability which this result affords for a cause other than chance is represented by 17 nines and a 5 following a decimal point; *i.e.*, the odds are nearly two hundred thousand million trillions of trillions to 1. (*Loc. cit.*, p. 653.)

[1] We would recommend slips of card, "chips," or balls, as preferable to slips of paper. — E. H

But I must now point out that while the existence of a number-habit was not taken into consideration in the earliest experiments made by the committee of the English Society, it was recognized at the outset that in experiments with cards, the card chosen must be drawn at random from the pack, and not selected according to the whim of the agent. And yet, curiously enough, it is more especially the card experiments which Professor Minot uses to illustrate his statement that "the law of relative frequency of ideas was not known to the committee reporting." He writes (p. 315): —

> For example, p. 23, they say, "The chances against success in the case of *any* one card are, *of course*, fifty-one to one" — (the italics are ours). On the contrary, the chances vary according to the card, and if the card is not drawn at random from a full pack, but selected by some person thinking of it, the chances in favor of success are very much greater than one to fifty-one.

The sentence on p. 23 (*Proceedings* of English S. P. R., Part I.) to which Professor Minot refers, reads in full: "The chances against success in the case of any one card are, of course, 51 to 1, assuming that there is no such thing as thought-reading, and *that errors of experiment are avoided*" — (the italics are mine); and the method of choosing the card is described sufficiently in other parts of the same report. Thus, on the immediately following page, we read: "Cards to be named, drawn at random from a full pack;" and on p. 20 we read, "we would choose a card from a pack," and "we then chose a card from a full pack." Similarly in the second report on Thought-transference (Part II., p. 71) the committee expressly refer to an objection that had been brought against their first report, that the percipient "might have known which card we were likely to choose, whereas we have stated that the cards were drawn at random from a full pack." This precaution is mentioned again expressly in connection with the experiments described in that report, and it is repeated in the third report (Part III., p. 170): "A full pack of cards was invariably used, from which a card was drawn at random." Thus Professor Minot criticises the results of the experiments with cards on the assumed ground, apparently, that a certain precaution was *not* taken, whereas it is repeatedly and expressly affirmed that this very precaution *was* taken. I dwell upon this point because it seems to me desirable to show that Professor Minot's opinion is founded upon a very cursory examination of the evidence brought forward in favor of Telepathy.

Professor Minot later proceeds (p. 315): —

> If we examine the drawings given in the various articles above referred to, we notice at once that with the exception of a single series, those with Mr. G. A. Smith as percipient, the figures drawn by both the agents and percipients are in greater part just such as our diagram-tests have shown to be the ones likely to be drawn. The authors of the articles in question having fundamentally misconceived the nature of the chances, of course fail to offer the necessary proof that the proportion of coincidences was greater than chance would account for. Until this is done it appears premature to accept these experiments as valid proofs of thought-transference.

The "various articles above referred to" are those in Part I., Part III., and Part XI. There are no drawings at all in Part I.; in all the drawings in Part III. Mr. Smith was percipient, and these are excepted by Professor Minot; there remains only the series in Part XI., given in the article by Herr Schmoll. That is to say, Professor Minot's criticism, instead of being here applied, as the reader might suppose, to the bulk of the experiments with diagrams, is applied to a single series, that a comparatively insignificant one, and, apparently, is not applied to the whole of this. But even here I venture to think that Professor Minot has thrown no new light whatever upon this series. The writer of the article, Herr Schmoll, has offered no definite calculation of the chances; but neither has Professor Minot, nor am I able, from his tabulations or from the diagram-returns, to make any. Twenty-six experiments are described, seventeen of which (Nos. 2, 4–19) were with drawings. I enumerate the objects and drawings chosen by the agents as follow, with brief and rough description: —

1. Pair of gold spectacles.
2. Capitol O, thickened on sides.
3. Penknife.
4. Two parallel horizontal lines.
5. Bars of a musical stave, with clef and crotchet.
6. Cross in position of capital X.
7. Triangle with dot in centre.
8. Flat ellipse with major axis horizontal, and straight line extending on each side in direction of major axis.
9. Capital A.
10. Capital S.
11. Capital T.
12. Spiral with axis vertical.
13. Two touching semicircles tangent vertical.
14. Three straight lines radiating at equal angles from a dot.
15. Capital K.

16. 
17. 
18. Semicircle with dot near centre.
19. The figure 4 made with straight lines.
20. Brass weight of 500 grms.
21. Gold watch.
22. A pamphlet 8vo.
23. A piece of candle, 20 centimeters long.
24. A faïence teapot.
25. "The stamp of the firm."
26. Double eye-glasses.

In order to estimate fully the chances here, we require to know, independently of other considerations (such as the environment and conversation of the sitters, familiarity with accounts of previous experiments, etc.), what chance there is of (1)'s being chosen, and then the chance — (1) having been chosen — of (2)'s being chosen, and then the chance — (1) and (2) having been chosen — of (3)'s being chosen, and so on. It will be obvious that to estimate this with any approach to accuracy we should need a much greater series of statistics than is at all likely to be available. Herr Schmoll's conclusion is: —

> The results of the preceding trials clearly leave much to be desired; nevertheless, it is not to be denied that in many cases the reproduction possesses the fundamental character of the original, and indeed in many (as, for example, Nos. 2, 8, 12, 13, 18, 21, 24, 25) very strongly approaches precision. In no single case, strictly speaking, did there appear absolute discrepancy between the form of the reproduction and that of the original. We have therefore been able to convince ourselves that the agents, concentrating their looks on the given object, projected on the mental eye of the percipient a picture more or less resembling it, and we take it as incontrovertible that the above results could not have been achieved by conscious or unconscious guessing.

Whether the reader who refers to the article for a detailed account of the experiments agrees with this conclusion or not, I venture to think that his judgment would not be unfavorably affected by the study of Professor Minot's results from the diagram-cards. Professor Minot says (p. 314): —

> Let us suppose by way of illustration that two persons make an experiment in thought-transference with diagrams. The agent

draws a circle; now four persons out of ten are likely to draw a circle (see Table VI.), and to draw it near the beginning of a series of diagrams; instead, therefore, of the chances of the percipient's drawing a circle being almost infinitely small, they are very great. The trial is proceeded with; the circle having been drawn, it is probable that the next figure will be different, as our cards show; the agent draws a square; again the percipient's unconscious chances are very great, and so on with a considerable series of diagrams. In this manner thought-transference might be simulated, and a proof of its reality obtained, which would seem overwhelming so long as the law of relative frequency is disregarded as an explanation.

Now, in the first place, we must remember that the diagrams drawn on the cards returned are not necessarily by any means such as would have been drawn had their artists been engaged in experiments for testing thought-transference. But, putting this consideration aside for the present, I draw the attention of the reader to the fact that although "four persons out of ten are likely to draw a circle (see Table VI.)," *as one in a series of ten diagrams*, only *one* person in ten is likely to draw it as the *first* of that series, as I find from the manuscript tabulations, which give less than 50 cards where the first figure is a circle. Examining the cards (501) myself, I find 43 in which the first figure is a plain circle. In 2 of these the second figure is a five-pointed star, in 2 others it is a horizontal oblong, in 14 it is a triangle, and in 16 a square. In the remaining 9 cards the series diverge after the first figure.

Taking the "circle-triangle" group, I find —

a.	Circle, triangle, *diverge*[1]	5
b.	Circle, triangle, triangle, *diverge*	3
c.	Circle, triangle, square, *diverge*	2
d.	Circle, triangle, square, triangle, *diverge*	2
e.	Circle, triangle, square, cross, *diverge*	2

The fourth figures are not formed in exactly the same way either in (*d*) or (*e*); and in neither pair is any one of the remaining figures common.

Taking the "circle-square" group I find: —

f.	Circle, square, *diverge*	5
g.	Circle, square, oblong, *diverge*	2
h.	Circle, square, triangle, *diverge*	5
k.	Circle, square, triangle, octagon, *diverge*	2
l.	Circle, square, triangle, heart, cross, *diverge* . . .	2

[1] *Diverge*, *i.e.*, the next diagrams in these series differ from one another.

In *l* the crosses differ in type, one being placed like a capital X; and in neither *k* nor *l* is any one of the remaining figures common.

Here, then, we have two similar series of five figures, beginning with a plain circle, in five hundred cards. The chance, therefore, of such a run is 1 in 250. Professor Minot says, "And so on for a considerable series of diagrams." Let us suppose that this "considerable series" consists of ten diagrams; and, as the returns in the case before us do not provide a basis for the chances beyond five diagrams, let us suppose that each of the second five is half as likely to be correct as the corresponding diagram in order in the first five; in other words, that the sixth diagram of the series is half as likely to be correct as the circle was originally, the seventh diagram half as likely to be correct as the square, and so on. On this estimate, the chance of a run of ten consecutive correct diagrams would be 1 in 2,000,000. Continuing the same estimate, the chance of a run of *twenty* consecutive correct diagrams would be 1 in 128,000,000,000,000.

These diagrams present an aspect of great importance which Professor Minot appears to have either overlooked or ignored, *viz.*, *the order in which the diagrams occur*. I cannot otherwise account for his statements that certain diagrams in the English records are "likely to be drawn." The question is one not simply of the "relative frequency of ideas," but, and much more, of their relative *sequence*. The chances are fundamentally misconceived unless the relative position of each diagram in the series is kept clearly in view. As I have suggested above (p. 536), it is manifest that Professor Minot has lost sight of this consideration when he can write, "Four persons out of ten are likely to draw a circle (see Table VI.), and to draw it near the beginning of a series of diagrams;" he wants to know the chance that a circle will be drawn first, and it is obvious from the manuscript tabulations that the chance is not four in ten, but one in ten.[1] To say that a diagram is likely to be drawn somewhere in a series of ten is a very different thing from saying that it is likely to be drawn at any particular place in that series. It may be very likely to occur in one position, and very unlikely to occur in another. I find from the returns that —

The circle is drawn as the			*first*	figure	once in	10 times.
"	"	"	*second*	"	20	"
"	"	"	*third*	"	13	"
"	"	"	*fourth*	"	26	"

[1] I need hardly say that I do not regard the number of cards returned as by any means large enough to serve as a basis for detailed conclusions concerning the relative frequency and sequence of more than perhaps two or three of the simplest figures, such as the circle, triangle, and square

The circle is drawn as the			*fifth*	figure once in	38	times.
"	"	"	*sixth*	"	45	"
"	"	"	*seventh*	"	42	"
"	"	"	*eighth*	"	45	"
"	"	"	*ninth*	"	50	"
"	"	"	*tenth*	"	62	"

Of course this does not imply that, *e.g.*, whatever the previous nine figures have been, the chance is only 1 in 62 that the tenth figure will be a circle. The chance might be greater or less, depending on the previous nine figures and their order; and the chances will unquestionably vary enormously according to the order. Thus, recurring to our two similar series of five diagrams, if the order is *cross*, *heart*, *triangle*, *square*, *circle*, the chance of a similar series would be much less than for the reverse order. I find from the manuscript tabulations that in only 12 cards out of the 500 is the first figure a cross, and by inspection of the cards I find that in not one of the sets beginning with a cross is the second figure a heart; so that on the basis of these returns the chances are greater for the series of the five diagrams *circle*, *square*, *triangle*, *heart*, *cross*, than for the series of the two diagrams *cross*, *heart*. Again, there is only 1 card in the 500 where the first figure is a heart, *viz.*, the card to which Professor Minot refers on p. 307; it "has ten hearts arranged like the pips on a playing-card, but inside each heart are four marks;" (these marks are different for each heart, and are intended to represent two eyes, nose, and mouth). On the basis of these returns, then, the chance is greater for the correctness of the series *circle*, *square*, *triangle*, *heart*, *cross*, than it is for the drawing of a *heart* as the first figure. Hence it is of fundamental importance, for the calculation of the chances, that we should know not only what diagrams are commonly drawn, but in what order they are commonly drawn.

Bearing the various foregoing considerations in mind, let us turn to Professor Minot's criticism of the experiments described by Herr Schmoll (*vide* p. 534). Professor Minot says, "The figures drawn by both the agents and percipients are in greater part just such as our diagram-tests have shown to be the ones likely to be drawn." Now, of the 17 drawings by the agents (*vide* p. 534) not more than 3 can be regarded as coming within the *ten* most frequent on the diagram-cards returned (Table VI., p. 308), and not more than 7 within the *twenty* most frequent; while of the drawings by the percipient (*op. cit.*, Art. IV.), certainly not more than *five* can be regarded as coming within the same group of *twenty*. I venture therefore to traverse Professor Minot's statement, even if

he means by "likely to be drawn," — *likely to be drawn as one of a series of ten diagrams*. But his criticism has no point unless he means much more than this, — unless he means that the figures in question are likely to be drawn at certain assigned places in the series, and this is just what our diagram-tests have *not* shown with regard to the series in question.

Similar remarks apply, still more forcibly, to Professor Minot's later statements, which are yet more extraordinary than those which I have discussed in detail. He writes: —

> If we examine the diagrams reproduced in the Proceedings of the English Society, Part II., pp. 86–97, and Part III., pp. 175–215, we observe among them also, a considerable proportion of the figures which are most likely to be drawn, so that, even under the assumption that everything was perfectly fair, the evidence is much less strong than the English committee have represented it.

I beg the reader to refer to these diagrams in the English *Proceedings* and compare his descriptions of them with the titles of the twenty most frequent figures enumerated in Professor Minot's Table VI. He will surely be surprised that Professor Minot can "observe among them also, a considerable proportion of the figures most likely to be drawn." Twenty-two reproductions are given in Part III.; of these five were with contact. Concerning the others, Prof. Stanley Hall writes: "With the record of these seventeen reproductions, without contact, of the most unconventional diagrams, we confess ourselves more deeply impressed than with any other work of the Society." Nor would this opinion be altered for the worse by a study of our diagram-returns. In my own case at least, such examination as I have been able to make of these returns seems to me to strengthen the conclusion of the English committee to which Professor Minot objects, that "here obviously an incalculable number of trials might be made, at any rate in the case of the more random and eccentric figures, before pure guess-work [aided by Professor Minot's knowledge of the diagram-habit] would hit upon a resemblance as near as that obtained in almost every case by Mr. G. A. Smith."

In closing this portion of my paper let me again remind the reader that the experiments with diagrams form but a fragment of the evidence upon which Telepathy depends, and that Professor Minot has referred to but a portion of this fragment. Whether he has been unduly biassed in the presentation of this portion, and whether the diagram-returns justify the application which he has made of them, may safely be left to the student of the records published in the English *Proceedings*, and in *Phantasms of the Living*. I have written

rather for those who are unfamiliar with those records, and I trust that one result of this discussion may be to stimulate our readers both to the careful perusal of the records themselves, and to similar investigations among their friends. Few, in truth, are the persons who have experimented in this direction, not merely lightly and casually, but seriously and persistently, as described in the article by Herr Schmoll. It is in the lack of patient endeavor, rather than in the rarity of telepathic sensitiveness, that I incline to think the real deficiency lies.

I pass now to some considerations of a very different sort, considerations which I wish to be regarded not so much the expression of a disagreement as the outcome of a desire to assist in the elucidation of a comparatively obscure class of mental processes. I refer to the spontaneous experiences grouped by Prof. Royce in the category of *Pseudo-Presentiments*. Prof. Royce quotes at length from a letter which he wrote to *Mind* on this subject, in which he applied the Pseudo-Presentiment hypothesis to a "very large proportion" of a certain class of cases published in *Phantasms of the Living*. I may fitly quote, therefore, a part of Mr. Gurney's reply, which the reader will find in *Mind* of July, 1888. After remarking that he had in various places suggested that *portions* of the experience might be *read back*, Mr. Gurney says: "The reason why I did not bring forward the hypothesis that the *whole experience* was a delusion of memory, is simply that to hardly any of the cases on which stress is laid does it appear to me that that hypothesis is at all applicable;" and finally he writes as follows: —

> I am quite content to accept Prof. Royce's view as to the comparative unimportance of cases, not supported by documentary evidence, which occurred more than ten years ago. But as regards the third class of cases which he mentions — cases of recent date where we have no record of the percipient's experience put into writing before the arrival of the news of the corresponding event — he seems to have ignored the support which is afforded to a large number of the amounts by the testimony of other persons that the percipient's experience was orally described before the arrival of the news. He says, "Members of the same family would be especially apt to be similarly subject to this form of delusion;" but though this might account, in some cases, for two or more members of a family, say A and B, having the same delusive memory that they had shortly before received an impression relating to C, it surely cannot commend itself as an explanation of their having quite different delusive memories — A having the memory that he had received

an impression relating to C, and B the memory that A had described to him such an impression.

But my chief objection to Prof. Royce's hypothesis is of a more general kind, and relates not to points of evidence as such, but to the actual nature of the phenomena on which the proof of 'telepathy' depends. We have seen that he omits all mention of *sensory hallucinations;* and it seems impossible that he can have duly recognized their importance in the argument. However much it were proved that the news of an exciting event had a tendency to produce the impression that one had known of it before, we should have got a very little way towards proving that the receipt of existing news about X had a tendency to produce in a sane mind the impression of having recently seen X in a place where he was not, not announcing, often not even suggesting, his actual condition, and without any exciting concomitants. Phenomena of this sort may be very hard to account for completely on any simple theory of *thought-transference*, but if the coincidences happen too frequently to be accounted for by chance, they form a complete proof of *telepathy*.

It is worth adding that the assignment of the experience in memory to a particular time constitutes a further most vital difference from the familiar illusions of "double memory," where "the feeling that one has been here before" is quite unlocalized in past time.

I think, indeed, that the considerations which Prof. Royce has adduced, though highly important in their application to a certain class of cases, do not appreciably affect our views of the accounts of spontaneous experiences on which the proof of telepathy depends. The comparative method of study, to which Prof. Royce has referred, led — in the grouping of narratives received by the English Society — to two, among other, distinct classes, which I may here call for convenience the *telepathic* and *premonitory* groups. Thus Mr. Myers writes (*Phantasms of the Living*, I., p. lxiii) : —

> When we began . . . to collect accounts of experiences which our informants regarded as inexplicable by ordinary laws, we were of course ignorant as to what forms these experiences would mainly take. But after printing and considering over two thousand depositions which seemed *primâ facie* to deserve attention, we find that more than half of them are narratives of appearances or other impressions coincident either with the death of the person seen or with some critical moment in his life-history.

And it is to this group, the *telepathic*, that *Phantasms of the Living* is devoted. For some cases, of course, it would be difficult at first sight to assign the class. Mrs. Sidgwick, in the article *On the Evidence for Premonitions* in the current number (Part XIII.) of the *Proceedings* of the English S. P. R., observes "that not a few

cases which are commonly spoken of as premonitions or presentiments may be explained, without assuming more than clairvoyance of the present. This is true of more than a fifth of the cases which have been provisionally classed as premonitions, and printed or type-written by the Literary Committee;" and she explains on the preceding page that by Premonition she means "predictions or foreshadowings or warnings of coming events which afford, if believed, a knowledge of the future greater than that which human beings could obtain by exercising their normal faculties on the facts before them." Her opinion is that the evidence at present collected by the English Society "does not seem to me sufficient to warrant a conclusion in favour of the reality of premonitions."

Now it appears to me that it is to the premonitory and not to the telepathic group that the hypothesis brought forward by Prof. Royce primarily applies. The case cited from Krafft-Ebing belongs obviously to the type of Premonition, though we might here accept the patient's account of his experiences without supposing any supernormal occurrence, since his dreams might well have been governed to a certain extent by his auditory hallucinations. Similarly, the cases quoted from Kraepelin belong also to the type of Premonition; certain events coming to the notice of the patients have been *prophesied* to them, directly or indirectly, long before. The special interest of these cases, Kraepelin suggests, lies in the fact that the patients regarded the events as the fulfilment of prophecy, and not as the duplication of actual previous experience. It is, however, especially noteworthy, as regards these patients, that there appears to be no indication of any tendency in their experiences to simulate a telepathic order; and we need a much fuller and wider acquaintance with such cases before classing them definitively apart from the so-called "double memory" experiences, of which they may prove to be merely varieties, differentiated from the common type by the patients' other and peculiar delusions. The feeling that some experience, whether a comparatively simple and single specific event, or a complex group of perceptions, has appeared before in the threads of "entangled circumstance" that life has woven into our past history, sleeping and waking, lies at the bottom of them all. To one it may seem to recur as the representation of a waking experience, to another as the actuality of a previous dream, to another as the real occurrence of an incident which was once imagined and the conception of which was caused by a reading or a conversation that constituted the prediction. It would not be surprising if the feeling in question, which the ordinary sane man almost sponta-

neously seeks to explain by reminiscences of his own shadowy land of dreams, should connect itself occasionally in the insane with their peculiar forms of delusion, and, as, *e.g.*, in the cases described by Kraepelin, be referred to the realm of imaginary readings or auditory hallucinations, or the transcendent care of the princely lover.

Prof. Royce goes so far as to admit that to verify his hypothesis, "even remotely, requires more than such *à priori* suggestions" as he puts forward, and my contention here is, that the cases which he cites from Krafft-Ebing and Kraepelin do not warrant such a wide application as he has made of his hypothesis, important as it possibly may be. I think, for example, that cases 19 and 20, accepting the evidence for no more than Prof. Royce apparently is willing to accept it, belong not to the group of pseudo-presentiments, but to that of "actual coincidences," and (as I have been convinced that in certain groups of such coincidences there is a causal relation between the two coincident events) I should describe them as cases of telepathy. In case 19, the "check put upon the narration" — to quote from one of our correspondents who has objected to Prof. Royce's interpretation of this particular case — which Prof. Royce regards as illustrating the liveliness of his typical hallucination, "shuts out the theory of hallucination of the memory." In case 20, the details of Miss Watkins' remembrance, especially those concerning her state on waking and her prolonged distress during the morning, —

> Just then I awoke, weeping bitterly. All that morning I was oppressed by a feeling of impending evil, a feeling that I struggled unsuccessfully to throw off, as having its source in the unreal experience of a few hours previous, —

appear to me to be entirely remote in character from the pseudo-presentiments of Kraepelin's cases.

I may here remind the reader of some of the different hypotheses which have been advanced in explanation of the illusion of the so-called "double-memory." One of the first in recent times to attempt an explanation of this, apart from the fascinating suggestion of genuine premonition or the fantastic notion of "pre-existence," was Wigan, in his *Duality of the Mind*, and he used it in support of his hypothesis that "each cerebrum is a distinct and perfect whole, as an organ of thought." He describes a delusion of his own on the occasion of the funeral of the Princess Charlotte. After giving the details of the actual occurrence, he writes: —

> I had fallen into a sort of torpid reverie, when I was recalled to consciousness by a paroxysm of violent grief on the part of the bereaved husband, as his eye suddenly caught the coffin sinking

> into its black grave, formed by the inverted covering of the altar. In an instant I felt not merely an *impression*, but a *conviction*, that I had seen the whole scene before on some former occasion, and had heard even the very words addressed to myself by Sir George Naylor.

His explanation is: —

> Only one brain has been used in the immediately preceding part of the scene, — the other brain has been asleep, or in an analogous state nearly approaching it. When the attention of both brains is roused to the topic, there is the same vague consciousness that the ideas have passed through the mind before, which takes place on re-perusing the page we had read while thinking on some other subject. The ideas *have* passed through the mind before, and as there was not sufficient consciousness to fix them in the memory without a renewal, we have no means of knowing the length of time that had elapsed between the *faint* impression received by the single brain, and the *distinct* impression received by the double brain. It may seem to have been many years.

Another explanation[1] of this class of cases is that "the received impression evokes analogous impressions in the past, vague, confused, and scarcely tangible, but sufficiently distinct to induce the belief that the new state is a repetition. There is a basis of resemblance between two states of consciousness which is readily perceived and which leads to an imaginary identification. It is an error, but only in part, since there is really in the recorded impressions of the past something resembling a first experience" (Ribot, *Diseases of Memory*, p. 187). That an explanation of this kind covers at least some of the cases has been established by Radestock, as Mr. Sully points out in his book on *Illusions*, from which I take the following passage quoted by him from Radestock's *Schlaf und Traum*:[2]—

> When I have been taking a walk with my thoughts quite unfettered, the idea has often occurred to me that I had seen, heard, or thought of this or that thing once before, without being able to recall when, where, and in what circumstances. This happened at the time when, with a view to the publication of the present work, I was in the habit of keeping an exact record of my dreams. Consequently I was able to turn to this after these impressions, and on doing so I generally found the conjecture confirmed that I had previously dreamt something like it.

[1] Mentioned by Sander, in *Archiv für Psych.*, IV., p. 252.

[2] See also *Archiv für Psych.*, VI., p. 673, for some interesting observations concerning the relation of dreams to this illusion.

We must not forget how multitudinous the past experiences are, besides the dreams which we recall from sleep, in which we may find some points of special similarity to the event or scene which now seems so familiar. All our perceptions; all the mental picturings suggested by reading and conversation; all the imaginings, involuntary or constructive, of our waking life; every whim and phantasy, every change, in short, of external and internal waking experience, go to swell the accumulation. And what shall we say of that larger domain still to which the fleeting resemblances may be traced, that

> "ocean of dreams without a sound,
> Whose waves never mark, though they ever impress
> The light sand which paves it, consciousness"?

Few, indeed, of the doubtless myriad nightly dreams leave marks discernible by the ordinary waking self; but it may well be that here and there the light of a new event may startle into shadowy form the subtle impression of some dream of ours that never merged into the recollections of the daytime, — that we never consciously knew. Presentiments which are thus explicable should be classed as Illusions, and not as Hallucinations of Memory. Just as in a darkening room, by a common Illusion of Perception, we may glimpse the edge of a table and interpret it as a chair, under the influence of the more vivid associations of the moment; so, of the foregone fugitive dream or reverie, or experience of whatever kind, only those fragments which resemble the present fact are brought into view; the rest of the shadowy experience is too dim in its difference to obtain any recognition at all, and the other elements of the perception before us take their place and complete the shadowy picture.

I do not suppose, however, that this explanation covers all the cases which *primâ facie* might seem to belong to the general type of delusive memory which we are considering. Yet another view, perhaps applicable in some cases, is, that after the actual event happens, it is recalled in detail, and we pass through it once more in imagination; this imagining, if very vivid, may simulate and take the place, in memory, of the actual event, which then becomes retrojected as a foreshadowing.[1] The reproduction may also occur in the form of a dream, which takes the place of the actual event, or may even itself be thenceforward wrongly localized in time, and regarded as a premonitory experience. Such an illusion as this last, it appears to me, might easily arise, since the dream might be associated during its process with other dreams of long prior actual events, and thus be-

[1] See Ribot, *Diseases of Memory*, pp. 189–190.

come erroneously remembered as occurring at the same time as the prior events themselves.

Yet another view is worth mentioning, restricted to the cases where, upon the occurrence of some event, the feeling that it has been experienced before arises apparently *instantaneously*. This view, which has a certain kinship to the psychological aspect of Wigan's hypothesis, is that the impression of the event is first received only semi-consciously, owing to a temporary diversion of attention, — it is perceived, but not apperceived, and a comparatively long interval elapses between the perception and the apperception; then follows the significance of the event in full consciousness, — it is apperceived, but the apperception (perhaps involving a re-perception) is dislocated, as it were, from the prior perception, which then wears the appearance of a dream or the fading memory of some remote but actual previous waking experience. Or, on the other hand, it may be that the apperception itself appears as the memory.[1]

For a discussion of some of the difficulties attending such hypotheses as the foregoing, or variations of them, the reader may turn to the latter part of Kraepelin's article. Lack of time[2] prevents my dealing with the subject further in the present number of *Proceedings*.

I add merely a few words as to the classification of Pseudo-presentiments. The reader will rightly infer, from what I have already said, that some of the cases which Professor Royce classes as pseudo-presentiments, I would class as genuine telepathic experiences; others as possibly telepathic; while some I would class as memory-illusions, and perhaps a few as memory-hallucinations. The two last-mentioned groups I would include under the name pseudo-presentiments. The word "presentiment" is ambiguous, but has its merits, if we regard it as implying a feeling anticipative either of the event itself or of the receipt of news of the event. *Pseudo-presentiments* might then be divided into two classes, *pseudo-premonitory* and *pseudo-telepathic*. I venture to think that the large majority of pseudo-presentiments will prove to belong to the pseudo-premonitory group.

RICHARD HODGSON.

[1] *Archiv für Psych.*, XVIII., p. 414.

[2] The delusions of "double-memory," I incline to think, may be partial or complete, and they may arise immediately or even after the interval of some days. Probably the explanations will be different for different cases, and how far we shall group the cases under one general class will depend upon our view rather of the genesis of the illusion than of its superficial appearance or its immediacy. These are among the points I should like to have discussed, did time permit, referring to special cases in illustration.

OPEN LETTER CONCERNING TELEPATHY.

BY PROF. C. S. MINOT.

MY DEAR MR. HODGSON: — I find nothing in Professor James' criticisms [pp. 317–319] which seems to me to call for any further answer than my report itself affords.

In regard to your own criticisms [pp. 532–539], may I say that as to whether my report justifies or not your impression that I have made only "a very cursory examination of the evidence brought forward in favor of telepathy" others must judge, but in reality I have been minutely and carefully over the whole of that evidence and over the important parts several times. When I began I had a very strong bias in favor of telepathy, and it is the patient and repeated examination of that evidence which has obliged me to conclude that telepathy has not been rendered even a probability. Since, however, in so difficult a discussion caution is indispensable, I have expressed myself in a very guarded manner in my report, merely affirming none of the experiments "afford conclusive evidence of thought-transference." It does not appear to me that you have invalidated my position.

One of your criticisms is based solely upon a misunderstanding. I showed that the English investigators had not taken into account the relative frequency of ideas. Of course they mentioned the possibility of unknown sources of error, as you indicate, but that nowise proves that they knew the particular source of error to which I have called attention. In regard to the card experiments, you will find in my article on the very p. 315 which you quote from, that my criticism is expressly limited to the cases when the card is "selected by some person thinking of it;" your strictures therefore are, if you will excuse me for saying it, without foundation.

In regard to the probabilities, I have shown that there was an important source of error. I did not think it, and do not think it, my part to go into the calculation of the exact degree of that error, for it suffices to show that it is great and neglected, as is the case.

It is not my intention to enter upon a detailed criticism of the evidence for telepathy, but you oblige me to make one general comment. The reason why the English estimate of the probabilities, which read astounding enough no doubt to those not accustomed to such reckonings, is fundamentally erroneous is that they have not

considered the probable error, which alone is the correct guide; the probability of a particular result is always enormously small in such experiments as have been made, but that probability is almost worthless as a measure of the value of the evidence until the probable error is known. In this respect the English Society have not yet given the demonstration of the value of their tests, which alone would justify the decided opinions they have published. The same requirement must be put upon the estimate of probabilities which you have made. In addition, you must remember that when *two* persons are experimenting with the thought-transference of diagrams, they *both* supply *diagrams* and exclude from repetition more diagrams than one person; your calculation needs to be rectified accordingly.

I am afraid this is not a very cordial letter in appearance; let me add that I appreciate your remarks and the manner in which you have made them. In replying, I hope to appear equally courteous in spite of being so very explicit. Will you excuse me if I do not enter into more detail? I think the readers of our *Proceedings* will have the material for decision so far as it is possible at present. The final judgment as to the reality of thought-transference will come when the future evidence is in. With cordial esteem, I remain.

Yours faithfully,

CHARLES SEDGWICK MINOT.

Boston, Feb. 28, 1889.

NOTES ON AUTOMATIC WRITING.

Many communications concerning experiences in automatic writing have been sent in to the Secretary during the past two years, and both he and the undersigned have witnessed the phenomenon in a number of instances. It is unquestionably a field from which a rich harvest of instruction may be hoped; but as professional occupations have prevented that steady experimental study of the matter which it deserves, I will content myself with jotting down a few points which may serve to stimulate the interest of the Society, postponing a more systematic paper to some later date. I must refer the reader to the important papers by Mr. Myers in Nos. VII., VIII., and XI. of the London Society's *Proceedings*, for a general introduction to the subject. I regret that the appeal to experiment with the planchette, which was made at the public meeting in the spring of 1887, was followed by insignificant results. Planchettes can be obtained at the toy-shops, or (at cost) by writing to the Secretary of

the Society; and, possibly, the remainder of this paper may lead to a little wider trial amongst associates and members.

One phenomenon of which Mr. Hodgson and I have been witnesses is both new and important. *The hand and the arm of the automatic writer are (in certain instances, at least) anæsthetic.* As soon as I read M. Pierre Janet's admirable account of the double personality of his somnambulist, L.,[1] I resolved to look for this symptom in ordinary planchette writers. It will be remembered that the skin of the hysteric L. had been for many years entirely insensible to contact, but that when she took to writing automatically on being waked from the hypnotic trance, the hand which wrote (and which signed all its communications by the name of Adrienne) expressed an intelligence perfectly perceptive of those skin-sensations of which the usual intelligence, expressing itself by word of mouth, was ignorant. Might not, conversely, the usual intelligence of ordinary non-hysteric automatic writers be transiently ignorant of the sensations of the writing hand and arm?

Persons who have written with a planchette are apt to speak of a tingling or prickling in the hands. I have actually tested three automatic writers for anæsthesia. In one of them, examined between the acts of writing, no anæsthesia was observed, but the examination was superficial. In the two others, both of them men, the anæsthesia to pricking and pinching, and possibly to touch, seemed complete. The second of these cases is so interesting that I subjoin the facts in detail.

William L. Smith, of Concord, Mass., student at the Massachusetts Institute of Technology, age 21, perfectly healthy and exceptionally intelligent, whose sincerity it is impossible to suspect, has amused himself on various occasions during the past two years with planchette writing. Of his previous performances more anon. On Jan. 24, 1889, he sat with Mr. Hodgson and myself, with his right hand extended on the instrument, and his face averted and buried in the hollow of his left arm, which lay along the table. Care was taken not to suggest to him the aim of the inquiry.

The planchette began by illegible scrawling. After ten minutes I pricked the back of the right hand several times with a pin — no indication of feeling. Two pricks on the *left* hand were followed by withdrawal, and the question, "What did you do that for?" — to which I replied, "To find whether you were going to sleep." The first legible words which were written after this were, *You hurt me.*

[1] *Revue Philosophique*, XXII., 577; XXIII., 449. Mr. Myers gives an abstract of the case in the third of his articles above referred to, pp. 237–239.

A pencil in the right hand was then tried instead of the planchette. Here again the first legible words were, *No use* [?] *in trying to spel when you hurt me so.* Next: *Its no use trying to stop me writing by pricking.* These writings were deciphered aloud in the hearing of S., who seemed slow to connect them with the two pin-pricks on his left hand, which alone he had felt.

After some more or less illegible writing (some of it in Greek characters) and questions asked and answered,[1] I pricked the right wrist and fingers several times again quite severely, with no sign of reaction on S.'s part. After an interval, however, the pencil wrote: *Don't you prick me any more.* S. then said, "My right hand is pretty well asleep." I tested the two hands immediately by pinching and pricking, but found no difference between them, *both apparently normal.* S. then said that what he meant by "asleep" was the feeling of 'pins and needles' [which an insensible limb has when 'waking up'].

The last written sentence was then deciphered aloud. S. laughed, having been conscious only of the pricks on his left hand, and said, "It's working those two pin-pricks for all they are worth."

I then asked, "What have I been excited about to-day?" Ans. *Possibly examining.* "No, that was yesterday; try again." Ans. *May be correct dont know possibly sleepin.*[2] "What do you mean by sleeping?" Ans. *I don't know (really?) You* [distinct figure of a *pin*] *me 19 times*[3] *and think I'll write for you.*

The sitting here ended. It was very inferior in legibility and variety to sittings of the same Subject a year previous. Two evenings later we had another sitting. S. had been most of the day in the open air, and had paddled a canoe ten miles. I immediately asked, "Are you still offended at my having pricked you?" Ans. *I'm(?).* "Where did I prick you the other night?" Ans. *On the side of my hand.* "Didn't I prick you anywhere else?" Ans. *No.* "Which hand?" Ans. *This hand.* "Which hand?" Ans. *Right.*

After some remote questions and answers the pencil was changed to the *left* hand, to see if that also would write. It spontaneously wrote a good deal, quite unintelligibly. "Are you angry?" Ans. *Yes.* "Who pricked you? How many times? Tell us all

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[1] *Q.* 'Who is writing? Is it Smith himself?" *A. YES. Pencil cant go alone.*

[2] What I had in mind was "building-plans." As a matter of fact, however, I had been acutely suffering all day from loss of sleep, and had vainly sought to get a nap in the afternoon. There are claims of lucidity for Mr. Smith's past planchette writing, and this answer may (possibly) not have been a mere coincidence. It is true that I am a chronically bad sleeper, and Mr. S. may have heard of the fact.

[3] I unfortunately hadn't counted the times. Nineteen is a plausible number.

about it." Ans. *19 times on the other hand.* No further writing came on this evening. Shortly after the last answer I pinched four times, severely, the skin of the *left* hand between my nails. S.'s eyes were closed, but his face was visible, and I *thought* I detected a very subtle facial and respiratory reaction upon the pinching. He, however, on being questioned some minutes later, denied that he had been pricked or pinched during this evening. Later still, whilst the left hand still held the pencil, I pinched his *right* hand once, whereupon he started and said he didn't "need to be waked up." No more writing taking place after a quarter of an hour or more, I compared the two hands and found that they had equal and normal sensibility. S. is still ignorant of what interested us in these sittings. He is, unfortunately, too busy to sit again for many weeks.

Here, as the reader will perceive, we have the consciousness of a subject split into two parts, one of which expresses itself through the mouth, and the other through the hand, whilst both are in communication with the ear. The mouth-consciousness is ignorant of all that the hand suffers or does; the hand-consciousness is ignorant of pin-pricks inflicted upon other parts of the body — and of what more remains to be ascertained. If we call this hand-consciousness the automatic consciousness, then we also perceive that the automatic consciousness may transfer itself from the right hand to the left, and carry its own peculiar store of memories with it. The left hand, writing automatically on the second evening, remembered the right hand's experiences on the first, and very likely (though this was not ascertained) knew nothing of its own.

These phenomena remind us of what the lamented Gurney described in his important paper "Peculiarities of Certain Post-hypnotic States," in Part XI. of the London Society's *Proceedings*. The facts there, it will be remembered, were these: An order to do something after waking was given to the subject during the trance. Of this order no apparent consciousness remained when the trance was over. But if, before the time of execution arrived, the subject's hand was placed upon a planchette, the writing which came was all about the order, showing that the latter was retained in a split-off portion of the consciousness, which was able to express itself automatically through the hand. This dissociation of the consciousness into mutually exclusive parts is evidently a phenomenon destined, when understood, to cast a light into the abysses of Psychology.

We owe to the kindness of Dr. C. W. Fillmore, of Providence, the report of a case of hystero-epilepsy which illustrates the same phe-

nomenon in an even more extraordinary manner.[1] The record begins in the nineteenth year of the patient's age, and continues for several years. It is filled with every conceivable species of suffering and disorder, but the entries which interest us in the present connection are the following: —

September 17, 1860. — Wild with delirium. Tears her hair, pillow-cases, bedclothes, both sheets, night-dress, all to pieces. Her right hand prevents her left hand, by seizing and holding it, from tearing out her hair, but she tears her clothes with her left hand and teeth. . . .

29th. — Complains of great pain in right arm, more and more intense, when suddenly it falls down by her side. She looks at it in amazement. Thinks it belongs to some one else; positive it is not hers. Sees her right arm drawn around upon her spine. Cut it, prick it, do what you please to it, she takes no notice of it. Complains of great pain in the neck and back, which she now calls her shoulder and arm; no process of reasoning can convince her of the contrary. [To the present time, now nearly five years, the hallucination remains firm. She believes her spine is her right arm, and that her right arm is a foreign object and a nuisance. She believes it to be an arm and a hand, but treats it as if it had intelligence and might keep away from her. She bites it, pounds it, pricks it, and in many ways seeks to drive it from her. She calls it 'Stump; Old Stump.' Sometimes she is in great excitement and tears, pounding 'Old Stump.' Says 'Stump' has got this, that, or the other, that belongs to her.] The history of September is her daily and nightly history till October 25th. . . .

November 12. — From eleven to twelve at night sits up, apparently asleep, and writes, with her paper against the wall. After she awakes, seems to be unconscious of what she has written. . . .

From November 20 to January 1, 1861, raving delirium; pulls her hair nearly all out from the top of her head. . . . The right hand protects her against the left as much as possible. . . .

February 1 to 11. — Under the influence of magnetism writes poetry; personates different persons, mostly those who have long since passed away. When in the magnetic state, whatever she does and says is not remembered when she comes out of it. Commences a series of drawings with her right paralyzed hand, 'Old Stump.' Also writes poetry with it. Whatever 'Stump' writes, or draws, or does, she appears to take no interest in; says it is none of hers, and that she wants nothing to do with 'Stump' or 'Stump's.' I have sat by her bed and engaged her in conversation, and drawn her attention in various ways, while the writing and drawing has been uninterrupted. As she had never exhibited any taste for nor taken any lessons in drawing I exhibit here some specimens of her first attempt.[2]

March, 1861. — She became blind. . . .

[1] The report is by the late Dr. Ira Barrows, of Providence. The patient was Miss Anna Wineor. Her mother, brother, and Dr. Wilcox, Dr. B.'s former partner, bear corroborative testimony.

[2] These specimens we have never received. — W. J.

January 4, 1862. — Is still blind; sees as well with eyes closed as open; keeps them closed much of the time; reads and draws with them closed. Draws in the dark as well as in the light; is clairvoyant. Writes poetry, chiefly with the right hand, and often . . . while it is dark. The hand-writing differs greatly in different pieces. . . .

January 10. — When her delirium is at its height, as well as at all other times, her right hand is rational, asking and answering questions in writing; giving directions; trying to prevent her tearing her clothes; when she pulls out her hair it seizes and holds her left hand. When she is asleep, it carries on conversation the same; writes poetry; never sleeps; acts the part of a nurse as far it can; pulls the bedclothes over the patient, if it can reach them, when uncovered; raps on the head-board to awaken her mother (who always sleeps in the room) if anything occurs, as spasms, etc.

January, 1863. — At night, and during her sleep, 'Stump' writes letters, some of them very amusing; writes poetry, some pieces original. Writes 'Hasty Pudding,' by Barlow, in several cantos, which she had never read; all correctly written, but queerly arranged, as, *e.g.*, one line belonging in one canto would be transposed with another line in another canto. She has no knowledge of Latin or French, yet 'Stump' produces the following rhyme of Latin and English: [1] —

Sed tempus recessit, and this was all over,
Cum illi successit, another gay rover;
Nam cum navigaret in his own cutter,
Portentum apparet, which made them all flutter.

Est horridus anguis which they behold,
Haud dubio sanguis within them ran cold.
Tringinta pedes his head was upraised,
Et corporis sedes in secret was placed.

Sic serpens manebat, so says the same joker,
Et sese ferebat as stiff as a poker;
Tergum fricabat against the old light-house,
Et sese liberabat of scaly detritus.

Tunc plumbo percussit thinking he hath him,
At serpens exsiluit full thirty fathom,
Exsiluit mare with pain and affright,
Conatus abnare as fast as he might.

Neque illi secuti? no, nothing so rash,
Terrore sunt muti he'd made such a splash;
Sed nunc adierunt the place to inspect,
Et squamas viderunt, the which they collect.

Quicumque non credat and doubtfully rails,
Ad locum accedat, they'll show him the scales;
Quas, sola trophea, they brought to the shore;
Et causa est ea, they couldn't get more.

[1] Does any reader recognize these verses? If so, will he please send them to the Secretary? It is important to ascertain whether their origin were not in the patient's memory.

'Stump' writes both asleep and awake, and the writing goes on while she is occupied with her left hand in other matters. Ask her what she is writing, she replies, "*I* am not writing; that is 'Stump' writing. I don't know what he is writing. I don't trouble myself with 'Stump's' doings." Reads with her book upside down, and sometimes when covered with the sheet. 'Stump' produces two bills of fare in French. . . .

Upon this one subject of her right arm, she is monomaniac. Her right hand and arm are not hers. Attempt to reason with her and she holds up her left arm and says, "This is my left arm. I see and feel my right arm drawn behind me. You say this 'Stump' is my right arm. Then I have three arms and hands." In this arm the nerves of sensation are paralyzed, but the nerves of motion preserved. *She* has no will to move it. *She* has no knowledge of its motion. This arm appears to have a separate intelligence. When she sleeps, it writes or converses by signs. It never sleeps; watches over her when she sleeps; endeavors to prevent her from injuring herself or her clothing when she is raving. It seems to possess an independent life and, to some extent, foreknowledge.

Miss W. died in January, 1873. The record of her last ten years is not given. It would appear, from certain passages of the record in our possession, that 'old Stump' used to write of Miss W. in the third person, as Anna. This seems to be the rule in automatic utterances.

Certain other peculiarities which I have never seen quoted together deserve mention. Thus the planchette-writer often tends to fall into a drowsy condition whilst writing, and to become abstracted from the outer world. Sometimes he even passes into a state of genuine sleep or trance—I have no data thus far for distinguishing which. The writing is often preceded by peculiar sensations in the arm, and the latter is apt to be animated by involuntary spasmodic movements before the writing regularly begins.

I was witness a year ago, in Mr. Smith's case, of a phenomenon which has been described since Braid's time as 'exaltation of the muscular sense,' but, so far as I know, only recorded of hypnotic subjects.[1] Mr. Smith wrote on large sheets of brown wrapping-paper, his right arm extended, his face on a level with the table, buried in the hollow of his left elbow, — a position which made vision of the surface of the paper a physical impossibility. Nevertheless, two or three times in my presence on one evening, after covering a sheet with writing (the pencil never being raised, so that the words ran into each other), he returned to the top of the sheet and proceeded downwards, dotting each *i* and crossing each *t* with

[1] See, for example, Carpenter's *Mental Physiology*, § 188.

absolute precision and great rapidity. On another evening, whilst sitting in the same position, he drew the entire outline of a grotesque human figure in such a way that the pencil ended at the point where it began, and that it is now impossible to tell, from inspection of the perfectly continuous outline, just where the point in question lay. Such feats would seem quite impossible to one in the normal waking state.

Another often noted idiosyncrasy of these writings is the *freakiness* of their execution. Mirror-script, spelling backwards, writing from right to left, and even beginning at the right-hand lower corner of the page and inscribing every word with its last letter first, etc., till the top is reached, are among the peculiarities of the automatic pencil. Mr. Myers has tried to assimilate some of these traits to what is observed in aphasia — with what success, later inquiry alone can show.

Another remarkable point is that two persons can often make a planchette or a bare pencil write automatically when neither can succeed alone. The explanation of this is hard to find. The individuals themselves will sometimes say, "One of us gives the force, the other the intelligence." Certain it is that perfectly determinate combinations of individuals are often required for success. The more physiological explanation is that the automatic freedom is interfered with by conscious attention to the performance, and that when two persons work together each thinks that the other is the source of movement, and lets his own hand freely go. We sadly need more discriminating observations on this as well as other points.

Of course, the great *theoretic* interest of these automatic performances, whether speech or writing, consists in the questions they awaken as to the boundaries of our individuality. One of their most constant peculiarities is that the writing and speech announce themselves as from a personality other than the natural one of the writer, and often convince *him*, at any rate, that his organs are played upon by some one not himself. This foreignness in the personality reaches its climax in the demoniacal possession which has played so great a part in history, and which, in our country, seems replaced by the humaner phenomenon of trance-mediumship, with its Indian or other outlandish 'control,' giving more or less optimistic messages from the 'summer-land.' So marked is it in all the extreme instances that we may say that the *natural and presumptive* explanation of the phenomenon is unquestionably the popular or 'spiritualistic' one, of 'control' by another intelligence. It is only when we put the cases into a series, and see how insensibly those at the upper extreme shade down at the lower extreme into what is unquestionably the

work of the individual's own mind in an abstracted state, that more complex and would-be 'scientific' ways of conceiving the matter force themselves upon us. The whole subject is at present a perfect puzzle on the theoretic side. And even on the phenomenal side we need more abundant proof than we have yet received that the content of the automatic communications may transcend the possible information of the individual through whose hand they come. To interest the reader in these more difficult phases of the subject I will append as illustrations some of the cases which we have received. The first is from Mr. Sidney Dean, of Warren, R.I., member of Congress from Connecticut from 1855 to 1859, who has been all his life a robust and active journalist, author, and man of affairs. He has for many years been a writing subject, and has a large collection of manuscript automatically produced.

"Some of it," he writes us, "is in hieroglyph, or strange compounded arbitrary characters, each series possessing a seeming unity in general design or character, followed by what purports to be a translation or rendering into mother English. I never attempted the seemingly impossible feat of copying the characters. They were cut with the precision of a graver's tool, and generally with a single rapid stroke of the pencil. Many languages, some obsolete and passed from history, are professedly given. To see them would satisfy you that no one could copy them except by tracing.[1]

"These, however, are but a small part of the phenomena. The 'automatic' has given place to the *impressional*, and when the work is in progress I am in the normal condition, and seemingly two minds, intelligences, persons, are practically engaged. The writing is in my own hand, but the dictation not of my own mind and will, but that of another, upon subjects of which I can have no knowledge and hardly a theory; and I, myself, consciously criticise the thought, fact, mode of expressing it, etc., while the hand is recording the subject-matter and even the words impressed to be written. If *I* refuse to write the sentence, or even the word, the impression instantly ceases, and my willingness must be mentally expressed before the work is resumed, and it is resumed at the point of cessation, even if it should be in the middle of a sentence. Sentences are commenced without knowledge of mine as to their subject or ending. In fact, I have never known in advance the subject of disquisition.

"There is in progress now, at uncertain times, not subject to my will, a series of twenty-four chapters upon the scientific features of life, moral, spiritual, eternal. Seven have already been written in the manner indi-

[1] I should say that I have seen some of these curious hieroglyphs by Mr. D., which professed to be Chinese. They bore no outward resemblance to what I have learned to know as Chinese characters. I owe to the kindness of Colonel Bundy some four or five other soi-disant specimens of ancient languages, automatically written, which I have had examined by my colleagues conversant with Sanscrit, Hebrew, Assyrian, Arabic, and Persian, as well as by a Japanese student who knew Chinese. None of the characters were in any instance recognized. — W. J.

cated. These were preceded by twenty-four chapters relating generally to the life beyond material death, its characteristics, etc. Each chapter is signed by the name of some person who has lived on earth, — some with whom I have been personally acquainted, others known in history. . . . I know nothing of the alleged authorship of any chapter until it is completed and the name impressed and appended.[1] . . . I am interested not only in the reputed authorship, — of which I have nothing corroborative, — but in the philosophy taught, of which I was in ignorance until these chapters appeared. From my standpoint of life — which has been that of biblical orthodoxy — the philosophy is new, seems to be reasonable, and is logically put. I confess to an inability to successfully controvert it to my own satisfaction.

"It is an intelligent *ego* who writes, or else the influence assumes individuality, which practically makes of the influence a personality. It is *not* myself; of that I am conscious at every step of the process. I have also traversed the whole field of the claims of 'unconscious cerebration,' so called, so far as I am competent to critically examine it, and it fails, as a theory, in numberless points, when applied to this strange work through me. It would be far more reasonable and satisfactory for me to accept the silly hypothesis of re-incarnation, — the old doctrine of metempsychosis, — as taught by some spiritualists to-day, and to believe that I lived a former life here, and that once in a while it dominates my intellectual powers, and writes chapters upon the philosophy of life, or opens a post-office for spirits to drop their effusions, and have them put into English script. No; the easiest and most natural solution to me is to admit the claim made, *i.e.*, that it is a decarnated intelligence who writes. But *who?* that is the question. The names of scholars and thinkers who once lived are affixed to the most ungrammatical and weakest of *bosh*. . . .

"It seems reasonable to me, — upon the hypothesis that it is a person using another's mind or brain, — that there must be more or less of that other's style or tone incorporated in the message, and that to the unseen personality, *i.e.*, the power which impresses, the thought, the fact, or the philosophy, and not the style or tone, belongs. For instance, while the influence is impressing my brain with the greatest force and rapidity, so that my pencil fairly flies over the paper to record the thoughts, I am conscious that, in many cases, the vehicle of the thought, *i.e.*, the language, is very natural and familiar to me, as if, somehow, *my* personality as a writer was getting mixed up with the message. And, again, the style, language, everything, is entirely foreign to my own style."

Another gentleman, Mr. John N. Arnold, of 19 College street, Providence, R. I., describes his experience as follows: —

I make my mind as negative as possible, place myself in the attitude of

[1] I have seen and read three of these chapters. They are fluent, scholarly, and philosophical enough, but to my mind have a curious resemblance in style to other inspirational productions which I have read, and doubtfully attain to real originality. One of them, signed Louis Agassiz, was, both in thought and diction, wholly unlike the utterances during life of my lamented teacher. — W. J.

writing, with pencil and paper, and in about two or three minutes I feel a sensation at the elbow as if a galvanic battery had touched it. The thrill continues down the forearm till it reaches the hand, which quickly doubles over towards the thumb, and then back, with a strong tension, several times. When quiet, it begins to write. The power that writes sometimes tells the truth, but oftener lies. For instance, an influence which called itself Lydia, my wife's sister, wrote that Rose (my wife) had been raising blood. I replied I thought not. Lydia insisted, and, upon reaching home, I found she was correct. Again, she wrote that a lady friend was dead. I contradicted the Automat, as I had seen the lady but a few hours before. Lydia seemed hurt to think I doubted her, and strongly asserted that the lady was dead. In a few hours I ascertained the falsity of Lydia's vehement assertion by meeting the lady in question. I got so little satisfaction from the power that I gave it up, and of late can only get names, but no communications, except yes or no, in answer to my questions.

In a second communication Mr. Arnold adds: —

The pencil was always held in my right hand. I never had any mirror-writing. I sometimes guessed what was coming, but never knew. For instance, many words begin with the first two or three letters the same, as "*pre*suming," "*pre*fix." I would sometimes guess, after the Automat finished the *e* in such a word; but generally was mistaken, even when the context would indicate my word to be the proper one.

It is at least ten years (and it may be more) since the writing about my wife. I had no reason to think my wife had had hæmoptysis. She had had an attack in 1860, when we went to Macon, Ga., but not since; so that I was surprised when the Automat wrote with such confidence and persistency, and said that when I got home I should see that it was telling the truth. When I reached home I questioned my wife about it. She seemed very much astonished, and wanted to know how I got my information, as she had taken pains to conceal it from me, fearing it would cause me alarm. I have just asked my wife about this affair, and she seems to remember it substantially as I do. I have never tried answering mental questions put by another; in fact, the Automat and I got disgusted with one another years ago. We had a falling out, and haven't been on good terms since. The Auto got tired with my lack of patience, and I got tired with the Auto's lack of truthfulness.

I am glad to answer any questions about this matter, and when you get a theory that will fit this problem, please write me. I don't mean unconscious cerebration, astral light, or spirit friends; but something new, something that will fit tight and snug all around and won't have to be taken in at the back, or let out in the arm-size, and won't go all to pieces like Don Quixote's pasteboard helmet when the Damascus blade of logic, reason, and common-sense descends upon it.

An isolated case of apparent clairvoyance, like that which this gentleman reports, had of course better be treated as an accidental

coincidence. But there are other cases harder so to treat, — cases where some sort of telepathy appears to be involved. But telepathy seems always doomed to be baffling. The telepathic explanation of the cases I have in mind is neither disproved nor established with the fulness that is desirable. As an illustration of what I mean, take Mr. W. L. Smith's case again. It was first made known to us in November, 1887, by a letter from one of his neighbors, Miss ——, who wrote as follows: —

After reading the reports on Automatic Writing published by the English S. P. R. . . . I determined to try my own power and those of my friends. Accordingly my friend W. L. S. and I each made a planchette. . . . The successful writer was S. himself, and with him we have obtained more remarkable results than I have ever seen reported. It is worth while to notice that he had never seen a planchette before he made his according to my direction, and had never seen writing done with one until he made his first attempt in my presence, so that the possibility of unconscious deception, which might have existed in the case of a person who had already amused himself with a planchette, was out of the question with him. The question of conscious deception may be set aside at once; yet, appreciating that experiments whose fairness depends on the honesty of any person lose their scientific value, we took pains so far as possible to avoid everything which might have been suspicious with unknown writers.

Our first attempt, though only partially successful, so far exceeded our expectations, that we were much encouraged.

After relating three attempts at answering mental questions which seem to have been failures the account goes on: —

At the fourth experiment, a repetition of the third, with a different card, the suit and number were immediately and correctly written. As in these cases there had been a possibility of thought-transfer, the next experiment was differently arranged.

The pack was carefully shuffled *by me*, and held under a table, both my hand and W.'s being in contact with it; neither of us could see the pack. I then faced the top card, again asking mentally for the suit and number of the card faced. The planchette immediately wrote the word *which*. We were about to consider the trial a failure when it occurred to me that I might have faced two cards. I found, on examining the pack, that this was not so; but, still without suggestion from W., I looked further, and found a second card in the middle of the pack, which I had unconsciously faced in shuffling.

I mention this in detail because it was the first instance of a writing unexpected by either W. or myself. At several succeeding experiments the planchette correctly wrote suit and number of cards turned up out of sight of every one, until we became tired of that test and gave it up.

A series of questions, the answers to which were unknown to any one

present, seemed to furnish a fair test for the powers of the planchette. At first the questions were asked aloud; in all cases they were put without suggestion by W.

I will describe two experiments as instances of trials of this kind. During these two experiments we sat in the dark, and yet the answers were legibly written.

My first question was, "What is the name on the visiting card which lies at the top of the cards in the hall?"

The planchette did not write immediately; during the time while we waited for an answer I involuntarily formed an idea of the name which I expected, and feared that thought-transfer would come in for a share of consideration if the answer should be correctly written. At last I heard the motion of the pencil; when it ceased we took the paper to the light and found the words *Upside down. After* reading this, we examined the card-plate, and found as an explanation of planchette's answer, the top card turned *upside down* on the pile.

Now, not only had S. no means of knowing that the top card was upside down, but no one else in the house knew it until after the writing by planchette; I had even a distinct idea of a certain name in my mind during the whole of the experiment. Furthermore, and most remarkable of all, the hall where the card-plate stood was unlighted, so that when we went to examine the card we were quite unable to say whether or not there was a name upon the card until we had carried the plate into the next room.

This fact reminded us of the power we had already seen in planchette to read the suit and number of playing-cards, held under the table so as to be out of the range of possible, as well as actual, vision.

We put the same question, "What is the name on the card which lies at the top on the card-plate?" a second time, the cards having been re-arranged by a third person, who himself did not know what card he had placed at the top. The planchette wrote, "*Miss L. P. H——*"; the name on the card proved to be Miss Lillian C. H——. This partial mistake struck us as interesting, but we could find no explanation for it, as the card-plate stood in a lighted room during this experiment, where it would have seemed much easier for planchette to see it than in the first trial.

Although these questions were put without the slightest suggestion from W., he had been told before each experiment what inquiry had been made. From this time on we took pains to keep from him all knowledge, not only of the answer, but of the question asked. The question was either asked mentally or written on paper, and kept, with great care, out of his sight, except in a few instances, which I will mark with an asterisk in the following descriptions. Although deception was out of the question, we tried to perform all experiments with as great strictness as if the writer had been unknown to us, and it is only in the starred cases that there existed the *possibility* of W.'s seeing the question.

In the following four experiments the *answers* to the questions asked were known to one or more persons in the room, but not to S.:—

1. *Q.* Is Miss H. going away Tuesday?
   A. Miss H. is no consequence to me. I don't know.

2. *Q.* What did her uncle do in Paris?

A. How should I know you or he did in Paris, or all France (sic), I wasnt there.

(Mr. F. said he had been thinking, when the question was asked, of a friend who had been with him in Paris.)

3. *Q.* What sort of a voyage home did he have?

A. Fair. If you keep that question to yourself there is no chance for thought transfer.

(This was not written at once, which was explained by the planchette as due to the fact that the question had been asked mentally, and by only one person. It was one of a few cases of mirror-writing.)

4. *Q.* On what steamer did J. A. come home?

A. J. A. has been way off like Mr. F. I am not everywhere.

(This was interesting, as W.'s acquaintance with Mr. F. was limited to the evening in which the latter had been present at a planchette writing, and during which, as may be seen from the second and third questions above, Mr. F.'s visit to Paris was mentioned.)

In the following six experiments the answers to the questions asked were known to persons present at the writing, and would have been known to W. if he had known what question was proposed. Accordingly, our care was exceedingly great in all these cases to keep the question out of sight. It is worth notice that in no case was the answer exactly what was expected by those who knew what inquiry had been made.

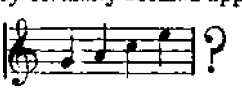
1. *Q.* Who wrote the play of 'Hamlet'?

A. I'd give a good deal to know that myself.

2. *Q.* Can Mr. F. make planchette write?

A. He can if he tries hard enough old man Bacon and gets some one to help at first.

(Before and after the words 'old man Bacon' were what might have been meant for parentheses. As the words had no meaning where they were written, we naturally referred them to the question immediately preceding, "Who wrote the play of 'Hamlet'?" where they certainly seemed appropriate.)

*3. *Q.* What letters correspond to the notes  ?

A. Gace.

*4. *Q.* Add 1905, 3641 and 9831.

A. 17377.

(Planchette first copied the quantities to be added, making, by the way, a mistake in copying; this mistake, however, did not appear in the addition, though a mistake does appear in a column where the copy was correct.)

5. *Q.* How far is the earth from the sun?

A. 192,310,009 kill.

(This is curious, as every one who had known what question had been asked was expecting the answer in miles. W., however, always uses the metric system.)

6. *Q.* Who wrote 'Childe Harold'?

A. Byron, not drunk when he did it.

Here would seem to be excellent evidence of mental questions answered and of telepathic or clairvoyant replies given. Sometime after this account was received I had the opportunity to sit with Mr. S. and the friends with whom the former successes had occurred. There were several other persons present as well. Writing came in profusion, bold and legible, but nothing that could be construed as telepathic. Many questions were written by the ladies with whom the former successes had occurred, out of S.'s sight, but were either not answered, or answered so vaguely that it was not certain that the particular question had been grasped. The questions were written across the table from Mr. S. Considering various hyperæsthetic possibilities, such questions should always be prepared outside of the room. Twice, early in 1888, Mr. S. sat for the Secretary and myself, when questions were secretly written, but in no instance pertinently answered. These negative results are, of course, not incompatible with the positive ones previously obtained, for if telepathy exist, it is certainly of fitful occurrence, even in a given individual. But they lend, at least, no strength to the first report; and, as luck will always have it, farther sittings with us (except the two recorded at the outset of this paper) have been made impossible to the subject by family wishes and his busy life.

Another similarly baffling case is given me by Mr. C., who graduated in 1888 at Harvard College, whom I know intimately, and whose sincerity I cannot doubt. Mr. C., it should be said, is himself the subject of certain automatic phenomena, with which, however, this narrative has naught to do. He told me of the following experience, either one or two days after it happened, and then wrote out the account which follows: —

It was on the evening of November 2. The company consisted of four ladies and two gentlemen. In the course of conversation a chance remark turned our thoughts upon psychological matters. Almost every one had some strange thing to relate, but no one would acknowledge belief in any supernatural power.

After speaking of various reports of mind-reading and hypnotic experiments I said, in a half-serious, half-joking way, "Suppose we try something of the sort."

The suggestion being favored, the daughter of the house, a girl of nineteen or twenty years of age, seated herself by a table, with pencil and paper. She seemed to think it was all foolery, but was amiable enough to contribute all she could to possible success, and, shading her eyes with her hand, she made herself as passive as possible.

On my part, I stood up at the opposite side of the table, about three feet removed, and fixed my mind upon a certain word, and (wishing to select

one that would be most remote from her mind) I took 'hell.' With almost no hesitation in beginning, the girl made the letters, one after another, with easy legibleness (though the handwriting was neither hers nor mine).

Surprised at the success of the experiment, I felt interested to continue, and now determined to test it to the satisfaction of others. Accordingly, I went for a moment into the hall with one of the company, and there said to her that my next word should be 'omen.' Returning to the room, the same success attended as before, except that the 'e' was, in its smallness, out of proportion to the other letters, and the line between 'o' and 'm' was too long, because of a slip of the hand.

The experiment continued in like manner till some ten or a dozen words were written, of which I now remember (besides the above two, 'bell' and 'omen') 'word,' 'four,' 'moon.'

The person to whom each time I announced my intended word was of a disposition entirely to be relied on as free from either serious or facetious tricks, though, for that matter, I do not see how collusion with the 'Subject' was possible without being noticed.

The paper on which the words were written I wanted to take, but as the young lady wished to keep it I said nothing. On inquiring for it a few days later, it could not be found.

On the third day after (November 5), I again went to the house to see if more might not be done. Certain other interests, however, being emphasized in my mind, I did not find myself able to exert so strong a will as on the previous occasion. Whether because of this or not, I cannot judge; but the results were more meagre, but two words being successfully written, 'music' and 'girl.' Upon my thinking of one word, 'orange,' my 'subject' wrote all the letters, but in wrong order, thus: 'georan.'

An additional fact that I noticed this time (and I think it was true of the first evening's experiments) was, that when I stood at the right side of the girl she wrote downwards, and when I stood opposite her she wrote upwards.

The rest of the trials, which were of lines and diagrams imagined by me, resulted in nothing but undecipherable scrawls.

Concerning the feelings of myself and of the 'Subject' there is but this to say: that the girl had a headache the next day after the experiment (to which, being unaccustomed to headaches, she ascribed it), and no effect after the second. Upon me there was no after effect either time, except that after the first experiment, and on the same night, I felt as one does after giving strained attention to one thing.

The lady who did the writing, three other ladies, and a gentleman who witnessed the first evening's performance, endorsed, on Nov. 16, Mr. C.'s statement as a 'true report'; but I am not at liberty in this case to publish any names. On Dec. 2, Mr. C. added this postscript: —

I omitted to say with regard to the second series of trials, that 'music,'

'girl,' and 'orange' (the three words which the girl wrote) were the only *words* that I tried.

Concerning the first evening's experiments, my memory enables me to add, that besides the words already mentioned as being successfully written, my subject wrote with remarkable plainness this figure [a spiral], and also its reverse (though not so promptly).

Yet one further fact, perhaps worth noting: On this first evening I twice (possibly three times) let my thoughts stray whithersoever they would, while my subject and the onlookers supposed that I was exercising my intent upon some particular word. The results in these instances were nothing; unrelated pencil-marks as rambling as my thoughts, though, of course, in no way resembling them.

A few days after this I spent an evening at the subject's house with C. Nothing of interest occurred, though we tried to get results similar to those of the first occasion. The subject wrote a very little, automatically; but no sign whatever of telepathy appeared. C., I found, had stood (on the successful occasion) where he could see the movement of the young lady's hand as it wrote. The hypothesis must of course be considered, that he may have guided it by unconscious indications, like those given in the 'willing game' to the blindfold subject. The indications must in this instance have been reduced to changes in his respiration. If such indications were given, they were at any rate ineffectual when I was there, and also on three later occasions, on which, with the same *modus operandi*, Mr. C. reports that he only got total or partial failure. The sitting first reported remains thus a unique occurrence, not to be distinctly classified as yet.

The great desideratum is to get cases which can be examined continuously. Little can be done without the help of associates of the Society. I publish these incomplete notes, making no mention of much of our collected material, in order to show how important is the field, and how great the need of its assiduous cultivation.

WILLIAM JAMES.

NOTE ON TWO RECENTLY REPORTED CASES OF PATHOLOGICAL AND OTHER PSEUDO-PRESENTIMENTS.

While I cannot doubt that readers of my Report and of its Supplement will be already sufficiently weary of my favorite hypothesis for explaining a large number of our narratives, I do not wish to let pass an opportunity for calling attention to two more proofs that pseudo-presentiments are actual mental phenomena, and that my hypothesis suggests, at all events, a *vera causa*. In the *Archiv für Psychiatrie* for the present year I find, just as this number of our Transactions goes to press, a new case reported, in an article by Doctor J. Orschansky, Docent in Charkow, in Russia. (See *Arch. f. Psych.*, Bd. xx, Hft. 2, p. 337.) The case is one of a Russian student, twenty-three years old, with hereditary predisposition to nervous disorders. An early and not precisely happy marriage, occurring while he was still a student, brought him into much trouble. In December, 1887, a student insurrection at the Moscow University led to his expulsion from the city by the police, along with many other students. Meanwhile, his wife bore him a child. After spending a short time in the country with her he returned to his mother's house in Charkow, manifested much disturbance of mind, had delusions of persecution, and finally was brought under Orschansky's care in the Charkow Asylum. His delusions related mostly to the police; hallucinations of sense were, at the time of examination, lacking; his consciousness was, as a whole, deeply depressed, dreamy, confused. In so far as this cloudiness of mind permitted, however, he showed a tendency, even in this early stage of his disease, to fairly systematized delusions, so that the case is diagnosed as paranoia.

On being questioned by the physician, he is cool, smiling, stupid in appearance, passive, unresisting, generally apathetic, but not incoherent. He confesses to a dread about his treatment, as he is sure that criminals are always poisoned with mysterious drugs. "Do you fear me?" the physician in effect asks.—"Yes. Three years ago it was prophesied to me that after three years Doctor Orschansky would treat me with electricity, but without success."—"But how, then, if I don't treat you with electricity?"—"Oh, that, I think, was prophesied me too." In narrating his adventures the patient goes on:

"In the railway car, too, everybody was talking about me. They prophesied everything that is to happen to me; how, for instance, at the station in Kursk, I should see the clerk at the Buffet handing out tea to the passengers; and how this clerk would be nobody else but Aliouschka, the executioner of Moscow. On the way, too, I saw a veiled woman. I think it was my wife. That, too, had been prophesied to me. And here I am being watched by the Princess T. She is disguised as servant-girl. It is the same person always following me about; sometimes she's blonde, sometimes brunette, sometimes young, and sometimes old. And that, too, they prophesied to me." — "And have people prophesied anything else to you?" — "Oh, yes; it was said that the doctors in Charkow would declare me mad, and then quarrel over me with the doctors in Moscow, who would declare me sane, and would finally win the day."

Closely associated with these delusions was a confused feeling of the power, the mysteriousness, or, in cases, the vast age of the patient's friends and companions. "Are you married?" asks the doctor.— "I think so." — "But you must surely know that."—"How can one know?" — "But who is your wife?" — "A midwife." (This was true.) — "How old is she?" — "I don't know. She says she's twenty-five years old; but it's possible she's 1,500 years old, or perhaps more; for she's everlasting" (*denn sie ist ewig*). As for what Orschansky calls "the persuasion of the patient that all his fate has been prophesied to him," our author directly denies that this has here anything to do with ordinary *Dyppeltdenken*, the "double memory" illusion of daily life. "Probably," says Orschansky, "this persuasion depends on his feeling of submission to his fate, on the idea of the mysterious power that oppresses his life, an idea not uncommon in cases of primary hypochondriac paranoia." The connection of the pseudo-presentiments with the patient's general condition of confused surprise seems to me also noteworthy.

In addition to the foregoing pathological case, I have just received, in consequence of a recent discussion of this topic, the instance reported in the following letter, which speaks for itself, being from one of our most frequent and useful correspondents. The experience, although not a typical pseudo-presentiment, is a near relative of the class.

BOSTON, Feb. 24, 1889.

DEAR MR. HODGSON: —

If I remember right, Professor Royce concluded that most of the cases where persons feel sure, after some striking event, that they had distinctly prophesied it before its occurrence, were cases of honest hallucination, and

where the *feeling* that the event had been clearly foretold was really the product of the mind *after* the event. I will tell you of a *dream* which I had a few nights ago, which possibly may be of interest in connection with these questions. My friend, C. W. B., visited us recently, and spoke with Mrs. A. and me repeatedly about his several trips to Europe, describing especially his experiences in Spain during his last trip.

A few nights later I dreamed of looking over with him a lot of large photographs of scenes in Scotland, which he took when we were in Scotland together, many of the photographs showing me very plainly in various attitudes and with different groups of people. Now, Mr. B. and I were never in Europe together, and I was never in Scotland in my life. Yet as each photograph was shown I felt all the keen delight of recognition of well-remembered scenes, and frequently exclaimed, "How well I remember that!" or "Don't you remember the day we were there," etc. I can still remember the features of several of the pictures, parks, grounds, etc., as they appeared in these photographs, and my keen interest in seeing them *again*, and my memory of many incidents and particulars of our being at these places together at some former time. I then dreamed, with the well-known inconsistency of a dream, that in the case of one place, Mrs. A. had been with me, and I turned and asked her if she didn't remember the day we were there, and what the old lady in charge of the place had said to us.

If I could in this dream have so strong a sense of having been in the photographed places before that each brought up a flood of remembered experiences, all of which were — pictures and remembrances — the coinage of the dream at that moment, is it not likely that this is a power which the mind sometimes exercises in *waking* hours? Yours, C. H. A.

I may add the repeated expression of my hope that some of the alienists of our asylums in this country may find time to make note of any analogous cases that come under their attention. Pseudo-presentiments, once distinguished, might prove to be anomalies worthy of even a more serious consideration.

JOSIAH ROYCE.

CONSTITUTION.

Article I. — Name and Objects.

Section 1. This Association shall be called the American Society for Psychical Research.

Sect. 2. The object of the Society shall be the systematic study of the laws of mental action.

Article II. — Government.

Section 1. At the first meeting of the Society a Council shall be chosen, consisting of twenty-one members, — seven to hold office for one year, seven for two years, and seven for three years; and thereafter seven shall be chosen by the members at each annual meeting, to serve for three years.

Sect. 2. The Council shall elect, each year, at its first meeting after the annual meeting of the Society, the following officers of the Society: a President, a Secretary, and a Treasurer, who shall discharge the duties usually assigned to these respective officers. The Council shall elect as many Vice-Presidents as shall be deemed advisable.

Sect. 3. The Council shall exercise general supervision of the investigations of the Society, and shall appoint the investigating committees.

Sect. 4. Vacancies in the Council, caused by death or resignation, shall be filled by the Council.

Sect. 5. The President shall be a member of the Council.

Article III. — Members and Associates.

Section 1. Any person of respectable character and attainments is eligible to the Society as an associate. Associates shall receive all the publications of the Society, may participate in all the meetings, present communications, and join in the debates.

Sect. 2. Members, not exceeding one hundred and fifty in number, may be elected by the Council from the body of associates. Members have all the privileges of associates, are entitled to vote, and are eligible to the Council.

Sect. 3. Associates may be elected either by the Council or by the Executive Committee of any branch, after nomination in writing by two members or associates.

Sect. 4. Each member and associate shall pay to the Treasurer an annual assessment of three dollars. The name of any member or associate two years in arrears for annual assessments shall be erased from the list of the Society; and no such person shall be restored until he has paid his arrearages or has been reëlected.

Sect. 5. Any member or associate may be dropped from the rolls of the Society on recommendation of the Council and a two-thirds vote at any meeting of the Society, notice of such recommendation having been given at least two weeks previously.

Article IV. — Meetings.

Section 1. The Annual Meeting shall be held the second Tuesday in January.

Sect. 2. Other meetings may be held at the call of the Council.

Article V. — Quorum.

Ten members shall constitute a quorum of the Society, and five a quorum of the Council.

Article VI. — Accounts.

A committee of two shall be appointed at each annual meeting to audit the accounts of the Treasurer for the year closing with that meeting.

Article VII. — Similar Societies.

It shall be the policy of this Society, by correspondence and otherwise, to coöperate with societies of similar object elsewhere.

Article VIII. — Branch Societies.

Section 1. A Branch of the Society may be established in any place by the Council, on written application from not less than five members resident in that place.

Sect. 2. The members of the Society on whose application a Branch is established shall constitute an Executive Committee to arrange the affairs of that Branch. The Executive Committee shall have power to add to their numbers by the election of other members of the Society belonging to that Branch. They shall also have power to choose from their own members officers of the Branch, to frame

by-laws for its government, and to elect persons, resident in their immediate vicinity, as associates of the Society and members of the Branch.

ARTICLE IX. — BY-LAWS.

SECTION 1. By-Laws recommended by the Council may be adopted at any meeting by a majority vote.

SECT. 2. By-Laws may be rescinded or changed upon recommendation of the Council at any meeting by a majority vote.

ARTICLE X. — AMENDMENTS.

Amendments to the Constitution, recommended by the Council, may be adopted at any annual meeting by a vote of two-thirds of the members present.

PROCEEDINGS, ETC., OF THE ENGLISH SOCIETY FOR PSYCHICAL RESEARCH.

Members and associates may purchase the back numbers of the Proceedings of the English Society. Parts I.–VIII., 40 cents each; Part IX., 80 cents; Part X., 60 cents; Part XI., 80 cents; Part XII., 80 cents. Under no circumstances is a member or associate entitled to more than one copy of each part.

Members and associates, on payment of their assessments, may have any future parts of the Proceedings of the English Society which are issued during the period of their membership. But the Proceedings will not be sent except to those who may so request.

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Application should be made to

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