## MARGERY HARVARD VERITAS

# A STUDY in PSYCHICS

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#### ERRATUM

Page 24, line 30, should read:

"in a bag for Dr. Wolbach and made off with. He nevertheless"

### MARGERY-HARVARD-VERITAS

The steady advancement of civilization has been made possible only by a patient and open-minded examination and classification of facts and phenomena. The universe is an inexhaustible reservoir of facts and of laws governing those facts. For eons, many of these laws and their underlying phenomena have lain latent, unobserved and unclassified. But they have always existed and always will exist, veridical and unalterable.

Flammarion says: "In analyzing the testimony of our senses we find that they deceive us absolutely. We see the sun, the moon, the stars revolving, as it seems to us, round us. That is false. We feel that the earth is motionless. That is false too. We see the sun rise above the horizon. It is beneath us. We touch what we think is a solid body. There is no such thing. We hear harmonious sounds; but the air has only brought us silently undulations that are silent themselves. We admire the effects of light, and the colors that bring vividly before our eyes the splendid scenes of nature, but in fact there is no light, there are no colors. It is the movement of colorless ether striking on our optic nerve which gives us the impressions of light and color. We burn our foot in the fire; it is not the foot that pains us; it is in our brain only that the feeling of being burned resides. We speak of heat and cold; there is neither heat nor cold in the universe, only motion. Thus our senses mislead us as to the reality of objects around us. Sensation and reality are two different things." There is a noumenon behind the phenomenon.

There are apparent facts, however, not only of the tangible material world but of that subtler, finer world, the psychic realm of the human entity. That almost untrodden region calls hauntingly to the intrepid explorer: "Come, search me and find me out, for in me is the secret of that which never dies!"

There is nothing more likely than that in the honest, patient, well ordered study of psychic phenomena may ultimately be found a solution scientifically sound of the problem of the continuance of the conscious entity beyond the change called death, a problem hitherto by almost common consent relegated to the domain of pure faith: a guerdon surely repaying every effort however prolonged or laborious!

· From the very nature of the subject, from the exceeding rarity of mediums through whom psychic manifestations occur with regularity, the number of those privileged to study the subject first-hand is limited. The multitude who are absorbingly interested in the subject are forced to content themselves with a study of whatever is published on the subject.

It is of the greatest importance that this latter class should not only have some facts about the "Margery" phenomena, but should have all the facts. There are, we will say, three hundred persons who

have, with their own eyes, witnessed some of the phenomena occurring in "Margery's" presence. There are a thousand times as many who are interested to know the real status and the proven facts. That great throng may be likened to a jury before which the evidence is to be marshalled.

This little summary and record is handed to you as a juryman. It is not a plea of any kind. It is a dossier of facts. It contains a concise and veridical history of the Margery case down to November, 1925; the unabridged signed records of the eight sittings arranged and controlled by a group of ambitious young gentlemen connected with Harvard University, and some illuminating comments thereon.

You, Mr. Juryman, are perchance engaged in a business or a profession. Every day of your life you weigh evidence or in common parlance balance the pros and cons. Whether or not you have been trained in logic is quite immaterial. You are honest. You have an open mind.

Three hundred observers have never yet found any trickery or anything to arouse their suspicion in the "Margery" phenomena. One small group after signing the records you read herein have signed an article in a daily paper that "all the phenomena were due to trickery." Which statement is more likely to be the truth? Bring in your verdict jury men!

Galileo, forced by way of recantation, to avow his belief in a stationary earth, muttered in his beard "E pur si muove"—"Still, it does move."

The committee at Cambridge have no beards into which they might mutter their real belief, after they had signed the "trickery" round-robin, but they know they have neither solved nor killed the "Margery" case. It is being constantly studied by a regular group of trained scientific observers who know from long experience that teleplasm is not to be handled like concrete and that levitation does not irresistibly demand the presence of a "Ford" jack by way of explanation. Every scientific safeguard, however, is being employed in order that an ultimate report, of indisputable probative value may be made.

In the meantime, gentlemen of the jury, you will well and truly hearken unto the evidence.

Theodore Roosevelt once said; "The grandest sport in the world is to champion an unpopular cause when you know you're right."

Galvani in 1762 said; "I am persecuted by two classes: the scientists and the know-it-alls. They call me the frog's dancing master. But I know that I have discovered one of the greatest forces of nature."

Writing in 1855, Capron said; "Just in proportion as the honesty of the mediums was proved did the wrath of the portion of the community enkindle against them. The very fact that it was not a cheat seemed to annoy them."

Barnum never puzzled more over anything than he did over this blindness of people in fooling themselves because they were so anxious not to be fooled. He talked about it a good deal in his lectures. "The biggest humbug of them all," he said, "is the person who believes that everything and everybody are humbugs."

Thus may be implied the brief of our paper and from these quotations it may be judged that our experience is of a kind as old as the ages.

Our purpose, herein, is to put in precise and scientific form a durable record of the "Margery" mediumship up to the present time. This record and summary will contain little argument and no criticism of our adverse critics. All the details presented will be, so far as possible, documentary. The first portion of the story is written by a clergyman in England, internationally known, who is a sympathetic writer on the subject of psychical research. The reaction of men and women of good minds, scientists, scholars and clerics, towards psychical research is different from that towards any other subject, in that they incline to discredit what may be earnest efforts to record phenomena observed under careful conditions. The critics seem to drop scientific methods and stop at nothing in the way of personal abuse, unspeakable innuendo and general disregard of the ethics of civilized life.

After about three years of experience with those interested in this subject, we find comparatively few who are really free\* to testify as to the things which their own senses reveal to them. We do not underrate the value of the conservative pull of the great majority of mankind to keep the minds of men stable and to keep society well organized, but we are convinced through experience, pleasant and unpleasant, that, in fairness to the subject, no investigator should go in for the study of psychical research unless he has written out and subscribed to a plain statement that he is fully prepared to testify as to what he observes whether it conforms to previous experience or not. The attitude of a scientist when "cornered" by fact is shown by this episode: an electric bell-box which can only be run by pressing down a wooden spring flapper on the top of it is rung repeatedly in the investigator's hands as he walks round the room. The box was made by the investigator and was examined by him both before and after the experiment in the same period of good red light. Then the same experiment was repeated, not once, but three hundred times. The investigator's sole comment was; "If I were to accept that experiment as a psychic phenomenon, I should have to overthrow the philosophy of a

<sup>\*</sup>In a recent conversation with one of us. Dr. Z. who is Professor of Psychology at XYZ College, said that the truth of the matter is that he, himself would not dare to go on public record in defense of supernormal phenomena though it were proved to him one hundred percent. He said it would probably cost him his job, even on the faculty of XYZ college, which is far more liberal than most colleges and that he would lose his membership in the American Psychological Association by being laughed out. In other words, he candidly admits that the state of mind today in academic circles towards supernormal phenomena is as closed and prejudiced as it was in the Middle Ages towards accepting evidence regarding the phenomena of physics.

lifetime." In other words, let Gibraltar fall but not my philosophy! That shall be unchangeable even in the face of facts.

The Margery mediumship and those immediately connected with it have remained strictly amateur and it has never broken into newspapers, except scientific journals, unless grievously attacked in public print. On the part of our critics, however, there has seemed to be a contagion for publicity which one scientist after another has acquired. It makes him rush into the daily newspaper or the popular magazine after the briefest study of the mediumship. We will not say whether this desire for the limelight is rewarded with money or fame or a dignified desire to make a scientific contribution. If it be the last, it is fair to say that the commoner way to make such contribution is through scientific journals and then only after long study.

The self-advertised exposers of the great mediums such as Palladino, Eva C., Kluski and Margery, exhibit a pathetic contrast to the patient, precise and fearless similar studies by Crookes, Barrett, Richet, Flammarion, Lodge, Geley, von Schrenck-Notzing, Feilding and others.

The latest example, showing the curious perversion of ethics which results in the untrained mind when exposed to psychic phenomena, has recently occurred. A group of Harvard instructors and students asked the privilege to have Margery sit at Harvard College. This was granted and at the end of a series of eight sittings the spokesman of the group extracted a promise, from the friends of Margery, for reasons best known to himself, that they should not publish the original signed notes of the group. These notes, of course, were of great value because they were made on the dictaphone in the presence of everyone concerned and by agreement the notes of each sitting had to be delivered, signed, to the friends of Margery before the next sitting. The promise not to publish was given by the friends of the medium in good faith and was kept. Then, in entire secrecy, one of the students in the group, feeling that he "owed it to science," wrote an "exposure" of the mediumship for a popular magazine and denied Margery even the opportunity of preparing a simultaneous reply. This action so disgusted the spokesman (Mr. Code) of the group that he, with the true spirit of a gentleman, when he heard of it, immediately released the friends of Margery from their promise not to publish. (vide infra.)

Throughout this ex parte statement (Atlantic Monthly, Nov., 1925) it will be noted that many facts are modified enough to be used adversely, and that nothing in the original notes justifies, either to the laboratory man or the man in the street, the conclusions that appeared. The writer and his friends fall constantly into the illogical sequence that if a thing can be done normally that at the same time it cannot be a psychic phenomenon. We admit that phenomena may be in three classes: first, those occurring for which there is an obvious normal explanation; second, those which may be of normal origin but for which the explanation is not apparent; and, third, those which from their very nature must be supernormal. In the last class comes passage of

solids through solids, apports, etc. Most of the phenomena in the seance room fall in the second class. They are things which can be done by a sleight-of-hand artist and are only supernormal if they occur under conditions of control which make it impossible for the psychic to do them. It is a fundamental regulation, therefore, of an honestly conducted investigation that the control of the psychic shall be such that the psychic is anatomically and mechanically incapable of making the phenomena. Constantly we find investigators making a "plant" on the psychic, either to prevent the phenomena or to leave a loophole in the control through which the investigator can escape later and thus avoid admitting that he could not explain the manifestation. Palladino constantly said: "Fasten my hands else I might help do the things."

While to the unthinking scoffer, table-tilting, levitation, bell-ringing, etc., may seem trivial in comparison with stage tricks, it must be remembered that those who are seriously investigating these phenomena are not out for a vaudeville entertainment but are intent on showing that if a single object should move even a single inch without there being a normal physical link of causation between the object and any person or thing in the vicinity, that here we have a phenomenon than which there could be nothing more challenging or veridical. That such phenomena have occurred is as well attested by competent observers as any other more or less obscure fact of science. It is the explanation that bothers the conventional scientist: he cannot pigeon-hole it, therefore he will have none of it.

Another intellectual error must be cleared out of the investigator's mind is that the phenomena are miracles. They are superphysical, if you please, but can be repeated indefinitely under strictest conditions of control. One can and one does always see the psychic terminal or rod showing in a black shadow against the luminous object levitated. But when one observer out of nine present says that that psychic terminal resembles a foot, ankle and leg, his imagination may have led him to link up the levitation with his past common sense experience. An observation of such importance should have been confirmed by other sitters and should have been put into the official notes.

The purpose of presenting the history of this mediumship up to the present time is solely to make the plea that it be considered earnestly; that it is apparently one of the best examples of this new psychic science. We have here apparently definite exterior motivation which takes place within nine feet of the psychic. We feel that our whole relation to phenomena at present should be merely that of recorders, with precision and scientific methods. The whole problem of cause and significance is not before us. A scientific study of the problem of this medium has no relation to human survival and return, spiritism or religion.

Those whose names are appended hereto have attended an aggregate of 887 sittings but are not definitely committed to any given

stand as to the causality of these phenomena. They do not say they have solved either the cause, or the laws governing the cause. They are, however, firm in the belief

- (a) That a conscientious study of the phenomena is of paramount importance;
- (b) That a multitude of things occur, which, so far as is yet observed, cannot be explained by any theory of deceit which has been even advanced, let alone proven;
- (c) That honesty, candor and independence of thought must always be a sine qua non for every psychic investigator who wishes his ultimate opinion to have weight;
- (d) That patient study plus adequate reflection is of vastly greater value than hap-hazard observation followed by premature publicity;
- (e) That the wisest attitude for the investigator is found in this quotation from Sir Edward Bulwer Lytton:

"Now my theory is, that the Supernatural is the Impossible, and that what is called supernatural is only a something in the laws of nature of which we have been hitherto ignorant. Therefore, if a ghost rise before me I have not the right to say "So, then, the supernatural is possible," but rather "So, then, the apparition of a ghost is (contrary to received opinion) within the laws of nature i. e. not supernatural."

To these five tenets we all subscribe.

The following summary of the case up to the time of the Harvard investigation is quoted from "Psychic Science," London, July, 1925.

What is known as "the Margery case" is likely to prove a landmark in the history of conditions imposed by psychical researchers and methods used by them in experiment with the medium for psychical phenomena. Sir Arthur Conan Doyle has offered us an account of this case but in view of a detailed publication in the "Boston Herald" of January 26th, and a fairly full summary which appeared in "Light," for February 14th, 1925, we propose only to give our readers an outline of the facts bringing the record up to date. Readers may be reminded that the medium is the wife of a surgeon of high standing in Boston, and that her services were gratuitously offered to the Committee of the "Scientific American" newspaper instituted as a result of Sir Arthur Conan Doyle's lectures in 1923 and of his good offices in obtaining the medium's consent that she would enter the competition advertised by that journal. The original Committee consisted of Dr. W. Franklin Prince, of the American S. P. R.; Dr. H. Carrington, of the London S. P. R., known for his defence of the mediumship of Eusapia Palladino; Dr. McDougall, English professor of psychology at Harvard University; and Dr. Comstock, lecturer on physics at the Massachusetts Institute of Technology. Houdini, the conjurer, acted as the fifth member of the Committee; and Mr. J. Malcolm Bird was present as Secretary.

From the first a lack of harmony and mutual confidence seems to have been apparent. "Houdini," says Sir Arthur, "will not trust Dr. Carrington or Mr. Bird. Carrington and Bird return the compliment." Dr. Prince does not accept Dr. McDougall's assurance that he has perfect control of the medium's left arm. In spite of this want of harmony, the phenomena seem to have been numerous. Margery and her husband (hereinafter called F. H.) behaved from the first with much generosity. They announced that if the prize of \$2,500, offered by the "Scientific American" for any well-attested phenomena were won by them, it would be handed over for psychic research. They paid in part the expenses of the members of the Committee in coming to Boston and entertained them while there; and there were ninety sittings. They bore with exemplary patience the irritations arising from the disputants, while even the gross insult inflicted on them by one member of the Committee did not prevent them from continuing the sittings. "Personally," says Sir Arthur, "I think that they erred upon the side of virtue, and that from the moment Houdini uttered the word 'fraud' the Committee should have been compelled either to prove it, to disown him or to cease their visits."

The "Spirit-control" of the medium professes to be her dead brother Walter, a virile personality whose masculine whisper resounded through the room, often at some distance from the medium, and continued equally loud when the medium's mouth was filled with water. This fact does not seem to have impressed the Committee. No less than thirty different phenomena were presented but so ill-arranged was the procedure of this scientific body that no award could be made without a vote of four out of five. But the members did not attend regularly. It was therefore possible for diligent members like Dr. Carrington and Mr. Bird to obtain essential evidence which Dr. Prince or Houdini, who attended comparatively few sittings, would fail to get.

Any negative decision arrived at by the Committee would, under such conditions, have no weight as a judicial finding, and the conclusions of the minority who witnessed all the phenomena would be entitled to respect.

The phenomena included phosphorescent lights, movement of objects, touches on the sitters when the doctor and his wife were under strict control, etc., etc. The chief tests centred around an electric apparatus which consisted of a dry cell and a bell inside a padlocked box. On the box-lid was a hinged wooden flap held up by a spring which, on pressure, made an electric contact and rang the bell. The bell was rung many hundreds of times during the sittings, even when placed out of all possible reach of the medium, and once while resting on Dr. Prince's lap while he waved his arms all over it. Mr. Joseph de Wyckoff, who was present as one of the sitters, heard the bell ring several times at his request, in good effective light at a distance of several feet from the medium whilst he controlled both her hands and her feet.

Dr. Carrington and Mr. Bird, after a time, yielded to the evidence of their senses and declared their conviction; the result appeared to be a cabal against them by other members of the Committee. Dr. Prince and Houdini seemed to have held the theory that Mr. Bird was helping to produce the results that they could not explain, although the same results were apparent in his absence. Mr. Bird, in consequence, was forced to resign the secretaryship, and Dr. Prince took his place. "No attempt," says Sir Arthur, "seems to have been made by the rest of the Committee to sustain their own official against this dishonourable charge which was not supported by a tittle of proof." Yet this charge is repeated in a pamphlet subsequently printed and broadcast by Houdini.

By the end of August the Committee presented an interim individual report. Dr. Carrington, who had been most diligent and had attended forty sittings, says, "I am convinced that genuine phenomena have occurred here." Dr. Prince, who had only attended six sittings, "Thus far the experiments have not scientifically and conclusively proved the existence of supernormal powers." Professor McDougall did not report. As to this Sir Arthur remarks, "One can quite sympathize with the position of eminent men who suddenly find that the confession of a truth may weigh heavily against them. Oliver Lodges and William Barretts do not abound, but at the same time one may fairly ask, 'Is it a moral position to take part in an investigation where one is prepared to agree with negative evidence, but knows in advance that positive evidence can hardly be publicly admitted?' On one occasion, May 12th, Professor McDougall in face of some phenomena, declared, 'If that happens again, I shall leave this house an altered man.' It did promptly happen again, but the alteration was not apparent."

Now as to Houdini. This man was first present at two sittings, (July 23rd and 24th, 1924); many phenomena occurred, everything done or said was recorded by dictaphone and typed in the next room. Houdini signed the records as correct. He afterwards wrote to people at a distance who had no means of checking his statement, saying that the programme was fraudulent. Such a letter has been seen by Sir Arthur Conan Doyle who cannot quote it as it is marked "private" although in the highest degree defamatory.

It ends with the curious argument that the medium had nothing to gain in any way and that therefore her action was suspicious. Houdini, in his pamphlet, suggests that the contact bell was rung by the medium advancing her foot and pressing the board with it—this at a time when it was placed between his own feet. He asserts that the medium used her head in order to move a table, but she could hardly use it to crumple up the cabinet. Houdini, however, signed the account of these sittings which stated that the "controls" were all right at the time; but the controls applied to sitters were not all right, as, by Houdini's own admission, he, by permission of Mr. Munn, proprietor

of the "Scientific American," another sitter (who, as an interested party, should really not have been present), had one hand free with which he was feeling around in the dark. The sending of these letters shows that Houdini had the prior intent to make the mediumship appear fraudulent, and that with his ingenuity as a professional conjurer this might be an easy matter. But he had not taken account of the medium's "spirit-control."

Here is the strange story from the actual record. On August 25th, Houdini arrived for a final test. Two days before, "Walter" had warned the circle that some trick would be attempted. When Houdini arrived he brought with him a portentous box, into which the lady was to be shut and fastened in with eight padlocks, leaving her arms extended at two side holes and her head at the top. Although he was only one of the Committee the other members were not allowed by Houdini to examine this box before use by the medium. This clumsy apparatus was put into use and the forces present showed what they thought of it by at once bursting the front open, bending the metal staples. Houdini said that the lady could have done it by muscular effort, but neither he nor Dr. Prince could assert that there had been any evidence of strain or effort; nor could be explain why, after all this fuss, the box he had brought was so flimsy that a woman could smash it open. A considerable wrangle ensued which, says Sir Arthur, did not make for harmonious conditions when the circle was resumed.

The contact apparatus was on the table and the question was whether it could ring when the medium was in the box when her hands were controlled. Houdini was holding the left hand of the medium with his right, his left hand was held by Mr. Munn, as to whom Sir Arthur says that it is a pity that his presence was permitted at this crucial sitting since, as he obviously had a large money stake in the discrediting of the medium, he might had been held to have purposely relaxed his hold upon Houdini's left hand, as is admitted on the previous occasion. Sir Arthur suggests that Mr. Munn, being a man of honour, it is possible that Houdini relaxed his own left hand by the old device of making one hand appear as two. "Whatever the cause, the result was dramatic. The voice of 'Walter' was suddenly heard calling out 'Comstock, take the box out in the white light and examine it.' This was done, and shocking to relate, the rubber eraser from an ordinary pencil was found to have been inserted into the angle so as to prevent the upper board descending and ringing the bell. Who placed it there? Who was it who had declared against the phenomena and had therefore an interest in stopping them? A cruel trick had clearly been played in order to discredit the medium. It took some definess to fasten that rubber into the right place. Who was there present who might have had that cleverness of touch? These questions answer themselves, and it is suggestive that Houdini's pamphlet suppresses the whole incident."

The seance was held in Dr. Comstock's house, and Sir Arthur holds F. H. to blame for his leniency in overlooking so gross an offence and allowing the sittings to continue. The very next night there was a second sitting, Houdini again being present. This time the medium was to be enclosed with only her head and arms out of the box. After entering it and before it was closed and padlocked, the medium, as if inspired, asked that it should be examined. Houdini replied, "Oh, no, that is not necessary." Houdini then with impressive deliberation, borrowed a tape-measure from F. H. and measured the distance from the psychic's chin to the bell-box and announced in a loud voice, "Just 18 inches." Having fastened her in, Houdini felt up along her left arm with his own right hand until it had passed through the hole in the box. No intelligible reason can be given for this action. An instant later the voice of "Walter" was heard, "What did you do that for, Houdini? You ——! Putting up a plant like that on a girl! There is a ruler in that cabinet! You won't live forever, and then you'll know better."

Houdini cried, "Oh, this is terrible! I don't know anything about any ruler. Why should I do a thing like that?" After a short conversation the lights were turned on, and Houdini was found with his head in his hands in a state of prostration. "I am not well. I am not myself!" he cried. The cabinet was examined and sure enough there was found within a folded two-foot rule with six-inch segments. "I am willing to forget this if you are!" cried Houdini. "I do not think," says Sir Arthur, "that it should be forgotten or that it will be forgotten."

Had this rule not been discovered, it might have been deadly, for the medium's arms, in the next experiment, were to have been drawn inside the holes. Suppose the contact-bell had then rung, it would have been a final proof of psychic power. But this rule, if 6 inches were retained as a handle and 18 inches extended out through the neck orifice of the box, would just reach the bell-box. It has been suggested that it had been left there by some careless carpenter (of course overlooked by Houdini who brought the box); but can any man imagine such a coincidence that he should leave the one implement which would discredit whatever the medium would do?

Incredible as it may appear, Houdini, in spite of this complete fiasco, none the less accused the long-suffering lady of fraud, and so got his advertisement after all. He says, "Summing up my investigations of the five seances I attended of 'Margery' in view of the fact that I deliberately caught her manipulating with her head, shoulders and left foot——and the blank seances——my decision is that everything that took place in the seances which I attended was a deliberate and conscious fraud." Houdini has pushed self-advertisement and defamation to the point of explaining how his skill and his wonderful box had stopped all phenomena. "An inch of wood," says Sir Arthur, "is likely always to stop phenomena just as an inch of porcelain would stop an electric current. In each case natural laws

are involved. An investigator who imagines that he disproves phenomena by checking or stopping them, only proves his own ignorance of the subject; though, in Houdini's case, that had already been amply shown by the innumerable errors in the book to which he has put his name."

So far we have followed Sir Arthur Conan Doyle's account. We are glad to hear that, to their credit, Dr. W. F. Prince, Dr. Comstock, Professor McDougall, Dr. Carrington and Mr. Bird have each and all repudiated the scandalous assertions.

More recently we have to chronicle the experiments made by Mr. Eric J. Dingwall with this medium, which, to judge by the public reports, have been distinctly favourable to the view that the phenomena produced were of a supernormal nature. Dr. Morton Prince, the well-known psychologist, in a long letter to the "Boston Herald," dated February 1st, claims that the labours of the "Scientific American" Committee were bound to end in a fiasco owing to the conditions under which they were compelled to work. One requisite condition, he says, is full and adequate light; another being that the experimenters shall after, modify and determine the conditions at will according to the effects produced. "A person in a trance or, for that matter, when fully awake," he says, "will subconsciously and without being aware of the fact, practise fraudulent acts . . . It is for this reason that the experimenters themselves as well as the medium must be under controlled observation. In darkness this is impossible."

Dr. M. Prince finds fault with Mr. Dingwall's public utterances which, he says, created an atmosphere of sensationalism and propaganda, and he attacks the English Society for Psychical Research for failure to examine substance claimed to be ectoplasm, and takes exception to Mr. Dingwall's report as breaking all the canons of scientific reporting. He announces on authority an offer by the Journal of Abnormal and Social Psychology of an award of \$5,000 to anyone claiming to produce supernormal material phenomena under rigid laboratory conditions and by recognized scientific methods, in full light,

with a committee appointed by that Journal.

F. H., in a satirical letter burlesquing Dr. Morton Prince's offer, announces that he will pay awards aggregating \$130,000 for phenomena each of which is to be photographed and developed in full white light. (1) \$10,000 for the full materialization of a spirit-form on the roof of the Copley-Plaza in bright sunlight at noon on any Tuesday. (2) \$20,000 for the metamorphosis of a larva into a butterfly without a cocoon, on the north wall of the public library on December 15th, 1925, ten minutes before midnight. (3) \$100,000 to produce a meteorite which shall fall from the sky on the State House dome at 10.15 a. m. any Friday, it being understood that if the stone does not appear there is no such thing as a meteorite."

The "Scientific American" Committee gave their verdict on the "Margery" case on February 12th, 1925. Their verdict was that

"Margery" had failed to produce any evidence of supernormal phenomena. Three of the Committee concurred in the opinion that she had failed to give positive evidence of any exceptional gifts. Another, Houdini, who, to judge by the newspaper report, has been allowed to vote, has denounced her as a fraud, and has alleged that he obtained a hundred proofs of her trickery. The fifth committeeman, Hereward Carrington, has recorded his belief in the genuineness of her powers. Malcolm Bird, Secretary of the Committee, has also publicly attested the abnormal nature of his experiences, and we regret to learn that he has suffered for his courage.

Dr. McDougall makes these additional comments, "As long ago as November, 1923, when I had enjoyed only a few sittings, I wrote 'Margery's' husband stating frankly that I was inclined to regard all the phenomena I had observed as produced by normal means, possibly with the admirable design of testing and exposing the gullibility of scientific men who venture to dabble in the field of psychic research. Since that date I have taken part in three series of sittings cagerly looking for evidence of supernormal phenomena and doing my best to keep my mind open to such evidence. During this period the inclination described above has grown steadily stronger, in the main, in spite of some minor fluctuations, and has become well-nigh irresistible."

Mr. Orson D. Munn, publisher of the "Scientific American" after reviewing the case, says, "The psychic award will not be granted to 'Margery.' It is only fair to state, however, that this fact has no financial significance. At the beginning of the sittings with her, 'Margery' stated that she was not applying for the money reward and would not accept it personally if received. The 'Margery' case being disposed of so far as the Committee and the "Scientific American" are concerned, the Committee will now proceed with the investigation of other persons who have applied for the award and whose cases are awaiting attention. There has been no change whatsoever in the personnel of the Committee nor in its plan of procedure." As a matter of report, however, the committee has never met again.

There should be no suspicion of bias or discreditable method if the future work of this Committee is to command public respect, and we would add that unless the attendances of its members are reasonably frequent, they cannot give judicial opinion upon results which may have occurred in their absence. It seems absurd to have to make so obvious a remark.

The difficulties lie in two directions: (1) That most of the phenomena occurred in darkness: (2) that so much of what occurred was subject to "spirit-control" and direction of "Walter." As to the first of these objections, it will be a reproach to scientific men if they cannot devise tests which are as valid in darkness as in light, and even more valid and convincing in darkness. Such tests are possible if they will take the trouble to frame them. Houdini refused to attend sittings in red light which were offered him in writing.

"Margery" is now giving sittings for various investigators in good red light, an ectoplasmic hand and arm has been seen and felt on many occasions; also the bell-box has been held in all positions, and even at a long distance from the medium and rings to command given

"The Boston Herald" for February 13, 1925, gives prominence to a statement by F. H., by which it appears than on January 19 Dr. W. F. Prince wrote asking for further sittings, but was told by him that as nothing had been heard from the Committee for three months it had been arranged that "Margery" should sit under the exclusive observation of Mr. Dingwall until February 14. This reply was dated January 20.

F. H. suggested that the period ensuing until February 14 should give ample time for the Committee to disavow the acts of one of its members and to express its disapproval of the subsequent "mouthings" of the same member. "In other words," he says, "on January 20 'Margery' declined to sit until the Committee proved themselves gentlemen and not mountebanks."

"Dr. Prince," he adds, "is deaf. He declares he does not know whether a bell that lies in his own lap rings or not."

On January 23, 1925, Dr. McDougall writes to F. H., saying: "I wish to assure you that my long-continued interest in this case is due to the fact that I am strongly disposed to believe that we have to do with a most remarkable and outstanding case of mediumship, there being a number of facts of my own observation which I cannot explain away by any other hypothesis to my entire satisfaction. On the other hand I have also noted a number of circumstances which do not fit in with the mediumistic hypothesis, and I would like to state these to you very frankly and have your assistance in my attempt to set all the phenomena in one orderly and acceptable scheme of interpretation."

Mr. Dingwall is quoted as having said: "The 'Margery' mediumship is not an ordinary mediumship. It is unique. It was the failure to realize the unique characteristics of the case that prevented the 'Scientific American' committee from arriving at a decisive verdict after ninety sittings. The final scandal was perpetrated by a member of the Committee whose knowledge of the act of self-liberation is as profound as his ignorance of the methods of scientific investigation. Thus the 'Margery' mediumship was treated as a burlesque puzzle or a vaudeville show." From his own observations Mr. Dingwall adds: "I have never upon any occasion detected anything that could be called fraud or any kind of deceit."

Dr. William McDougall follows with a special article in the "Boston Evening Transcript" of February 18, 1925. He says he has for the past sixteen months given much time to the case, and that for some months he has been the only member of the Committee permitted to take part in sittings with the medium, wherefore a consider-

able responsibility rests with him towards the general public. He had hoped to have a few more sittings before he gave his final verdict, but the state of affairs has forced his hand and led him to write to the "Scientific American" stating an opinion adverse to the claims of the medium "together with a statement (signed by Dr. W. F. Prince and myself) to the effect that in our opinion the prize offered by that magazine should not be awarded to 'Margery,' she having failed, in spite of ample opportunities, to convince us of the supernormal character of any of her phenomena . . . "Further on he says: "The reader will notice that I do not assert (and the Committee does not assert, as has been incorrectly stated in the Press) that 'Margery' has failed to produce any evidence of supernormal phenomena. She has produced a very considerable quantity of such evidence."

We do not wish to do Dr. McDougall any injustice, but must confess ourselves a little at fault in appreciating the delicate distinction involved in the contrast between these two statements, when put together thus:

(1) "Margery has failed to convince us of the supernormal character of any of her phenomena."

(2) "Margery has produced a very considerable quantity of evi-

dence of supernormal phenomena."

If the quality of the phenomena produced was not good enough to produce conviction, then it is surely a mistake to call it, as he does, "evidence of supernormal phenomena." In another place he says that very many of the phenomena have been produced by normal means "and that in all probability the same is true of all of them." "It is impossible," he says, "to prove that 'Margery' never did, never can, or never will produce any supernormal phenomena. A verdict is necessarily given in terms of probability. . . . The defect is in respect of the quality rather than the quantity of the evidence. What I do assert (and with this I think most of the members of the Committee would agree) is that the evidence of the opposite tendency far outweighs the evidence of supernormality."

To sum up Dr. McDougall's position it amounts to this, that because of the large amount of evidence pointing to the production of phenomena by normal means, he is unable to believe that the rest, for which a supernormal explanation is the only one which offers itself, can really be believed to be supernormal at all. It is probably normal, but he has no idea how it is produced. Can anything be less satisfactory? He is smarting under many reproaches which he details. But how can he be surprised that Mr. Dingwall calls the enquiry a "vaudeville show," that Dr. Morton Prince pronounces the work of the Committee "a fiasco," and that Mr. Bird says that they have "refused to risk" their "scientific reputations" by giving a favourable verdict.

After what we have heard of the Houdini episode it is not a little remarkable to find Dr. McDougall saying, "I will only point out that in respect to the principal accusations by and against Mr. Houdini,

the other members of the Committee, if they had to take sides, in the matter would have to accept the word of one party against the other, and that they would have no sufficient ground for preferring the word of the 'medium' to that of their colleague Mr. Houdini."

Dr. McDougall says now that on examining the detail of the ectoplasm he found that some presented all the appearances of the lung of some animal surgically manipulated to resemble roughly in shape the human hand. The use of the term "surgically" might be considered a veiled innuendo against F. H.; but the whole of this part of his statement abounds in such innuendoes. He cannot make a direct charge. He implies that the ectoplasm is really some substance held in "Margery's" mouth and thence extruded; but how he does not suggest.

The findings of a paraffin wax glove wrapped up in a part of the room ten feet distant from the medium is adduced as an unsatisfactory feature. Incidentally it leads to his admission that the room had not been examined before the sitting. The glove was of a supernormal nature—like those of Kluski. Perhaps he does not attach any weight to such a point. He must not be surprised if the general consensus of opinion should be that the whole proceeding was a farce and a travesty of science.

For a full summary of the principal facts in the controversy concerning Dr. McDougall and the "Margery" mediumship, we may refer our readers to Mr. J. Malcolm Bird's article in the April, 1925, number of the Journal of the A. S. P. R. We have thought it better to give our readers the foregoing outline only, as the literature of this important case is quite too voluminous for us to review in detail. We are able to reproduce the original record of the sitting of November 7, 1924, with the signatures of Dr. Elwood Worcester and Dr. W. McDougall, wherein it will be seen that it is stated that the bell rang in a good red light following Dr. McDougall's suggestions. In view of this, his subsequent statement in public print that "Walter" could not ring the bell in red light seems incapable of explanation, and we do not know how Dr. McDougall can meet this.

With regard to Mr. Dingwall's estimate of the "Margery" mediumship, he has written in a letter to Baron Schrenck Notzing as follows:

"It is the most beautiful case of teleplasmic telekinesis with which I am acquainted. We can freely touch the teleplasm. The materialized hands are joined by cords to the medium's body; they seize objects and move these. The teleplasmic masses are visible and tangible upon the table in excellent red light. I held the medium's hands; I saw (teleplasmic) fingers and felt them in a good light. The 'control' is irreproachable."

This letter was reproduced in the Paris "Revue Metapsychique" for January and February, 1925. Those who attended Mr. Dingwall's lecture at the S. P. R. on March 18, 1925, were many of them im-

Sitting at 10 Lime Street, Mavenher 7th, 1924.

Present Psyche, McDougall, Worcester, Crandon.

Shortly after 9 o'clock, the bell box and table having been examined, the bell rang in the dark. Then some whispering. Then light brief touches reported by Dr. Morcester on left wrist, forehead and right thigh. Then touch on McDougall's right forearm as though slight squeeze of fingers and thumb of hand coming out of cabinet. Dr. McDougall reported touch and asked for touch on left arm. Walter promised and after five minutes McDougall reported similar touch on left forearm and about same time slight noises about or on bellbox. Then more sporadic irregular ringing of bell-box in dark. Then with double control including both hands and feat and head (of Dr. Grandon by Dr. Worcester and of Psyche by Dr. McDougall) numbered rings at request twice in dark (three and fire, the latter irregularly spaced).

Walter sent for Conant and directed that flash photo be taken at end of ringing to request in red light - some irregular ringing in dark after camers set by Conant, then at walter's instructions red light turned on. McDougall requested two short, one long. The bell rang two fairly short, one long, a little interrupted or otherwise irregular IN GOOD RED LIGHT. Flash photo teken during last ringing, then bell stopped in light and box examined in red light NO DARKMESS INTERVENING. McDougall observed at once that very slight pressure on board sufficed to ring bell (Harvard Cooperative Calendar) now easily rang bell, but after a few minutes it no longer sufficed even at extreme free margin.

Elwood Woreester

(Signed) Elwood worcester

P. S. Bell beg was brought down stairs after interval of some thirty minutes and it was then found that resistance of spring supporting lid seemed further increased i.e., the book (Pictures of Arctic Travel) which on leaving seance room rang bell when front edge of book was half way from hinge now required to be advanced to front edge of lid.

W. McDougall

Facsimile of notes dictated and signed by Reverend Elwood Worcester and Professor William McDougall at the end of a sitting. The bell-box was made by the Scientific American Committee and called by them "fraud-proof." Dr. McDougall personally made the spring.

It is to be noted that the box rang the number of times requested by Dr. McDougall and was then examined in the same period of red light, no darkness intervening. Nothing to explain the phenomenon was discovered.

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pressed with the feeling that he had taken a generally favourable view of the mediumship, and his slides and demonstrations certainly confirmed the impression that we have here a group of phenomena hardly to be explained on normal grounds. But the lecturer was clearly dissatisfied with the conditions under which observations were made, and would not go so far as to affirm his belief in their authenticity; but he said that if fraudulent, the frauds were so ingenious and so complete that the task of the investigator would be most difficult. We gather that Mr. Dingwall has since stated in writing that he cannot come to any conviction either as to the genuineness of the phenomena or the contrary, and that nothing will induce him to say that he will admit their supernormal nature.

There seems a nemesis attaching to the work of some of these investigators. For a brief space they will be moved by what they witness to a point of enthusiasm which almost persuades them of reality, then as the impression fades they will fall back into that negative frame of mind in which they are no longer able to appreciate, it would seem, the reality of the occurrences, and the old, old doubts surge back upon them and leave them impotent to form any positive conclusion. And then perhaps a feeling of professional caution comes in to set the seal upon their attitude of negation.

Since the above was written, many other seances have taken place with "Margery" in good red light, and a complete hand and arm have been seen and touched and photographed on several occasions.

When some critic declares his belief that phenomena are produced normally, ten observers jump into the field crying their belief to the contrary. While the manifestations go on in sittings, sometimes as many as five a week, there is constantly an environment of controversy going on between the critics and champions of Margery.

Dr. Prince declares in writing that he can make out an equally good circumstantial case against Margery or Houdini. When challenged to do this in writing he fails to do so. Dr. McDougall, finding himself laughed at for his lack of scientific methods and accuracy, comes back in the April number of the Journal American S. P. R. adducing new "facts" to revive the weakness of his first criticisms. These "facts" are wholly post-factum, the worthy Professor having even kept them secret from his colleague Mr. Dingwall. Dr. McDougall now remembers that he smelt something like rubber, which must be a rubber pipe, from the Psychic's mouth to the breathing luminous ball seen on the table by all observers. This paper of Dr. McDougall's with its attenuated scientific quality shows evidence of feeling and also a suggestion of an irresistible urge behind it that cries "This mediumship must be exploded." This urge may be honest conviction on his part or it may be stimulated by more worldly circumstances, or academic pressure.

To Dr. McDougall's paper in April, Margery's husband replied in the July number of the Journal Am. S. P. R. This reply is more

or less satirical showing that many of the good Professor's sittings contained much more comedy than science. This paper declares the intent of the writer not to continue any more controversy but rather to devote the study of the mediumship always to observation of the constantly changing and developing phenomena. The reality of anything, after all, must be attested for the time being by the pragmatic touch. As another Professor of psychology has pointed out, at one time we had the Atomic Hypothesis, later we had Atomic Theory and now we have Atoms, but the Atom only has reality in so far as "it works." Matter itself has received body blows in the way of change of definition in the last ten years. So ectoplasm slowly acquires a reality. Its existence has been admitted by a large group of scientists on the Continent. Out of one hundred signers, thirty-two were full professors. If the Margery mediumship goes on describing the physical characteristics, the source of origin, the method of disappearance, the forms it takes and the temperature it shows, the definition, and therefore the reality, of ectoplasm will come to be present in the minds of men.

Of the reality of ectoplasm, Professor Charles Richet says: "The alternative, then, is that the phenomena are genuine or that they are due to fraud. I am very well aware that they are extraordinary, even so monstrously extraordinary that at first sight the hypothesis of immeasurable, repeated and continued fraud seems the more probable explanation. But is such a fraud possible? I cannot think so. When I recall the precautions that all of us have taken, not once, not twenty, but a hundred, or even a thousand times, it is inconceivable that we should have been deceived on all these occasions.

"Assuredly it is possible that I may be mistaken, even grossly mistaken, along with Crookes, De Roches, Aksakoff, Myers, William James, Schiaparelli, Zollner, Fechner and Oliver Lodge. It is possible that some day an unexpected experiment may explain our prolonged deception quite simply. So be it, but till it has been explained how we have all been duped by an illusion, I claim that the reality of these materializations must be conceded.

"Following the example of Descartes, we ought to make a clean sweep of all that has been said and written on the subject. The facts of ectoplasms and telekinesis are certain; but their mechanism is profoundly mysterious; therefore let us experiment again and again. We shall certainly reap the reward."

Following a fixed plan, the group of observers for the last few months has resolved itself into a kind of developmental circle, of the same people. The conditions of control are adequate. The Psychic sits with one garment on, having been thoroughly examined by a woman sitter or a woman doctor. This examination is repeated at the end of the sitting. Two sources of the ectoplasm seem apparent, one is abdominal and the other is the ear. From the former source the ectoplasm is grayish in tint and forms itself into the grosser and cruder

efforts at materialization such as the hand and forearm. These structures are seen freely in the red light, are photographed by three cameras at once, two of them being stereoscopic. The structures apparently contain bones and sinews and are covered with skin and occasionally have finger-nails. The hand sometimes in addition has a whole forearm, total length 14 inches. The form of ectoplasm (or teleplasm) which comes from the head is pure white and is apparently tending to form itself into something similar to a head. As many flash lights are taken as the control approves, and the cameras record what the eyes see.

The number of good minds observing the case constantly increases. Apart from the developmental sittings which have been described, one or two nights a week are reserved for sitters from a long waiting list. They include people from all professions and occupations. Preachers of all faiths come to observe. School teachers, lawyers, engineers, business men and mechanics are among the sitters. There is no center of propaganda. No one is asked his opinion, no one is asked to sign anything. No one is excluded who has an honest, earnest purpose. The conventional ethics of the seance room are added to the common ethics of good behavior. Apart from this there are no rules or reservations.

The latest work of the circle is a completely mechanical demonstration of the true independence of the Walter voice. Thirty-six tests so far under good conditions of control seem to point towards the existence of this voice apart from the speaking mechanism of the Psychic. Detailed publication of this study will appear later. Mr. Bird, Dr. Comstock and Dr. Carrington have already testified to the reality of this phenomenon.

An article was published in the Atlantic Monthly, November, 1925, by Mr. Hudson Hoagland (hereafter called H.), a graduate student in Harvard College. He is working this year for Ph. D. in part under Professor William McDougall one of the principal adverse critics of the mediumship.

We propose to compare this article with the signed notes of the sittings. No hypothesis of trickery, or any other kind, will stand unless every fact fits into it and supports it. The notes were made on a dictaphone or immediately after the sitting by the investigators themselves. They were fair and true and were made in the presence of F. H.

By agreement, these signed notes of each sitting were delivered to F. H. before the next sitting. It was further agreed, and incor-

porated in the notes (q. v.) that "if no suspicion of fraud is entered in these notes, it shall be deemed non-existent."

If one will take the pains to read Mr. Hoagland's article critically, one will see that it is a mass of contradictions, evasions and assumptions. Not once does he face honestly the real issue: DO THESE PHENOMENA TAKE PLACE, OR DO THEY NOT TAKE PLACE, WHEN THE PSYCHIC'S FOUR LIMBS AND HEAD ARE UNDER RIGID CONTROL? Five minutes of such control have settled the matter for scores of observers. But Mr. Hoagland did not wish to settle it; so his colleague, Mr. Code, resorts to evasion himself, in order to give full scope to their hypothetical arguments, which, to anyone acquainted with the phenomena of hysteria and automatisms are absurd. No scientific journal would publish such an article.

Now to the analysis of the article by Hoagland. (H.)

(I) p. 668 (H) "Though it has always been maintained that the Walter voice was distinct from that of the medium, I never saw supporting evidence for this."

Notes. May 19, p. 6. "At Walter's direction, Code buttons Psychic's robe. While he is doing so, Walter says 'Hello' apparently from point behind Psychic's head and slightly higher. Code's head about one foot from Psychic's head at this time."

Notes. June 30, p. 7. "Walter continues to talk until 10.50, and then says Good night.' During this conversation he uses his peculiar Japanese chuckle, imitating the laughter of Dr. Wolcott. This noise continues, and according to Code, seems to be high above the Psychic's head. . . . At 10.52 Walter again says Good night' and again in fairly bright red light makes his Japanese chuckle, distinctly vocal, not a whisper."

At the end of this sitting the notes continue thus: "Unless there is a suggestion of fraud in this record it is assumed to be non-existent in our opinion. Dr. Fawcett is absolutely certain that nothing was concealed about the body or hair or in the clothes."

(II) H. p. 669. "He (F. H.) also averred that he had some psychic powers, etc."

This statement is wholly imagination. F. H. is certain he has no such powers.

(III) H. p. 674. "10.22. Code reports Psychic's right ankle-band off. Walter says "I can hide them from you any time I want," and obscures most of the right anklet from Code. It was clearly not

the left foot that obscured the right anklet." What did it? Control was "perfect."

Notes. June 29, p. 10. "It is to be noted that the bands the Psychic wore had been made by the observers and substituted for bands which she had brought with her; that the Psychic had complained before the sitting that the ankle-bands were too loose, and had attempted to tighten them with safety pins. The band's coming off during the sitting was thus made possible by the carelessness of the observers." They were 12 inches in circumference; her usual ones were 8 inches.

If the garter fell off why didn't Code pick it up? It was not forbidden; the garter was not a psychic structure. What honorable intent would he have had in not confirming his statement?

H. refers to all phenomena up to the sitting of June 30 as produced by right leg of medium (the control of hands being perfect). How is it that the luminous band, off the leg, revealed as a complete circle on the floor was never noticed at other sittings where one man's whole job was always to watch the feet? H. on p. 672 "This was in keeping with what we were led to expect from Walter, since he had once said, when we saw his tentacle swaying to and fro across the medium's ankle bands, etc."

(IV) H. P. 675. "What I saw holding the doughnut appeared to be a human right foot, the toes clamped over the periphery of the disc, creasing it in a way verified by examining the doughnut after the sitting. Further, by shifting my position, I clearly saw the ankle and leg silhouette to a point above the knee."

Since the terms of the agreement were that any suggestion of fraud be included in the record of sitting or assumed to be non-existent, how is it that Mr. Hoagland (who, unlike Mr. Code, is unhandicapped by personal consideration for Margery) did not reveal at the time the supremely important discovery he made at the sitting of June 29? Mr. Code, hampered by personal considerations, at once reports the comparatively unimportant fact that an anklet is off. Yet Mr. Hoagland who clearly sees the silhouette of ankle and leg to a point above the knee, says ne'er a word. Why? This discovery and exposure at this time would have settled the Margery case once and for all. Both science and honor would have been vindicated. Mr. Hoagland might explain his suppression at the time of this vital discovery.

The statement of Hoagland that he saw foot and leg is not a part of the dictaphonic notes. There were seven people present: no other confirmed it. We not only concede, but declare that when a luminous object is levitated under control conditions, such levitation is not a miracle but is done by a visible tangible terminal. That it is a human foot is so fundamental a charge that it should appear so to other observers and at other sittings. There is no such note.

(V) Code's imitation seance: Then there was a private sitting of the group at which Code gave an imitation Margery show. If the intent of this meeting was scientific and the purpose of these gentlemen was honorable, why was not F. H. invited? Was it that they wanted Margery to fail? Was it that they favored Code's explanation and wanted him to succeed? This calls for psycho-analysis of the group. This secret meeting appears more like conspiracy than science. Duplication of phenomena does not prove identity. Code is an amateur sleight-of-hand artist; he is a toe-dancer; he can use his feet almost as if they were hands. Though Code might easily in fairness have given his imitation show to Margery's friends, he has been careful not to do so. Dare we assume that it might not "get by" the observant eye of F. H.? We are willing to assert that Code could not produce any of the phenonomena under the same controls imposed upon Margery. We have not seen any descriptive record of Code's imitation.

If Margery's lower extremity performs the wonders ascribed to it, in spite of the close observation of the investigators, it must be a very accomplished limb. In succession the medium is credited with the skill of a conjuror, the prehensile flexible toes of a baby, the knowledge of an electrician, all without a movement of the body or a single fumble or collision in the dark. Does it seem reasonable?

(VI) H. P. 676. The use of plasticine: "imprints showed coarse skin marks of the human foot . . . . traces of lint, sand were found

freshly pressed into the plasticine, etc."

F. H. Here again there was no effort to be scientific or honest. Walter pounded on two balls of plasticine; the Psychic's heel was pressed on six or seven balls of it, as a check, for comparison. The only just procedure would have been then and there to examine the originals of Walter and the checks of Margery, carefully segregated, so that all might confirm the findings. As it was, they were all piled in a bag by Dr. Wolbach who made off with them. He, nevertheless, reports: "Notes, June 30, p. 9. "that the plasticine showed impressions as of fingers but without skin marks." No segregation of the balls touched by Walter was made. Therefore there was no evidential identification of the balls showing skin marks as being his. Such methods would not prevail even in a criminal court.

The day of June 30, 1925, Mr. Code calls on Margery. He tells her that during trance the night before her right foot did all the manifestations. This statement was received by the Psychic with bewilderment. Bravely then, taking advantage of the fact that he was talking to the Psychic, as he thought without witnesses, he tells her that they are sure, with the new surgeons'-tape control, (which she herself had suggested for the ankles) that no phenomena will take place; that a blank seance will be a dreadful thing; that he, Code, is willing to act as accomplice and put over the show for that night. This statement is received with surprise by Margery and the accomplice-offer rejected with indignation. The author of the fantastic "hypnotic impersonation theory" is aghast. If, under the new con-

ditions, phenomena should happen in the forthcoming sitting at Harvard, his brain-child of "hypnosis" could not survive. He made up his mind that, like the well-known curfew, no truly psychic phenomenon must appear that night. Since he was to be in control on one side, the problem was easy. Two things only were necessary:

(1) Confess to his committee that he let the psychic's hand go,

though he constantly said to the dictaphone "control perfect";

(2) Support his "confession" by saying he aided the psychic, as a result of a conspiracy with her at a private sitting.

Code "went through" on both counts.

Now, October 24, 1925, Mr. Code writes F. H. saying, in effect, on June 30, 1925, the day of the last Harvard sitting, that he had a private sitting\* with Margery at Lime Street. At that sitting he alleges that Walter told him to let the psychic's hand loose at the forthcoming seance at Harvard and to slip up her arm the luminous wristlet. The allegation appears to us unworthy.

What quality of science or justice is it in the minds of these men to accept this story of a private seance? The author of it says the psychic was unconscious, but even then, he dare not tell the tale to

his committee in her presence.

An honest judge on hearing such unsupported testimony would frown and say "contempt." The jury would laugh. Yet it appears the decision of this group of intellectuals, that the whole affair was trickery, is based on this unsupported fantastic tale.

#### The official sitting of June 30, 1925.

(VII) H. P. 678. "June 30, our last sitting, expecting either a blank seance or a fundamental change in the phenomena."

F. H. This is true. They were so sure of a blank that they brought no apparatus except the bell-box. There was no luminous doughnut, no weight lifting. How then could the same phenomena appear as of June 29? June 29 there was no coordinate luminous board: June 30 there was. The bell-box was rung, various sitters were touched; a hand was silhouetted, etc. Code and Shapley constantly reported "controls perfect." Our amateur observers were "hard put" to explain what was happening. Whereupon this bright "fact" is now brought to light. "He (Code) therefore (p. 679) resolved to help Walter to prevent the coming seance from being a blank. . . . In addition, Mr. Code testified that he acted as Psyche's accomplice on the evening of the thirtieth and permitted her to . . . free her right hand from his control."

The notes say nothing of this and the notes of the last sitting

<sup>\*</sup>In view of the present statement of Mr. Code that he had a sitting in the seance-room at Lime Street on June 30, 1925, it should be stated that we have in our possession affidavits from two different persons. One is a person, not a member of or a servant in the household, who was present within a few feet of Mr. Code and Margery from the beginning to the end of Mr. Code's visit. At no time was there a "sitting" nor did Margery or Mr. Code go to the seance-room at any time.

were not received by F. H. till July 15. Is it unfair to assume that this bright little idea was born after July 15?

Much more important is this: Mr. Code's alleged betrayal of his Committee to the medium after the discovery by Mr. Hoagland of the 29th could only be of worth as evidence after considerable close examination. Bare assertion is not equivalent to authenticity. Code all during June 30 said repeatedly "control perfect" to the dictaphone and to his colleagues. Then he testifies later he acted as accomplice and let the Psychic's hand go free. On October 26, 1925, Code writes: "On the thirtieth of June I never lost contact with the (Margery) hand and arm. In this sense F. H. is quite correct in saying that my control was adequate." Margery's luminous right wristlet remained fixed and visible to all in relation to the level of the table and her right knee. Nothing in the notes suggests that her wristlet was pushed up the arm, nearer the luminous head-band. The sole purpose of everyone in the circle wearing luminous bands was to prevent anyone acting as accomplice. One statement or the other must be untrue. Code is thus disqualified as a witness. Is it not likely that the accomplice fairy-tale was the only way to explain the phenomena? Here were two material statements in flat contradiction. Unless one of the two were supplemented in some way, Code's evidence would be on a ludicrous dead center. It is submitted that the more compelling influences at work would urge Mr. Code to bulwark, if he could, the "trickery" theory rather than that of possible supernormality.

But one deviation from truth needs another. As the show went on, things happened that even a free psychic's hand could not do. H. p. 679: "Code further stated that she then proceeded to remove various objects from the region of her lap with her right hand. Once or twice she used her own hand to produce silhouetting on the coordinate board, though the artificial hand was usually employed. . . At the end of the sitting the medium returned these artificial objects with her right hand. The search made by Dr. Fawcett before and after the seance of course revealed nothing. The things displayed on the table must have been stored away internally, and no internal examination has ever been permitted."

F. H. No anatomist would express such an implication. More of this was to appear, however.

June 30 there were present two honest men who thought they were to report things as they were. All observations in the dictaphonic notes are precise and correct. The teleplasmic hand described has indeed the source, form and behavior of that which we have seen, handled, measured, weighed and photographed in good red light repeatedly.

Notes. June 30. p. 5. "Dr. Osterhaut said that it felt like a cold slimy and rather clammy finger, which felt as though it had bones in it, but too flexible for an ordinary finger." P. 6. "There seems to be

a large hand like a man's. 10.28, at the request of Dr. Shapley, Walter shakes Dr. Wilson's hand. Dr. Wilson (Mass. Inst. Tech.) says that the hand was cool, but not cold, and went through a regular hand-shaking process with him. Apparently very poor articulation. Professor Wilson cannot be sure of any bony structure, neither can he be sure there was none." This hand which "seemed like a man's, strong, too flexible," with apparently very poor articulation, "not surely containing any bony structure" also needed an "artificial hand" to explain it and such a "fact" was promptly made to fit the need.

This "artificial hand" they imply was hidden by a woman wearing a single searched garment! By the grace of physiology, according to the written and signed statement of their woman physician, Dr. Fawcett, such a hiding was catamenially impossible! And there were not marks or signs on any person or any object that threw any suspicion that Dr. Fawcett's statement was not true. (notes, June 30, p. 9.)

Thus after making "facts" to prop up their hypothesis, old Dame Nature catches the group in coils of their own making. The one holy and inviolable thing in science is truth. Destroyed are they who depart therefrom.

The friends of Margery left the sitting of the 30th serene in the knowledge that an honest verdict must be positive.

Here follow extracts from letters subsequent to the sittings. They are self-explanatory. They show the disagreements between Hoagland and Code, the "parents" of the "exposure."

July 7, 1925, Hillyer writes F. H. as follows:

"I agree with you heartily that the important advance in this elaborate hypothesis (hypnosis and amnesia) is the total absence of any cry of conscious fraud; that is all to the good, no matter what conclusion we arrived at, you may be sure that any hypothesis involving such a charge would find me at your side."

July 15, 1925, a paper from Damon, Marshall, Code and Hoagland says, "nothing in these reports shall be interpreted as a charge of deliberate and conscious fraud." H. (p. 680) says: "Margery's phenomena have been produced by automatisms aided by high sensitivity to suggestion and a certain amount of amnesia." This was H.'s idea October 1, 1925.

Sept. 10, 1925, Mr. Code writes to Margery:

"That so-called "hypnosis" theory is my work and honest work, too. I have been accused by one or two persons of making up that theory out of whole cloth to protect a lady I knew to be a fraud. Taint so. I formulated the theory on perfectly good evidence and I used it to protect no fraudulent lady, but a fine woman."

October 9, 1925, the following letters were written:

Dear Dr. Shapley:-

I understand from Bird that Hoagland, a graduate student and a member of the group sitting with Margery last May, is about to publish an article on the mediumship in a popular magazine. In doing this, Hoagland has not my permission, direct or indirect.

In a way I cannot much regret (before I see the article) that he should publish his hypnosis theory concerning the mediumship, for

he will thereby only proclaim himself ridiculous.

As you know, the young men constituting the so-called Harvard group exacted from me a binding promise not to publish the notes of the Harvard sittings and the names attached to them. This promise still holds, and without your permission the notes signed by you gentlemen will not be given out.

The main purpose of this letter is to inform you that this contemplated action by Hoagland and his associates has no sanction from me, and is likely to bring ridicule upon the University, which as an alumnus I have the right to love as much as you.

(Signed) F. H.

#### Dear F. H.:

Several days ago I received from Hudson Hoagland what I took to be confidential information that he was about to publish in a wellknown periodical of good standing an account of the recent Harvard investigation of the Margery mediumship, including a statement of the hypothesis of hypnosis.

Upon receipt of this information, I at once wrote to Hoagland and to other members of the Harvard group requesting that you be informed immediately of this publicity. I received word in return that you had been informed, so I assume that I am at liberty to write to

you on the subject.

This account by Hoagland I assisted in the preparation of, with the understanding that it was to be delivered as an address before a private meeting of a learned society, and that you were to be informed in advance. I have opposed all along the actual publication of our findings, on the grounds that such publication would be injurious to you and Margery, in spite of the fact that hypothesis H affords you protection against the charge of deliberate and conscious fraud.

Another periodical of very wide circulation and good repute has asked me for an article on the Margery mediumship. I have replied

that I do not feel at liberty to write such an article.

In view of the publication of Hoagland's article, my understanding with you that the Harvard reports are not to be published is naturally terminated, and I hereby authorize you to use my name in the publication of these reports and in the discussion of them.

Yours sincerely,

(Signed) GRANT H. CODE.

October 12, 1925, the following letters were written: Dear F. H.:

The enclosures pretty well explain each other. I am sorry that my letter to Bird has exaggerated an inevitable misunderstanding of Hoagland's behavior. The sequence of events is as follows: 1. Hoagland obtained my assistance in the preparation of a paper which was to make the general results of the Harvard investigation available to science without violation of confidence with you. The paper reviewed the Harvard sittings and stated Hypothesis H with an argument for it to protect you against the charge of deliberate conscious fraud. It was my understanding that this paper was to be delivered before a meeting of a learned society and that you were to be informed in advance. I certainly did not contemplate general publicity nor concealment from you. 2. On the advice of friends, after my departure from Cambridge, Hoagland submitted this paper to a public journal. 3. It was accepted. 4. Hoagland obtained the consent of certain members of the Harvard group. 5. Hoagland notified me. 6. I protested that this was a violation of confidence and that you must be informed at once. 6. I had a letter from Shapley to the effect that Hoagland had written a letter to you. 7. I wrote Bird. 8. I wrote you. 9. I received a letter from Hoagland enclosing his letter to you for my criticism, informing me that he had not yet sent it, but that he had been passing it about among the group for criticism. 10. I held my letter to you, revised Hoagland's letter to you, and wrote him. 11. I received this morning letters from Hoagland and Bird enclosing your letter to Shapley. 12. I wrote the letters which I enclose.

Yours sincerely, (Signed) GRANT H. CODE.

Copies to Hoagland and Bird.

October 12, 1925.

Dear Hudson: (Hoagland)

I have your undated letter this morning, referring me to F. H.'s letter to Shapley. Before writing to Bird, I had a letter from Shapley saying that you had written a letter to F. H. I naturally assumed that you had also mailed it. On this information, I also assumed that F. H. and Bird were already informed and that my writing to them would involve no breach of confidence with you. I did not mention the name of the journal in which the article was to appear nor the date of publication, though I am still of the opinion that all this information should have been placed in F. H.'s hands and his consent obtained before your paper went to press.

As I informed you, upon receipt of your letter enclosing a copy of your letter to F. H. asking for my criticism of it, and stating that you had not mailed it, I held my letter to F. H. I believe I neglected

to mention this fact in my last letter to you. This omission was an oversight and no attempt to deceive you.

You ask me why I couldn't have waited a few days. Since I had every reason to suppose that the information you gave me was no longer confidential, I had no reason for waiting. And since your publication without notice to F. H. placed me in a very disagreeable position as being your accomplice in the violation of an agreement which I had been instrumental in negotiating, I had every reason to explain my position as soon as possible.

I assume that you acted in good faith, but I deplore what I

consider your bad judgment and mismanagement.

I am withholding information about date and place of publication from Bird and F. H., since I have this information only from you in confidence. I insist that it is the duty of you and your editor to give F. H. this information at once.

I am sending copies of this letter to Bird and F. H.

Yours sincerely,

(Signed) GRANT H. CODE.

October 14, 1925, the following letter was written to the editor of the "Atlantic."

Dear Mr. Sedgwick:-

I am told that you are about to publish an article on the Margery mediumship by a lad from Harvard.

May I ask you for advance proof-sheets of this article? They will be held by me as absolutely confidential. My reasons for this request are:

- 1. The article has been written without my approval or permission. In fact, the reports upon which the article is based were considered to be strictly confidential by all persons concerned therewith.
- 2. I should like to have the opportunity to prepare, if I so desire, a reply to the above article and one to appear simultaneously with it.
- 3. I am sure the Atlantic Monthly would appreciate any suggestions from me which might prevent its becoming the victim of a hoax.

  Sincerely yours,

(Signed) F. H.

The Editor of the Atlantic did not see fit to give F. H. an advance copy.

October 22, 1925: a statement signed by all of the group except Code says: "the group is in absolute agreement that the only conclusion possible to them is that trickery accounted for all the phenomena."

October 25, 1925: Mr. Code writes to the Boston Herald: "Mar-

gery never 'confessed' to me at any interview or sitting, private or public, nor did I ever say she did." It should be added that Margery never had any private sitting with Mr. Code.

November 2, 1925: the writers of this paper offered an article on the Margery mediumship to the editor of the Atlantic. The offer was declined. It would not be as conventional and safe to "expose" Harvard as it was to "expose" a mere medium.

November 11, 1925: Mr. Code writes to F. H.: "I expected a blank on the thirtieth (of June) for two reasons. A blank would appear to confirm the observers in their opinion that the whole business was trickery. This opinion did not satisfy me because I thought certain phenomena could not be produced by a free foot. I could not believe that the whole mediumship was a fraud cooked up between you."

To the writers of this paper, it appears possible that after six Harvard sittings, it suddenly occurred to the investigators that they were in a fair way to be obliged to approve of so unconventional thing as a medium.

We do not blame the group for crying "trickery" if it is necessary to save their positions at Harvard. Our only regret is that men with good minds should not have foreseen what their predicament and that of their University would be if they found clear-cut psychic phenomena.

Why F. H. always sits on the medium's right is now to be seen. The reader will note that at all sittings where F. H. sat at the psychic's right, Hoagland sat next, to right. At every critical moment when things were actually happening, Hoagland was in contact with the psychic's right hand, F. H.'s two hands and his head. At such moments any observations by Hoagland, being shared by F. H. had to be reported with precision and honesty. Something had to be done. The phenomena could not be explained normally. Then these "scientists" decided to put one of their own men, Code, on the psychic's right. This man was now free to report anything he pleased to support his hypothesis. He was free to declare he let the psychic's hand go. He was free to say he was an accomplice. F. H., the only friend of the medium present, could not check up on Code's accuracy, not to say honesty, as he might have done if he were at Code's right. The "Code as accomplice" theory was necessary, else their cause was lost. It was therefore "born," not on the dictaphone in the presence of all, but eight to fifteen days later.

At the seventh sitting they appeared with twelve-inch anklets. Can it be that these were to form a way of escape for the honorable investigators? Walter then, being in no wise discouraged, at the eighth sitting put up a show that required the hypothetication of an "artificial hand." This was made silly by a then-existent physiological fact.

The newspaper paraded both sides of the story, making the Atlantic article an anti-climax. We will not say that chagrin, fear and hysteria prevailed in the group. But something had to be done, and the "trickery" round-robin came into being.

It is not our desire to hide from their just reward the names of these keen investigators at Harvard. They are Harlow Shapley, Professor of Practical Astronomy; Edwin G. Boring, Director of the Psychological Laboratory; S. Burt Wolbach, Professor of Pathology; Hudson Hoagland, Graduate Student; Grant H. Code, sometime Assistant in English; Robert H. Hillyer, Instructor in English; S. Foster Damon and John Marshall, Assistants in English; Hilbert F. Day, Instructor in Surgery. It seems unfair to the world that amongst all the three to four hundred people who have observed this mediumship, precision of observation and clear-cut decision of fraud should be limited to this group. Such ability should be distributed.

Having brought out a magazine article which speaks of unconscious automatism that entirely exonerates F. H. from complicity, within two days, apparently from chagrin that their publication had been anticipated, a statement of absolute trickery comes from this group. Strangely enough, Code's signature to the "trickery" stuff is absent. Their attendance at sittings were as follows: Shapley five, Boring one, Wolbach two, Day two, Hillyer three, Marshall four and the rest eight.

When the inconsistency of the unconscious automatic action theory with that of trickery was pointed out to Dr. Shapley, he responded in the following rather heated manner:

"Yes, we know how the tricks are done. One of the group has reproduced practically all of them, and some that Margery herself cannot do. There is nothing to it but fraud throughout. . . . . Personally, I now doubt if there is any physical medium in existence, for Margery was recognized as the best."

Along the same lines, Mr. Code in a conversation with one of us admitted, with pure modesty, that he had solved the whole medium problem for all time. The reader may save his resources, therefore, for he need buy no more books on this subject. Messrs. Shapley and Code have settled it.

The reader is asked to read the Harvard original dictaphonic notes, to see if he is able to make the same conclusion of trickery.

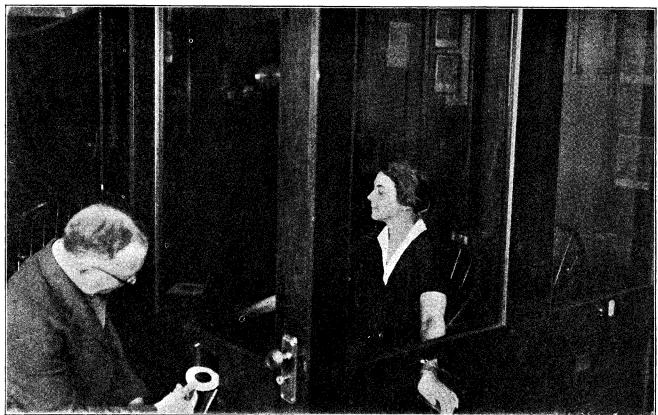
As has been seen, the essential points in the Cambridge position are as follows:

First, the observation at one sitting only, by one of the Com-



The Richardson-Dennett cabinet, all glass. In it the Psychic is rigidly controlled by wire and lead seals to all extremities and head.

Levitation goes on freely nevertheless.



The Richardson-Dennett cabinet, all glass. In it the Psychic is rigidly controlled by wire and lead scals to all extremities and head.

Levitation goes on freely nevertheless.

mittee only (Hoagland), of what seemed to be a leg silhouetted against the luminous plaque on the table.

Second, the purposeful relaxation, at one sitting only, of an arm by one of the Committee (Code), and the implication that a released member always accomplishes the alleged supernormal phenomena.

Third, the reproduction by one of the Committee (Code) of some

of the phenomena by means of acrobatic dexterity of his legs.

As regards the explanatory theory of hypnosis, automatism and unconscious fraud, this is so fantastic as to require no serious discussion, especially in the absence of any real supporting facts. For we have been able, in the very recent past, by using special apparatus to show that the three occurrences above mentioned have no evidential value. The methods applied have been as follows:

The medium has been enclosed in a special plate-glass cabinet, which cabinet was designed by one of us (M. W. R.) and presented to the mediumship by Mr. Carl P. Dennett of Boston. This cabinet is six feet long, three feet wide and seven feet high. The floor is solid but is hinged at the back so it can be lifted and the area underneath inspected. The roof is solid and screwed firmly to the frame. The door is an ordinary glass door with latch and lock. Around the cabinet, about two and one half feet from the floor and supporting the upper panes of glass, is a sash, six inches in width. Through each of the two longer sides of this sash are cut two openings four inches by four and one half, closed by doors hinged at the bottom, opening outwards and capable of being closed with snap-catches. Similar single openings are cut in sash of front door and in rear of cabinet. Each opening has a snap-lock door. In the upper left hand corner of each of these small doors is an eye-bolt and on the sash immediately above it another eye-bolt. These adjacent eye-bolts are utilized for sealing purposes either by wire or small padlocks. On the floor of the cabinet at suitable points are inserted two heavy eye-bolts for the control of the feet. A similar eye-bolt is inserted in the ceiling above the medium's head. The medium being properly seated, strong picture wire is tied adequately around each ankle, passed through the adjacent eye-bolt and sealed with lead American Ry. Express seals. The hands, having been passed through the lateral doors of the cabinet, are firmly secured by the picture wire to the eye-bolts, on the exterior of the cabinet. The head is then controlled by a loop of one inch roller bandage around the neck and passed through the eye-bolt in the ceiling. Thus secured the medium can move extremities and head a few inches in any direction and not more.

The circle having been formed, and the door having been closed and locked, and all unoccupied small doors having been sealed with seals, Walter, the control, accomplishes the following feats:

An observer sits before the opening in the front door and holds just within it an illuminated disc of paper (doughnut). After a few minutes Walter's ectoplasmic terminal is seen and felt bending

the paper backwards and forwards. Finally he says "Let go." The luminous doughnut is then lifted in broad graceful circles over the entire front of the cabinet high above the medium's head and sometimes two or three feet behind her head. Finally, after three or four minutes, Walter passes the disc out of the opening in which the right hand of the medium is placed. Later a large, illuminated, three-pound megaphone is placed in the anterior right hand corner of the cabinet. In a few minutes Walter raises this gracefully into the air, and, with perfect control, carries it forwards and backwards around and above the medium's head, and finally drops it in the back part of the cabinet.

It-is obvious from this description that the medium's feet, hands and head have had no part in this levitation. The door is, then unlocked and opened. The wire seals on ankles and wrists are inspected and found to be intact as is also the bandage control of the head.

One defect in this procedure was pointed out, in that the sitters holding the medium's hands might fraudulently, in some fashion, insert apparatus to cause this levitation. To eliminate this possibility Walter was asked to give individual sittings in the following fashion. All persons leave the room, excepting one observer, who, sitting in front of the door, passes the illuminated disc into the cabinet, whereupon Walter levitates it gracefully and completely as before. This experience of individual observation has been accorded to twenty-nine persons who can testify that, alone in the room, with Margery completely controlled as described above, levitation of luminous objects continues unimpeded in the locked and sealed glass cabinet.

These experiences serve to demolish absolutely the Cambridge position which sought to explain these extraordinary phenomena through fraud and acrobatic dexterity. Further discussion of the Harvard group or any consideration of their theories, deduced from facts that do not exist, is unnecessary.

Note. Striking as the above detailed phenomena are, their importance is overshadowed by the almost unbelievable fact that the voice of Walter, the control, is an independent one. Proof of this fact has been demonstrated by Dr. Richardson through the use of specially devised apparatus. Full details concerning this apparatus will be found in the December (1925) number of the American Journal for Psychical Research.

We append herewith the official notes of the Harvard sittings. They appear absolutely as written and signed. These official notes, made by these observers, immediately after the occurrence of the phenomena, seem to us to be the most reliable statements they have made or could make. Their sensations were fresh of impression, they exchanged their views with each other before their recollections or sense of balance and value had become in any wise blurred. At the time of their signing, no motives for modification of view, arising external to the phenomena themselves, had had opportunity to affect them.

The mediumship can well afford to stand or fall by these signed records.

We believe that, to the unbiased and thoughtful reader, these notes alone would compel a verdict favorable to the genuineness of the mediumship. The light added by the above-mentioned fraud-proof glass cabinet experiments makes this assurance inevitable. The pity of it is that a potentially able group of Harvard observers should have been misled by the vagaries of two of its own members into hasty and half-baked conclusions, and into the unwarranted support of fantastic and untenable theories.

## SEANCE AT EMERSON HALL, HARVARD COLLEGE, CAMBRIDGE, MASS., MAY 19, 1925.

### INTRODUCTORY NOTE.

In the body of this report it was thought best to preserve the dictaphone record complete in the order in which it was taken. For convenience in reading, a description of the seance room and apparatus, a statement of general procedure, a list of sitters, and some other details scattered through the dictaphone record are here recorded.

The seance room for the sitting of May 19th was Emerson 11, a small laboratory on the third floor of Emerson Hall. The room has no windows. The only door was locked throughout the seance. The cabinet, across the room from the door and facing it, consisted of black curtains hung from a frame of boards about two feet from the ceiling. The curtains, hanging from this frame to the floor, were so arranged as to form a curtained alcove about four feet square and ten high, closed on three sides, open toward the door, the back being about two feet from the back wall of the room. A windsor chair for the Psychic stood within the cabinet. A small megaphone, not illuminated, stood within the cabinet at the right of the Psychic. A plain wooden table, about two feet by four, stood across the open side of the cabinet. A circle of plain wooden chairs (five) stood around this table. At the left of the Psychic outside the circle there was another chair. At the right of the Psychic outside the circle there was a victrola on a wooden box, an Edison dictaphone on a stand with records and an illuminated watch, a chair, a red light on a small stand, and the seance apparatus.

This apparatus consisted of a large megaphone with bands of luminous paint on either end, another large megaphone (not used), the English bell-box (a percussion bell enclosed in a wooden box, rung by hitting an illuminated disc about four inches in diameter), a small illuminated basket about six inches long, a "doughnut" (an illuminated paper disc about four inches in diameter with a hole in the middle), an electric torch the light covered with red paper, and several other illuminated objects which were not used. All these objects were illuminated by means of phosphorescent paint exposed to light just before sitting.

The sitters were: the Psychic ("Margery") F. H., Dr. Deborah Fawcett; S. Foster Damon, Assistant in English, Harvard College; Robert S. Hillyer, Instructor in English, Harvard College; John Marshall, Harvard, 1925; Hudson Hoagland, Graduate Student in Psychology, Harvard College; Grant H. Code, Assistant in English, Harvard College.

During the sitting, F. H., the Physic, and Dr. Fawcett wore illuminated elastic bands on feet and wrists, and illuminated marks fastened on the center of the forehead with tape. Mr. Code had placed similar bands on his feet and wrists before the seance, so that illuminated powder from the bands came off on his shoes and cuffs, making them visible during the seance. Dr. Fawcett sat outside the circle at the Psychic's left, Mr. Code outside the circle at the Psychic's right. All other sitters were in the circle.

Before the seance, the Psychic disrobed in the presence of Dr. Fawcett, who searched her person and the robe and slippers which the Psychic wore into the seance room. The Psychic was conducted to the seance room by Dr. Fawcett and Mr. Damon. Mr. Hudson Hoagland searched F. H. in the seance room before and after the seance. After the seance Dr. Fawcett accompanied the Psychic from the room and searched her again. These searches verified the fact that neither the Psychic nor F. H. concealed apparatus upon their persons. The nature of the phenomena and control were such as to exclude the opportunity for the use of such apparatus if it had existed.

In addition to search and the locking of the laboratory door, "control" was of two sorts; hand and visual. Hand control was maintained by the usual joining of hands to form a circle, Mr. Damon controlling the Psychic's left hand, F. H. her right, Mr. Hoagland F. H.'s right. In the record, "double control" means that Mr. Hoagland holds both of F. H.'s hands and the Psychic's right. The illuminated bands made visual control possible. Mr. Marshall watched the feet of the Psychic and F. H. Mr. Hillyer watched the heads. Mr. Hoagland and Mr. Damon watched the hands. In the record, "Control perfect" means that the hand control remained unbroken and that the observers detected no significant movements of the illuminated bands and head marks.

Signed: GRANT H. CODE.
S. FOSTER DAMON.
HUDSON HOAGLAND.
DEBORAH FAWCETT, M. D.
JOHN MARSHALL.
ROBERT HILLYER.
F. H.

# SEANCE AT EMERSON HALL, HARVARD COLLEGE CAMBRIDGE, MASS., MAY 19, 1925.

In the following report, words were added to amplify or explain the dictaphone records; (all words in parentheses were in the dictaphone records, but should be omitted). Otherwise, the text of this report has been transcribed from and corrected by the dictaphone records made on the spot.

Emerson Hall, Harvard College, Cambridge, Mass., May 19, 1925, 9 P. M. Circle formed 9:02. Lighted bands adjusted. 9:04 breeze from cabinet noted by F. H. and Damon. Order of circle clockwise: Psychic, Damon, Hillyer, Marshall, Hoagland, F. H. Physic again. Outside cabinet at Psychic's left, Dr. Deborah Fawcett; outside cabinet at Psychic's right, controlling dictaphone and phonograph, Code. Walter's voice at 9:20. Walter: "The forces are low; you'll have to wait a few minutes." Code repeats this into dictaphone. "If McDougall reads that! This is a nice, comfortable room: looks like the Charlestown jail. What's this, a free country? - with Harvard." "Whew!" whistle. Trance beginning, 9:22. 9:25, Psychic in trance asks to have left sleeve pushed up. 9:26, Walter says: "Don't go clawing round. Keep your circle." 9:27, something large touched inside of Damon's right knee. Control perfect. 9:35, movement of small megaphone on floor beside right of Psychic's chair. 9:36, another movement of small megaphone. Code was asked where it was and replied: "The movement of the megaphone was on the floor beside the medium's chair." Walter says: "No it isn't; it's behind the chair; dear me. Walter then asked Code to find megaphone and replace it; he found it behind chair. Note: the cabinet was narrower than the Lime St. cabinet, and the loose folds of the curtain fell close to Psychic's chair. 9:37, Code moves small megaphone to side of chair. Strong movement of small megaphone. Walter says: "Strong movement." Small megaphone seen by Damon levitated in light of F. H.'s feet. Luminous powder off F. H.'s bands illuminated the entire front of his shoes. Marshall has maintained visual control of all feet.

None moved: 9:38, Psychic's head on table; 9:39, Walter told Damon to put small megaphone on table—he has done so. Note: in this last sentence, the order of events is wrong. Walter told Damon to put small megaphone on table. Damon felt about under table, not finding it. Psychic moaned. Then Damon found megaphone just in front of his own feet, and placed it on the table. Psychic's head then fell on table, beside megaphone. Throughout this record, the time is the exact time of recording, rather than the exact time of the phenomena. Since Code could not observe all phenomena, they were described to him. 9:40, trance becomes much deeper. Loud snores.

Psychic's head off table, 9:41. 9:42, Dr. Fawcett having said something, Walter remarks: "Who's this over here in the corner?" F. H. explains: "That's Dr. Fawcett, Walter; you've met her before." Walter asks why she was not in circle; F. H. says there wasn't room for her. Walter says: "Say, she isn't as big as that!" Movement of small megaphone on table, in front of Damon, 9:45. "Heads and all hands of Psychic and F. H. control perfect," says Hoagland. "Feet control perfect," says Marshall. Damon reports left hand of Psychic constantly in control. Code also notes that Psychic's right hand and left hand of F. H. were visible to him at corner of table. Voice through megaphone, 9:46. 9:47 Walter asks Code to put doughnut on table, bright side down. Code in doing so touches Psychic structure in center of table. It felt like fleshy part of hand, rather rough. Note: illuminated apparatus had been placed on floor between F. H. and Code. Walter instructed F. H. "not to go grabbing for anything." Small megaphone pushed off table (fell) into Damon's lap. 9:49, doughnut moving. 9:50, slight movement of table. Damon says (it) doughnut moved in a circle of about 3 inches at 9:49. He could hear it scrape (rattle) as it moved. A few seconds later, wider movements of doughnut (disc).

Walter says: "My sakes, the child is born!" few seconds, another movement of small doughnut. The doughnut has flopped over, bright side up, on corner of table nearest Hoagland. Doughnut picked up two feet above surface of table, and dropped. Control perfect. Feet perfectly still. Code can see psychic hand against doughnut from his position. during movement of doughnut. Terminal plainly visible by Hoagland. Double control of Psychic and F. H. Circular movement of doughnut on table. Control reported by Hoagland. All could see terminal. Same movement re-executed. F. H.'s head on Hoagland's shoulder adds to control. Vigorous movement of doughnut about table. Terminal visible. Doughnut levitated to at least two feet. Three feet. At this point, the dictaphone record is imperfect because it jammed during dictation. The part omitted was a detailed description of the rather complicated movements of the doughnut in the air above the table. Before this last levitation, the ring was turned over, so that (bright side was up and then dim side was up) dim side up and then bright side up. Walter calls for double control. F. H.'s head on Hoagland's shoulder, Hoagland holding Psychic's right hand and both of F. H.'s hands. Doughnut levitated and carried about (dropped), terminal visible; dropped on floor near John Marshall. Walter picked it up on floor. Feet motionless; double control; F. H.'s head on Hoagland's shoulder. Carried up above table, levitated, moved about in air for fifteen seconds. Levitation of five feet above floor. Damon has Psychic's head. 9:55 deep snores continue. Double control continues.

Walter asked for a fifty-cent piece; F. H. finally said he had one in left trouser pocket; Code fished for it unsuccessfully; then found

one of his own. 9:57, Code laid fifty cents in center of doughnut. Doughnut on center of table, bright side up. This by Walter's direc-Double control, F. H.'s head on Hoagland's shoulder. Feet O. K. Fifty cents moved about and clicked on table. Taken out of doughnut, Damon reports. Sounds as if it were being picked up and rung on table. Walter says: "It sounds as if it were being dropped." Coin rapping on table. Four raps, by request of Hoagland. Raps five times by request of Hoagland. Hoagland's right hand on doughnut, palm up; fifty cents dropped into it. Marshall controls: Hoagland's right wrist. Before this, fifty-cent piece was put on Damon's end of table by Walter and rapped. At direction of Walter, Code placed basket on table beside doughnut. Continuous double control of Psychic and F. H. Marshall reports visual control of feet. Damon has basket on his left palm, Hillyer controlling Damon's wrist. Terminal moves doughnut about table and (and) hangs doughnut on basket. Double control adequate, feet controlled. Walter moved doughnut again while on basket. Then he said, "Hold on tight!" Damon held it by thumb and little finger; Walter pulled so hard at basket several times that Damon feared the basket might be crushed by the necessary strength of his own grip. Walter then said: "Let go" and Damon did. Basket thrown into corner behind F. H., with doughnut. Damon says it was all he could do to hang on to the basket with thumb and little finger. Doughnut just this second dropped at Hoagland's feet, 10:05. "Have you been holding it, Walter?" Walter laughs. That was twenty seconds after throwing episode, at least! Code locates basket behind left back leg of F. H.'s chair. Walter, addressing Dr. Fawcett: "Say, doc, did you find that fourth arm the Kid had concealed?" Doughnut moving on floor. Double control of Psychic and F. H. At Hoagland's feet doughnut levitated under table. Foot control perfect. Doughnut moved around under table. Marshall, who was watching feet, saw doughnut picked from floor on his side of the table, lifted up to edge of table, on side away from the Psychic, lowered under table, but not to floor, then to top of table on Psychic's side. Hillyer and Hoagland also saw this. It was brought up slowly above table near Damon-Walter whistling at the same time-and put down bright side down on table. Throughout this performance, the snores of the Psychic were heard, mixed with Walter's whistling. "A pudding with raisins," says Walter, commenting on Code's use of word "mixed." Whistles. Code puts large megaphone on table at direction of Walter. Double control of F. H. and Psychic, F. H.'s head on Hoagland's shoulder. Psychic's head visible. Feet all controlled by Marshall. Operation of megaphone on table: Psychic structure visible to Code against large end of megaphone. Megaphone levitated, apparently balanced by handle, moved freely, rotated, at first small end up, then large end up. Now small end towards table, small end banged on table several times, megaphone dropped on floor. 10:10, small end under

table, megaphone on far side of table from Psychic. Lifted up from under table, small end first, dropped again, pulled vigorously out toward Damon's feet, back again toward Hoagland. (Correction) between Damon's feet.) Double control and control of head perfect. Foot control by Marshall. Movement of large megaphone continues between Marshall and Hoagland. Megaphone stood small (side) end up. This is on far side of table from Psychic, touching Marshall's chair, between Marshall and Hoagland. Precisely 10:10 now. These movements between 10:05 and 10:10. Walter says, of Code's dictagraphing: "You've got a good unseen guest there." (Foster) Damon reports something touching him on right elbow; this was not a psychic touch. At direction of Walter, Hoagland turns doughnut bright side up on the table and puts nose in it. Walter pulls Hoagland's hair vigorously. Double control of F. H. and Psychic. F. H.'s head on Hoagland's shoulder; Psychic's head visible; Damon has Psychic's head. 10:11 further feeling about on Hoagland's head, pulling in direction toward Psychic. Damon has Psychic's left hand and head. "Now feeling about," says Hoagland. At Walter's command, Code puts English bell-box on far side of table center from medium. Test bell-box. Complete control reported throughout. 10:12, bell-box rings. Walter's hand visible on side nearest medium. Box pushed away from medium. Walter gives bell-box a solid bang. The hand was visible covering half of top of bell-box on side toward medium. Solid shape of hand not visible; seen in silhouette only. 10:14 Double control continues, Hoagland reports. 10:20, "Continuous performance, good as Keith's."

Walter said that this was the end of the phenomena, but continued talking for several minutes. Damon states that throughout the seance, since before the light was put out, he has had continuous control of Psychic's left hand. (End of second record on account of

jamming. Beginning of third record.

At Walter's direction, Code buttons Psychic's robe. While he is doing so, Walter says "Hello!" apparently from point behind Psychic's head and slightly higher. Code's head about one foot from Psychic's mouth at this time. (Repetition of end of SECOND record) 10:25, Walter calls for dim red light. Hillyer reports that he watched head all through and saw no synchronous movement of head. During entire seance, Psychic and F. H. wore illuminated wristlets and anklets and spots on foreheads; also Dr. Fawcett. Dr. Fawcett reports that before the seance the Psychic removed all clothing. Dr. Fawcett is absolutely certain that nothing was concealed about the body or hair, or in the clothes. The Psychic wore into the seance room one warm woolen garment.

Unless there is a suggestion of fraud in this record, it is assumed to be non-existent in our opinion. Cabinet and room examined after seance, in white light. F. H. was searched before the seance by Hoagland; Hoagland examined the contents of his pockets and felt all over

F. H.'s body. After seance. Hoagland examined F. H. again in white light, outside clothes, without disrobing F. H. It is agreed by all sitters that a typewritten copy of this record shall be given to F. H. with the signatures of all sitters, before another sitting takes place. The sitting took place in Emerson 11 on the third floor of Emerson Hall, a small room with one door and no window which was prepared for this purpose by Hudson Hoagland and Grant Code. Hoagland has kept the door locked and maintained possession of the key to the door ever since the room has begun to be prepared. He notes that of course there are other keys to the door. The door was at the opposite side of the room from the cabinet. The cabinet was made of curtains hung from boards nailed near the ceiling. In addition to the cabinet, the room contained chairs for the circle, a small table, red light, victrola, dictaphone, and the usual seance-room apparatus. Illuminated marks were prepared for all sitters, but were abandoned before the seance began, on advice that Dingwall found them confusing. 10:40, Dr. Fawcett reports she has made a thorough search of the medium after the seance and has found nothing concealed about her person, or in her gown, or in her slippers. Dr. Fawcett accompanied the Psychic from the seance room and made immediate search. End of record, G. H. Code recording. This report was typed by Damon and checked by Code from the original dictaphone records. Signatures of those present: Grant H. Code; S. Foster Damon; Hudson Hoagland; Deborah Fawcett, M. D.; John Marshall; Robert Hiller; F. H.; Psychic.

This dictaphone record was dictated from the record by Code to Damon, who then corrected it from the original records. All underlined words have been added for the sake of correction, explanation, or amplification. All words here in parentheses are in the original records, but should be omitted. These emendations were made by joint consent of Hoagland, Code, and Damon, the other sitters not being available.

SEANCE of May 27, 1925. First record. Emerson 11, Harvard College, Cambridge, Massachusetts, May 27, 1925. The arrangement of the room as in the Seance of May 19, except for a clothesline stretched from the front right leg of Psychic's chair up to a hook in the opposite wall, in the moulding about two feet from ceiling. The circle was formed at 9:20. Order clockwise; Psychic, Damon, Hillyer, Marshall, Hoagland, F. H., Psyche again. Outside circle, at Psychic's right, controlling dictaphone and phonograph, Code. Hands, heads, and feet of all (sitters) present were illuminated. 9:25 Damon, Hillyer, and Marshall report cold wind from cabinet. At 9:40, Walter rang the bell-box several times. No voice. Trance beginning

a few seconds after the ringing of the box. About 9:43 the Walter voice came through 9:45, further ringing of bell-box. The bell-box in use is the one constructed by Code: an electric contact-box like the Scientific American box. 9:46, box rung again. 9:47, Walter turned back the contact-board and rang the bell apparently by pushing on the contact. About 9:48, (further movement) further ringing of bell box and movement of opaque object against light on wrist-band and bell-box top. Damon reports that he can hear something scraping about on the table.

9:50, Walter said: "I'll break the — bellbox," and rang it. After that, Hoagland tried to ring it and could not. Bellbox is being moved about the table. Hoagland examined bell-box and found part of brass contact broken off. (The bell-box was rung after it was broken. Correction) Walter rang the bell-box after he had broken off the contact point, apparently by completing the circuit with the broken bit of brass. Walter instructed Hoagland to put the cover down and to put the broken part of the contact on top of the cover. Walter is rapping with the broken part of the bell-box. 9:55, Walter calls for the doughnut on the table. Code placed doughnut on table bright side up, and Walter moved the bell-box from approximately the center of the table to Damon's end of the table. Then he moved doughnut slightly. His hand was visible against the edge of the doughnut. Then he asked to have the doughnut turned bright side down. 9:57, the doughnut raised up from the table, pushed back the flap of the bell-box, and then was replaced on the table. It had been levitated about three feet above the level of the table. It came over infront of Damon and the terminal was visible to Damon and Hillyer.

9:58, Walter asks Code to move small megaphone a little forward in cabinet. It is standing at the right front leg of the medium's chair on the floor. The dictaphone jams. (Repetition:) After interval of a few seconds, megaphone is heard scraping along floor. Walter directs Hoagland to put the doughnut bright side up on the table and place his hand on it palm up. 10 o'clock, Walter directs to have table pushed away from Psychic. Megaphone put in Hoagland's hand, having been levitated from the floor. F. H. hands and Psychic's head visible by Hoagland; Marshall reports control of feet; Damon reports control of Psychic's left hand; Psychic's right hand under observation by Code. Walter takes hold of megaphone and pulls it from Hoagland's hand. This is about 10:02. At 10:14 the megaphone was picked up from the table and banged Damon in the face, then was replaced on the table, and then came back and touched Damon on the right hand. Hoagland reports control of all F. H.'s and Psychic's hands, heads and feet. This was possible as follows: Hoagland had tactual control of F. H.'s head and two hands, also Psychic's right hand; visual control of Psychic's head and left hand (this hand was moreover held by Damon from the red light at the beginning to the red light at the end); Marshall signalled visual control of feet. Megaphone fell to floor, was picked up again and placed on the table. Movement of cover of contact box. 10:05, Walter directed Marshall to lean forward and "have a little talk." The small megaphone mouthpiece was presented to Marshall's mouth, and he was told to talk through it, by Walter. Then the megaphone was brought across to Damon and pushed against the left side of his face, which was away from the medium. Then the megaphone was placed between (Robert's) Hillyer's legs and Marshall's. All this was done while the table was pushed away from the medium, where it remained throughout the seance—about three feet, I should say, Marshall being on the far side of the table from the Psychic. Marshall is about one foot from the far wall from the medium. Walter pulled (Robert's) Hillyer's trouser-leg very strongly; Hillyer reports that the Psychic's feet were not near his feet when his trouser cuff was pulled.

Shall we gather at Old Harvard,
Shall we go to all the bother
For McDougall?
Shall we gather at the river?
Shall we eat a pound of liver
For McDougall?

This entry is a poem by Walter. End of the first record. Seance of May 27, second record. Walter continues to recite poetry.

Onward, psychic soldiers, Marching as to war, With the cross of Science Going on before; We are not united, All divided we; Some prefer the English, Some, Philosophy.

10:10, Hoagland reports terminal visible on doughnut. The small piece of metal broken from the bell-box was put in the doughnut by Hoagland. Walter took it and touched Hoagland with it. 10:11, Walter directs Hoagland to take small piece of metal from doughnut. Hoagland feels for it and finds it is not there. Walter laughs. Hand seen over doughnut again; clink of metal. The small piece had been brought back. 10:15, Walter took the piece of metal and dropped it on the bell-box. Damon could see the terminal against the luminous doughnut. 10:16, metal playing about bell-box.

10:17, sounds as if Walter were ripping the flap off the bell-box. Walter says: "am not breaking it; it is a psychic noise. It's a psychic band." Now alternate thumps on bell-box and slight cracks on top

of bell-box, involving the ringing of the bell. The rap is a distinct though brief roll as if on the snare-drum. Whistle during it. Between 10:17 and 10:20, continuous banging on table and rapping on top of bell-box alternately, accompanied by Walter's whistle. Damon reports Psychic's left hand, head and feet in control; Hoagland reports double control of hands of F. H. and of the right hand of Psychic; feet in observation. Thumping continues. F. H.'s head on Hoagland's shoulders throughout. Feet under observation. Louder whistle from cabinet. 10:20, levitation of doughnut. Holding doughnut in air, he continues to punish the bell box. Note: three simultaneous phenomena. The movement of the doughnut, virtually stationary at first, gradually seems to correspond to the small rapping. The movement is high in the air. Bell box falls into Hoagland's lap. Snores of Psychic are heard by Damon during whole performance. (Foster) Damon defines the noise as a "bump-rip."

Walter tells story of G. P. C. Story emphasized by two bumps on table. Walter objects that they are "bump-rips" on the bell box. Further bumps on the table, table moving.

10:23, Walter tells Code to put basket on table. He does so. Walter instructs Hoagland to put doughnut on table. He does so. Damon reports movement of basket. Walter calls for fifty cents. Code gets fifty cents from left trouser pocket of F. H., and puts it in doughnut. Walter, feeling for it, moves doughnut about on table. Walter calls for double control. Terminal visible over doughnut. Fifty-cent piece, in front of Damon, rings on table. All hands, heads and feet of F. H. and Psychic accounted for. Coin snapped twice on table in front of Damon. Marshall (holds basket) shakes basket to see there is nothing in it, then holds it in air above table. Fifty-cent piece found in it by Hoagland. The basket was held about one foot above table during this experiment.

After that, Walter picked up the basket and waved it about, at least two feet above the table. *Perfect control*. Then Walter threw the basket apparently straight up in the air. 10:25, Walter produced basket from under table, raised it up, and placed it on table. This levitation rose to four feet from floor, one foot above table. Then he waved it, threw it up in the air again. It landed behind Code's chair.

10:29, at Walter's command, Code put clothespin with illuminated end on rope. Walter flips it about rope and finally knocks it off on to floor. Movement of doughnut on table. Levitation of doughnut; doughnut turned over and placed on table dark side down query: up? Walter says: "I'll show you a very nice trick in a minute"; this was said just before he picked up the doughnut. It is now 10:30; the doughnut is on the table, dark side down query: up? The table is shaking; Walter says: "An earthquake!" The doughnut seems to be moving over the edge of the table nearest to the Psychic, rather

towards F. H.'s corner. Most of this time the doughnut is invisible. 10:34 doughnut fell on floor; moving slightly towards Psychic's feet. Nobody's feet moved. Doughnut continues to move about on floor under table, Damon holding Psychic's head as well as her left hand. 10:35, doughnut rises on inner right hand corner of table from floor. Double control perfect. Movement of doughnut heard on table. Further scraping round on table, table continues to rock. Walter rocks table to demonstrate that it is not solid on its feet.

In the following experiment, Walter's purpose evidently was to tear the luminous doughnut through to the center, so that he could hang it on the clothesline; unfortunately he tore a piece clean out of it. He expressed discontent, and then tried to crease the larger fragment, so that it could ride on the line; but again he failed. He then was satisfied with some levitations of the fragments. The details, as dictated to Code, follow:

10:36, Walter asks to have doughnut turned over; Code finds it on nearest side of table and turns it over. Walter picks it up and hangs it on Damon's hand—on Damon's right hand, the one controlling the medium's left. Walter directed Damon to hold it with his left finger and thumb over the table—to hold it "good and solid." Walter tore piece out of the doughnut held over the table, then he came back to tear off some more. "Psychic dinner," he says. He is fumbling with the broken end of it in Damon's hand, trying to fold it. Double control reported. Walter picks up second fragment and moves it about over table and drops it near (second) first fragment. End of second record.

Seance of May 27, THIRD RECORD. Another levitation of the two fragments of the doughnut. 10:38, Walter directs Hoagland to hold on rope. Walter pulls rope. Walter saws back and forth on rope. Deep snores of Psychic heard. Just before this, Walter said: "Watch me move the medium's chair," and it moved (it) back. (He) It moved (it) back again until the cord was tightened and Walter directed Hoagland to hang onto the cord. He directed Marshall to feel it, too. (Some levitations preceding this have been omitted. To continue:) Code is directed to pick up clothespin, he does so, and puts it on rope about the level of the table. Clothespin moved up rope, a foot above table. Further movement, at least eighteen inches above table. About 10:42, Walter is asked to move the clothespin up the rope. Covered by his hand, the clothespin moves up the rope. Walter whistles and swings rope, causing the clothespin to oscillate back and forth. About 10:45, Walter waves clothespin back and forth. The clothespin is now within six inches of (John's) Marshall's nose, just above the far side of the table, a little beyond, perhaps.

A long conversation with Walter follows these last phenomena, in which Walter is asked about various ideas for control and for experiment. Walter says in general, he will try (in general). About 10:55,

the red light was turned on, the distance the clothespin had moved up the rope was measured. It was found to be forty-five and one-half inches from the chair. Note: Walter had complained that the clothespin had slipped down the rope somewhat, and all present were sufficiently convinced to allow the pin to be pushed up about six inches to what seemed its former position. Then the measurement was taken. Examination of the bell box shows that the "rip-bump" was produced by bending the (cover) flap of the box—the bell box—as far as it would go, thus producing the "rip," and then banging down on the (bell) box, thus producing the "bump." The piece of brass off the broken contact—the piece Walter used, laying it across the terminals of the wires to ring the bell box, after the contact was broken,—this piece was found on the floor under the table. The painted controls faded out: the F. H. and Psychic controls on painted tape were as adequate as they were at the seance of May 19th, checked also by double control. Hillver notes that the time when his trouser leg was pulled, it was taken hold of in the front and lifted up as far as it would go. almost hard enough to lift the foot off the floor. Among other possible experiments discussed with Walter was that of putting a picture pasted on a wooden board into a sealed bottle marked by the film of the same picture pasted on the inside of the bottle, the bottle being sealed with a cork and red wax and marked with the right thumb print of Code. Walter said he would try to do this—either to put the board with the picture on it into the bottle, or some other small object. He advised that the bottle should not be taken to the Lime Street seance room, saying that if it were, it wouldn't prove anything. The bottle is accordingly being left in the seance room at Emerson Hall. Walter also said, in answer to a question from Mr. Damon, that he might be able to link together two rings of different kinds of wood. Dr. Fawcett, who was to search the medium, was expected up to the last minute, but did not appear. The medium was examined superficially through the robe, by Mr. Hoagland, who also examined F. H. superficially. Hoagland is reasonably sure that there is nothing concealed in the room, was dictating into the dictaphone throughout the performance of most of the phenomena. The illuminated bands on everybody's feet held their light satisfactorily to the end of the seance. End of record, G. H. Code recording.

Signed GRANT H. CODE,
ROBERT HILLYER,
S. FOSTER DAMON,
HUDSON HOAGLAND,
JOHN MARSHALL.

These records were compiled by Dr. E. G. Boring, Hoagland, Code, Damon and Marshall, and were checked by John Kremer's record of the buzzer circuit, the dictaphone records having failed to record. It was drawn up immediately after the seance.

SEANCE of June 3, 1925. Emerson 11, Harvard College, Cambridge. The room was as in previous seances except for three clothes lines, one rising vertically to the ceiling from the left arm of the Psychic's chair, one horizontal from the right leg, and the diagonal line as in seance of May 27. On each of these was an illuminated clothespin. The table was placed in a corner and a board raised about three inches above the floor substituted. As Mr. Code was to sit in the circle, phonograph was placed at his right, and dictaphone in front of him.

All present wore illuminted head bands, wristlets and anklets, which remained bright throughout the seance, with the exception of the Psychic's which were changed as record shows hereafter. Further to insure that the circle was never broken without the knowledge of all, an electric circuit was passed through the circle so arranged that any break was immediately perceptible to an operator, Mr. John Kremer, who was stationed outside the door.

Before the sitting Code's new bell box was opened and examined by Dr. Boring and F. H. It was then locked and the key given to Dr. Boring who returned it to Code after the seance, having examined the box and found it still locked and intact.

Dr. Boring looked over the room before and after the sitting. Hoagland searched F. H. immediately before and after the sitting. Dr. Fawcett reports that she made a thorough search of the person, hair and clothes, and all parts of the body of the Psychic, before and after seance, and found nothing suspicious in any way about the body or clothes.

Almost invariably control was announced either during or immediately after each phenomenon. There was double control throughout a large portion of the phenomena, F. H.'s head being on Dr. Boring's shoulder during about two-thirds of the double control. Visual control throughout. Damon held Psychic's head occasionally. Walter at one time allowed Damon to put a brighter bracelet on Psychic; another time Walter made Psychic place Dr. Boring's anklets on her feet, because her own had grown very dim. Damon controlled Psychic's left hand from beginning to end of seance, except at this time, when he controlled her elbow. Dr. Boring says that during most of the

important phenomena he had double control checked by visual control. Damon adds that when he was placing table in circle, he gave the Psychic's left hand to Dr. Fawcett and took it from her again,

thus avoiding any break in the electrical circuit.

At 9:22½ circle formed. Order clockwise; Psychic, Damon, Dr. Fawcett, Code, Marshall, Hoagland, Dr. E. G. Boring, F. H. Psychic again. 9:37, the last break recorded by the buzzer circuit during the first period of phenomena. Trance in ten minutes; voice some time later. About fifteen minutes before any phenomena. Walter directs Damon to put table in circle because it is better to start with table. Walter then says he touched Dr. Boring. Dr. Boring did not feel it. Walter then said he would touch him again and give a strong pressure on front inside of the lower left leg midway between ankle and knee, as if pulled toward medium. Damon puts doughnut dim side up on table. It moves some eighteen inches. Damon reports terminal visible. Dr. Boring says that part of the doughnut was dark, as if obscured. Very shortly after doughnut was levitated twenty-four inches above table. Double control established after the first levitation.

10:18, white electric light bulb in ceiling, previously unscrewed sufficiently in Marshall's judgment to entirely prevent lighting, flashed on by accident. Damon reports the Psychic was at this time lying back relaxed in her chair. She began to moan and dropped her head forward on the table. The buzzer circuit was ordered broken and the wall switch turned off, thus depriving dictaphone of current. Pause. Walter then said that it was nobody's fault, not to break the circle, no harm is done, but that there would be no phenomena for ten minutes. He further said that he had expected it, and that that is why he had had table put in,—to protect himself. "Don't get excited: I'm here in the dark; I'm taking care of the Kid." Then in red light Marshall took the bulb out. Walter spoke during the red light several sentences. Another pause in the darkness. Buzzer system resumed and wall switch turned on at 10:32. Walter called for bell-box. One long ring at 10:43,—Damon announced seeing terminal just before the ring. This was repeated. Code tells Walter that if he turns back flap, he can use illuminated spool under it as a telegraph key. He does so. He does so again while Code holds out dictaphone mouthpiece to get record, at 10:47. Dr. Boring describes terminal like a mitten with a bit of thumb and finger about 2 cm long visible on spool.

Then Code said if Walter would pull spool out he could ring box by inserting a quarter inch terminal. Walter tried to extract it but Code finally did it for him—it was quite easy when lifted directly up. Then Walter played with the spool, rolled it about, scraped it the whole length of the table; it finally rolled off near Code. Code replaced it on bell box, and was tapped on hand. Walter played with the spool some more until it rolled off and fell at Damon's feet. Then the bell box was removed. Fifty-cent piece was placed on table by Marshall who then turns doughnut bright side up. Dr. Boring was directed

to put the half dollar into the doughnut but could not find it on the table. Walter said he had it and rang it on the table. He played

with it until it dropped on the floor, then rang it on the floor.

Damon then placed the basket on the table. It was freely levitated, bumped on Dr. Boring's face, then thrown out of circle. Then Hoagland suggested that Walter pull Dr. Boring's hair. Dr. Boring placed his nose in the doughnut and encouraged Walter to pull as hard as possible. He was pulled with a fumbling horizontal movement strongly enough to hurt a little.

Marshall then placed the large illuminated megaphone on the table. It was freely levitated. Damon reports that the small end was pounded on the table, and was then thrown off against the dictaphone.

The clothes pin on the vertical line between Damon and Psychic was then pushed up a few inches. The other cords were then swung. Walter then pulled the doughnut (bright side up) to the edge of the table nearest Psychic and slid it round the edge, under the table end and brought it up again to the surface. He then tried to hang doughnut on the clothes pin on the diagonal cord about two feet above table, but failed. He succeeded on a second try. Damon mentioning the half dollar, Walter at once rang the coin on the floor, then threw it on the table, where it fell off. The spool was then thrown across the table.

This, the last of the phenomena, was followed by a long talk. At eleven eighteen Dr. Fawcett released her right hand from Damon's left. This break was at once reported by Kremer. At 11:21 the circle was broken. A slow increase of red light.

Kremer reports that Walter's whistling was audible through the

door quite regularly.

Code reports that in order to wind the phonograph and still keep the circle, he brought his left hand across and grasped Dr. Fawcett's left and freed his right hand, to wind phonograph Marshall controlled his left elbow. About quarter of an hour before the end of the phenomena the repeating apparatus on the phonograph went completely wrong; with Walter's consent the phonograph was stopped. At the end the phonograph started and Walter (joking?) said he started it himself. The phonograph, it will be noted, was outside the circle.

The Psychic was uneasy throughout, complaining of the intense

heat, resting her head on the table, etc.

Typed by Marshall from Damon's dictation. As to the substantial correctness of the foregoing and in the sense of my addendum hereto: July 3, 1925. (Signed) EDWIN G. BORING.

Signed S. FOSTER DAMON,
JOHN MARSHALL,
HUDSON HOAGLAND,
GRANT H. CODE,
D. FAWCETT, M. D.

## Addendum: by E. G. Boring.

It is obvious that, in a session involving eight persons, it is impossible for any one individual like myself to observe any of the sitters simultaneously, and hence to vouch for the continuity of any set of conditions. This situation is a corollary of the limited range of human attention and is one of the fundamental reasons for the common statement that isolation, control, and repetition must constitute the essence of an experiment. What one does in attesting to the occurrence of these phenomena under controlled conditions is to make a reasonable inference from the data at hand to accept many assertions that are made by other sitters during the progress of events. My attestation under these conditions is probably as reliable as the ordinary attestation of a witness under oath who is not too psychologically sophisticated, but the sincere unreliability of witness under oath is well known.

In the sense of the foregoing limitation, I am ready to assert that the account of the sitting on June 3rd, 1925, is true, to the best of my knowledge and belief. I remained with the five sitters (excluding the medium and F. H.) for an hour after the session while the notes were made from which the foregoing account is constructed. I approved the statements in the notes at the time, and felt a personal confidence in the integrity of this group and their genuine desire to arrive at as an exact account of the experimential aspect of the phenomena as possible.

The only mysterious feature of the sitting so far as I could see was the occurrence of the so-called "teleplasmic arm" which seemed to cause all the other phenomena by the same natural means that any arm could cause them, unless it should be added that I had the impression that the "teleplasmic arm" occasionally found objects in the dark more readily than one would expect a human arm to do under normal conscious control.

I feel no reasonable doubt at all that there was an "arm" which moved about on the table, obscuring portions of the illuminated objects, and which, one could perceive visually, by means of the light from the illuminated paint, to have considerable thickness. It was what one calls a "solid" object in the sense that one would not call a piece of cardboard solid. I could see only small portions of the "hand" of this "arm" as it came over the luminous objects, but on several occasions I noted that it had a larger bulk superior with a smaller protrusion, from 1-2 cm. long, inferior to it. An extended left hand, dorsal surface up, viewed from the right of the owner of the hand, would assume about this form. On one occasion only I noted a small protuberance from the superior mass, in the position that the index finger would occupy in the foregoing illustration.

In all cases the "hand's" shadow ran off the luminous surface in the direction of the medium.

In handling the bell box and other objects on the table, and in

manipulating and pulling my hair, I was convinced that the "hand" was actuated approximately as would a normal arm extended from the medium. By this statement I mean that the movement appeared to be "pull" when toward the medium and "pushes" when away from the medium, and that the "hand" seemed unable to reach readily over the bell box to the part of the table beyond the medium.

In general the visible operation of the "hand" seemed clumsy and awkward. The manipulation of the half dollar was not visible. The only exception that I recall to this generality was the rapid pushing of the button of the bell box which was supposed to be in telegraphic code.

The "arm" could exert considerable pressure. F. H. frequently rested his head on my shoulder as a control, and one time I mistook this pressure for the "arm." When my hair was pulled I begged Walter to pull harder and pull out some hair if possible. The "hand," however, always gripped a considerable tuft of hair and, while it pulled hard enough to elicit the pain sensation, it did not pull hard enough to arouse real discomfort. As I try from memory this morning to duplicate the intensity of these pressures on a balance I should say that they were of the order of five pounds. My own head pressing the scale pan with what I think this pressure must have been was five pounds. My secretary, while feeling five pounds weight on the scale with her right hand tried to pull my hair the same amount with her left hand, and this pull seemed to give rise to about the same degree of mild pain that I had at the sitting.

I have no beliefs at all in respect of the manner in which this hand was produced or caused to move, except in so far as this account implies that I believe the more primary locus of the force exerted to have lain in the direction of the medium from the phenomena. The sitting did not provide conditions for any generalizations at all other than the immediately observational ones of the report itself and of this addendum.

This addendum was written at 9 A. M. the morning following the sitting with memories fairly fresh and reinforced by conversation with my family in the interim. Signed: EDWIN G. BORING.

Transcript from Dr. Boring's manuscript by John Marshall.

The dictaphone record, which constitutes the first part of this report, was dictated by Code, transcribed by Damon, and read back by Hoagland. The rest of the record was elaborated by Damon and Code from notes made immediately after the seance by Shapley, Code, Hillyer, Damon and Marshall.

SEANCE of June 10, 1925. First Record. Emerson Hall, Harvard College, June 10, 1925. Circle formed at 9:35. Red light on again for a moment to adjust dictaphone. Dr. Fawcett searched the Psychic before the sitting, and conducted her to the seance room, after which she was under observation by Code and Damon until the circle was formed. Dr. Fawcett then left. F. H. was also searched by Hoagland. Order of circle clockwise; Psychic, Damon, Hillyer, Code, Professor H. Shapley, Marshall, Hoagland, F. H. Psychic again. The Psychic's arms are held outside the (horizontal) diagonal and vertical ropes (at each side of the cabinet) attached to the two arms of her chair. All sitters are marked by means of luminous bands on hands and feet, and by numbers fastened on the forehead with tape, the numbers beginning at I, and running round the circle in the order the sitters were given. An electric circuit controlled from outside the seance room is run through the circle, as at the last sitting. phonograph has been placed outside the seance room door, and is controlled from outside the seance room. Arrangement has been made to test the conductivity of the psychic arm or terminal by means of one electrode fastened between the medium's shoulders, and another free on the table which (the control) Walter is to be asked to pick up. Acid and alkaline litmus paper has also been prepared for the terminal to touch. The illuminated apparatus has been placed on the shelves and on the floor behind Damon and Hillyer and Code. About 9:47, trance is coming on. 9:50, Walter's voice is heard. Conversation with Walter; the electrode arrangement is explained to him. 9:55 break in buzzer circuit reported; undetected in circle. Damon asks Walter where it was. Walter says: "God knows! I can't watch the circle!" The break was only for a second; there appears to be a loose connection on the machine outside. A complete break does not signify a break in the circle,—only a decrease in intensity. Break reported about 9:56 or 7-on and off several times. Walter laughs. Walter asks for double control, at approximately 9:59. 9:59 Walter says, "I'm going to work this metal thing first." (John) Kremer is warned outside. Kremer reports that the galvanometer was-Jam in record; Kremer says that the missing word was "Off-circuit." Walter moves the terminal on the table, picks up the electrical connection, and immediately Kremer reported that the galvanometer was thrown way off; then he reported that it went back to normal. Walter (reported) repeated this experiment three times. The galvonometer experiment again; Damon reports holding Medium's head during last movement of electrode. Repeated again; Damon has control again. F. H.'s head reported visible. All feet and hands reported visible. (F. H.—correction:) Hoagland has double control. (9) 10:05, Professor Shapley asks Walter to push electrode off onto floor, on Shapley's side of table. Walter laughs and pushes electrode; (at first try) it does not go quite off. (9-10:05, correction:) 10:05 Walter says, if it is agreeable to everybody, Hillyer may pass behind cabinet and take F. H.'s place; F. H. to pass behind cabinet and table Hillyer's place. This change is made. Just before this, the dictaphone is pushed by Code outside the circle, because Walter complains that the sparking on the (comb) brushes of the dictaphone interferes. Walter says we don't need double control now but can have regular control, because there are strangers now in control of the Psychic. This places F. H. between Damon and Code, and Hillyer between the Psychic and Hoagland.

Walter says: "Put that metal thing back on the table." Reported that it is still on the table. Walter says: "A little farther over, please!" Break reported in buzzer circuit; on again-break apparently coincided with the movement of the electrode fastened to Hbagland's arm. 10:09, Kremer wakes up to find galvanometer off. Galvanometer back to normal. Off again. This corresponds to the movements of the electrode by Walter. Walter is rapping on the table and scraping on the table with the electrode. Galvanometer back, coinciding with Walter's letting go of the electrode. Professor Shapley asks to have electrode dropped off table. Walter says: "Want me to throw it at you?" Shapley says: "No, I don't!" Walter waves electrode in air, in front of Professor Shapley, throws it on the floor beyond the table: corresponding galvanometer reported. Jam of dictaphone—the levitation of the electrode. . . Here the dictaphone record becomes unintelligible. The sparking had become so brilliant that it was deemed best to set it aside. During this levitation of the electrode, Walter playfully flourished it in Professor Shapley's face, and then said that he would have thrown it at him but that he was afraid of breaking the professor's glasses. Shapley verified the fact that he was wearing glasses; when Code remarked that Walter had no apparent means of knowing this, Walter laughed.

Walter was then asked to ruffle the litmus papers. A fringe of blue litmus papers had been stuck on one edge of a board, and another fringe of red on the opposite edge. Walter ruffled the papers and scrubbed the board about on the table, and then directed that the board of papers be put aside. After the seance, it was discovered that the blue litmus had been partly turned red, but it was thought that, since the papers were still wet, and since the red ones had been prepared by acidifying blue papers, some of the solution might have been transferred from the red ones to the blue.

Walter called for the doughnut; it was placed on the table, dim side up. After two attempts, during which it fell to the floor twice, Walter levitated it. This third time it was picked up by the edge. Shapley reports: "The shape of the terminal was like that of a child's hand in a mitten without a thumb."

Walter then picked up the large dark megaphone from the floor on the medium's right, dragging it up against Hillyer's knees, and placed it on the table, where it banged about and was laid on its side. Then the luminous megaphone was laid on the table in place of the dark one. at Walter's request. At first it was levitated seemingly by the handle; then the terminal was seen to grasp it by the large end, when the megaphone struck various hands at request, and was pivoted in such a way that the small end was presented successfully to the sitters in the half of the circle to the left of the Medium.

The bell box was then placed on the table. Walter (rang it once with the flap, then) turned it back and rang it several times with the spool. Walter then removed the spool himself, to see if he could ring it through the quarter-inch hole. He asked Code for some luminous paint to mark the hole; but as there was none, he asked for (accepted) the doughnut instead. Then he said he had done his best, and directed that the hole be painted for next time.

At Walter's direction, the bell box was removed, and a doughnut, the basket, and a half dollar were placed on the table. The coin was in the doughnut. Then Walter (picked up the basket and gave it to) Professor Shapley (who verified) the fact that there was nothing in it. Walter then placed the half dollar in the basket, where Professor Shapley found it. Professor Shapley held the basket above the table during this experiment.

Shapley then put his nose in the doughnut on the table, at Walter's request. His hair was pulled many times with a force of ten pounds in his estimation.

After this there was a violent levitation of the table, which fell over on F. H.'s toes.

Under the table had been placed a board raised on four two-inch wooden blocks. Walter now moved the doughnut about on this low board.

The table was now replaced and Walter called for the electrode attached to the galvanometer again. The galvanometer was a little slow in working, so Walter said in effect: "They're asleep out there; don't disturb them—I'll do the announcing." For some time he played with the electrode, announcing "On" and "Off" just before it was announced by Kremer outside.

About this time, Marshall called attention of the circle to the luminosity about the Medium's feet, which is described at length in his Addendum to this report. Professor Shapley asked to have various parts of this light obscured by Walter, which was done. Code described the effect as that of a luminous cloud which came up about her ankles. When Walter was going, this light faded very distinctly, as was noted by Code and Damon, the anklets gradually becoming brighter. Walter also called attention to the dimness of the head piece, which was not surrounded by any luminous cloud. Damon put his wristlets beside the Psychic's, and noticed a very obvious difference, his being much brighter.

After some conversation, Walter then announced that he was going. The red light was gradually turned on; he said "Good-bye!" distinctly, three times in the red light.

Signed: S. FOSTER DAMON, GRANT H. CODE, HUDSON HOAGLAND, HARLOW SHAPLEY. Addendum by John Marshall: Regarding the special phenomena about the feet of the Psychic. Sitting of June 10, 1925.

It has been the custom in recent sittings for the control of the Psychic's feet to be assigned to me in particular as it is comparatively easy for me, in my position across the circle to keep them in sight under the table.

I have always noticed that the Psychic's anklets were much dimmer than those of the sitters to her right and left, but previously had attributed this condition to inferior illumination.

At the sitting of June 3rd, however, it became very difficult for me to maintain an adequate control because of this dimness. Accordingly I asked that something be done, with the result that the anklets were changed as recorded in the record of that sitting.

In the present sitting, moreover, I gradually became satisfied that there was more illumination than could come from the anklets about the feet of the Psychic. About the middle of the sitting, when Walter was attempting to pick up something from the floor, so that for the moment my attention was even more than usual concentrated on the area about the Psychic's feet, I saw a luminescent something about four inches (as near as I could judge) from the Psychic's legs. At the same time I noticed a definite diminution of that little light there was from the anklets, as if some mass of varying density were passing between me and the light. At that time, I asked Walter if it had anything to do with him, to which he replied, "Yes, it's me!" He went on to say, as I remember, that the most of his force was concentrated below the thighs of the medium; and later in the sitting, spoke once of "clinging" about her feet.

This phenomenon of varying the intensity of the light from the Psychic's anklets continued through the sitting, through a broad range of variation: at times, the anklets were at what seemed their normal luminosity; at times, they were almost completely obliterated; yet for the most part (as a matter of fact, I think, always) distinctly visible. It may be, however, that they once disappeared entirely. At any

rate, the variation was definite enough to be distinct.

I am satisfied that these phenomena have nothing to do with faulty visual observation. They were observed at times by the sitters adjacent to me, Dr. Shapley on my right, and Mr. Hoagland on my left. Although the phenomena never passed the stage of luminesence, still there could be no doubt that there was some sort of light present. And this luminescent area apparently had some form of its own; I remember being reminded at first of a ribbon waving lazily in front of a ventilator.

After the sitting, Dr. Shapley and myself satisfied ourselves in a dark room that there was no phosphorescence on the psychic's gown which might have caused the light which we have observed. Mr. Hillyer and Mr. Damon also told me that they found the Psychic's gown, when they covered her before the concluding red light control, underneath her so firmly that a good tug was necessary to disengage it.

## HARVARD COLLEGE OBSERVATORY. CAMBRIDGE, MASS.

Addendum by Harlow Shapley to the report describing the seance in Emerson Hall on June 10, 1925.

- 1. Prior to the sitting, on both June 9 and June 10, I examined the seance room and the apparatus to be used, on the second occasion in the company of Dr. S. B. Wolbach. Both of us were fretted by the suspended cloth "cabinet" but there seemed to be no questionable features of the room, the apparatus, or the plans for the sitting. Past sittings were discussed with Hoagland, Boring and MacDougall, so that I was pretty well informed concerning procedure and expected physical phenomena.
  - 2. This sitting was the first serious seance I ever attended.
- 3. With my small emendations (in red), the report prepared from dictaphone and memory after the seance represents the phenomena that I saw, heard, and felt.
- 4. I was impressed more than I had expected by the distinctness of the phenomena, and by the frankness and sincerity of Psychic and F. H.
- 5. The wrist bands of the medium were invisible to me during the latter part of the sitting, and the head light was only faintly visible at times. After the sitting I examined her wrist bands and found them soaking wet (apparently from perspiration, for the room was hot and we all perspired profusely).
- 6. The medium's luminous anklets were at times lost in the luminous haze that appeared to surround the Medium's ankles. The anklets, when clearly distinguishable were near the center of the luminous phenomena. I examined the anklets after the sitting; they were taken home by the Medium who said that they were better than some others. (I understood her to say that she had brought them, or at least they were hers. I think she meant the anklets were firmer or more elastic than others, and that she was not referring to their luminous qualities.)
- 7. The event of Walter pulling the small basket out of my hand with an estimated force of about ten pounds is not mentioned in the report.
- 8. No evidence of trickery of any kind was observed; and no suspicious actions on the part of any one in the circle.

Written after reading the report on the seance.

June 22, 1925. Signed: Harlow Shapley.

SEANCE of June 22, 1925, at 18 Traill Street, Cambridge, the residence of Mr. Hudson Hoagland.

Circle formed at 9:30, in order clockwise; Psychic, Professor Shapley, Foster Damon, Mr. Bird, Code, Hoagland, F. H., Psychic agam. Luminous wristbands and anklets on all sitters. Luminous numerals on hands. (Illuminated marks have also been placed on the knees of the Psychic.) Mr. Damon in charge of winding phonograph, which is outside circle. Code at dictaphone (which is inside the circle Search of the Medium was made by Mrs. Heath (a trained nurse) before the sitting. Mrs. Heath conducted the Medium to the seance room, after which the Medium was under observation.

9:38 trance beginning to come on. About 9:40, Dr. Shapley reports spasmodic twitching of the Medium's left hand, and the Medium's left leg is put into his lap. F. H. reports right hand twitches also. 9:45, Medium's left foot removed from Professor Shapley's lap, and placed on his right foot. With this movement, table moved by Medium's left knee. About 9:46, Medium's left foot returned to Professor Shapley's lap. 9:47, Psychic places right foot on F. H.'s knee.

9:50, Walter's voice comes through. Conversation with Walter follows, in which the lights as means of control are discussed. Walter prefers the electric circuit to the lights. Walter also comments on the fact that the Medium is wearing bloomers at this seance. About 9:54, right foot of Psychic returns to floor. Left foot returned a moment afterward. After a period of relaxation, Walter continues talking, and inquires about the apparatus that is prepared. Shortly after this conversation, at 10 o'clock Walter says: "Everybody get your feet back from under the table, if you don't mind. That's my house."

10:02 Professor Shapley suggested observation of the Medium's anklets and headband, to see whether they grew dimmer and whether there was any luminosity as in the last sitting at Emerson. Walter says: "You won't see that tonight," and laughs.

10:03, Walter says: "Cheer up, Hoagland!" Hoagland says: "I wasn't feeling sad then, but my face was long." Walter replies: "As long as a horse."

10:05, Walter inquires whether F. H. is likely to leave before the end of the sitting, and says: "If he does, put Code in his place. I'm used to him. He's a crook," says Walter.

10:06, Medium's head on table. Medium's head went up again almost immediately.

10:09, Walter complains of the sparking of the dictaphone motor and asks to have it stopped. The dictaphone is placed outside circle as far as the tube will reach behind Hoagland, and is run from that position by Code still in circle.

10:10, Walter calls for doughnut to be placed on table. Mr. Bird puts large doughnut on table. Walter comments on size of doughnut.

10:12, Code is put outside circle with dictaphone. Immediately after this Walter calls for double control. Hoagland has both of F. H.'s hands; Shapley, both of Psychic's. Table is pushed toward Bird, away from Psychic. Bird reports the Psychic's feet are motionless. 10:12, Hoagland reports seeing terminal on table silhouetted against large doughnut. 10:13, small doughnut substituted for large doughnut. Moved about table. Dr. Shapley reports silhouette on small doughnut as it is moved about table.

Immediately after this, Walter calls for paraffine. 10:15, Hoagland in preparing paraffine, releases F. H.'s hands. F. H. places his hands on Hoagland's leg, where Hoagland feels them throughout this break. The hands are also visible on account of the luminous bands. The plate of paraffine is placed on table with the luminous doughnut between the plate of paraffine and the Psychic. Dr. Shapley and F. H. alternately report the luminous doughnut eclipsed. Then the paraffine dish is heard moved about the table. Bird reports that the paraffine dish is now in a different position because the luminous doughnut is now visible to him, whereas it was not before.

10:18, Dr. Shapley reports touch on right hand. Both Psychic's feet visible; F. H.'s hands, head and feet visible; the Psychic's hands held by Dr. Shapley; visual control of Medium's head.

10:19, scraping on table, followed by noise of lifting and dropping of plate. Faint click, as of finger nail on plate. Plate lifted and set down gently.

10:20, Dr. Shapley reports something rubbing his right knee with considerable force. Both Psychic's feet visible and motionless; Psychic's hands fully controlled by Shapley; F. H. completely controlled by Hoagland; Psychic's head visible. Hoagland reports touch on left knee, and F. H. reports touch on left hand, which is on Hoagland's left knee. Hoagland reports this object appears to be luminous; the luminous object is the top of the megaphone. Now Walter has pushed the megaphone against Hoagland's leg.

10:31, doughnut scrapes about on table.

 more stroking of Hoagland's knee. Walter says: "Want more paraffine?"—also says: "Shapley's a wreck!"

End of first record.

### SECOND RECORD:

10:25, levitation of doughnut reported by Dr. Shapley. Then Walter asks Hoagland and Dr. Shapley to feel along the edge of the table nearest the Psychic. They did so, and found it plastered with paraffine. Doughnut is picked up off table. Then it sinks slowly behind edge of table, partly visible. Then it is brought up again immediately. Falls on floor. Dr. Shapley attempts to recover doughnut, but Walter says: "Let it go."

Psychic's head on table, and then up again.

10:27, paraffine plate removed by Damon, and Code, bell box placed on table by Bird. Hand control of Damon and Bird suspended during the operation, except for visibility. Walter turns bell box through angle of 45 degrees as it stands on table. Walter touches Shapley's right hand. 10:28, bell box rings. Previous reports of control O. K. Hoagland's left hand holds both of F. H.'s hands against F. H.'s chin. F. H. is also visually controlled. All visual controls O. K.

10:29, Hoagland is instructed to stick out his left foot a bit. Walter touches Hoagland's ankle and appears to be untying his shoe with considerable dexterity and lightness of touch. Damon sees silhouetting against Hoagland's anklets. Walter is now trying to take the band off Hoagland's ankle, and is pushing down with considerable force, estimated at about four pounds. Feeling round skillfully, he snaps the anklet. Snaps it twice again. Controls verified during this manæuvre. All controls O. K. throughout this performance.

10:30, Walter instructed Dr. Shapley to put his foot out under the table. Walter says: "My, he's got on a high shoe." Walter fumbles with Dr. Shapley's shoe string. Hoagland sees Walter's terminal silhouetted against Psychic's ankle band. Bell box rings once. Walter fumbles with Dr. Shapley's ankle immediately after. 10:32 Walter again fumbles with Dr. Shapley's anklet.

10:33, bell box moved. One long ring. Flap turned back. Irregular ringing. Silhouetted hand over spool ringing bell. More ringing. Hoagland says it seems to have very crude fingers. Ringing again. Spool entirely eclipsed from Bird. More ringing. Hoagland reports that very apparently there are some crude fingers on the hand. Control O. K.

10:35, Walter pulls spool out and levitates it about with considerable speed. Raised up about two feet again and brought down again. Moved with great rapidity. Dropped on table, rolls off to Psychic's left, and falls on floor towards Dr. Shapley. Moving on floor, probably rolling, immediately afterward.

10:36, Damon drops out of circle to keep phonograph going which has been giving considerable trouble. Walter says, "Never mind if it does stop. Come back into the circle." Damon takes his place in the circle.

10:37, movement of megaphone on floor; picked up and dropped again, apparently. Psychic's head and arms lean on table. Further

movement of megaphone on floor.

10:38, Walter says: "Let the phonograph go" (to Damon, who was making a last attempt to run it). Immediately afterward, megaphone presented to Dr. Shapley. Dr. Shapley takes hold of megaphone by the small end. Flap of bell-box goes back. Dr. Shapley reports silhouette of large, ill-formed hand against bell box. Bell box moves slightly. Walter feels about megaphone. Walter pulling on megaphone.

10:39, Walter imitates the dying phonograph, which is permitted to run down. Walter moves cabinet. Control O. K. Cabinet moved at Dr. Shapley's edge about 6 inches. Walter continues to imitate

the dying phonograph.

10:41, Walter calls for large megaphone. Bird and Hoagland break circle while this megaphone is placed on the table. Bell-box removed. Bird and Hoagland join hands immediately. Movement of megaphone on table. Megaphone is standing vertically on table and is moved about standing. All controls O. K. Megaphone continues to move, and rises into air, floating horizontally and diagonally. Big end presented to Dr. Shapley, then to Hoagland, then to Shapley, and megaphone placed vertically on table again, large end down. Controls

O. K. throughout the entire performance.

10:45, Walter calls for board on table. Bird and Hoagland remove megaphone without breaking circle. Shapley and Damon break circle between them in order to put coordinate board on table. A large object about the size of a forearm and hand obscures part of board in front of the Psychic's right. Hoagland and F. H. think it was larger than this. Slight movement of table just after this. 10:50 extension of 4 inches on table seen near Shapley's edge. Extension of 7 inches, more than this, 10 inches, on Hoagland's edge. Another extension. The thing seems to be about three inches wide and 10 inches long, and tapers to a point. Terminal comes out on Hoagland's edge of table and runs out about 7 inches. Approximately the same shape as before. Occasional rapid flickers on Dr. Shapley's edge of table. After these phenomena, slight quiver of Medium's hands reported by Shapley. Dr. Shapley says there was no movement synchronous with the obscuring of the flap on the table.

About 10:55, Psychic leans over against table, Dr. Shapley reports. Back again immediately. The whole of the lighted board phenomena has been with the victrola off. It is not running at all now. 10:56, Hoagland notes luminous object between the Psychic's legs back in the cabinet. This luminous object is probably the spool.

10:58, circle restored where Dr. Shapley has had double control for so long. Psychic's left foot now in Dr. Shapley's lap.

11:02, Walter says good night in red light.

11:04, full red light. Circle broken. At one time, Professor Shapley thought he heard Walter's voice distinctly coinciding with a snore of the Medium.

End of second record.

Dictated and transcribed by Code, typed by Damon.

Signed: HUDSON HOAGLAND, S. FOSTER DAMON, GRANT H. CODE, J. MALCOLM BIRD.

SEANCE of June 24, 1925, at Emerson 11, Harvard College.

Note: as the first dictaphone record was a blank, the first part of this record was reconstructed by Damon and Code from notes made immediately after the sitting by Shapley, Day, Hoagland, Code, and Damon.

Order of circle clockwise: Psychic, Dr. Day, Code, Dr. Wolbach, Damon, Hoagland, F. H. and Psychic again. Professor Shapley, in curtained recess to the Psychic's right of the cabinet, was in charge of recording from the illuminated bar of the scales on which the chair of the Psychic was placed. Dr. Fawcett searched the Psychic before the seance and conducted her to the seance room, where Dr. Day conducted her into the seance room and maintained control of her hands until the circle was formed. Dr. Fawcett left after the Psychic entered the seance room. As in the sitting of June 10th, an electrode was then fastened between the shoulders of the Psychic. Electrodes for passing a current through the circle were fastened to Damon's left hand and to Hoagland's right insulated by rubber glove. The current passed through the circle, rang a buzzer which Miss Dorothy Hall outside the seance room observed by means of ear-phones. It was her function to announce and record any break in the circle. The electrode fastened between the shoulders of the Psychic was connected to a galvanometer which was also connected to another electrode left free on the table. This electrode was illuminated by means of phosphorescent paint. Mr. John Kremer, outside the seance room, kept the galvanometer under observation.

At 9:20 the door was locked and the electrical apparatus was tested in red light. The light was turned out about 9:23. At 9:25

Walter's voice came through, a very weak whisper at first. Evidence of trance coming on almost immediately. When Code noted this in the dictaphone, the Psychic denied that she was in a trance, but the voice in which she made this denial was the tamiliar querulous sleepy voice of the trance.

Walter was asked to perform the galvanometer experiment first. Day and Hoagland held the Psychic's hands through rubber gloves in order to isolate her electrically from the rest of the circle, F. H. resting his two hands on Hoagland's left forearm. Walter moved the electrode, scraped it about on the table, and levitated it several times with some visible silhouetting. Damon reports that he saw something bunched like a fist holding the electrode. Dr. Wolbach did not see it, so asked to have the experiment repeated. Code reports that he was absolutely certain at once when the electrode was moving on the table Kremer reported the galvanometer circuit broken. Since Walter had asserted that he had made his teleplasm a non-conductor when the galvanometer experiment was first tried at a previous sitting, Code called to Kremer for confirmation of the fact that the circuit was broken. Kremer confirmed this report while the illuminated electrode was still in motion on the table. (It seems most probably that the electrode was pulled by the insulated wire during above. Signed by H. H.) Otherwise, the galvanometer report corresponded with the movements of the electrode, the circuit apparently being made when the electrode was moved, and broken when it was released. Finally, the electrode, levitated just beyond the edge of the table farthest from the Psychic, was dropped at Damon's feet, where it lay half under his chair.

After some discussion of what Walter was to do next, Dr. Wolbach placed a paper plate of molten paraffine on the table after allowing it time to cool slightly. Walter was afraid it was too hot, and then after apparent examination announced that the paraffine was "all soupy in the middle" and asked to have it removed until it had cooled a little more.

Shapley reports oscillation of two or three pounds during the galvanometer experiment. At the end of the sitting he said that it seemed as though there were no additional weight during the extension of the tentacle until it lifted something.

The paraffine experiment being deferred, Walter said he would lift the weights next. Before the sitting, Drs. Wolbach and Day had arranged a number of weights in order according to list. These weights were brought into the seance room in a covered box. The order of weights was unknown to all others, and Dr. Day said that he did not think they remembered the order. (We had a record of the order. Signed S. B. W.) Code placed a large basket on the table. The rim and handle of the basket were painted with luminous paint. Into this basket Dr. Wolback and Damon placed the weights one at a time in the order arranged by lot. It had been arranged that while Walter lifted the basket containing the weights, Professor Shapley,

who did not know the order of the weights, was to record the reading of the scales on which the Psychic's chair was set. The weight of Psychic, platform, and chair before any levitation was 183.5. The weight of the chair and platform was 39.5. The weight of the Psychic was 144. The first weight was one pound, recorded by Shapley as one pound; the second  $5\frac{1}{4}$ , recorded by Shapley as 5; the third was 2, recorded as 3; the fourth was 4, recorded as  $5\frac{1}{2}$ ; the fifth was  $11\frac{3}{4}$ , recorded as 71/4; the sixth and last was 61/2, recorded as 63/4.\* After the first levitation, Walter asked that the luminous edge of the basket be covered, but not the handle. He further asked that Dr. Wolbach and Damon brace the basket with their hands. As the largest weight was being placed in the basket, Walter remarked: "Gee, that's a flat iron." He levitated all weights several times, so that Shapley in all cases got checks of weights. Several times after the weighted basket had been held steadily in the air for some time, it would sink slowly to the table again. The last weight was waved about considerably. Code and Damon report that they observed by the silhouetting that the terminal grasped the handle of the basket close to the rim nearest the Psychic for all levitations, instead of in the center of the top of the handle. Walter directed that the basket should be left on the table after the last weight was removed. He then levitated the basket, waved it about considerably, and brought it close to Dr. Day's face, touching him. Then he threw the basket outside the circle. It landed behind Hoagland and F. H. All breaks in the circle, made for the purpose of introducing apparatus, were reported at once by Miss Hall, indicating that the buzzer circuit, as a check on hand control was working perfectly. At this point, 9:58 Code discovered that the dictaphone was not recording, and adjusted it.

### DICTAPHONE RECORD.

Immediately after this, Dr. Wolbach placed two dishes of paraffine on the table. Walter said he touched the first of these with the palm of his hand and said that we would get skin marks which would be coarse. He said: "like a nigger's." On the second dish, he said, he marked his fingers, and that his palm touched it. He said that it would be a very funny looking thing. This experiment was concluded about 10 o'clock.

Immediately afterwards, Walter called for Code's bell-box. It was placed on the table by Dr. Wolbach. It was rung at 10:01. Walter asked how many times he should ring it; Dr. Wolbach asked for three rings. Walter makes three slow rings, and says: "The thing doesn't work very well." Controls O. K. (Controls were also O. K. for the galvanometer and the weights experiment.) Dr.

<sup>\*</sup>These weight-lifting experiments by the psychic rods, the light weights directly lifted, the heavier ones by leverage, confirm entirely similar experiments by W. J. Crawford. (F. H.)

Wolbach suggests turning back cover; immediately Walter says: "You leave that alone," and flips back cover himself. He rings the bell by the spool underneath. Dr. Wolbach reports spool eclipsed. Thirteen pounds extra pressure (I meant less weight on scale platform. Reading was about 170 pounds. Signed H. S.) reported by Shapley on one of these rings. Walter lifts spool out of bell-box and waves it about circle. Day reports seeing arm silhouetted against F. H.'s hands while spool was levitated in air about two feet above table. During part of this levitation, Walter whistled. Damon reports that twice he saw a sort of crease or scallop in the terminal on the spool; so did Hoagland. This phenomenon was complete about 10:04.

Professor Shapley asked for twenty pounds' pressure on table; it went more than above twenty. Professor Shapley asked for thirty-three. Walter says that it would be a waste of strength. This experiment complete at 10:05.

At 10:06, Professor Shapley reports Walter fooling with scales

but not pushing on table.

10:07, Dr. Day says: "Have you anything small enough to put through that hole and ring that bell?" Walter says: "What are you doing—reading my mind?" The spool is now on the floor under the table. The flap is turned back. Dr. Day reports silhouetting. Dr. Wolbach reports obscuring of ring around hole on bell box. Walter calls for relaxation.

10:11, Walter says: "Shapley, stop fooling with the scales!" Professor Shapley reports that Walter is fooling with the scales, wiggling the weight about, which goes up and down a pound or so.

10:12, Walter lifts flap of bell box vertical, and then tilts up the end of the box to which the flap is attached, and balances it on the lower edge of the opposite end on the table, and makes the flap bow towards Hoagland; then lowering the box to the table, he makes it hitch about more or less as if dancing, waving the flap at the same time; stands box vertical on end. lifted apparently by flap, levitates it a few inches above table. Weight during this levitation 7½ pounds. (Correction: since the flap moved independently during the levitation, the box was probably not levitated by the flap.) He finishes by pushing the box towards Dr. Wolbach, who takes it with his left hand and places it on floor. Dr. Day reports that the flap was moved back and forth when the bell box was in the air.

Walter calls for doughnut on table, about 10:16; then immediately calls for a second doughnut on table. One doughnut silhouetted, then second doughnut silhouetted immediately afterwards; both covered at the same time. The hand comes from Dr. Day's direction, apparently, and the terminal is shaped like a mitten. (As Code remembers the silhouette, it was in the shape of a baby's mitten, with fingers and thumb pointing away from Dr. Day. As Code observed it. it shifted its position, so that the wrist came more from the Psychic's direction.) While one continues silhouetted. Walter levitates the

other doughnut, waves it in the air about two feet above the table, flourishes it towards Hoagland, and drops it on table. Walter says: "Shapley, come around." Professor Shapley passes behind cabinet and stands behind Dr. Day. The one doughnut continuously silhouetted, while the other is moved about on the table. The other one is now moved; the two are moved alternately. One of the doughnuts is levitated above Dr. Day's head and held to Shapley's face. Walter says: "Take it!" and hands it to Professor Shapley, who takes it with his hand. Controls continue O. K. Walter asks him to hold it out again; Professor Shapley holds it out. Walter says: "Get back there; leave that hole for me, you son of a gun!" Walter gets doughnut from Professor Shapley by sticking his terminal into the hole, levitates it above table, places it on other doughnut, which has remained on table and silhouetted all this time. Both are moved together, then Walter pulls one out from under the other, scrubs the other one around on the table. Snores from the Psychic during the conversation with Walter. The right hand one continues silhouetted while the left hand one continues to move about. (Psychic's right and left) The right hand doughnut continues to be considerably obscured.

10:21, Dr. Wolbach places fifty-cent piece in illuminated doughnut: Walter touches him while he is doing so. The circle is broken in this manoeuvre and the break is reported from outside. Scraping of doughnut, followed by scraping of coin on table, followed by rapping on table. Dr. Wolbach is asked how many times the coin should rap. He says: "Twice, I should say." Walter raps twice, and then says: "I should say three times." (Three dots is Morse code for S—the initial of Stinson—Walter's last name.) It is also used for "Yes" in seances. Code notes that Walter uses three raps or three rings very frequently. Walter raps three times. (It has also been found by probability that this is the most frequent number chosen between one and ten by people in general.—H. H.)

Professor Shapley asks for raps one, two, and then one; Walter gives these raps. Controls O. K. Walter asks Dr. Wolbach to put his hand over the doughnut palm up. Walter drops coin on table, and asks Dr. Wolbach to pull his hand back; he does, and then returns hand to position over doughnut. Whistle from Walter; Walter places coin in hand. Walter immediately levitates the doughnut and flourishes it in the air, whistling briskly all the while. This flourishing and whistling continues for several seconds, followed by scraping of doughnut on table, dim side up. Both doughnuts scraped about on table. 10:25, Walter continues scraping of doughnuts about on table for seconds while he whistles and talks. 10:36, circle broken by Dr. Day to recover doughnut from under table.

Record changed between 10:28 and 10:29. Code drops out of circle and before changing record places coordinate board on table. (This piece of apparatus, first used at Hoagland's house, is a drawing board to which is fastened by thumb-tacks a piece of paper marked

off into one-inch squares by lines of luminous paint. The lines are numbered at the edge of the board.) Silhouetting of hand, moving on coordinate board. In the center of the table, between 10 and 14, (lines horizontal to the edge of the table nearest the Psychic, high numbers nearest the Psychic) there is an object which seems to be spread out star-fish-wise and connected on the side toward the Psychic by a process which runs off the edge of the board, and which is approximately an inch and a half wide. (This width apparently varied. Sometimes this connecting process could scarcely be seen.) In the center of the table—"There are three!" (Code in dictating makes this explanation.) In the center of the table an island starfish-shaped about four inches in diameter remains in the middle of the table. Walter says: "Now I'm going to knock your eye out!" and obscures the edge of the table towards F. H. While this remains obscured, another process appears on the edge of the table nearest Code and Dr. Day; this is withdrawn, alternately obscuring the different sides. There is now a process more or less like a hand, a large one, very much like a foot, obscuring the corner of table nearest Code. It extended across the corner of the table as far as between 9 and 10. Walter says: "The center one is my main thing." The center one is the starfish process, which extends out about six inches from the edge. It has a main mass about four inches in diameter, observed by Shapley as well as Code, with a process running off the edge of the table toward Psychic. Dr. Day also sees the process running off the table. Walter pushes it out to 8; now It (I believe the right terminal and not the control one was extended across the table. H. S. per H. H.\*) runs out to the far edge of the table, about 16 inches; Hoagland reports, toward Dr. Wolbach. Controls O. K. throughout. (The luminous anklet on Psychic's left leg was stationary throughout the seance; the right one moved a great deal and often. S. W. W.\*\*) Again there are three processes on the table; this is in response to some remark about three feet in describing the control. Dr. Day remarks that he cannot see the connection with the central one; Professor Shapley says it is very thin; Walter says: "Now can you see it?" and makes it thicker so that Dr. Day reports that he can now see the connection. A process described as more or less like a hockey stick is now on the table, 10:35, Walter trails it across the table; the angle bends as though it were being trailed. Dr. Shapley says: "Can you hit the table while we're looking at it?" Walter whistles and hits the table quite violently -a quite violent thump twice. Something remained on the table during this striking, and Walter appeared to strike the table with another object. Controls O. K. throughout.

<sup>\*</sup>This was inserted into the dictaphonic records by Hoagland acting under instructions from Dr. Shapley. It is in hand-writing and was written in sometime between July 1 and July 15.

\*\*This was inserted in hand-writing by Dr. Wolbach into the typed dictaphonic records sometime between July 1 and July 15. Neither this interpolation nor that above were a part of the dictaphonic record. The motive of the interpolaters we leave to the readers.

10:36, Walter directs Dr. Wolbach to put his head down on illuminated board, the coordinate board; Walter says: "I'll take his number off," and does so. Professor Shapley reports that the arm which did this appeared to have two joints like an elbow and a wrist. The diameter was approximately three inches, but tapering toward the wrist. Controls O. K. Dr. Wolbach reports distinct pressure on his hand, and attempts to pull his hair. No especial sensation of cold.

About 10:37, Walter discontinues phenomena, and tells us to relax and tell stories. 10:39, a decided increase in the intensity of the electric circuit is noticed, and it is discontinued by order from within the circle. The Medium seemed to notice this change in intensity. She made some little sound at the time. At approximately 10:40, Walter asks F. H. to close the Medium's robe, and calls for red light. We say "Good night" in red light; Walter says: "Go to ——!" faintly. As the light comes on, the band which came off Dr. Wolbach's head is seen on the table, about the center of the coordinate board, on the edge nearest the Psychic.

Examination of the room follows by white torch light, also examination of the paraffine plates; prints are seen in them, including skinmarks; the plates, however, had crystallized slightly. Dr. Shapley reports that he could observe the alley behind the cabinet during most of the seance; during the latter part of the seance he was, of course,

standing behind Dr. Day, at the Medium's left.

Miss Dorothy Hall states: "I hereby state that I searched the medium after the seance on June 24, accompanied her from the laboratory to the dressing room, examined her kimona, sash, and body. There was no apparatus of any description about her person."

At the beginning of the seance, when Walter's attention was called to the fact that Dr. Shapley was in the corner behind the cabinet he asked what he was doing there. Professor Shapley said: "Trying to get your number." Walter said: "I have yours, Number Seven, or words to that effect." Shapley was wearing Number Seven.

> Signed: HARLOW SHAPLEY, HUDSON HOAGLAND, S. FOSTER DAMON, GRANT H. CODE, S. B. WOLBACH, HERBERT F. DAY.

Seance of June 29, 1925.

Circle in order clockwise; Psychic, Dr. Day, Code at dictaphone, Shapley, Wolcott, Damon, Hoagland, F. H., Psychic again. The Psychic was searched before the seance by Mr. Heath, a trained nurse. F. H. was searched by Hoagland. Before the seance, Hoagland sealed both doors of the seance room with paraffine. Dr. Shapley examined the seance room immediately before the forming the circle. Circle formed at 9:21. Lights out.

Walter's voice says: "Hello" at 9:25. Trance observed immediately afterward. Hoagland asks Walter about the use of the rheostat. Walter says: "Turn it on later." Hoagland asks whether Walter uses the Psychic's eyes and ears. Walter says "No." Hoagland asks Walter if some other person could be substituted permanently for F. H. at his position in the circle. Walter suggests Code, and says: "Start tomorrow night." (Before assenting to this change, Walter asked F. H.'s assent. F. H. left the decision entirely to Walter. The effect was of Walter's courtesy and desire not to hurt F. H.'s feelings.) Hoagland asks if Walter will give a voice test by permitting some member of the circle to put his hand over the Psychic's mouth while Walter whistles. Walter says: "Some night; not tonight; and that will be the only phenomenon the night I do that." (In response to an inquiry by Code, who explains that seeing and hearing are within the range of physical phenomena), Walter explains that his seeing and hearing can go on even if the Psychic's eyes are covered and her ears stopped up . . . that his sensory organs are in so much independent of hers; but that he could not see or hear if she were not present.

Walter takes census of church-going (i. e. Walter asks each member of the circle whether he goes to church). 9:36, Hoagland requests Walter to put one of his terminals through holes in a board fastened vertically to the table. In this board were bored a series of holes, graduated in size, and outlined with luminous paint. Walter calls for double control; Hoagland has both of F. H.'s hands; Dr. Day has both of the Psychic's hands. Day reports silhouetting against third hole.

Code places his old bell-box on top of the new contact box. Double control O. K. Bell-box rung with flap; Morse A. Walter turns back flap and takes out spool. Hoagland reports silhouetting; Day reports silhouetting covering spool with a finger-like projection. Foot control checked at Code's request by having each foot move separately in a different direction.\* Hoagland's hands both visible. (Dr. Wolcott had remarked that his wristbands were dim.)

9:40, at Walter's request, Code removed large contact box from under small contact box, leaving small contact box on table by Hoagland. Spool loose on box. Immediately afterwards, silhouetting on spool; two levitations of spool. Second time, spool dropped on floor.

<sup>\*</sup>All hands and feet of psychic and F. H. being thus accounted for, what made the "finger-like projection"?

About 9:45, Walter closes flap and then opens it again; Wolcott, sitting opposite Psychic, reports that the voice is nearer than before. Walter playing with flap. Wolcott reports voice considerably nearer. Movement of bell box on table, lifted up by end to which flap is attached, flap moving at same time. Controls O. K. 9:46, Code bell-box removed from table by Code. Wolcott again reports voice coming nearer. Day, at Psychic's immediate left, reports no change in position of whistle.

Walter's terminal discovers handle of weight apparatus on table (a large spool touched up with luminous paint at each end and fastened to the rope of a weight-lifting device), Walter moving handle of weight-lifting apparatus on table. Approximately 9:49, Dr. Day reports seeing projection about six inches above table. Professor Wolcott repeatedly reports voice nearer. 9:50, Dr. Day reports handle lifted about a foot above table. Walter asks how much weight on the weight machine? Hoagland reports 16 pounds. Hoagland substitutes a lighter weight, 6 lb., 4 oz. 10:51, weight lifted about 10 inches. Weight raised and lowered repeatedly. Dr. Day reports terminal about a foot above table. Walter inquires how high weight will go. Weight being lifted to the limit, 22 inches, and let down slowly. Raised to limit several times. Day reports perfect control. Controls checked all around O. K. on hands, heads and feet. Day reports terminal seen between third and fourth circle during this weight lifting. Weight lifted again about 9:55.

9:58, plasticine ball placed on table. Walter requested to give it one good squeeze. Movement of paper around plasticine ball reported. Experiment completed about 9:59. Dr. Day reports rubbing on right knee. 10 o'clock, control reported O. K. during impression made on plasticine plaque, which was placed on table after ball was removed. Day reports rubbing on right knee. Hoagland also reports rubbing on his pants. This experiment complete about 10:05.

Handle banged on table, Walter weight lifting and whistling at same time.

About 10:06, Hoagland places illuminated compass on table. Compass moved about. No apparent effect on needle. Compass removed. While Hoagland is feeling for rope to put on table, Walter gives a smart blow on table at Dr. Shapley's request. This occurs about 10:08. Hoagland reports rope lost, 10:10, after getting into hot paraffine, Hoagland finds illuminated rope and places it on table. Walter is requested to tie knot in the rope. Controls reported O. K. Movement of rope. Dr. Day requested by Walter to place his head on table. Walter places luminous rope across Dr. Day's neck, Walter is requested to whistle while he is doing this, and proceeds to whistle. Dr. Day reports being rapped on the top of the head as if by a palm. Walter asks Dr. Day to raise head. Dr. Day attempts to raise head and finds head held down by rope. Walter asks to have head down again. Dr. Day puts head down, and reports rope constantly moving.

Walter pushes rope down over Dr. Day's right ear and then over his left ear. Rope lifted above Dr. Day's shoulders. Whistling continuous during the most important movements of the rope. Hoagland reports that tentacle eclipsing both of the Psychic's arm-bands as Walter moves terminal back and forth. Dr. Day reports touch on forehead immediately after. Walter removes rope from Dr. Day's neck and lifts it above table to about the level of the sitters' heads. Walter is again asked to tie a knot in the rope. Walter directs Dr. Day to take hold of rope in right hand. Walter playing with other end of rope on table. As Dr. Day moves one end, Walter says: "Good evening" and touches him on the hand. Between 10:10 and 10:15 Walter makes persistent effort to tie knot in rope held in Dr. Day's hand. About 10:20 Walter concludes efforts to tie knot.

10:22, Code reports Psychic's right ankle band off, Walter says: "No, 'tisn't," and covers part of the complete circle on the floor. The rope is left hanging over Dr. Day's fingers. Walter calls attention to the anklets. They apparently are partially obscured from some sitters in the circle. 10:23, Walter directs Code's attention to anklets. The left one seems normal, the right one slightly elongated, both as if over instep and heel. Walter says: "I can hide them from you at any time I want," and obscures most of the right anklet from Code. It was clearly not the left foot which obscured the right anklet.

10:25, Code released momentarily to put checker board on table. Walter calls for checkers on his side of board. Code readjusts them. While he is doing so, Walter asks Code where his right wrist band is. Code finds that the cuff of his rubber glove, worn to insulate him against the dictaphone in order to prevent a short circuit, is turned down so as to hide right wrist band completely. Code adjusts glove, bringing wrist band into sight." Game with Shapley begins at 10:30. Walter says, following one of Shapley's moves: "What did you put it over there for, you son of a gun?" Walter gets a king and says: "King." Query: "Do you play checkers according to Hoyle?" Walter: "No, we play according to Shapley." Silhouetting whenever Walter moves.

10:35, checker board removed. Coordinate board placed on table by Code. 10:38, silhouetting on coordinate board. Continuous whistling. Size of silhouette about 3 inches by 24. Two terminals reported; one big one on Hoagland's edge, the second one toward Dr. Day. Terminals continue on coordinate board. Controls reported O. K. Movement of silhouetting about coordinate board. Controls reported O. K. Hoagland reports that he is as sure of F. H.'s hands, head and feet as he is of his own. Other controls reported O. K. during silhouetting on large coordinate board. This phenomenon about 10:39. Shapley asks Walter to leave one terminal on table and sit with the other one as he did the last sitting. One terminal continues on board. Then second terminal pounded on board. Whistling during pounding. Controls reported O. K. Pounding two or three times. The

Psychic's left leg is pressed against Dr. Day's right knee throughout these phenomena. Damon reports both feet visible where they should be. Hoagland reports F. H. completely controlled and motionless throughout. Damon reports feet visible on floor. The left foot of the Psychic is in front of Dr. Day's right foot and touching it during these phenomena. The back of Dr. Day's hand is resting on the Psychic's thigh.

10:45, Shapley asks for doughnut on coordinate board. Walter consents: "If you don't discover the lost world, nobody will." Damon puts doughnut on table dim side down. Controls O. K., Damon reports. Walter says: "I'm going to put my force on the table. Get on there." Silhouetting in center of coordinate board on side toward medium. Walter says: "I'll make a hand out of that." Immediately a second silhouetting to the Psychic's right of the first silhouetting on the table. This silhouetting appears to be a terminal which picks up doughnut and levitates it above table. Dr. Wolcott blows at doughnut which Walter holds in the air toward him. Doughnut, blown from Walter's grasp, falls to table. Wolcott laughs. Walter picks up doughnut and moves it at Wolcott. Walter says: "Blow, you son of a gun, blow!" Wolcott is unsuccessful in attempting to blow the doughnut from Walter's grasp. Dr. Wolcott reports that he did at one time, but not every time he blew. Experiment repeated. Controls reported O. K. throughout. When doughnut is returned to board it is crumpled. Dr. Wolcott says he blew as hard as he could, but could not dislocate the doughnut. Dr. Wolcott estimates that the doughnut was at that time about two feet above the table. Walter asks Shapley to pick up doughnut by one edge. Shapley does so on corner of table to Psychic's left, farthest from her. Dr. Shapley holds doughnut about 18 inches above front left corner of table. Walter touches Shapley's hand, takes doughnut from him, waves it at him. Psychic's hands tremble while Walter is shaking doughnut violently. He holds it toward Dr. Wolcott and says: "Good evening, sir." Dr. Wolcott responds: "Good evening," and then says: "Guten Abend," which Walter repeats, but he does not repeat: "Mein Herr," which Dr. Wolcott added. Immediately after Code dictated this into the dictaphone, Walter said, "Mein Herr, Mein Herr, Mein Herr!" (Dr. Wolcott continued to address Walter in several languages, including Japanese, to all of which Walter jestingly responded with unintelligible sounds. Dr. Shapley asked the purpose of addressing thus, but Dr. Wolcott did not explain his motive, except to say that Walter should understand him. Dr. Shapley said he himself didn't understand and asked why Walter should. To this question Dr. Wolcott refused to reply. Later in conversation with Dr. Wolcott, it was inferred that he belicved any genuine spirit would have the gift of tongues and understand all languages. Earlier in the evening he had remarked that he supposed Walter was one of the Psvchic's secondary personalities, to which Walter had replied: "Yes, the question is which one?" Dr.

Wolcott had also inquired how Walter could drop a spool if he were a spirit. After the seance he testified that the phenomena were not to be accounted for by group hallucination, that the phenomena were certainly material and physical, and that he must doubt the word of those who reported control O. K.) Damon reports Psychic's feet on floor during this conversation and during blowing. Someone asked what had become of the doughnut. Walter says: "Shapley, put out your hand and I will give it to you." Dr. Shapley holds out hand above table. Walter offers doughnut to him, and Dr. Shapley takes it.

10:50, Dr. Wolcott puts his nose in the doughnut, and reports something touched the back of his head. Dr. Day reports that the projection coming across the table to touch Dr. Wolcott was visible to him against luminous paint. Dr. Wolcott reports the feeling as of a heel on his head. Dr. Wolcott reports that the back of his head was touched several times, his hair rumpled a bit. Dr. Wolcott put his head down a second time and asked to have his hair pulled, but Walter did not touch him.

F. H.'s hand released to straighten Psychic's robe. Dr. Day reports decided trembling of Psychic's right hand as light is turned on with a flash. As red light comes on, Psychic's hands revealed, held in Dr. Day's with rope. Full red light at 11 o'clock. Psychic out of trance. Circle broken. The ankle bands are found over the Psychic's insteps and heels very tight so that they left marks in the flesh. Examination of plasticine records shows that they are apparently successful. Plasticine impressions also taken of the Psychic's hands and feet.

It is understood that the statement: "So and so reports" does not mean necessarily that the person reporting was the only one to observe the phenomena reported. Ordinarily the person chiefly concerned reports to the dictaphone operator anything which that operator cannot himself observe.

Code reports that between 9:36 and 9:40 when he asked Walter for a test of feet control, it was his impression that the right ankle band was not on the foot but flat on the floor, partly obscured by some object. At the call for control, the band was partly obscured at a different point and moved along the floor. It was then returned to a position where it might be conveniently covered by the toe of the Psychic's left foot. Later when Code reported that the right ankle band was off, the complete circle then visible was immediately partly covered. Later some object was placed inside it, either the right foot or a slipper. At the end of the sitting, both ankle bands and slippers were in their proper positions.

Immediately after this sitting, when all but Hoagland, Damon and Code had left 18 Traill Street, Code undertook to see whether it was possible to remove his right ankle band while giving the impression that it was still in place. This was done to enable the observers to estimate the importance of the discovery that during the seance one

of the Psychic's ankle bands was off. Accordingly, Code placed himself in the Psychic's chair, Hoagland controlling one of his hands and Damon the other. Code found that with his stockinged feet it was very difficult to remove the ankle band without snapping it away from his foot to some distance. He then removed his sock and tried again with ankle bands and sneakers over his bare feet. He found this time that under cover of the restlessness of simulated trance, he could easily slip his feet out of his slippers and remove the ankle band from his right foot with the great toe of the left. After doing so, he held the right ankle band partly covered by the toe of his left foot. 'It was found that these operations could not be detected by visual control and that the result produced the effect of good foot control. Then with his right foot, Code repeated several of the phenomena of the seance just concluded. He rang the bell box with the flap, turned back the flap, rang it with the spool, removed the spool, levitated it. Took a pencil from Hoagland's pocket and rang the new contact box through one of the holes. Levitated the small contact box by the flap. Pushed the boxes aside. Fumbled with the handle of the weight machine, levitated it, and lifted the weights. Then Code called for the coordinate board and produced silhouetting with his right foot. Then he offered to show three teleplastic terminals on the coordinate board, and proceeded with his right foot to place his sneakers in turn upon the corners of the board, after which he showed the silhouetting of the foot in the centre. Later he reproduced with his foot the effects of touches and stroking on the head and of hair pulling, and the untying of a shoe. He concluded the experiment by putting on his right ankle band again with the toe of the left foot, and putting on his sneakers. The observers, Damon and Hoagland, agreed that Code had produced by this means precisely the effect of most of Walter's phenomena during the recent Harvard sittings. It was accordingly agreed that the Psychic should be asked to wear illuminated bands of adhesive plaster instead of the old illuminated bands of elastic tape for the next evening's sitting.

It is to be noted that the bands the Psychic wore had been made by the observers and substitutes for bands which she had brought with her, that the Psychic had complained before the sitting that the ankle bands were too loose, and had attempted to tighten them with safety pins. The band's coming off during the sitting was thus made possible by the carelessness of the observers.

It is to be further observed that Code did not produce anything resembling what Walter called his "main thing," or the apparently detached small masses of teleplasm which Walter had exhibited at previous Harvard sittings.

The observers further note that whereas when Code reported the ankle band off, Walter denied the fact and said: "No 'tisn't," it has been noted several times that Walter has corrected mistakes in observation by sayings "I didn't do that," that he has refused to claim one of his sly tricks as a genuine phenomenon, but has simply laughed when

it was recorded, and then has permitted the observers to find out how the trick was done. Thus, on one occasion when Hoagland reported being touched on the knees by a luminous mass, Walter laughed and continued to push the large megaphone against Hoagland's knee until Hoagland discovered what the luminous mass was, the top of the megaphone.

Signed: S. FOSTER DAMON,
GRANT H. CODE,
HILBERT F. DAY,
HUDSON HOAGLAND.

Seance June 29, 1925.

Addendum by Professor Shapley.

- 1. For myself and for the other scientists I invite to attend these sittings with Margery, I wish to specify definitely that we sign the reports with the understanding that the terms technically and specially used at these sittings and in the reports, such as Walter, ectoplasm, ectoplastic arm, Walter's voice, and so forth, are used only as designating terms to facilitate the description of the physical phenomena. It is understood that neither I, nor these representative Harvard men I have invited and shall invite to attend, wish to indicate, by the use and approval of the use of these terms, that we subscribe to any hypothesis whatever concerning the real nature of the phenomena.
- 2. A second understanding with you, your associates, and F. H. is that no use of my signature, or of those men whom I invite to the sittings, shall be made without specific authorization.\* And further that every effort will be made to avoid publicity with regard to the investigations carried on at the sittings.

Signed: HARLOW SHAPLEY, Per HUDSON HOAGLAND.

I certify that this is a true copy.

Signed: GRANT H. CODE.

We, the undersigned, subscribe to the understanding stated in these paragraphs.

Signed: GRANT H. CODE,
JOHN MARSHALL,
S. DAMON FOSTER,
HILBERT F. DAY,
HUDSON HOAGLAND.

<sup>\*</sup>This specific authorization has been obtained, see p. 28. The "understanding to avoid publicity" was made, apparently, in order that Messrs. Shapley and Hoagland might reach the public press first.

Emerson Hall, Harvard College, Cambridge, Mass.

Seance of June 30, 1925.

Circle formed at 9:25. Order of circle clockwise; Psychic, Dr. Shapley, Marshall at dictaphone, Damon, Dr. Osterhout, F. H., Dr. Wilson, Dr. Fawcett, Hoagland, Code and the Psychic again. Code bell box on table to begin with. Red light out at 9:29. Electric circuit was reported working at 9:29. Judge Gray at buzzer phones and phonograph outside room. Walter's voice at 9:35. Trance came on a few seconds after the voice. Walter says that the Psychic's ankleband was off at the sitting of June 29th. "The reason I denied it was because the man was ready to jump on you at any minute." This refers to Professor Wolcott, who was present at the last sitting. Dr. Shapley reports the Psychic's left foot on his right knee at 9:47. Dr. Shapley reports that the Psychic's left foot was put on table and then returned to his right leg. There is a noise on the table. Psychic's left foot removed from Dr. Shapley's lap. Dr. Shapley reports that he felt an object rub his right hand, which is on the Psychic's knee. This occurred at 9:48. The touch is repeated. The object feels, Dr. Shapley says, as if it had several protuberances or fingers, and is cold. Laid again on Dr. Shapley's hand, which is on the Psychic's knee. This all occurs about 9:46. Code reports control of the Psychic's right hand and that the back of his hand is resting on her knee. Her head is far back in the cabinet. Code reports something on top of the bell box at 9:50. Code reports movement of rudimentary fingers. Verified by Hoagland. Movement of bell box immediately after this. Dr. Shapley reports rudimentary hand silhouetting on the bell box. Walter says: "It's a good hand, not rudimentary." Code reports he was touched on the head. Dr. Shapley was touched on the hand by the same object which touched him before. Bell box rung at 9:51. Control O. K. Continued silhouetting on the bell box. Bell box continues ringing. About 9:52, silhouetting continues all this time. About 9:53 Code's face slapped. The thing which touched him was colder than the Psychic's hand. About 9:54 bell box rung again. Hoagland, at the request of Walter puts his head on bell box and is hit on the head about 9:55. Control O. K. Damon is requested to put his head on the table and is hit. Damon describes the sensation as the hitting of a rope on his head. Walter says he is a liar. Dr. Shapley reports that the same thing has touched him again on the hand and has three or four strands and has had all along. Damon records that this is what hit him. Bell box tilted on the table. Flap was moved. This occurred about 9:56, while Walter was whistling, Damon says. Code says there seems to be a thumb over the flap, and a finger under the flap, both very small like a baby's. Controls reported O. K. by Shapley. Hoagland reports long fingers silhouetted against the spool at 9:57.

Damon verifies this. The spool was levitated and dropped to the table. Dr. Shapley says that it was put in his hand before it was dropped to the table. Dr. Osterhout adds that F. H.'s head was on his left shoulder at the moment when the spool was levitated. Continued silhouetting round the illumination on the bell box. Walter rang the bell box at 9:58 through the half inch hole, as he had never done before. Walter orders bell box removed. Head, hand and foot control O. K. Hoagland removes bell box. Flopping of teleplastic hand. Flopping of Walter's hand, according to Walter's correction, on the table. Strange cuckooing noise in the air is described by Walter as "your friend from Japan." a previous sitter who had addressed Walter in several languages. Code is again touched on the head. At 10:00 o'clock, Dr. Shapley is asked to put his nose on the table. Dr. Shapley says: "Ouch. Walter pulls my hair like the devil." F. H.'s head is on Dr. Osterhout's left shoulder. Code reports a touch on the head. Levitation of table is reported by Damon. (This sentence in the dictaphone record is a mistake. Correction by Damon and Code: Code observed that the end of the bell box nearest him was lifted about one inch off the table and reported the levitation, saying "table" instead of "bell box." Damon, who had at the same time observed a jarring of the table but no levitation, suggested it was a tilting instead of a complete levitation. The record should read: "Levitation of bell box reported by Code; Damon reports movement of table at same time.") Good tactual control. Dr. Shapley's pulse is being taken by Walter's several fingers. The hand feels decidedly colder than the Psychic's hand, and damp. This happened at 10:02. Dr. Shapley reports that the Psychic has crossed her feet, and that while he touches both of the Psychic's thighs, the hand is again laid on his pulse and left there. Convulsive movement of the Psychic's feet during this phenomenon. Dr. Shapley reports that Walter is tapping his fingers continually with his hand. Walter asks Dr. Shapley what the touch feels like, asks him if it feels like a heel, referring to the observations of Dr. Wolcott at the sitting of June 29th. Dr. Shapley replies: possibly like the heel of an eel. At 10:06 Walter asks for the plasticine balls. (A number of balls of plasticine had been rolled smooth between boards and lay ready on a small board with small wooden peg stuck in them to permit handling without making an impression on this plasticine.) While Hoagland is putting this apparatus on table, Code, at Walter's request, moves the spool near the middle of the table.

There is a levitation of the spool. The spool was put in Dr. Shapley's hand. Then it dropped to the floor, after a levitation according to his judgment of about 9 inches. Tapping again on Dr. Shapley with Walter's hand. The temperature of the hand is decidedly low.

Walter asks what he shall do with the plasticine. Hoagland says: "Squeeze it hard." There is a noise on the table of the moving plas-

ticine. Controls O. K. Walter beating time with one of the balls of plasticine as he whistles. Code's chin touched with the plasticine. Hoagland reports silhouetting against the Psychic's right wristband. Walter says it was Code's head. Walter apparently covers up the Psychic's left wristband and asks where it has gone. At Walter's request, Hoagland moves the balls from the table. Walter says the plasticine looks just like a heel. Walter asks that one of the balls be left for him to play with. Hoagland asks for red light in order to find one that has not been touched. Walter refuses to permit red light. Plasticine balls removed. Walter rapping on the table. At Walter's request, Dr. Osterhout puts his hand on the table. Dr. Osterhaut reports something very cold, like a cold finger. F. H. feels it too. It was on the back of Dr. Osterhout's hand and his hand was also touched. F. H.'s head was on Dr. Osterhout's left shoulder throughout this phenomenon. Controls O. K. Dr. Shapley's right hand was on the Psychic's left knee throughout. Walter touches Dr. Wilson. Dr. Wilson said that the hand felt like a flyswatter, and later said it felt like a cold hand, five fingers, all of which he could feel. F. H.'s head was on Dr. Wilson's shoulder throughout.

At 10:16 at Walter's request, Dr. Shapley put doughnut on table. There is a silhouetting of the fingers all over the doughnut. There is a levitation of the doughnut. At Walter's request, Dr. Osterhout leaned forward and took the doughnut in his hand. He felt the fingers holding the doughnut. Dr. Osterhout said that it felt like a cold, slimy, and rather clammy finger, which felt as though it had bones in it, but too flexible for an ordinary finger. All this was done in the air. The time is now 10:20. At Walter's request, Dr. Shapley places the coordinate board on the table. Dr. Osterhout has F. H.'s head on his shoulder. Dr. Shapley reports that Walter has taken hold of the paper on the coordinate board and lifted it from the table. Dr. Shapley reports that the hand on the board looks distinctly like a complete hand. Dr. Shapley reports that to him the hand seems to extend from the Psychic's right knee. Controls by general consent O. K. The time is now 10:22. There is a left hand now apparent on the table and Walter whistles at the same time. The time is now 10:24. There is now a right hand on the table, according to Walter. Dr. Shapley says that it appears to him to be a right hand. Dr. Shapley reports a right hand on the table, at 10:241/2. While Walter's hand is on the table, Dr. Shapley controls both the Psychic's knees. There are now two hands on the table, at 10:25. One hand is well formed. The other is a long extension, shaped like a cat's tail. Hoagland feels both the Psychic's feet in slippers. Code verifies this. The hand according to Code reaches up to the seveninch line. Dr. Shapley says that it is the same length as the other terminal, which also lies on the table. It now has gone back again. Back again with a hockey stick formation. Then off again. The hand has now reached out to the ten-inch mark, according to Hoagland.

The time is now 10:26. Dr. Shapley reports that it seems to him that there is a third tentacle, which moves beside the two on the table. According to Hoagland, the long terminal has disappeared at 10:27. F. H., who has been counting aloud, reports that the hand was on the coordinate board 192 That was the large hand. The other came and went. Walter lifts one corner of the paper on the coordinate board. Code reports more silhouetting on the middle of the board. According to Dr. Shapley the hand seems to extend from the Psychic's right knee. Code, on the other side of the Psychic correcting Dr. Shapley's observation, says that from his position the hand appears to come from between the knees. Dr. Wilson saw it in a third position; namely, extending from the Psychic's left knee. Code's left hand controlling the Psychic's right has been on the Psychic's right knee continuously. (Note: "leg" would be more exact than "knee." During the restlessness of the trance the position of the hands varied. Code's hand was in contact with some part of the Psychic's leg at all times, usually the knee.) At Walter's request, Walter is given the doughnut by Marshall and the doughnut is moved nearer the center of the table, by Dr. Shapley. The doughnut was picked up by Walter and thrown onto the table. Walter flaps his hand on the board. The fingers of the hand are visible to everybody. The hand now at 10:30 is drumming on the table, in time with Walter's whistling. Code again reports silhouetting near the middle of the edge of the board. Hoagland reports that the hand seems to reach the six-inch mark. There seems to be a large hand, like a man's. 10:28, at the request of Dr. Shapley, Walter shakes Dr. Wilson's hand. Dr. Wilson says that the hand was cool, but not cold, and went through a regular hand-shaking process with him. Apparently very poor articulation. Professor Wilson cannot be sure of any bony structure. Neither can he be sure that there was none. At Walter's request, Hoagland puts his hand on the table. At 10:35, Walter tapping his hand in Hoagland's palm. Hoagland received from Walter in the palm of the hand a cold leathery touch. "A number of protuberances seem to be connected with this touch." Walter says, after Hoagland's description: "My hand is just as good as his," and shows it on the table. Hoagland says that it was not cold but cool. Walter lifts the corner of the paper on the coordinate board slightly. At 10:35, according to Marshall's observation, the phenomena cease. This statement was immediately refuted by silhouetting on the coordinate board. The time is now 10:40. Code reports continued movement of the Psychic's right hand, going up as high as his head. At 10:45, Walter says: "Good night. I'm going home now." Code starts to put on the light and is asked by Walter not to hurry. According to Dr. Shapley the process which was shown last was about 8 inches by 3 inches, with the length along the edge of the board. At 10:48, Walter again says good night. Between 10:45 and this time there had been more conversation, with Walter. Walter

continues to talk until 10:50, and then says: "Good night." During this conversation he uses his peculiar Japanese chuckle, imitating the laughter of Dr. Wolcott who was in the circle at a previous sitting. This noise continues, and according to Code, seems to be high above the Psychic's head. At Walter's request, the red light is put on very, very dim. At 10:52, Walter again says good night, and again in a fairly bright red light makes his Japanese chuckle, (apparently a high ascending trill on the uvula, with the lips formed for U., distinctly vocal, not a whisper.) The red light is put on gradually stronger. Circle broken at 10:55. Psychic comes out of trance and remains in the room during search of room.

Signed: S. FOSTER DAMON,
JOHN MARSHALL,
GRANT H. CODE,
HUDSON HOAGLAND.

Our experience with "Margery," as detailed, in part, above, leaves in our minds no doubt that this mediumship is one of the most important ever recorded. Walter, the control, states frankly that he is neither omniscient nor omnipotent; that he, in his sphere, is experimenting just as we are; that he can see in the immediate future a great extension of the phenomena in scope and power. Under the circumstances it is manifest that the mediumship should be observed by as many competent and critical minds as possible. Those in charge of the mediumship, therefore, gladly offer opportunity for such observation to persons properly accredited and reliably introduced.

## The Latest Margery "Exposure"\*

By J. Malcolm Bird Research Officer, American Society for Psychical Research

Most of the readers of this Journal will have seen, or at least heard of, an article in the Atlantic Monthly for November, by one Hudson Hoagland, which purports to bring the Margery case to a climax and to an end. Many of these readers have not alone seen it, but have written or called to ask me what I think of it and what I propose to do about it. Some of these queries have been based upon the idea that I am Margery's official champion, obligated to defend her against all comers. This is not the case. I am on record with an emphatic favorable judgment-which I could and would reverse if it were shown that her phenomena are fraudulent, that she does them thus and so. But this must be shown. And any attempt to show it must have, from me more than from any other favorably disposed person (this by virtue of my official position), the most careful scrutiny in the search for grounds for reversal or sustainment of my published opinion. Similarly when I find that a published indictment of the mediumship fails to withstand analysis, I must state this fact in print, with my reasons. I should like every reader of this article to feel that it is not a defense of Margery, not a defense of my own opinion even, but solely a vigorous exception to Hoagland's statement. To this end, I studiously refrain from arguing that the mediumship is valid, confining myself to the thesis that this latest "exposure" has completely failed to establish any presumption against its validity. And of course, like Hoagland, I confine myself to the phenomena that have occurred in his presence, ignoring the fact that much has happened in his absence toward the explanation of which his theories make no contribution.

Mr. Hoagland was one of a group of excessively young men, attached to Harvard University in one way or another, who took it upon themselves to examine the Margery mediumship, starting last May. He himself sets forth their lack of qualification for this undertaking with engaging frankness; I could not hope to improve upon his showing here. 'So far as he goes he gives an accurate picture of what he and his colleagues planned to do, why they wanted to do it, how they set about it, the results they got, and the verdict they reached. It must be understood, however, that while the investigating group was organized upon Hoagland's initiative and with him as the nominal head, another man, Mr. Code, turned out to be the dominant member. Hoagland, while I have met him, is a comparative stranger to me; with Code I have had close and cordial relations for some months. At the points where

<sup>\*</sup>Journal A. S. P. R., Vol. XIX, December, 1925, p. 717.

Hoagland's story does not cover the ground, my knowledge is reinforced by conference and correspondence with Code. His name will consequently occupy, in my narrative, a place of prominence out of proportion to what its place in Hoagland's would lead one to expect. With such reinforcement as may thus be necessary, I proceed then to summarize Hoagland's results and Hoagland's verdict, for the benefit of any who have not seen his original article.

Six sittings had been held, and none of the investigating group entertained any serious thought that the phenomena were other than genuine. During the seventh seance, an incident occurred which opened their eyes to a possibility of fraud theretofore overlooked. Experiment showed that if this fraud could be employed, a considerable fraction of the manifestations which they had seen could be reproduced by trickery. Without further experiment, they then concluded that all the other phenomena could be engineered by use of certain additional tricks; and that in fact they were so engineered in the seance room. They were now satisfied that the mediumship was totally fraudulent, in the physical sense. This complete reversal of conviction occurred in the course of a single experimental conference following the seventh sitting; which I think gives us good indication of the absence of mature judgment characterizing these aspiring young men.

But there was a large body of observations indicating absolute belief by Margery and by Dr. Crandon in Walter and in Walter's identity as the deceased brother. Indeed, to psychologist as to layman, this must be the feature of the case which close contact with the Crandons makes most obvious. A theory reconciling these conflicting aspects was needed; and one was forthcoming. Like the theories covering the suppositious physical fraud, it was formulated initially only in outline, to be elaborated and modified in its details as its promulgators lived and worked with it during the ensuing days. It is in its finished

form that I proceed to discuss it.

The basic idea has so far, in print and in conversation, eluded accurate definition to me. It partakes of the nature of hypnosis, but must not be identified as hypnosis in the strict technical sense, since both in and out of trance Margery's condition in the seance-room is not one of hypnosis in this sense. Hoagland et al. show a tendency to seek middle ground between the concepts of hypnosis and of mere intense auto-suggestion, with complications. The upshot is that through the motivation unintentionally supplied by Dr. Crandon's keen interest and desire and by other less definite factors, Margery is pictured as going into this indeterminate state of amnesic suggestibility, wherein her physical resources are utilized for physical fraud without her concurrent knowledge or subsequent memory. There would have to be much extra-seance preparation, for which we are told that she lapses into the near-hypnotic state at convenient moments during the day. There would have to be much release of her right hand by Dr. Crandon in the seance, for which much the same thing happens to him. Individual members of the Code-Hoagland group are not agreed as to just how much we may picture the two Crandons as deliberately and consciously "helping out" a Walter who came into existence, initially in the way indicated, as a semi-hypnotic impersonation of the dead brother, and in whose reality they have faith. Indeed, some of them are inclined to reject this interpretation wholly, and turn toward a theory of completely conscious fraud. This statement, going a bit further that Hoagland goes in his text, is to that degree based upon conversation with Code; it is I think a fair summary of what all involved unite in calling "Hypothesis H."

With their working hypothesis now organized, as described, the Harvard investigators, still in conference in the small hours following their seventh seance, considered their next step. A sitting was scheduled for the impending evening. They decided to go through with this; and they agreed upon means for excluding, in it, the frauds which they now visualized as constituting the modus operandi of the mediumship. This seance, they agreed, must then result either in a total blank, or in the spontaneous substitution of other means of fraud leading to unaccustomed phenomena. But to their utter amazement, the critical sitting had neither of these issues. On the contrary: it led to a brilliant performance, differing from previous Harvard seances only about as these differed among one another.

After the medium had left the house, Code "explained" this unexpected result to his colleagues, in a statement of such extraordinary character that they could not possibly have given it credence, had they not been possessed of the strongest emotional urge to believe factors adverse to the mediumship. He had decided, without consulting or informing them, that the psychological back-fire, upon the Crandons, of a blank sitting at that particular point would be more severe than he cared to be responsible for. Hoagland is vague here, because Code himself was vague in his picture of what would happen to Margery and her husband if he let the exposure go off according to schedule. By way of preventing the catastrophe, he went to Lime Street during the afternoon of the day on which the fateful seance was to occur. He saw Margery. For what transpired we have two versions, and we must leave Hoagland's article while we set them down.

Margery tells us that Code talked with her in the living room, alone as he supposed. He put before her in outline the claim that Walter is a hypnotic impersonation, and that the physical phenomena are done through normal use of her extremities. She replied that it was interesting, if true; and that if it were true, she certainly wanted to know it. Code then, she tells us, offered to extend any aid to make the seance of the evening a success. He was coldly turned down, and left the house

Code, and with him Hoagland, would have us believe that after an interview with Margery substantially as pictured by her, he asked permission to consult Walter. Margery, he says, expressed doubt that

Walter would come in the daytime, but finally agreed to try it. They adjourned to the seance room on the top floor; she went promptly into trance and Walter "came through." Code put the whole matter before him, including his reasons for not wanting a blank sitting. The upshot was that Code and Walter agreed upon means for Code to assist in the production of fraudulent phenomena on a sufficient scale to make the sitting a success.

At first I was not alarmed when Code insisted, confidentially, that he had had this sitting, while Margery denied it. Code's story provided for that: not wishing to perturb the Doctor, he got Margery to promise secrecy. But when it comes to the point where the Doctor knows about Code's claim through the public prints, this reason is rendered obsolete, and at the same time its initial good faith is somewhat shaken. The situation that now exists is that Code has made affidavit covering his claim, as outlined above; while Margery has made similar affidavit covering hers. And, if affidavits are to rule, Margery is in a clear majority; for she has a supporting affidavit from the eavesdropper at whose presence I have hinted. This is the sort of thing which abounds in the present controversy, robbing one of all confidence in the completeness and accuracy of one's facts. It is extremely difficult for me to believe that either Margery or Code is deliberately lying about this item; yet one of them is obviously carrying a desperate lie to the last desperate ditch.

The entire subsequent procedure of the Harvard group is predicated upon Code's story; so, of course, is the rest of Hoagland's article. If I am to proceed, therefore, I must myself assume, for purposes of argument, that his is the true version of what happened. I make this assumption purely as a convention, and in no sense as a mark of preference between the two stories. Whether the agreement which Code says he reached in his conference with Walter is supposed to have contemplated his subsequent confession to his own colleagues, after the critical seance which we have left hanging in air, is not clear. In any event, that confession was that, by connivance in the fraudulent use of Margery's hands if not by more active means, Code had permitted fraud, aided in fraud, followed and observed the fraud, and was now reporting it. The final conclusion was formulated on the spot that the physical phenomena of the mediumship were entirely "normal" in their physical production.

Hoagland's article is well done. To one having no further source of information I do not see how it could be other than conclusive. My extraneous knowledge, however, makes it seem to me so inconclusive as to modify in no slightest degree my previously expressed opinions of the mediumship. Ultimately, it will have to be met in all detail. At the moment, I cannot undertake this task, because I am confident that all the pertinent facts, properly ordered, are not in my hands. But without delay I must make such outline as is today possible of my reasons for discrediting Hoagland's article, so far as they are not

evident from implication in what I have already said.

First: it was not the intent to publish anything as the result of this investigation. The members of the group took pains to pledge themselves and everybody else to this effect, and to strengthen these pledges after they knew what their findings were to be. They pledged Dr. Crandon to silence; they even went to the length of pledging me—for no other apparent reason that this Journal is the logical organ of publication. And then: with no adequate notice to his colleagues and with none at all to Crandon until this was demanded by his colleagues, over the vigorous protests of these colleagues, in a popular rather than a scientific organ, Hoagland publishes what at least one of his colleagues agrees with me in pronouncing a garbled and inadequate statement.

Regardless of any agreement, this constitutes a grave scientific impropriety. The detailed minutes of all sittings held by this group exist. In the nature of things, they contain all the evidence to which standing can be given. In the nature of things, some of this evidence leans one way and some the other. The only orderly thing to do is first to publish these records in their entirety. Only after this has been done is it proper for any person to brief the evidence in support of any particular conclusion. What Hoagland has done is to take advantage of his confidential position to brief the evidence before it has been published, and to present this brief as an orderly publication of his committee's work. Facts harmonizing with his hypothesis he gives us; those which can be forced into such harmony he so forces; those which cannot be minimizes or suppresses entirely. No reader of his article would for a moment imagine that any phenomena had been obtained which do not fit into Hoagland's scheme of interpretation; yet such is the fact, as will be seen on examination of the extracts from the seance records which appeared in the Boston Herald and the New York Times for November 18th, 19th and 20th. Were it not for this publication, which the Harvard group would have prevented if they could, the status would be that all the evidence for the prosecution had been presented, all that for the defense suppressed, and the result put before the public as the complete story. This is not science: this is

The publication strikes another false note when we compare it with the action of Code in the critical seance. On the one hand we have such tenderness for the Crandons that control is deliberately omitted and the entire scientific character of the findings vitiated, as I shall show in greater detail below, just to avoid "possible deleterious consequences" to Margery and her husband. On the other we have a course of action which could with certainty have been predicted to involve the widest broadcasting in public places of charges of physical fraud; with an attempt to make the fraud subconscious through an explanation of such extraordinary character as to defy belief by the average critic, leaving this critic the choice of rejecting the Harvard work in toto, or adjudging Margery a deliberate trickster. Unwillingness to call the

lady a fraud to her face and in private stands side by side with complete willingness to have such charges spread on public record. One can only inquire what degree of consistency in thought and action

is to be regarded as a prerequisite to psychic research.

This inquiry must be reiterated when we discover that detached spectators were invited to the seance, whose conduct in at least one instance constituted grounds for serious resentment by the Crandons and apology by the regular members of the investigating group. In the face of this fact, one wonders whether they had not lost sight of their original aim to conduct an investigation under rigorous scientific conditions, whether they had not suffered a relapse into psychic vaudeville.

"Rigorous scientific conditions" would imply, too, some relation between the individual abilities of the investigators and the individual tasks undertaken. One examines Hoagland's text in vain for evidence that such relationship was sought. Thus, he lists as present at one or more seances a Professor of Psychology, one from the Medical School, one from the Rockefeller Institute, a surgeon other than Dr. Crandon —and a world-famous astronomer. And when he comes to the point of questioning the physiological validity and the good faith of Margery's trance, whose opinion does he cite? The astronomer's, if you please, and his alone!! One must wonder, not alone whether all the responsibilities of the work were parcelled out in the same hit-or-miss fashion, but equally whether Hoagland's own appraisal of evidence is as uncritical in the general case as in this particular one.

One of the major features of the indictment hinges upon Code's ability as a contortionist and slight-of-hand artist, which is considerable. He is the member of the group upon whom falls the duty of verifying that Margery's phenomena can be done as the Committee claim they are done. His report is summarized in the statement that he can do all she can do, and certain things which she cannot do. The naive enthusiasm of these gentlemen runs away with them and blinds them to the fact that if this means anything, it means that Code's methods

differ from those at work in Margery's seances.

Moreover, I am prepared to dispute the statement that Code can reproduce Margery's phenomena under her conditions. He tried it for my benefit in a two-hour session. His reproduction of the restlessness and noises of Margery's trance was brilliant; and of course, if there is fraud, it is true that these features afford the principal "cover." His reproduction of a certain few of her phenomena left little or nothing to desire. But his attempts to reproduce certain other items were a gross failure, made the worse by his complete lack of appreciation that he had fallen short. And his pretense at duplication of Lime Street conditions of control was such as to arouse the criticism of the other, far less experienced spectator, in equal measure with

I publish in this connection, for the first time, a fact of great in-

terest. Code gave several exhibitions of his "Margery phenomena" to his colleagues. In their actual sittings, these gentlemen had used several electrical bell-boxes of their own construction, modifications in various ways of the original "Scientific American bell-box." For no reason which he has ever been able to state in respectable terms, Code, prior to using one of these in his exhibition sittings, incorporated in it a trick wiring which enabled him to ring the bell by touching externally two particular screws which, in appearance, were merely part of the structure of the box. This trick, which in the nature of things Margery could not have used, Code employed in "duplicating" her phenomena to his colleagues. Whether he told them the facts which I have just detailed I do not know; nor is it material. For since the bellboxes used at their sittings were their property, remaining in their hands all the time and subject to their examination and control at all times, it is not even pertinent to plead that Code played this trick as an illustration of the ease and the nature of electrical tricks with the bell-box. Moreover, the reason why the Scientific American bellbox was rejected and new models made, was that, in the former, certain portions of the electrical circuit were outside the box. This was regarded as objectionable on general theoretical grounds, and the models designed by the Harvard boys were in each case so got up that the entire electrical mechanism was locked up inside the respective boxes. Code's device for ringing the bell by trickery, in addition to its general inadmissibility, is open to the very specific complaint that it brings part of the electrical system outside the box again, and hereby violates the principles formulated with so much pains by Code and his colleagues. Is it quite impossible for these young men to be consistent?

Nor is this item of double bad faith the end of the tale. After Hypothesis H has been handed down, Dr. Crandon asked the Harvard group to donate to the Lime Street seance room any of their apparatus for which they had no further use. The tampered bell-box was one of the things thus turned over. Code had ample opportunity to eliminate the trick wires before delivery, but failed to do so. He states that he meant to tell the Crandons about them, in person, when he delivered the box, but that they were out; that he telephoned several times, each time failing to catch either of them. He attempts no explanation of his failure to write; he simply states that he let the matter drop. The upshot was that for some weeks there was innocently in use in the Margery seance room this bell-box with the trick circuit for fraudulent ringing of the bell! Fortunately, it was I who found it, rather than some one who would charge fraud against Margery without investigation of the facts. Under examination by me, Code voluntarily characterized his own course of action throughout this episode as idiotic. I am wholly ready to believe that it was only that, nothing worse. But one must wonder whether the same idiotic conduct marks his whole connection with the case; and in so wondering, one cannot be blind to the fact that almost all the critical observations leading up to the theory

of fraud and to Hypothesis H itself were made by him, and that these hypotheses themselves were framed by him. Just what are the standards of common sense and general intelligence demanded of one who

essays to expose a medium?

The arguments adduced in Hoagland's article are open to all sorts of comment and rebuttal; I mention but a very few of the more obvious considerations. Like so many observers, they content themselves with showing that certain of the phenomena might have been fraud; concluding then that all of them were fraud. Their answer here, of course, would be that Walter and Crandon prevented them from making the critical observations; to which I rejoin that they must then outwit Walter and Crandon, or keep quiet about their opinions. It is pertinent to ask whether Crandon's presence at Margery's right (where he sometimes sat during this series) made any difference in the phenomena or in the behavior of the luminous controls on the right foot; in the presence of the theory that he releases her hand, it should, since it would then be superfluous for the foot to come into play. This is a sample of the points of major importance which are left quite uncovered.

Margery, we are told, did the bulk of the phenomena, for seven sittings, with her right leg. A particular observer was detailed to keep her feet under visual control; for six sittings he reported nothing suspicious; in the seventh it is emphasized that suspicion was aroused quite accidentally, and apparently in the mind of some other sitter. This surely speaks volumes as to the thoroughness with which the work was done!

A choice morsel of evidence which Hoagland rolls over and over on his tongue arose when impressions in modelling clay were made from the "teleplastic terminals." Debris from the floor and from Margery's slipper was found in these, and they showed skin markings characteristic of the human foot. Hoagland considers and rejects the familiar plea that this ought to be the case with real teleplasm; many critics will be dissatisfied with his grounds for rejection, and with his excuse for not having compared the skin markings of the teleplasm with those of Margery. But let that pass.

The psychic herself, when these molds were taken, at the end of the seance made several clay imprints of her own heel, etc., for purposes of comparison. The proper marking of the two classes of prints, so that when compared at another time and place there might be every guarantee against confusion, is a major factor here. Scientific competence would surely recognize the need for showing in detail, in the record, that adequate measure had here been taken; and Hoagland's showing on behalf of his general precision of procedure is so weak as to impose an added burden. Yet the record gives no account of the handling of the clay balls carrying the impressions. This omission lends more weight to Dr. Crandon's ex parte allegations than these would have of themselves. What he charges is that, without any attempt at

labelling, all the clay balls, carrying both types of imprint, were dumped promiscuously into one basket and carried off. The failure to make the record show that they were identified or identifiable vitiates the whole test; and Hoagland is in error in citing it.

While I speak of adequacy of procedure, let us glance at another item. The possibility of foot fraud must have been in the minds of the investigators, for they provided foot control. This control consisted of luminous elastic tapes about the psychic's ankles. Do I put their stupidity too strongly when I say that it took six successful seances plus an accident to draw the attention of these young men to the fact that a luminous garter can be removed from a lady's bare ankle if it is not in some way attached to her skin? And then they presume to attack the extremely delicate and complex problems of psychic research!

I have referred to the fact that phenomena appear in the Harvard records which the hypothesis of fraud as laid down by these investigators does not cover. I confine myself to citation from the record of June 22nd, when I was present through the courtesy of Code and Hoagland.

During part of this seance there stood on the table a bowl of hot water carrying a surface layer of melted paraffin, placed there in the hope of getting paraffin hands a la Kluski. Nothing of the sort was obtained, but Walter did plash freely about in the bowl, and he did drabble his paraffin-coated terminal about on the table and on the astronomer's trousers, to such a degree that at the end of the seance it seemed that the latter must be ruined. If this were done by fraud, using the psychic's hand or foot, there must be a supply of cold water present; and there was none. If done by fraud using any object known to be present, paraffin must be found on this object at the end of the seance; and this did not occur. If done by fraud using any object clandestinely introduced, this must be made away with at the end.

This brings us to a new critical point, and brings once more into question the adequacy of the record. On this evening the psychic wore under her bathrobe a pair of Mrs. Hoagland's silk bloomers. We were given to understand that this constituted an effort to rule out the usual hypothesis of fraud through anatomical concealment; and that to this end, the garment, so sealed that the psychic could not get it off without leaving tell-tale marks, had been put on her by Mrs. Hoagland's trained nurse. Yet the record makes no reference to all this, and only by apparent accident, some twenty minutes after the start of the seance, does it carry any reference at all to the novel garment, in the words: "Walter comments on the fact that the medium is wearing bloomers at this seance." Apparently Walter is a better observer and recorder than his critics! And certainly there is no evidence that the smearing of the paraffin could have been done fraudulently.

Among other phenomena of this seance, fraudulent explanation of which would require discussion beyond what these young men have given it, were untying of the shoes of the sitters on Margery's either side; and the ringing of a bell-box on the table, followed "immediately" by a fumbling at the angle of her left-hand neighbor. Likewise, the entire good faith of Hoagland's discussion is impugned when we learn that, in the presence of a major hypothesis of anatomical concealment, he fails to mention other than in most casual way the measure of prevention taken, fails to identify the sitting at which it was used, fails to take it into account in framing his final conclusion, and fails to tell his reader that the phenomena which remained "unchanged" from the previous sitting in face of this control included ectoplasmic shapes on the table which could have been neither a human hand, a human foot, nor the corner of a bathrobe.

I have lost all count of the number of different artificial hands and arms of various sorts that Margery would need at her disposal to produce all the different varieties of ectoplasm chronicled. There is no fundamental impossibility here, of course! but this part of the theory does suffer from one such defect, aside from the fact that measures taken to rule it out are mentioned only accidentally in the record and only casually in Hoagland's brief. The hypothesis of anatomical concealment, taking it at its intrinsic value alone, is stretched far past the breaking point. Mr. Hoagland and his collaborators from the Department of English are under an obvious and severe misunderstanding as to the size, shape, and other dominant characteristics of the anatomical storehouse which it is customary to mention under the gentle euphemism "within the medium's body." Moreover, at the final sitting, where on the face of Hoagland's story this particular fraud becomes quite indispensable, the Crandons claim that her condition, with the resulting bandages, was such as to rule it out as impossible. The presence of the bandages is admitted by the Hoagland group; but the reality of the condition giving rise to them is attacked. The Crandons insist that the female physician who examined Margery before and after the seance has been influenced to modify, subsequently, her very forceful endorsement at the time of Margery's claim of ill health. It would seem that Hoagland might at least have recorded this disputed fact, as he has done in the other notable instance revolving about the circumstances that led to the use of a luminous control too loose for security. The dispute as to whether Code really had his private conference with Walter is, I believe, not knowingly suppressed by Hoagland; he probably wrote in ignorance of Margery's denial.

These young men were bitter against Houdini's ex post facto methods—his way of waiting till the seance was over, and the medium gone, and then saying that she cheated, that he was conscious of it at the time. They thoroughly understand the vicious character of this claim; yet at the most critical stage of their work, at the point where they must have a blank seance to support their claims and where they fail to get one, they fall back upon Houdini's exact procedure. I must tell them what I told Houdini and McDougall: they prove nothing that way save their own incompetence. If they can't or won't prevent

fraud, they must demonstrate it while it is happening. And in this demonstration, they must not rely upon the allegation of bad faith against one of their own number. Whom was Code double-crossing: Margery, or his own colleagues? Logically and in its evidential values, his story breaks down utterly at the point where he failed to take a colleague into his confidence prior to the seance; or better, to make a written record of his Walter conference which he could prove to have been prepared prior to the seance. To any rational person in Code's position, as he describes it, this ought to occur. To one who, like Code, has seen Houdini in a similar position and has condemned him without reserve for his conduct, it must have occurred.

Granting Code's story, his whole procedure was in still another sense quite inadmissible. On his theory, Walter is a hypnotic impersonation. On any theory at all, short of deliberate fraud, he comes only when the medium is in a condition analogous to hypnosis, and himself possesses many characteristics of a hypnotic personality. The fair-minded spiritualist, I think, will grant that even under his theory this is a fair description of the control's status in our physical and biological world. Well, then: what have we?

Code provokes the invasion of this hypnotically circumstanced personality, and in its presence he talks not fraud in general—which would be bad enough. No: he pictures to it the specific fraud which is to be engineered at a specific time and place. Is it not then inevitable that this fraud will occur? Is it not clear that, in plain words, Code has hypnotized Margery, or Walter, or both, into commission of fraud; and has then held this fraud against the mediumship as a whole? The one thing that could make the situation more outrageous than it would otherwise be is not even lacking. Of all the theories open as to the actual nature of the Walter personality, Code and his colleagues select the one which absolutely clinches this argument, absolutely bars any defense, absolutely confesses that if Code suggests deception to Walter, Walter must deceive! And then Code takes up, in the seance-room, the one post from which he can control this hypnotic situation, from which he can stand over Walter and insure that he shall deceive!

Professor Edwin G. Boring, one of the Harvard group, having attended one sitting, has qualified, according to Atlantic Monthly standards, to write on the mediumship, and does so. In one place he says: "Mr. Code arranged a seance in which he was to produce all the Margery phenomena by trickery. I was present and held the important position of controlling his left hand. I wanted the control to be as rigid as possible in order that the demonstration should be convincing, but, I also wanted Code to succeed. . . Once, in red light, he

attempted too much and I saw how the trick was done. I should then have reported fraud into the dictaphone, according to the general understanding, but it never occurred to me to do so. It was only after I had gone home and thought it over that I realized that the desire to have Code succeed had won over the desire to control him rigidly."

## The Voice Machine \*

Experiments Proving the Independence of the Control's (Walter's) Voice

By Mark Wyman Richardson, A.B., M.D. (Harvard)

The Margery mediumship dates from May, 1923. During the intervening two and a half years, a considerable number of entities purporting to be persons previously existent in this world, have manifested their presence through a great variety of phenomena, mainly physical in character. Among these phenomena nothing has been more striking than the development of means for the communication of ideas.

As commonly happens, the first apparatus used by the "controls" was the table, by means of codified tilts or raps. Then, after a few weeks, the medium being entranced, the controls communicated by using her voice. As early as July, 1923, however, still another method appeared in the shape of a faint, seemingly independent whispered voice. This voice has increased steadily in strength up to the present time, and now, at its best, can be heard easily by the entire circle of sitters. When, as frequently occurs, the control uses a megaphone, the whisper can be heard throughout a large room. Although other controls have at times communicated in this whispered voice, the attempts have, in the main, been weak and not satisfactory. "Walter" Stinson, the medium's brother, and the main control, has been the one to develop to a maximum this method of communication, and several hundred sitters can now testify to extraordinary evenings of wit and wisdom spent with Walter at Lime Street.

Naturally, the appearance of this voice raised immediately the question as to its origin. Was it really independent of the medium? Did Walter use the medium's vocal organs? Or did the medium herself or some other person do the whispering? This was a difficult question to answer, for the voice occurred almost never except in total darkness—rarely and faintly in red light.

In an effort to solve this problem, a number of experiments have been made, but for one reason or another these experiments have been inconclusive. For instance, the so-called water test has been used twelve times with a great variety of sitters and has always proved

<sup>\*</sup> Journal A. S. P. R., Vol. XIX, December, 1925, p. 673.

successful, in that Walter continued to speak and whistle even though the mouths of all persons in the room were filled with water. A typical test of this type occurred on November 3, 1923, with the following circle: Dr. Crandon, Professor William McDougall, Mr. Helson and Dr. Roback, of the Harvard Psychological Department, and Margery. Preliminary experiments with the test showed that none of the sitters could utter more than a gurgling sound with water in the mouth.

A second type of test required that every mouth should be controlled by the superimposed hand of a next-door neighbor. A typical instance of this test occurred on June 17, 1924. The circle consisted of Dr. Richardson, Mr. Adler, Captain Cross, Mrs. Richardson, Dr. Crandon and Margery. Professor Comstock stood outside the circle, but within the cabinet, between Margery and Dr. Crandon. There was red light in the hall next to the seance room, which was, therefore, partially illuminated. Dr. Comstock gives this description of this test in the Boston Herald of December 19, 1924. "I know this: that at one time I placed one hand over Margery's mouth and nose, and the other over Dr. Crandon's mouth and nose, and pressed them hard, so hard that I must have hurt them. Walter's voice—a hoarse whisper—came as clearly as it did before. How or from where I don't know. But it came."

Another experience bearing on the independent voice occurred January 17, 1925. Notes of this sitting, signed by Dr. Elwood Worcester, Professor William McDougall and Mr. Eric Dingwall read as follows: 'Twice when Margery's mouth was held by Dingwall's hand, and (in trance) she was quietly and normally breathing through her nose, and Dr. Crandon's face was on Dr. McDougall's left shoulder, five to eight sounds were heard like nasal breathing and loud and not near Margery's head—one and three quarters to two and one half feet away." In other words, respiratory sounds apparently independent of the medium were present.

In addition to the above mentioned observations, it is important to note that the whispered voice is apparently independent of any individual sitter. The circle has varied constantly in membership, Dr. Crandon, the medium's husband, being the only sitter practically always present. Dr. Crandon, however, is frequently called to the telephone during a sitting, but the voice persists in his absence. Furthermore, the voice is independent of place, for it has been clearly in evidence whether the sitting has been held in my own house, Dr. Comstock's apartment in Boston, the Harvard Psychological Laboratory, the Laboratory of Dr. Geley in the Institut Metapsychique in Paris, the British College for Psychic Science, the British Society for Psychical Research, and in several other places in Boston, Cambridge, New York, Niagara Falls or Buffalo. Moreover there have been a few but undoubted instances of so-called "overlaps," that is to say, instances in which Walter and Margery have spoken at the same time. It seems, therefore, almost certain from the evidence at hand that Walter's voice is independent of place and, furthermore, of all normal vocal organs not excepting those of the medium herself. It was to settle finally this all-important question that I planned the apparatus about to be described.

The problem to be solved was as follows: so to control the mouths of all persons present in the seance room that the occurrence of any voice must be ascribed to supernormal vocal organs: that any attempt to open a mouth, or to use the lips, must be indicated immediately upon an easily-observed registering mechanism. Furthermore, inasmuch as the experiment had to be carried out in absolute darkness, the apparatus must in some manner show any lack of control through luminous indicators.

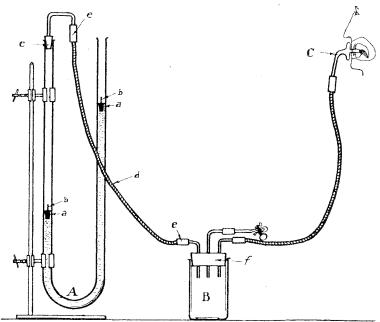


FIGURE 1. — DR. RICHARDSON'S VOICE-CONTROL APPARATUS.

(A), the U-tube; (B), the reservoir bottle; (C), one of the mouthpieces; (a, a), cork floats; (b, b), luminous markers; (c), rubber cork; (d), flexible tube, armored with metal; (e), rubber gas-pipe tip; (f), rubber cork.

My preliminary thought was to use the childish plaything known as a "squawker." As is well known this toy consists of a rubber balloon tied to a cylindrical wooden mouthpiece. Over the inner end of the tube is stretched a thin piece of rubber. The balloon is then blown up and kept inflated by pressing the end of the tongue or finger against the outer opening of the wooden tube. The release of the air pressure is indicated by a loud "squawk." I expected that such an instrument held by the lips, teeth and tongue would so control these structures that any attempt to whisper or whistle would be futile. I found, however, that if the air was released slowly no "squawk" was made, and,

furthermore, that with open lips quite adequate whispering was possible although whistling was out of the question.

There next followed considerable experimentation with glass mouthpieces for use with the U-tube apparatus about to be described, and several such mouthpieces had to be discarded for various reasons. Finally what seems to be an adequate mouthpiece was devised in consultation with Mr. F. S. Macalaster of the Macalaster-Bicknell Company, makers of laboratory apparatus in Cambridge.

The complete apparatus, as finally constructed, consists essentially of three parts, the basic, physical principle being air pressure originating commonly in the mouths of all persons present, and applied to columns of water in a U-tube of glass.

(1) *U-tube*. (A, Fig. 1.) Each arm of this tube is 36 inches long; the diameter  $\frac{3}{4}$  inch; the space between the arms three inches. This tube, supported on an iron stand by two clamps, is filled about half full with water. Naturally, at rest the height of water in each arm is the same. Upon each water surface is floated a cork of proper size (a) into the upper surface of which is driven perpendicularly a wooden match (b) approximately  $2\frac{1}{2}$  inches long and painted with luminous paint. These luminous matches serve to indicate, in the darkness of the seance-room, the relative water levels in each branch of the U-tube.

In the opening of the one arm of the U-tube is inserted a rubber cork (c) through which passes a glass tube \(^{1}\!\!/\_{4}\) inch in diameter and curved outward and downward at the top. To this tube is attached another about three feet long (d), such as is used commonly for connections with gas stoves. Each end has a firm (practically solid) rubber terminal (e), with a concavity at the end to facilitate, in its ordinary use, insertion upon the nipple of a gas pipe. The tube is armored with metal, is incompressible, and, therefore, peculiarly fitted for its present use in that it can not be squeezed by any uncontrolled hands or mouths. This descending tube is connected with a large flat, wide mouthed "reservoir" bottle, now about to be described (B).

- (2) Reservoir bottle. (B, Fig. 1.) This is large and flat, and has a large mouth filled with a rubber cork (f). This cork is perforated with seven ¼-inch glass tubes. One connects with the descending tube (from the U-tube) already described, and six others are distributed around the periphery of the cork. In a full circle of six, each tube is connected with a corresponding mouth by an armored gas-tube similar to that already described. Into the free end of each tube is inserted a special mouthpiece (C).
- (3) Mouth piece. (Figure 2.) This, manufactured by an expert glass-blower, consists of a glass tube (a) which fits snugly the rubber tip of the armored tube (b). Four inches from the distal end of this glass tip the tube is expanded into a hollow disk (c) about two inches in diameter. The proximal or mouth surface of this disk then becomes

again contracted into a sort of glass nipple (d). Close to the disk this nipple is perforated on its upper and lower surface by single small apertures (e), 2 mm. by measurement. These are for the control of the lips. The free end of this nipple is open and this opening is controlled by the tip of the tongue (f). The above-mentioned disk prevents the withdrawal of the nipple into the deeper recesses of the mouth or cheeks.

More recently to meet a suggested criticism, small (4 mm.) prongs (g) have been added to the nipple just back of the lip openings. These glass prongs are to prevent a rubber sheath of any type from reaching the lip holes. Needless to say, this improved mouthpiece has not in any way impaired the success of the apparatus.

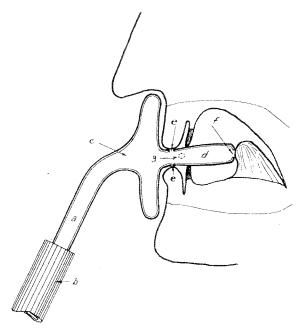


FIGURE 2. — DETAILED VIEW OF THE GLASS MOUTH-PIECE.

(a), tube connection; (b), rubber gas-pipe tip; (c), hollow disk or collar preventing entire unit from entering mouth; (d), nipple end; (e, e), holes controlling lips; (f), hole controlling tongue; (g), projection on side of shank, preventing a rubber sheath of any sort from scaling the lip-holes. The entire unit, from the tube connection (a) up, is blown in a single piece. It is entirely hollow, as the double-lined outer walls in the sketch indicate.

Modus operandi. A nipple is placed in the mouth of each sitter. He is then told to press his lips firmly upon the two openings (e) before described; then to blow through the open end of the nipple. As a result of the increased air pressure in the closed arm of the U-tube, the column of the water in that tube descends while the column in the other tube ascends in corresponding fashion. When the luminous indicators in the tubes show a definite inequality in the water levels, all

sitters are told to hold this position by closing the end of the nipple with the tongue. Under these conditions any appreciable movement of the lips or tongue-tip of any sitter will release the air pressure and the column of water in the free arm of the U-tube will fall, carrying with it the luminously marked float.

In over thirty tests with this apparatus there have been no failures. Any attempt by a sitter to whisper or whistle has been detected immediately by a fall in the water level, due to the release of air pressure. Nevertheless, although all mouths have been sealed, Walter has been able to whisper freely, to enunciate sentences containing a large number of dental sounds (such as "David dug a deep and dirty ditch" or "George is an extraordinary jazzy jay-bird, by jingo") and to whistle in a most complicated manner.

Thus the proof has been forthcoming that Walter's voice is independent of any vocal organ normally present in the seance room.

In connection with these tests the following points are of interest. In the first place, the apparatus has never worked better than on its first trial. It was then absolutely new to everyone and there had been no opportunity through acquired skill to defeat the mechanics of the apparatus. Indeed, every new sitter is now urged to try his luck in invalidating the test but thus far without success. Gum, rubber sheaths, rubber nursing nipples or other substances in the mouth cannot be so manipulated by the tongue or lips as to close the air holes. Indeed, with the hands free, the fingers cannot be substituted for the lips without betraying the fact.

Until recently the tests have been always with a full circle of five or six sitters, for Walter, the control, seemed to need for his work the force supplied by such a large circle. Lately, however, Walter has acceded to my suggestion that he produce the independent whisper in the presence of the medium and one other person only (see Fig. 3). To do this, all openings except two in the reservoir bottle are closed with clamped rubber tubes. The mouth and nose of the medium are examined for foreign bodies. The full circle then sits till Walter has made his arrangements, whatever they may be. When he is ready, the chosen observer places two nipples in two tubes and puts one in his mouth and the other in that of the medium. In turn, medium and observer blow through tubes to prove absence of obstruction. The observer then takes the medium's hands and blows up the apparatus in the dark. Red light is then turned on for an instant to show both mouth pieces in position and adequate hand control. The rest of the circle then leave the room, turning out the red light as they go. Immediately, though the mouths of the medium and observer are sealed, Walter whispers loudly (e. g. "George was an extraordinary jazzy jaybird, by jingo.") and whistles merrily. On signal the other sitters return; observe in the darkness that the machine is still in action; turn on the red light and make sure that the mouthpieces are still in position. Medium and observer then, in succession, blow

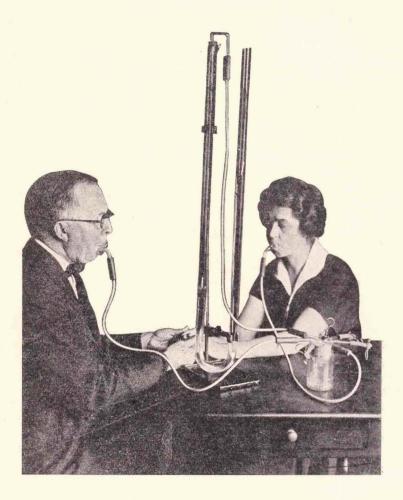


FIGURE 3. — THE APPARATUS IN USE.
Dr. Richardson at the left, Margery at the right.

through the tubes to show that no obstruction exists. The observer immediately takes the mouthpieces and examines them for any occluding substances. The mouth and nose of the medium are again examined for foreign susbtances.

Please note that throughout the above procedure the hands of the medium are held. This fact disposes of a pertinent critcism that a free hand placed tightly over the open end of the U-tube would hold the water columns in place even though release of air pressure had occurred.

Four of these "tete a tete sittings" have taken place: one for myself at the house of Mr. Carl Litzelmann in Cambridge and three at Lime Street for Mr. Charles S. Hill of Boston, Dr. T. Glen-Hamilton of Winnipeg (both members of the A. S. P. R.) and Mr. J. Malcolm Bird of New York, the Society's Research officer. As the result of our experiences we can testify without hesitation to the independence of Walter's voice, under the conditions named.

A distinguished foreign psychic investigator once said:—"If you will prove to me the independence of Walter's voice, I shall be compelled to consider seriously the spiritistic hypothesis." I agree complete with this sentiment. Here is certainly a problem touching human life in its most fundamental aspects, and worthy of the closest attention of anatomist, physiologist, psychologist and—theologian.\*

## Dr. Richardson's Voice Control Machine\*\*

BY J. MALCOLM BIRD

Research Officer, American Society for Psychical Research.

Dr. Richardson holds himself ruthlessly, in the preceding narrative, to what he visualizes as the essential bare bones of his story. This he does intentionally, so that the reader may be diverted to a minimum degree from the main course of his argument. But in so concentrating on the main line, he necessarily leaves untrodden certain by-paths into which some of his readers will wish to explore. In order that they may do this, while Dr. Richardson's desire is conserved to have the bold outlines of his work undimmed by digressions of any sort, I do the digressing myself, herein and separately from his text.

Dr. Richardson's painstaking work with the voice-control machine

<sup>\*</sup> Professor Edwin G. Boring, in a recent article (Atlantic Monthly, January, 1928) says "On the other hand if the committee had actually discovered some normal explanation of the originally strange events,—that Margery rang the bell-box with her foot, or that Walter's voice was Margery's whisper in a trance,—then they might have given a negative report. Still they would not have been sure of their generalization. Perhaps Margery made the particular whisper that they observed, but perhaps Walter also whispers at other times. Their whole finding would be upset if it could later be shown that any whispering at all occurred without Margery's participation."

<sup>\*\*</sup> Journal A. S. P. R., Vol. XIX, December, 1925, p. 680.

were pointless if it did not lead to new conclusions or to new security in old ones. If it is to do either of these things, we must ask what has been lacking in previous attempts to prove the independence of the Walter voice. To these he refers briefly; a more detailed source, up to a certain date, will be found in Chapters XI and XXXVII of my Margery book.

The first attack upon the problem was with the water test. This has been made on many occasions-Dr. Richardson counts them as twelve. Numerous persons have been convinced by these experiences. The objections advanced against them by those who do not find them final are based upon two counts. Often it has been proved beyond rational doubt that Margery took into her mouth a given bulk of water; and that after the Walter voice had been heard she discharged the same bulk of the fluid. But there has never been continuous light throughout one of these tests; and this makes it doubtful if rigorous proof has ever been afforded that the water discharged was the same water as that taken in, and that it had remained continuously in her mouth throughout the interval. Repugnant as may be the idea that it did not-disguising, even, if you will-it is not to be disposed of by mere application of these epithets. It is even more doubtful whether there has even been real proof that no sitter took it upon himself to speak for Walter in the emergency of the water test.

The procedure of controlling the various mouths in the circle by hand has also had a trial; but it can be condemned offhand as defective in principle. Confederacy is among the things we must exclude; this is why we control all mouths in the room, rather than merely Margery's, or merely hers and her husband's. But in control of the mouths by hand, each supposititious confederate participates in the control of his neighbor! We must never forget that nobody to whom the confederacy hypothesis may be applied can be given any task of control; for if he cannot be trusted not to cheat, he certainly cannot be trusted to report his control truthfully.

There is a fundamental distinction at this juncture between tele-kinesis and acoustic effects. There can be no argument as to the point in the room at which a telekinetic incident occurs. It is often feasible to have all possibility of fraud in that region under the control of one or two sitters, to whom the confederacy hypothesis does not apply. Dr. Thirring's account of his sittings with Willy, in this issue, is a case in point; the presence in the room of persons whom he can fairly suspect of confederacy does not matter. But with auditory effects the situation is radically different. Only rarely, as in the Margery seance of May 19th, 1924, is agreement among the sitters sufficient, with general conditions of determination at the same time sufficiently good, to lead those present into any confident and unanimous statement of the locus of such phenomena. Even when this is the case, those present and so reporting expect to find their statements taken with large doses of salt by those absent. And if the sitters cannot agree where the voice

came from, or if the detached critic cannot grant that they have this knowledge, the problem of control becomes at once generalized to cover all sitters present; whereupon the difficulties of the preceding para-

graph at once govern.

Collateral observations of one sort or another are of contributory value but can never be conclusive. Occurrence of the Walter voice in Dr. Crandon's absence and in that of every other individual sitter makes it necessary only to grant that there is no single, unique confederate. Variation of the seance quarters leads no further. Overlap between Margery's and Walter's voices is something of which I have not been fortunate enough to hear a clean-cut instance. I have heard overlaps between their respective laughs, and between his voice and her yawn, laugh, cough, etc.; so I am quite prepared to grant that the more critical overlap between their actual speaking voices has occurred. But this loses its force if we couple the confederacy hypothesis with denial of the certainty of sound location in the dark; and, whether I agree with them or not, people make this denial. And so it goes. One must realize with Dr. Richardson, that a mechanical mouth-control of some sort, applied to all mouths in the room, is the only hopeful means of attempting finality on this delicate question.

That the problem of design here is not a simple one is indicated by the multiple failure of the rubber-balloon control. It will be seen how Dr. Richardson has applied the lessons learned from this failure. Whether the release of an air-column will make a noise obviously depends upon the speed of release; whether the release will affect the pressure exerted by the column is clearly dependent upon the mere fact of release, and in no way upon velocities. Whether the shape of a luminously-marked object has altered might well be a matter of opinion, especially if it collapses along one's line of vision; but if we restrict it to a vertical path and ask whether it has moved in toto, we deal with a clear question of fact. It is perhaps not entirely superfluous to point out that the introduction of the air-pressure above the water prevents any loss of status, during the period of a given test, by seepage of air through the water column; where, if the attempt were made to support a column of water by air introduced from below, bubbling would occur and the water would replace the air in short order.

I must emphasize that in the apparatus as finally adopted, the slightest release of air, the slightest failure to maintain a tight seal over all three openings, results in the instant and precipitate collapse of the upper float. Nobody has even succeeded in substituting a finger, inserted in the mouth, for the lip or tongue; the attempt always leads to a fleeting but fatal loss of air-tightness at the critical moment of the transfer. This remark of course is made for its bearing upon the sensitiveness of the apparatus, and is quite aside from any question of hand control during a crucial test.

As for the use of a sheath of any sort, it will be understood that, blown by hand, the glass nipples are far from exactly circular in

section and far from identically all of the same shape. The remote possibility that in spite of these irregularities a sheath could be obtained that would tightly seal any particular mouthpiece that a given sitter happened o be using at the moment, has been met by the addition of the two litle knobs q.

The suggestion for fraud which Dr. Richardson's text leaves most nearly open would seem to be the use of some regurgitated material to cork the three little holes. But it will be recalled that the medium's hands are controlled throughout a test. With her tongue immobilized it is pretty clear that she could not place such corks; with her hands immobilized, she could certainly not remove them again; and if one indulge in wild flights of vague fancy to picture their insertion and removal, one would perhaps stumble over the necessity of substituting them for tongue and lips without any instantaneous loss of air-tightness, and of reversing the substitution under the same necessity. Finally, anything sufficiently plastic and adhesive to seal the holes must, sometimes, work through them and leave remnants of its substance inside the hollow mouthpiece—something of which careful examination after use denies the occurrence.

The idea must not be got that the presence of this apparatus in one's mouth absolutely inhibits all vocal sounds. Anybody, without previous practice, can hum the consonant m, down his throat, without loss of air-pressure; indeed, when using the machine, I have employed this sound as a means of signalling to and from Margery. After a good deal of careful experiment, I have found myself quite unable to give what would be recognized as any other civilized consonant or vowel sound; although crude approximation can be given to several, notably a guttural k and a heavily breathed t. One can also, with extreme difficulty, manage a muffled, vowel-like noise of indeterminate character. But for each of these, the free parts of the mouth have to be so carefully "set" that it is out of the question to adjoin two different sounds, as in normal speech; and indeed, aside from the m hum, real speech sounds are utterly and absurdly impossible. This is particularly significant in view of the fact, recorded by Dr. Richardson, that the apparatus was used with conspicuous success on its first introduction into the seance room.

Indeed, it is hard enough, in all conscience, to hold the mouthpiece idle in one's mouth for any period, without accidental collapse of the air pressure. The longer one clings to it, the wetter and slipperier the glass shank gets between one's lips and teeth. The fact that it is not uniformly cylindrical greatly increases the difficulty of gripping it so that it will not slip. One must bite down on the glass, almost painfully; and then clamp the lips down over the holes with equal emphasis. The holes of course are not at exactly the same position in all the mouthpieces, and I find that some of them are less adapted to the particular size and shape of my lips than others; yet in use, after being sterilized, they are dealt out promiscuously.

At first it was assumed that the voice-control machine would be used in regular sittings, and that every person in the circle would take a mouthpiece. This has been done often enough, and still is done when occasion calls for that sort of a demonstration; but there are two reasons why it is not the best practice. One is the general objection, following from what we have said some distance above, to having any superfluous sitters in the room during the production of alleged supernormal sounds. The other arises out of the difficulty of using the mouthpiece without accident.

During the afternoon of the day before my "tete-a-tete sitting," referred to in Dr. Richardson's text, Margery and I invaded the seance room and tried out the apparatus. We felt this to be desirable, since she had not used it for some weeks and was a bit rusty in its handling; while I had never used it at all. We practiced with the mouthpieces, individually and together, for something like a half-hour. At first I found it quite out of question to maintain a seal on mine for more than a few seconds at a time. After I had mastered the fundamentals of the technique, we found that repeatedly, using the apparatus together as we should have to do that evening, one or the other of us would cave in and lose the air after thirty seconds to a minute of airtightness. When, during my one-man sitting, we succeeded in holding the pressure without disaster for nearly five minutes, the feat was hailed by all present as a very extraordinary one.

It is then plain that when five or six persons are hitched up to the voice-control machine, the completion of a brief test without accidental collapse of the air-pressure is the exception rather than the rule. The tendency of some sitters to snicker at the spectacle presented by a roomful of people all struggling desperately to maintain their air-tight grips of this very extraordinary apparatus does not help. Neither does the fact that one must exhale as well as inhale wholly through the nose in order to maintain one's air-pressure. The one-man sittings were apparently adopted, initially, as much in the effort to escape from the continual invalidation of episode after episode through accident occurring in the mouth of some individual sitter, as through any other motive. Even with a single sitter plus Margery, failures of this sort occur. I urge most strongly the additional brilliance which these circumstances bestow upon tests with this machine which do succeed.

I might remark parenthetically that the hardest feature of the device to master comes right at the beginning. One must blow, to raise the float, leaving the tongue-hole open for the purpose while tightly gripping the lip-holes; so that the air will not issue from them instead of going down through the tube. This is simple enough; but usually it is only after repeated ludicrous failure that one finds a way to clamp the tongue over its hole with sufficient promptness, after one ceases blowing, to prevent the escape of most of the air that one has just put in.

Criticism of the apparatus within my hearing has centered about the notion that it is a complicated and uncertain means of achieving a simple end. Now control of all mouths present, as I have pointed out, is anything but a simple function. It seems to me that the apparatus is as simple as one can expect, in view of what it is designed to do. Objection to it probably arises out of a fundamental misunderstanding of the reasons for its use. It must be appreciated that many of the friendly sittings held in Lime Street are little more than psychic vaudeville shows, given in the absence of any serious investigators, for the spiritual and emotional edification of a group consisting partly of sincere old friends and partly of strangers, who come bringing more or less justifiable introductions, and who sit out of one species or another of curiosity. The operation of any machine, when attempted by persons having no practice with its peculiarities and no technical knowledge of its workings, is apt to be a pretty sad affair; and this machine is no exception. It is a mistake to place it in action in the presence of such a group as I have described. But put it in action with a single serious sitter who is moderately practiced in its manipulation and who understands what it is all about; bring to such a sitting a procedure of adequate recording; and one has a brilliant demonstration of the independence of the Walter voice. Its tendency to fail in use through failure of a sitter to hold it properly is partly overcome by restricting as closely as possible the number of sitters who take a mouthpiece; and for the other part, this tendency is a function of the improper use of the machine, in conditions where it should not be used. Such failure, I must specify with all emphasis, is not a matter of suspicion. For when one loses one's grip on the mouthpiece, one is invariably aware of being the cause for the float's collapse; and it is a fact that the collapse of the float in the course of a test is invariably followed by announcement of responsibility for the accident, from the sitter with whom responsibility lies.

Dr. Richardson has mode clear the typical course of events for the one-man sittings, the routine under which these are held. It will be of value to supplement his account by my own description of my own experience in this direction. It will be understood that the procedure of holding the mouthpiece in one's mouth and taking Margery's hands in one's hand quite prevents one from using the dictaphone. Hence, I have no running minutes of this sitting, dictated as the events of the seance unfolded, such as it is my habit to bring away from my sojourns in Lime Street. I therefore give, without any attempt at the use of quotation marks, such parts of my subsequently-drawn-up account of my Lime Street seances of October 19th and 20th, 1925, as are pertinent here.

Sitting on October 19th, the circle, clockwise, ran Margery; Dr. Richardson; Dr. T. G. Hamilton of Winnipeg, A. S. P. R. member; Mr. C. S. Hill of Boston, A. S. P. R. member; myself; Mrs. Richardson; Dr. Crandon. There was some thought of getting ectoplasmic

photographs in sequence to results obtained on my last previous visit, and ultimately to be published in the Journal or Proceedings of this Society. Hence Messrs. Conant and Gerke, who at this period are doing all the photographic work that is being done in Lime Street, were free in the room with their apparatus. The sitting, so far as physical action was concerned, was devoted wholly to voice-control work. No attempt was made to have a one-man episode, Walter stating that he required considerable time for preparation, and (as was quite true) that Margery and I lacked practice in the physical operation of the machine. Only two of the mouthpieces were in use, the other connections at the top of the reservoir bottle being closed with the customary clamps.\* Of these two, one was with Margery and one with me. Sometimes with and sometimes without hand-control of Margery by me, "Walter" gave in all perhaps a dozen separate episodes with the machine, speaking freely and whistling brilliantly, while the float remained absolutely steady. One might be particularly vigorous about the impossibility of pursing the lips for whistling while holding the lip holes sealed, were it not for the known possibility of whistling through the nose. Dr. Richardson examined Margery's mouth before the first of these episodes and after the last, rendering a negative report each time.

The second seance of October 20th, was a repetition of the first, except that the one-man experiment was made by me. This was conducted, in detail, as follows:

There had been talking under control of the machine, in the presence of the entire circle (arranged as the night before), so that when the decks were cleared for the one-man episode, Margery and I each had a mouthpiece, which we had respectively been using. Margery laid hers down while Dr. Richardson examined her mouth, making a negative report. Before or during this examination I took her hands, in red light on the table, and held them continuously thereafter until after the test had been completed by the second oral examination. Mouth examination was conducted by white pocket flash, with the regular red light for general illumination. Having completed his examination, Dr. Richardson put the mouthpiece back in Margery's mouth.

In darkness, I now blow into my mouthpiece while Margery held hers sealed; the float rose properly, showing that my tube was not clogged. I then held while Margery blew, similarly proving that her side of the apparatus was operative. She then held while I blew the float up close to the top of the tube, after which we applied to our two ends of the apparatus the closure which was to be maintained throughout the balance of the test. Red light was given, in which the other sitters verified my control of Margery's hand (separately, one of hers

<sup>\*</sup> It will be noted that if these clamps are not tight, the pressure will not be maintained; and there will then result a failure of the test, rather than an invalidation of an apparently successful test. The same remark applies to any other accident which could happen to the apparatus, other than clogging of one of the tubes.

by each of mine), the proper positions of the two mouthpieces in our two mouths, and the position of the float near the top of the tube. The red light was then extinguished, and all persons other than Margery and myself filed as rapidly as possible into the hall. Dr. Richardson checked up on the completeness of this exodus. The closing of the door was my signal that they were all gone. It was hardly closed when Walter began talking; and he continued with minor intervals of silence throughout this stage of the test.

I do not recall all that he said. He did articulate the test sentence: "George is an extraordinarily jazzy jay-bird, I'll be jiggered;" also the expression "phenomenish phenomena" which somebody had coined during the general part of this sitting. He whistled brilliantly, laughed, and chatted a bit at me, without hesitation and without any restriction of vocabulary. He had of course to conduct a monolog, since I could not answer with the machine in operation. I permitted this to go on until I felt that my air-tight grip on the mouthpiece was beginning to be menaced by jaw weariness; I then signalled by stamping on the floor for the return of the others. Dr. Richardson himroom, and in the darkness had verified the undisturbed position of the luminous float, when my grip broke down and the float fell. While my self and some of the others, though not all, had actually got into the control of Margery's hands continued Dr. Richardson removed Margery's mouthpiece, examining this and her mouth with negative results.

The two mouthpieces here used had been selected by me, before the sitting, at random from the general supply; and when the time came, they were apportioned by me at random between Margery and myself. I might say, merely as an item of collateral interest, that on both these evenings, there were brilliant demonstrations of the voice machine, operated by Margery and me in the presence of the others. Likwise at one stage Walter signalled for a flashlight photograph to be taken. He made the point that this would show the float in its high position, with the open top of the tube untampered with. The idea, of course, is that if this open top were sealed in any way, after the float had been blown up into its unbalanced position, the vacuum here would hold against the tendency of air to flow out through the mouthpieces, and even if the latter were left open the float would stay up. In this connection, the importance of hand control and of the absence of detached sitters is obvious.

My present position with regard to this apparatus and what it proves is a little different from that of certain other observers who have been convinced by Dr. Richardson's machine that the Walter voice is independent. Something like a year ago, I expressed my thorough conviction that at least at times this was the case. The only question which this machine can therefore introduce, so far as I am concerned, is whether we now have a more categorical proof than we have yet had, of something which I have long regarded as fact. That the machine

furnishes this must be obvious. Had my own previous certainty been in any sense a weak-kneed one, it would surely have been strengthened by these tests.

Professor H. A. Overstreet, (Prog. Education: April, 1925) in a recent able article, says, "There is a certain habit of mind which is allowed to persist and rather exultantly trained . . . . . exemplified and glorified in "debate" . . . . It is quite obvious that the debate has in it precisely that evil quality of which we have happily rid ourselves in the field of science. . . . . It is the We Win—You Lose attitude. It is We Have the Truth—You Are All Wrong attitude. It is the attitude of To Us Be the Glory—to You the Humiliation. The debater starts with his mind made up, his conclusions settled. That, of course, is the primary sin against the spirit of science.

"What the student means to do, at all costs, is to win. And, as we sadly know, he does it sometimes by garbling facts or omitting them; by evading issues; by misquoting; in short, by employing all the cunning techniques of the astute military tactician . . . . . Debate is mentally demoralizing. It may, indeed, induce research and develop cleverness. It gains there, however, at a profound spiritual cost. . . . For the mind is fundamentally an instrument of exploration and adjustment. In the long evolution of man, it has been his most precious means of finding out the truth about his world. When it becomes employed to the end of mere victory over an opponent, it becomes an instrument perverted. . . . . . . . Biologists do not debate, nor chemists, nor physicists. They explore, experiment, discuss."