

RESEARCHES
INTO THE PHENOMENA OF
—MODERN—
SPIRITUALISM



BY

SIR WM. CROOKES, F. R. S.

ILLUSTRATED

THE AUSTIN PUBLISHING CO.,
ROCHESTER, N. Y.



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*Reprinted from "The Quarterly Journal of
Science" and other publications*

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PREFACE.

Of all the eminent Scientists who have painstakingly investigated the mysterious phenomena of Modern Spiritualism—and there are many—Sir William Crookes must be easily recognized as leader.

His eminence as a discoverer and an inventor and his vast services to the world as a chemist have given to his "Researches into the Phenomena of Modern Spiritualism" a value and potency that could not attach to labours of men equally honest and painstaking, but devoid of his scientific attainments and great reputation.

Beginning his investigations of Spiritual Phenomena over a third of a century ago, when the prejudice against Psychic Phenomena was much stronger than today, and pursuing his researches with all the care, caution and accuracy that marked his other scientific work, he rendered his studies in this new field doubly valuable to the world by his conscientious record of all the details and conditions and his noble boldness in publishing the same to the world.

The record of his experiments with Daniel Douglas Home and Miss Florence Cook as psychics, all conducted under test conditions, must ever stand among the most marvelous of human experiences and an impregnable defence of the spirituality of man's nature and of his ability to survive the shock of death.

The articles, here quoted, first appeared in the *Quarterly Journal of Science*, of which Sir William was the able editor; and they have been supplemented by ex-

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tracts from the speech of the eminent scientist delivered from the chair of the British Association, at its Bristol meeting in 1898, in which speech he declared over again his convictions concerning the value of the results of scientific investigation into what has been known as the realm of the occult.

Some correspondence appearing in the earlier reproductions of the *Quarterly* articles is withheld from this issue in order that the limit set by the price of the work may not be exceeded. Such deletion is, however, no material loss to the student, as it is, in the main, a repetition of the matter contained in the following pages. The first statements of the scientist were so full, so complete, that, with the diagrams given, they form the clearest and most conclusive answer to any criticism.

For a long time students of psychic research in America have found it difficult, and in some cases impossible, to procure copies of this celebrated work. We hope in bringing out this edition in popular form, at one-third of the price charged for the English edition, we shall render a service to the cause of Truth by bringing this invaluable work into the hands of tens of thousands who would otherwise miss its interesting and transcendently important facts.

B. F. AUSTIN.

June, 1904.

Experimental Investigation of a New Force.

Twelve months ago in this journal I wrote an article, in which, after expressing in the most emphatic manner my belief in the occurrence, under certain circumstances, of phenomena inexplicable by any known natural laws, I indicated several tests which men of science had a right to demand before giving credence to the genuineness of these phenomena. Among the tests pointed out were, that a "delicately poised balance should be moved under test conditions;" and that some exhibition of power equivalent to so many "foot-pounds" should be "manifested in his laboratory, where the experimentalists could weigh, measure, and submit it to proper tests." I said, too, that I could not promise to enter fully into this subject, owing to the difficulties of obtaining opportunities, and the numerous failures attending the enquiry; moreover, that "the persons in whose presence these phenomena take place are few in number, and opportunities for experimenting with previously arranged apparatus are rarer still."

Opportunities having since offered for pursuing the investigation, I have gladly availed myself of them for applying to these phenomena careful scientific testing experiments, and I have thus arrived at certain definite results which I think it right should be published. These experiments appear conclusively to establish the exist-

ence of a new force, in some unknown manner connected with the human organization, which for convenience may be called the Psychic Force.

Of all the persons endowed with a powerful development of this Psychic Force, and who have been termed "mediums" upon quite another theory of its origin, Mr. Daniel Douglas Home is the most remarkable, and it is mainly owing to the many opportunities I have had of carrying on my investigation in his presence that I am enabled to affirm so conclusively the existence of this Force. The experiments I have tried have been very numerous, but owing to our imperfect knowledge of the conditions which favor or oppose the manifestations of this force, to the apparently capricious manner in which it is exerted, and to the fact that Mr. Home himself is subject to unaccountable ebbs and flows of the force, it has but seldom happened that a result obtained on one occasion could be subsequently confirmed and tested with apparatus specially contrived for the purpose.

Among the remarkable phenomena which occur under Mr. Home's influence, the most striking, as well as the most easily tested with scientific accuracy, are—(1) the alteration in the weight of bodies, and (2) the playing of tunes upon musical instruments (generally an accordion, for convenience of portability) without direct human intervention, under conditions rendering contact or connection with the keys impossible. Not until I had witnessed these facts some half-dozen times, and scrutinized them with all the critical acumen I possess, did I become convinced of their objective reality. Still, desiring to place the matter beyond the shadow of doubt, I invited Mr. Home on several occasions to

come to my own house, where, in the presence of a few scientific enquirers, these phenomena could be submitted to crucial experiments.

The meetings took place in the evening, in a large room lighted by gas. The apparatus prepared for the purpose of testing the movements of the accordion, consisted of a cage, formed of two wooden hoops, respectively 1 foot 10 inches and 2 feet diameter, connected together by 12 narrow laths, each 1 foot 10 inches long, so as to form a drum-shaped frame, open at the top and bottom; round this 50 yards of insulated copper wire were wound in 24 rounds, each being rather less than an inch from its neighbour. The horizontal strands of wire were then netted together firmly with string, so as to form meshes rather less than 2 inches long by 1 inch high. The height of this cage was such that it would just slip under my dining table, but be too close to the top to allow of the hand being introduced into the interior, or to admit of a foot being pushed underneath it. In another room were two Grove's cells, wires being led from them into the dining room for connection, if desirable, with the wires surrounding the cage.

The accordion was a new one, having been purchased by myself for the purpose of these experiments at Wheatstone's, in Conduit Street. Mr. Home had neither handled nor seen the instrument before the commencement of the test experiments.

In another part of the room an apparatus was fitted up for experimenting on the alterations in the weight of a body. It consisted of a mahogany board, 36 inches long by $9\frac{1}{2}$ inches wide and 1 inch thick. At each end a strip of mahogany $1\frac{1}{2}$ inches wide was screwed on, forming feet. One end of the board rested on a firm

table, whilst the other end was supported by a spring balance hanging from a substantial tripod stand. The balance was fitted with a self-registering index, in such a manner that it would record the maximum weight indicated by the pointer. The apparatus was adjusted so that the mahogany board was horizontal, its foot resting flat on the support. In this position its weight was 3 lbs., as marked by the pointer of the balance.

Before Mr. Home entered the room the apparatus had been arranged in position, and he had not even the object of some parts of it explained before sitting down. It may, perhaps, be worth while to add, for the purpose of anticipating some critical remarks which are likely to be made, that in the afternoon I called for Mr. Home at his apartments, and when there he suggested that, as he had to change his dress, perhaps I should not object to continue our conversation in his bedroom. I am, therefore, enabled to state positively, that no machinery, apparatus, or contrivance of any sort was secreted about his person.

The investigators present on the test occasion were an eminent physicist, high in the ranks of the Royal Society, whom I will call Dr. A. B.; a well-known Serjeant-at-Law, whom I will call Serjeant C. D.; my brother; and my chemical assistant.*

* It argues ill for the boasted freedom of opinion among scientific men, that they have so long refused to institute a scientific investigation into the existence and nature of facts asserted by so many competent and credible witnesses, and which they are freely invited to examine when and where they please. For my own part, I too much value the pursuit of truth, and the discovery of any new fact in nature, to avoid inquiry because it appears to clash with prevailing opinions. But as I have no

Mr. Home sat in a low easy chair at the side of the table. In front of him under the table was the afore-said cage, one of his legs being on each side of it. I sat close to him on his left, and another observer sat close to him on his right, the rest of the party being seated at convenient distances round the table.

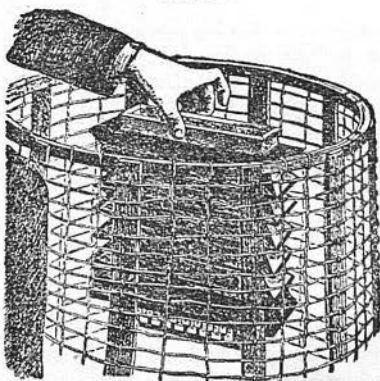
For the greater part of the evening, particularly when anything of importance was proceeding, the observers on each side of Mr. Home kept their feet respectively on his feet, so as to be able to detect his slightest movement.

The temperature of the room varied from 68 degrees to 70 degrees F.

Mr. Home took the accordion between the thumb and middle finger of one hand at the opposite end to the keys (see woodcut, Fig. A) (to save repetition this will be subsequently called "in the usual manner"). Having previously opened the bass key myself, and the cage being drawn from under the table so as just to allow the accordion to be pushed in with its keys downwards, it was pushed back as close as Mr. Home's arm would permit, but without hiding his hand from those next to him (see Fig. B). Very soon the accordion was seen by those on each side to be waving about in a somewhat curious manner; then sounds came from it, and finally several notes were played in succession. Whilst this was going on my assistant went under the table, and reported that the accordion was expanding and contracting; at the same time it was seen that the hand of Mr. Home by which it was held was quite still, his other hand resting on the table.

right to assume that others are equally willing to do this, I refrain from mentioning the names of my friends without their permission.

FIG. A.



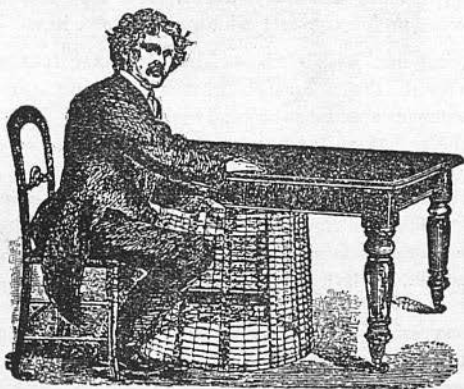
Presently the accordion was seen by those on either side of Mr. Home to move about, oscillating and going round and round the cage, and playing at the same time. Dr. A. B. now looked under the table, and said that Mr. Home's hand appeared quite still whilst the accordion was moving about emitting distinct sounds.

Mr. Home still holding the accordion in the usual manner in the cage, his feet being held by those next him, and his other hand resting on the table, we heard distinct and separate notes sounded in succession, and then a simple air was played. As such a result could only have been produced by the various keys of the instrument being acted upon in harmonious succession, this was considered by those present to be a crucial experiment. But the sequel was still more striking, for Mr. Home then removed his hand altogether from the accordion, taking it quite out of the cage, and placed it in the hand of the person next to him.

The instrument then continued to play, no person touching it and no hand being near it.

I was now desirous of trying what would be the effect of passing the battery current round the insulated wire of the cage, and my assistant accordingly made the connection with the wires from the two Grove's cells. Mr. Home again held the instrument inside the cage in the same manner as before, when it immediately sounded and moved about vigorously. But whether the electric current passing round the cage assisted the manifestation of force inside it, is impossible to say.

FIG. B.



The accordion was now again taken without any visible touch from Mr. Home's hand, which he removed from it entirely and placed upon the table, where it was taken by the person next to him, and seen, as now were both his hands, by all present, I and two of the others

present saw the accordion distinctly floating about inside the cage with no visible support. This was repeated a second time, after a short interval. Mr. Home presently re-inserted his hand in the cage and again took hold of the accordion. It then commenced to play, at first, chords and runs, and afterwards a well-known sweet and plaintive melody, which was executed perfectly in a very beautiful manner. Whilst this tune was being played I grasped Mr. Home's arm, below the elbow, and gently slid my hand down it until I touched the top of the accordion. He was not moving a muscle. His other hand was on the table, visible to all, and his feet were under the feet of those next to him.

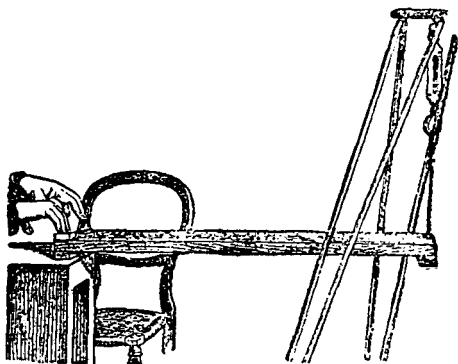
Having met with such striking results in the experiments with the accordion in the cage, we turned to the balance apparatus already described. Mr. Home placed the tips of his fingers lightly on the extreme end of the mahogany board, which was resting on the support, whilst Dr. A. B. and myself sat, one on each side of it, watching for any effect which might be produced. Almost immediately the pointer of the balance was seen to descend. After a few seconds it rose again. This movement was repeated several times, as if by successive waves of the Psychic Force. The end of the board was observed to oscillate slowly up and down during the experiment.

Mr. Home now of his own accord took a small hand-bell and a little card match-box, which happened to be near, and placed one under each hand, to satisfy us, as he said, that he was not producing the downward pressure (see Fig. C). The very slow oscillation of the spring balance became more marked, and Dr. A. B., watching the index, said that he saw it descend to $6\frac{1}{2}$

lbs. The normal weight of the board as so suspended being 3 lbs., the additional downward pull was therefore $3\frac{1}{2}$ lbs. On looking immediately afterwards at the automatic register, we saw that the index had at one time descended as low as 9 lbs., showing a maximum pull of 6 lbs. upon a board whose normal weight was 3 lbs.

In order to see whether it was possible to produce much effect on the spring balance by pressure at the place where Mr. Home's fingers had been, I stepped

FIG. C.



upon the table and stood on one foot at the end of the board. Dr. A. B., who was observing the index of the balance, said that the whole weight of my body (140 lbs.) so applied only sunk the index $1\frac{1}{2}$ lbs., or 2 lbs. when I jerked up and down. Mr. Home had been sitting in a low easy-chair, and could not, therefore, had

he tried his utmost, have exerted any material influence on these results. I need scarcely add that his feet as well as his hands were closely guarded by all in the room.

This experiment appears to me more striking, if possible, than the one with the accordion. As will be seen on referring to the cut (Fig. C), the board was arranged perfectly horizontally, and it was particularly noticed that Mr. Home's fingers were not at any time advanced more than $1\frac{1}{2}$ inches from the extreme end, as shown by a pencil-mark, which, with Dr. A. B.'s acquiescence, I made at the time. Now, the wooden foot being also $1\frac{1}{2}$ inches wide, and resting flat on the table, it is evident that no amount of pressure exerted within this space of $1\frac{1}{2}$ inches could produce any action on the balance. Again, it is also evident that when the end furthest from Mr. Home sank, the board would turn on the further edge of this foot as on a fulcrum. The arrangement was consequently that of a see-saw, 36 inches in length, the fulcrum being $1\frac{1}{2}$ inches from one end; were he, therefore, to have exerted a downward pressure, it would have been in opposition to the force which was causing the other end of the board to move down.

The slight downward pressure shown by the balance when I stood on the board was owing probably to my foot extending beyond this fulcrum.

I have now given a plain, unvarnished statement of the facts from copious notes written at the time the occurrences were taking place, and copied out in full immediately after. Indeed, it would be fatal to the object I have in view—that of urging the scientific investigation of these phenomena—were I to exag-

gerate ever so little; for although to my readers Dr. A. B. is at present represented by incorporeal initials, to me the letters represent a power in the scientific world that would certainly convict me if I were to prove an untrustworthy narrator.

In the *Quarterly Journal of Science*, October 1st, 1871, the illustrious investigator replied to the charges brought against him by those who were not in agreement with his findings, and recorded a series of further experiments. He wrote: When I first stated in this journal that I was about to investigate the phenomena of so-called Spiritualism, the announcement called forth universal expression of approval. One said that my "statements deserved respectful consideration"; another expressed "profound satisfaction that the subject was about to be investigated by a man so thoroughly qualified as," etc.; a third was "gratified to learn that the matter is now receiving the attention of cool and clear-headed men of recognized position in science"; a fourth asserted that "no one could doubt Mr. Crookes' ability to conduct the investigation with rigid philosophical impartiality"; and a fifth was good enough to tell its readers that "if men like Mr. Crookes grapple with the subject, taking nothing for granted until it is proved, we shall soon know how much to believe."

These remarks, however, were written too hastily. It was taken for granted by the writers that the results of my experiments would be in accordance with their preconceptions. What they really desired was not *the truth*, but an additional witness in favour of their own foregone conclusions. When they found that the facts which that investigation estab-

lished could not be made to fit those opinions, why—"so much the worse for the facts." They try to creep out of their own confident recommendations of the enquiry by declaring that "Mr. Home is a clever conjurer, who has duped us all." "Mr. Crookes might, with equal propriety, examine the performances of an Indian juggler." "Mr. Crookes must get better witnesses before he can be believed." "The thing is too absurd to be treated seriously." "It is impossible, and therefore can't be."* "The observers have all been biologised (!) and fancy they saw things occur which really never took place," etc., etc.

These remarks imply a curious oblivion of the very functions which the scientific enquirer has to fulfill. I am scarcely surprised when the objectors say that I have been deceived merely because they are unconvinced without personal investigation, since the same unscientific course of *a priori* argument has been opposed to all great discoveries. When I am told that what I describe cannot be explained in accordance with preconceived ideas of the laws of nature, the objector really begs the very question at issue, and resorts to a mode of reasoning which brings science to a standstill. The argument runs in a vicious circle: we must not assert a fact till we know that it is in accordance with the laws of nature, while our only knowledge of the laws of nature must be based on an extensive observation of facts. If a new fact seems to oppose what is called a law of nature, it does not prove the asserted fact to be false, but

* The quotation occurs to me—"I never said it was possible, I only said it was true."

only that we have not yet ascertained all the laws of nature, or not learned them correctly.

I may at once answer one objection which has been made in several quarters, viz., that my results would carry more weight had they been tried a greater number of times, and with other persons besides Mr. Home. The fact is, I have been working at the subject for two years, and have found nine or ten different persons who possess psychic power in more or less degree; but its development in Mr. D. D. Home is so powerful, that, having satisfied myself by careful experiments that the phenomena observed were genuine, I have, merely as a matter of convenience, carried on my experiments with him, in preference to working with others in whom the power existed in a less striking degree. Most of the experiments I am about to describe, however, have been tried with another person than Mr. Home, and in his absence.

Before proceeding to relate my new experiments, I desire to say a few words respecting those already described. The objection has been raised that announcements of such magnitude should not be made on the strength of one or two experiments hastily performed. I reply that the conclusions were not arrived at hastily, nor on the results of two or three experiments only. In my former paper (*"Quarterly Journal of Science,"* page 340), I remarked:—"Not until I had witnessed these facts some half-dozen times, and scrutinized them with all the critical acumen I possess, did I become convinced of their objective reality." Before fitting up special apparatus for these experiments, I have seen on five separate occasions, objects varying

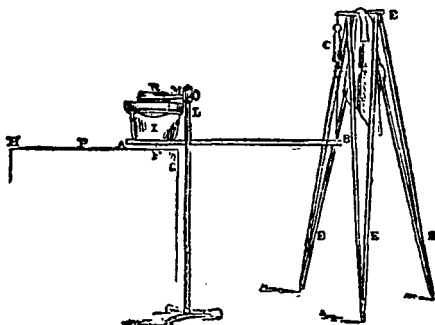
in weight from 25 to 100 lbs., temporarily influenced in such a manner, that I, and others present, could with difficulty lift them from the floor. Wishing to ascertain whether this was a physical fact, or merely due to a vibration in the power of our own strength under the influence of imagination, I tested with a weighing machine the phenomenon on two subsequent occasions when I had an opportunity of meeting Mr. Home at the house of a friend. On the first occasion, the increase of weight was from 8 lbs. normally, to 36 lbs., 48 lbs., and 46 lbs., in three successive experiments tried under strict scrutiny. On the second occasion, tried about a fortnight after, in the presence of other observers, I found the increase of weight to be from 8 lbs., to 23 lbs., 43 lbs., and 27 lbs., in three successive trials, varying the conditions. As I had the entire management of the above mentioned experimental trials, employed an instrument of great accuracy, and took every care to exclude the possibility of the results being influenced by trickery, I was not unprepared for a satisfactory result when the fact was properly tested in my own laboratory. The meeting on the occasion formerly described was, therefore, for the purpose of confirming my previous observations by the application of crucial tests, with carefully arranged apparatus of a still more delicate nature.

He then proceeds to record further experiments with the medium D. D. Home. On trying experiments (previously recorded) for the first time, I thought that actual contact between Mr. Home's hands and the suspended body whose weight was to be altered was essential to the exhibition of the force; but I found afterwards that this was not a necessary condition, and I there-

fore arranged my apparatus in the following manner:

The accompanying cuts (Figs. 2, 3, 4) explain the arrangement. Fig. 2 is a general view, and Figs. 3 and 4 show the essential parts more in detail. The reference letters are the same in each illustration. A B is a mahogany board, 36 inches long by 9½ inches wide and 1 inch thick. It is suspended at the end, B,

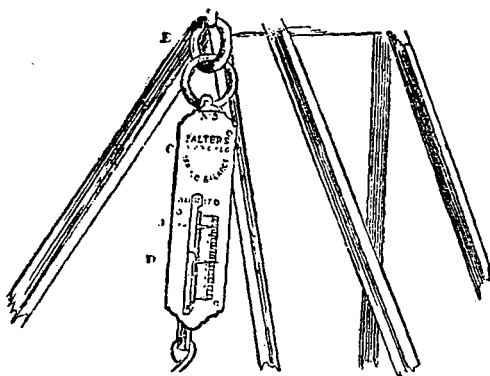
FIG. 2.



by a spring balance, C, furnished with an automatic register, D. The balance is suspended from a very firm tripod support, E.

The following piece of apparatus is not shown in the figures. To the moving index, O, of the spring balance, a fine steel point is soldered, projecting hor-

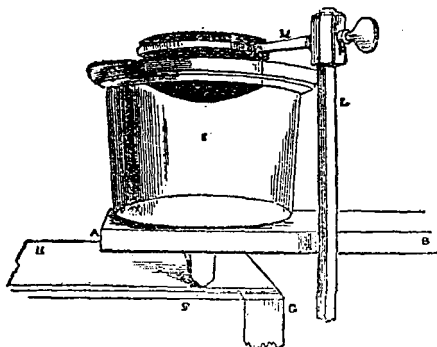
FIG. 3.



izontally outwards. In front of the balance, and firmly fastened to it, is a grooved frame carrying a flat box similar to the dark box of a photographic camera. This box is made to travel by clock-work horizontally in front of the moving index, and it contains a sheet of plate-glass which has been smoked over a flame. The projecting steel point impresses a mark on this smoked surface. If the balance is at rest, and the clock set going, the result is a perfectly straight horizontal line. If the clock is stopped and weights are placed on the end, B, of the board, the result is a vertical line, whose length depends on the weight applied. If, whilst the clock draws the plate along, the weight of the board (or the tension on the balance) varies, the result is a curved line, from which the tension in grains at any moment during the continuance of the experiments can be calculated.

The instrument was capable of registering a diminution of the force of gravitation as well as an increase; registrations of such a diminution were fre-

FIG. 4.



quently obtained. To avoid complication, however, I will only here refer to results in which an increase of gravitation was experienced.

The end, B, of the board being supported by the spring balance, the end, A, is supported on a wooden strip, F, screwed across its lower side and cut to a knife edge (see Fig. 4). This fulcrum rests on a firm and heavy wooden stand, G H. On the board, exactly over the fulcrum, is placed a large glass vessel filled with water, I. L is a massive iron stand, furnished with an arm and ring, M N, in which rests a hemispherical copper vessel perforated with several holes at the bottom.

The iron stand is two inches from the board, A B, and the arm and copper vessel, M N, are so adjusted that the latter dips into the water $1\frac{1}{2}$ inches, being $5\frac{1}{2}$ inches from the bottom of I, and 2 inches from its circumference. Shaking or striking the arm, M, or the vessel, N, produces no appreciable mechanical effect on the board, A B, capable of affecting the balance. Dipping the hand to the fullest extent into the water in N, does not produce the least appreciable action on the balance.

As the mechanical transmission of power is by this means entirely cut off between the copper vessel and the board, A B, the power of muscular control is thereby completely eliminated.

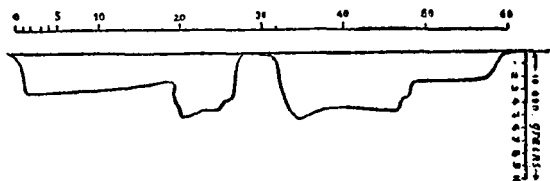
For convenience I will divide the experiments into groups, 1, 2, 3, etc., and I have selected one special instance in each to describe in detail. Nothing, however, is mentioned which has not been repeated more than once, and in some cases verified, in Mr. Home's absence, with another person possessing similar powers.

There was always ample light in the room where the experiments were conducted (my own dining room) to see all that took place.

Experiment I.—The apparatus having been properly adjusted before Mr. Home entered the room, he was brought in, and asked to place his fingers in the water in the copper vessel, N. He stood up and dipped the tips of the fingers of his right hand in the water, his other hand and his feet being held. When he said he felt a power, force, or influence, proceeding from his hand, I set the clock going, and almost immediately the end, B, of the board was seen to descend slowly

and remain down for about 10 seconds; it then descended a little further, and afterwards rose to its normal height. It then descended again, rose suddenly, gradu-

FIG. 5.

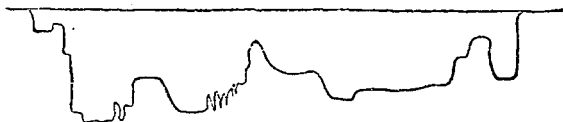


ally sunk for 17 seconds, and finally rose to its normal height, where it remained till the experiment was concluded. The lowest point marked on the glass was equivalent to a direct pull of about 5,000 grains. The accompanying figure (5) is a copy of the curve traced on the glass.

Experiment II.—Contact through water having proved to be as effectual as actual mechanical contact, I wished to see if the power or force could affect the weight, either through other portions of the apparatus or through the air. The glass vessel and iron stand, etc., were therefore removed, as an unnecessary complication, and Mr. Home's hands were placed on the stand of the apparatus at P (Fig. 2). A gentleman present put his hand on Mr. Home's hands, and his foot on both Mr. Home's feet, and I also watched him closely all the time. At the proper moment the clock was again set going; the board descended and rose in

an irregular manner, the result being a curved tracing on the glass, of which Fig. 6 is a copy.

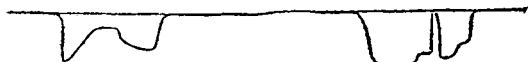
FIG. 6.



In this and the two following figures the scales, both vertical and horizontal, are the same as in Fig. 5.

Experiment III.—Mr. Home was now placed 1 foot from the board, A B, on one side of it. His hands and feet were firmly grasped by a bystander, and an-

FIG. 7.



other tracing, of which Fig. 7 is a copy, was taken on a moving glass plate.

Experiment IV.—(Tried on an occasion when the power was stronger than on the previous occasions).

FIG. 8.

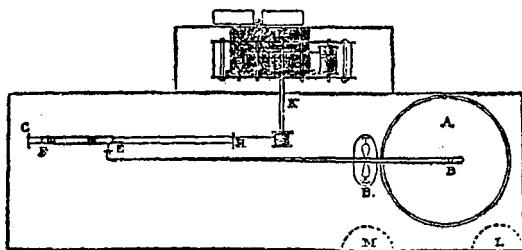


Mr. Home was now placed three feet from the apparatus, his hands and feet being tightly held. The clock was set going when he gave the word, and the end, B, of the board soon descended, and again rose in an irregular manner, as shown in Fig. 8.

The following series of experiments were tried with more delicate apparatus, and with another person, a lady, Mr. Home being absent. As the lady is a non-professional, I do not mention her name. She has, however, consented to meet any scientific men whom I may introduce for purposes of investigation.

A piece of thin parchment, A, Figs. 9 and 10, is stretched tightly across a circular hoop of wood. B C is a light lever turning on D. At the end, B, is a vertical needle point touching the membrane, A, and at C is another needle point, projecting horizontally

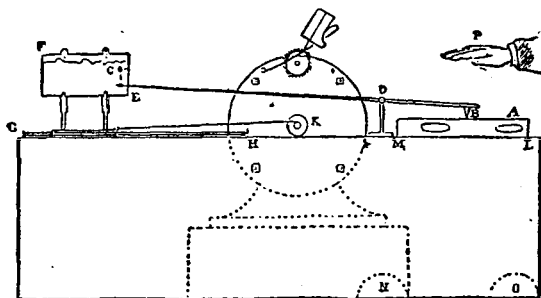
FIG. 9. (Plan.)



and touching a smoked glass plate, E. F. This glass plate is drawn along in the direction, H G, by clock-work, K. The end, B, of the lever is weighted so that it shall quickly follow the movements of the centre of

the disc, A. These movements are transmitted and recorded on the glass plate, E F, by means of the lever and needle point, C. Holes are cut in the side of the hoop to allow a free passage of air to the underside of

FIG. 10. (Section)



the membrane. The apparatus was well tested beforehand by myself and others, to see that no shaking or jar on the table or support would interfere with the results: the line traced by the point, C, on the smoked glass was perfectly straight in spite of all our attempts to influence the lever by shaking the stand or stamping on the floor.

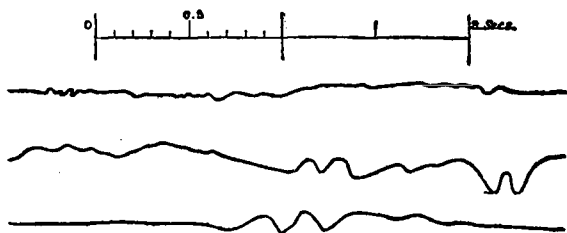
Experiment V.—Without having the object of the instrument explained to her, the lady was brought into the room and asked to place her fingers on the wooden stand at the points L M, Fig. 9. I then placed my hands over hers to enable me to detect any conscious or unconscious movement on her part. Presently percussive noises were heard on the parchment, resembling the dropping of grains of sand on its surface. At

each percussion a fragment of graphite which I had placed on the membrane was seen to be projected upwards about 1-50th of an inch, and the end, C, of the lever moved slightly up and down. Sometimes the sounds were as rapid as those from an induction-coil, whilst at others they were more than a second apart. Five or six tracings were taken, and in all cases a movement of the end, C, of the lever was seen to have occurred with each vibration of the membrane.

In some cases the lady's hands were not so near the membrane as L M, but were at N O, Fig. 10.

The accompanying figure 11 gives tracings taken from the plates used on these occasions.

FIG 11.
Scale of Seconds.



SCALE OF SECONDS.

Experiment VI.—Having met with these results in Mr. Home's absence, I was anxious to see what action would be produced on the instrument in his presence.

Accordingly I asked him to try, but without explaining the instrument to him.

I grasped Mr. Home's right arm above the wrist and held his hand over the membrane, about 10 inches from its surface, in the position shown at P, Fig. 10. His other hand was held by a friend. After remaining in this position for about half a minute, Mr. Home said he felt some influence passing. I then set the clock going, and we all saw the index, C, moving up and down. The movements were much slower than in the former case, and were almost entirely unaccompanied by the percussive vibrations then noticed.

Figs. 12 and 13 show the curves produced on the glass on two of these occasions.

Figs. 11, 12, 13 are magnified.

These experiments *confirm beyond doubt* the conclusion at which I arrived in my former paper, namely, the existence of a force associated, in some manner not yet explained, with the human organization, by which force increased weight is capable of being imparted to solid bodies without physical contact. In the case of Mr. Home, the development of this force varies enormously, not only from week to week, but from hour to hour; on some occasions the force is inappreciable by my tests for an hour or more, and then suddenly reappears in great strength. It is capable of acting at a distance from Mr. Home (not unfrequently as far as two or three feet), but is always strongest close to him.

Being firmly convinced that there could be no manifestation of one form of force, without the corresponding expenditure of some other form of force, I for a long time searched in vain for evidence of any force or power being used up in the production of these results.

Now, however, having seen more of Mr. Home, I think I perceive what it is that this psychic force uses up for its development. In employing the terms *vital force*, or *nervous energy*, I am aware that I am employing words which convey very different significations to many investigators; but after witnessing the

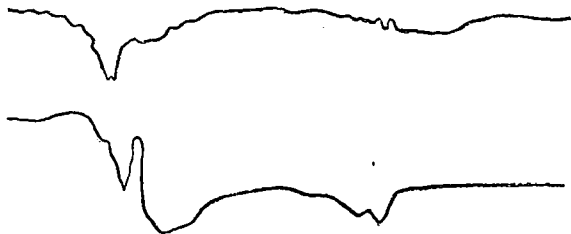
FIG. 12.



painful state of nervous and bodily prostration in which some of these experiments have left Mr. Home—after seeing him lying in an almost fainting condition on the floor, pale and speechless—I could scarcely doubt that the evolution of psychic force is accompanied by a corresponding drain on vital force.

I have ventured to give this new force the name of *Psychic Force*, because of its manifest relationship to certain psychological conditions, and because I was most desirous to avoid the foregone conclusions implied in the title under which it has hitherto been

FIG. 13.



claimed as belonging to a province beyond the range of experiment and argument. But having found that it is within the province of purely scientific research, it is entitled to be known by a scientific name, and I do not think a more appropriate one could have been selected.

To witness exhibitions of this force it is not necessary to have access to known psychics. The force itself is probably possessed by all human beings, although the individuals endowed with an extraordinary amount of it are doubtless few. Within the last twelve months I have met in private families five or six persons possessing a sufficiently vigorous development to make me feel confident that similar results might be produced through their means to those here recorded, provided the experimentalist worked with more delicate apparatus, capable of indicating a fraction of a grain instead of recording pounds and ounces only.

As far as my other occupations will permit, I purpose to continue the experiments in various forms, and I will report from time to time their results. In the meanwhile I trust that others will be induced to pursue the investigation in its scientific form. It should, however, be understood that, equally with all other scientific experiments these researches must be conducted in strict compliance with the conditions under which the force is developed. As it is an indispensable condition of experiments with frictional electricity that the atmosphere should be free from excess of moisture, and that no conducting medium should touch the instrument while the force is being generated, so certain conditions are found to be essen-

tial to the production and operation of the Psychic Force, and unless these precautions are observed the experiments will fail. I am emphatic on this point, because unreasonable objections have sometimes been made to the Psychic Force that it is not developed under adverse conditions dictated by the experimentalist, who, nevertheless, would object to conditions being imposed upon himself in the exhibition of any of his own scientific results. But I may add that the conditions required are very few, very reasonable, and in no way obstruct the most perfect observation and the application of the most rigid and accurate tests.

Just before going to press I have received from my friend, Professor Morton, an advance sheet of the *Journal of the Franklin Institute*, containing some remarks on my last paper by Mr. Coleman Sellers, a leading scientific engineer of the United States. The essence of his criticism is contained in the following quotation:

"On page 341" (of the "Quarterly Journal of Science") "we have given a mahogany board '36 inches long by 9 1-2 inches wide, and 1 inch thick,' with 'at each end a strip of mahogany 1 1-2 inches wide screwed on, forming feet.' This board was so placed as to rest with one end on the table, the other suspended by a spring balance, and, so suspended, it recorded a weight of 3 pounds; i. e., a mahogany board of the above dimensions is shown to weigh 6 pounds—3 pounds on the balance, and 3 pounds on the table. A mechanic used to handling wood wonders how this may be. He looks through his limited library, and finds that scientific men tell him that such a board should weigh about 13 1-2 pounds. Did Mr. Crookes make this

board himself, or did Mr. Home furnish it as one of his pieces of apparatus? It would have been more satisfactory if Mr. Crookes had stated, in regard to this board, who made it. . . . Let it be discovered that the 6 pound mahogany board was furnished by Mr. Home, and the experiments will not be so convincing."

My experiments must indeed be convincing if so accomplished a mechanic as Mr. Coleman Sellers can find no worse fault with them than is expressed in the comments I have quoted. He writes in so matter-of-fact a manner, and deals so plausibly with dimensions and weights, that most persons would take it for granted that I really *had* committed the egregious blunder he points out.

Will it be believed, therefore, that my mahogany board does weigh only 6 pounds? Four separate balances in my own house tell me so, and my greengrocer confirms the fact.

It is easy to perceive into what errors a "mechanic" may fall when he relies for practical knowledge on his "limited library," instead of appealing to actual experiment.

I am sorry I cannot inform Mr. Sellers who made my mahogany board. It has been in my possession about sixteen years; it was originally cut off a length in a wood-yard; it became the stand of a spectrum camera, and as such is described with a cut in the *Journal of the Photographic Society* for January 21, 1856 (vol. II, page 293). It has since done temporary duty in the arrangement of various pieces of apparatus in my physical laboratory, and was selected for these particular experiments owing to its shape being more convenient than that of other available pieces of wood.

But is it seriously expected that I should answer such a question as. "Did Mr. Home furnish the board?" Will not my critics give me credit for the possession of some amount of common sense?



NOTES OF AN INQUIRY INTO THE
PHENOMENA CALLED SPIRITUAL.DURING THE YEARS 1870-73.*

Like a traveler exploring some distant country, the wonders of which have hitherto been known only through reports and rumors of a vague or distorted character, so for four years have I been occupied in pushing an enquiry into a territory of natural knowledge which offers almost virgin soil to a scientific man. As the traveler sees in the natural phenomena he may witness the action of forces governed by natural laws, where others see only the capricious intervention of offended gods, so have I endeavoured to trace the operation of natural laws and forces, where others have seen only the agency of supernatural beings, owning no laws, and obeying no force but their own free will. As the traveler in his wanderings is entirely dependent on the good will and friendliness of the chiefs and the medicine men of the tribes amongst whom he sojourns, so have I not only been aided in my enquiry in a marked degree by some of those who possess the peculiar powers I have sought to examine, but have also formed firm and valued friendships amongst many of the recognized leaders of opinion whose hospitalities I have shared. As the traveler sometimes sends home, when opportunity offers, a brief record of progress, which record, being necessarily isolated from all that has led up to it, is often received with

*.First published in the *Quarterly Journal of Science* for January, 1874.

disbelief or ridicule, so have I on two occasions selected and published what seemed to be a few striking and definite *facts*; but having omitted to describe the preliminary stages necessary to lead the public mind up to an appreciation of the phenomena and to show how they fitted into other observed facts, they were also met, not only with incredulity, but with no little abuse. And, lastly, as the traveler, when his exploration is finished and he returns to his old associates, collects together all his scattered notes, tabulates them, and puts them in order ready to be given to the world as a connected narrative, so have I, on reaching this stage of the enquiry, arranged and put together all my disconnected observations, ready to place before the public in the form of a volume.

The phenomena I am prepared to attest are so extraordinary and so directly oppose the most firmly rooted articles of scientific belief—amongst others, the ubiquity and invariable action of the force of gravitation—that, even now, on recalling the details of what I witnessed, there is an antagonism in my mind between *reason*, which pronounces it to be scientifically impossible, and the consciousness that my senses, both of touch and sight—and these corroborated, as they were, by the senses of all who were present,—are not lying witnesses when they testify against my preconceptions.

But the supposition that there is a sort of mania or delusion which suddenly attacks a whole room full of intelligent persons who are quite sane elsewhere, and that they all concur to the minutest par-

ticulars, in the details of the occurrences of which they suppose themselves to be witnesses, seems to my mind more incredible than even the facts they attest.

The subject is far more difficult and extensive than it appears. Four years ago I intended only to devote a leisure month or two to ascertain whether certain marvelous occurrences I had heard about would stand the test of close scrutiny. Having, however, soon arrived at the same conclusion as, I may say, every impartial enquirer, that there was "something in it," I could not, as a student of Nature's laws, refuse to follow the enquiry wheresoever the facts might lead. Thus a few months have grown into a few years, and were my time at my own disposal it would probably extend still longer. But other matters of scientific and practical interest demand my present attention; and, inasmuch as I cannot afford the time requisite to follow the inquiry as it deserves, and as I am fully confident it will be studied by scientific men a few years hence, and as my opportunities are not now as good as they were some time ago, when Mr. D. D. Home was in good health, and Miss Kate Fox (now Mrs. Jencken) was free from domestic and maternal occupations, I feel compelled to suspend further investigation for the present.

To obtain free access to some persons abundantly endowed with the power I am experimenting upon, now involves more favour than a scientific investigator should be expected to make of it. Spiritualism amongst its more devout followers is a religion. The mediums, in many cases young members of the

family, are guarded with a seclusion and jealousy which an outsider can penetrate with difficulty. Being earnest and conscientious believers in the truth of certain doctrines which they hold to be substantiated by what appear to them to be miraculous occurrences, they seem to hold the presence of scientific investigation as a profanation of the shrine. As a personal favour I have more than once been allowed to be present at meetings that presented rather the form of a religious ceremony than of a spiritualistic *seance*. But to be admitted by favour once or twice, as a stranger might be allowed to witness the Eleusinian mysteries, or a Gentile to peep within the Holy of Holies, is not the way to ascertain facts and discover laws. To gratify curiosity is one thing; to carry on systematic research is another. I am seeking the truth continually. On a few occasions, indeed, I have been allowed to apply tests and impose conditions; but only once or twice have I been permitted to carry off the priestess from her shrine, and in my own house, surrounded by my own friends, to enjoy opportunities of testing the phenomena I had witnessed elsewhere under less conclusive conditions.* My observations on these cases will find their due place in the work I am about to publish.

* In this paper I give no instances and use no arguments drawn from these exceptional cases. Without this explanation it might be thought that the immense number of facts I have accumulated were principally obtained on the few occasions here referred to, and the objection would naturally arise of insufficiency of scrutiny from want of time.

Following the plan adopted on previous occasions,—a plan which, however much it offended the prejudices of some critics, I have good reason to know was acceptable to the readers of the *Quarterly Journal of Science*—I intended to embody the results of my labour in the form of one or two articles for this journal. However, on going over my notes, I find such a wealth of facts, such a superabundance of evidence, so overwhelming a mass of testimony, all of which will have to be marshalled in order, that I could fill several numbers of the *Quarterly*. I must therefore be content on this occasion with an outline only of my labours, leaving proof and full details to another occasion.

My principal object will be to place on record a series of actual occurrences which have taken place in my own house, in the presence of trustworthy witnesses, and under as strict test conditions as I could devise. Every fact which I have observed is, moreover, corroborated by the records of independent observers at other times and places. It will be seen that the facts are of the most astounding character, and seem utterly irreconcilable with all known theories of modern science. Having satisfied myself of their *truth*, it would be moral cowardice to withhold my testimony because my previous publications were ridiculed by critics and others who knew nothing whatever of the subject, and who were too prejudiced to see and judge for themselves whether or not there was truth in the phenomena; I shall state simply what I have seen and proved by repeated experiment and test, and “I have yet to learn that it

is irrational to endeavour to discover the causes of unexplained phenomena."

At the commencement, I must correct one or two errors which have taken firm possession of the public mind. One is that *darkness* is essential to the phenomena. This is by no means the case. Except where darkness has been a necessary condition, as with some of the phenomena of luminous appearances, and a few other instances, everything recorded has taken place *in the light*. In the few cases where the phenomena noted have occurred in darkness I have been very particular to mention the fact; moreover, some special reason can be shown for the exclusion of light, or the results have been produced under such perfect test conditions that the suppression of one of these senses has not really weakened the evidence.

Another common error is that the occurrences can be witnessed only at certain times and places—in the rooms of the medium, or at hours previously arranged; and arguing from this erroneous supposition, an analogy has been insisted on between the phenomena called spiritual and the feats of legerdemain by professional "conjurers" and "wizards," exhibited on their own platform and surrounded by all the appliances of their art.

To show how far this is from the truth, I need only say that, with very few exceptions, the many hundreds of facts I am prepared to attest—facts which to imitate by known mechanical or physical means would baffle the skill of Houdin, a Bosco, or an Anderson, backed with all the resources of elaborate machinery and the practice of years—have all taken place in my own house, at times appointed by myself,

and under circumstances which absolutely precluded the employment of the very simplest instrumental aids.

A third error is that the medium must select his own circle of friends and associates at a *seance*; that these friends must be thorough believers in the truth of whatever doctrine the medium enunciates; and that *conditions* are imposed on any person present of an investigating turn of mind, which entirely preclude accurate observation and facilitate trickery and deception. In reply to this I can state that (with the exception of the very few cases to which I have alluded in a previous paragraph* where, whatever might have been the motive for exclusiveness, it certainly was not the veiling of deception) I have chosen my own circle of friends, have introduced any hard-headed unbeliever whom I pleased, and have generally imposed my own terms, which have been carefully chosen to prevent the possibility of fraud. Having generally ascertained some of the conditions which facilitate the occurrence of the phenomena, my modes of conducting these inquiries have generally been attended with equal and, indeed, in most cases with more, success than on other occasions, where, through mistaken notions of the importance of certain trifling observances, the conditions imposed might render less easy the detection of fraud.

I have said that darkness is not essential. It is however, a well-ascertained fact that when the force is weak a bright light exerts an interfering action on some of the phenomena. The power possessed by

* See Note on Page 37.

Mr. Home is sufficiently strong to withstand this antagonistic influence; consequently, he always objects to darkness at his *seances*. Indeed, except on two occasions, when, for some particular experiments of my own, light was excluded, everything which I have witnessed with him has taken place in the light. I have had many opportunities of testing the action of light of different sources and colours, such as sunlight, diffused daylight, moonlight, gas, lamp, and candle light, electric light from a vacuum tube, homogenous yellow light, etc. The interfering rays appear to be those at the extreme end of the spectrum.

I now proceed to classify some of the phenomena which have come under my notice, proceeding from the simple to the more complex, and briefly giving under each heading an outline of some of the evidence I am prepared to bring forward. My readers will remember that, with the exception of cases specially mentioned, the occurrences have taken place *in my own house, in the light, and with only private friends present* besides the medium. In the contemplated volume I propose to give in full detail the tests and precautions adopted on each occasion, with names of witnesses. I only briefly allude to them in this article.

CLASS I.

The Movement of Heavy Bodies with Contact, but without Mechanical Exertion.

This is one of the simplest forms of the phenomena observed. It varies in degree from a quivering or vibration of the room and its contents to the actual rising into the air of a heavy body when the hand is

placed on it. The retort is obvious that if people are touching a thing when it moves, they push it, or pull it, or lift it; I have proved experimentally that this is not the case in numerous instances, but as a matter of evidence I attach little importance to this class of phenomena by itself, and only mention them as a preliminary to other movements of the same kind, but without contact.

These movements (and indeed I may say the same of every kind of phenomenon) are generally preceded by a peculiar cold air, sometimes amounting to a decided wind. I have had sheets of paper blown about by it, and a thermometer lowered several degrees. On some occasions, which I will subsequently give more in detail, I have not detected any actual movement of the air, but the cold has been so intense that I could only compare it to that felt when the hand has been within a few inches of frozen mercury.

CLASS II.

The Phenomena of Percussive and Other Allied Sounds.

The popular name of "raps" conveys a very erroneous impression of this class of phenomena. At different times, during my experiments, I have heard delicate ticks, as with the point of a pin; a cascade of sharp sounds as from an induction coil in full work; detonations in the air; sharp metallic taps; a crackling like that heard when a frictional machine is at work; sounds like scratching; the twittering of a bird, etc.

These sounds are noticed with almost every medium, each having a special peculiarity; they are more varied with Mr. Home, but for power and certainty I have met with no one who at all approached Miss Kate Fox. For several months I enjoyed almost unlimited opportunity of testing the various phenomena occurring in the presence of this lady, and I especially examined the phenomena of these sounds. With mediums, generally it is necessary to sit for a formal *seance* before anything is heard; but in the case of Miss Fox it seems only necessary for her to place her hand on any substance for loud thuds to be heard in it, like a triple pulsation, sometimes loud enough to be heard several rooms off. In this manner I have heard them in a living tree—on a sheet of glass—on a stretched iron wire—on a stretched membrane—a tambourine—on the roof of a cab—and on the floor of a theatre. Moreover, actual contact is not always necessary; I have had these sounds proceeding from the floor, walls, etc., when the medium's hands and feet were held—when she was standing on a chair—when she was suspended in a swing from the ceiling—when she was enclosed in a wire cage—and when she had fallen fainting on a sofa. I have heard them on a glass harmonicon—I have felt them on my own shoulder and under my own hands. I have heard them on a sheet of paper, held between the fingers by a piece of thread passed through one corner. With a full knowledge of the numerous theories which have been started, chiefly in America, to explain these sounds, I have tested them in every way that I could devise, until there has been no escape from the conviction that they were true objective occurrences not produced by trickery or mechanical means.

An important question here forces itself upon the attention. *Are the movements and sounds governed by intelligence?* At a very early stage of the enquiry, it was seen that the power producing the phenomena was not merely a blind force, but was associated with or governed by intelligence: thus the sounds to which I have just alluded will be repeated a definite number of times, they will come loud or faint, and in different places at request and by a pre-arranged code of signals, questions are answered, and messages given with more or less accuracy.

The intelligence governing the phenomena is sometimes manifestly below that of the medium. It is frequently in direct opposition to the wishes of the medium: when a determination has been expressed to do something which might not be considered quite right, I have known urgent messages given to induce a reconsideration. The intelligence is sometimes of such a character as to lead to the belief that it does not emanate from any person present.

Several instances can be given to prove each of these statements, but the subject will be more fully discussed subsequently, when treating of the source of the intelligence.

CLASS III.

The Alteration of Weights of Bodies.

I have repeated the experiments already described in this Journal, in different forms, and with several mediums. I need not further allude to them here.

CLASS IV.

Movements of Heavy Substances when at a distance from the Medium.

The instances in which heavy bodies, such as tables, chairs, sofas, etc., have been moved, when the medium has not been touching them, are very numerous. I will briefly mention a few of the most striking. My own chair has been twisted partly round, whilst my feet were off the floor. A chair was seen by all present to move slowly up to the table from a far corner, when all were watching it; on another occasion an arm chair moved to where we were sitting, and then moved slowly back again (a distance of about three feet) at my request. On three successive evenings a small table moved slowly across the room, under conditions which I had specially pre-arranged, so as to answer any objection which might be raised to the evidence. I have had several repetitions of the experiment considered by the Committee of the Dialectical Society to be conclusive, viz., the movement of a heavy table, in full light, the chairs turned with their backs to the table, about a foot off, and each person kneeling on his chair, with hands resting over the backs of the chairs, but not touching the table. On one occasion this took place when I was moving about so as to see how everyone was placed.

CLASS V.

The Rising of Tables and Chairs off the Ground, without Contact with any Person.

A remark is generally made when occurrences of this kind are mentioned: Why is it only tables and chairs which do these things? Why is this property peculiar

to furniture? I might reply that I only observe and record facts, and do not profess to enter into the Why and Wherefore; but indeed it will be obvious that if a heavy inanimate body in an ordinary dining-room has to rise off the floor, it cannot very well be anything else but a table or a chair. That this propensity is not specially attached to furniture I have abundant evidence, but like other experimental demonstrators, the intelligence or power, whatever it may be, which produces these phenomena can only work with the materials which are available.

On five separate occasions a heavy dining-table rose between a few inches and $1\frac{1}{2}$ feet off the floor, under special circumstances, which rendered trickery impossible. On another occasion a heavy table rose from the floor in full light, while I was holding the medium's hands and feet. On another occasion the table rose from the floor, not only when no person was touching it, but under conditions which I had pre-arranged so as to assure unquestionable proof of the fact.

CLASS VI.

The Levitation of Human Beings.

This has occurred in my presence on four occasions in darkness. The test conditions under which they took place were quite satisfactory, so far as the judgment was concerned; but ocular demonstration of such a fact is so necessary to disturb our pre-formed opinions as to "the naturally possible and impossible," that I will here only mention cases in which the deductions of reason were confirmed by the sense of sight.

On one occasion I witnessed a chair, with a lady sitting on it, rise several inches from the ground. On

another occasion, to avoid the suspicion of this being in some way performed by herself, the lady knelt on the chair in such a manner that its four feet were visible to us. It then rose about three inches, remained suspended for about ten seconds, and then slowly descended. At another time two children, on separate occasions, rose from the floor with their chairs, in full daylight, under (to me) most satisfactory conditions; for I was kneeling and keeping close watch upon the feet of the chair, and observing that no one might touch them.

The most striking cases of levitation which I have witnessed have been with Mr. Home. On three separate occasions have I seen him raised completely from the floor of the room. Once sitting in an easy chair, once kneeling on his chair, and once standing up. On each occasion I had full opportunity of watching the occurrence as it was taking place.

There are at least a hundred recorded instances of Mr. Home's rising from the ground, in the presence of as many separate persons, and I have heard from the lips of the three witnesses to the most striking occurrence of this kind—the Earl of Dunraven, Lord Lindsay, and Captain C. Wynne—their own most minute accounts of what took place. To reject the recorded evidence on this subject is to reject all human testimony whatever; for no fact in sacred or profane history is supported by a stronger array of proofs.

The accumulated testimony establishing Mr. Home's levitations is overwhelming. It is greatly to be desired that some person, whose evidence would be accepted as conclusive by the scientific world—if indeed there lives a person whose testimony *in favour* of such phenomena

would be taken—would seriously and patiently examine these alleged facts. Most of the eye-witnesses to these levitations are now living, and would, doubtless, be willing to give their evidence. But, in a few years, such *direct* evidence will be difficult, if not impossible, to be obtained.

CLASS VII.

Movement of Various Small Articles without Contact with any Person.

Under this heading I propose to describe some special phenomena which I have witnessed. I can do little more here than allude to some of the more striking facts, all of which, be it remembered, have occurred under circumstances that render trickery impossible. But it is idle to attribute these results to trickery, for I would again remind my readers that what I relate has not been accomplished at the house of a medium, but in my own house, where preparations have been quite impossible. A medium, walking into my dining-room, cannot, while seated in one part of the room with a number of persons keenly watching him, by trickery make an accordion play in *my own* hand when I hold it keys downwards, or cause the same accordion to float about the room playing all the time. He cannot introduce machinery which will wave window curtains or pull up Venetian blinds eight feet off, tie a knot in a handkerchief and place it in a far corner of the room, sound notes on a distant piano, cause a card-plate to float about the room, raise a water-bottle and tumbler from the table, make a coral necklace rise on end, cause a fan to move about and fan the company, or set in motion a pendulum when enclosed in a glass case firmly cemented to the wall.

CLASS VIII.

Luminous Appearances.

These, being rather faint, generally require the room to be darkened. I need scarcely remind my readers again that, under these circumstances, I have taken proper precautions to avoid being imposed upon by phosphorised oil or other means. Moreover, many of these lights are such as I have tried to imitate artificially, but cannot.

Under the strictest test conditions, I have seen a solid self-luminous body, the size and nearly the shape of a turkey's egg, float noiselessly about the room, at one time higher than any one present could reach standing on tiptoe, and then gently descend to the floor. It was visible for more than ten minutes, and before it faded away it struck the table three times with a sound like that of a hard solid body. During this time the medium was lying back, apparently insensible, in an easy chair.

I have seen luminous points of light darting about and settling on the heads of different persons; I have had questions answered by the flashing of a bright light a desired number of times in front of my face. I have seen sparks of light rising from the table to the ceiling, and again falling upon the table, striking it with an audible sound. I have had an alphabetic communication given by luminous flashes occurring before me in the air, whilst my hand was moving about amongst them. I have seen a luminous cloud floating upwards to a picture. Under the strictest test conditions, I have more than once had a solid, self-luminous, crystalline body placed in my hand by a hand which did not belong to any person in the room. *In the light*, I have seen a luminous cloud hover over a heliotrope on a

side table, break a sprig off, and carry the sprig to a lady; and on some occasions I have seen a similar luminous cloud visibly condense to the form of a hand and carry small objects about. These, however, more properly belong to the next class of phenomena.

CLASS IX.

The Appearance of Hands, either Self-Luminous or Visible by Ordinary Light.

The forms of hands are frequently *felt* at dark seances, or under circumstances where they cannot be seen. More rarely I have *seen* the hands. I will here give no instances in which the phenomenon has occurred in darkness, but will simply select a few of the numerous instances in which I have seen the hands in the light.

A beautifully-formed small hand rose up from an opening in a dining-table and gave me a flower; it appeared and then disappeared three times at intervals, affording me ample opportunity of satisfying myself that it was as real in appearance as my own. This occurred in the light in my own room, whilst I was holding the medium's hands and feet.

On another occasion, a small hand and arm, like a baby's, appeared playing about a lady who was sitting next to me. It then passed to me and patted my arm and pulled my coat several times.

At another time, a finger and thumb were seen to pick the petals from a flower in Mr. Home's button-hole, and lay them in front of several persons who were sitting near him.

A hand has been repeatedly seen by myself and others playing the keys of an accordion, both of the medium's hands being visible at the same time, and sometimes being held by those near him.

The hands and fingers do not always appear to me to be solid and life-like. Sometimes, indeed, they present more the appearance of a nebulous cloud partly condensed into the form of a hand. This is not equally visible to all present. For instance, a flower or other small object is seen to move; one person present will see a luminous cloud hovering over it, another will detect a nebulous-looking hand, whilst others will see nothing at all but the moving flower. I have more than once seen, first an object move, then a luminous cloud appear to form about it, and, lastly, the cloud condense into a shape and become a perfectly-formed hand. At this stage the hand is visible to all present. It is not always a mere form, but sometimes appears perfectly life-like and graceful, the fingers moving, and the flesh apparently as human as that of any in the room. At the wrist, or arm, it becomes hazy, and fades off into a luminous cloud.

To the touch, the hand sometimes appears icy cold and dead, at other times, warm and life-like, grasping my own with the firm pressure of an old friend.

I have retained one of these hands in my own, firmly resolved not to let it escape. There was no struggle or effort made to get loose, but it gradually seemed to resolve itself into vapour, and faded in that manner from my grasp.

CLASS X.

Direct Writing.

This is the term employed to express writing which is not produced by any person present. I have had words and messages repeatedly written on privately-marked paper, under the most rigid test conditions, and have heard the pencil moving over the paper in the

dark. The conditions—pre-arranged by myself—have been so strict as to be equally convincing to my mind as if I had seen the written characters formed. But as space will not allow me to enter into full particulars, I will merely select two instances in which my eyes as well as ears were witnesses to the operation.

The first instance which I shall give took place, it is true, at a dark *seance*, but the result was not less satisfactory on that account. I was sitting next to the medium, Miss Fox, the only other persons present being my wife and a lady relative, and I was holding the medium's two hands in one of mine, whilst her feet were resting on my feet. Paper was on the table before us, and my disengaged hand was holding a pencil.

A luminous hand came down from the upper part of the room, and after hovering near me for a few seconds, took the pencil from my hand, rapidly wrote on a sheet of paper, threw the pencil down, and then rose up over our heads, gradually fading into darkness.

My second instance may be considered the record of a failure. "A good failure often teaches more than the most successful experiment." It took place in the light, in my own room, with only a few private friends and Mr. Home present. Several circumstances, to which I need not further allude, had shown that the power that evening was strong. I therefore expressed a wish to witness the actual production of a written message such as I had heard described a short time before by a friend. Immediately an alphabetic communication was made as follows: "We will try." A pencil and some sheets of paper had been lying on the centre of the table; presently the pencil rose up on its point, and after advancing by hesitating jerks to the paper, fell down.

It then rose, and again fell. A third time it tried, but with no better result. After three unsuccessful attempts, a small wooden lath, which was lying near upon the table, slid towards the pencil, and rose a few inches from the table; the pencil rose again, and propping itself against the lath, the two together made an effort to mark the paper. It fell, and then a joint effort was again made. After a third trial the lath gave it up, and moved back to its place, the pencil lay as it fell across the paper, and an alphabetic message told us—"We have tried to do as you asked, but our power is exhausted."

CLASS XI.

Phantom Forms and Faces.

These are the rarest of the phenomena I have witnessed. The conditions requisite for their appearance appear to be so delicate, and such trifles interfere with their production, that only on very few occasions have I witnessed them under satisfactory test conditions. I will mention two of these cases.

In the dusk of the evening, during a *seance* with Mr. Home at my house, the curtains of a window about eight feet from Mr. Home were seen to move. A dark, shadowy, semi-transparent form, like that of a man, was then seen by all present standing near the window, waving the curtain with his hand. As we looked, the form faded away, and the curtains ceased to move.

The following is a still more striking instance. As in the former case, Mr. Home was the medium. A phantom form came from a corner of the room, took an accordion in its hand, and then glided about the room playing the instrument. The form was visible to all

present for many minutes, Mr. Home also being seen at the same time. Coming rather close to a lady who was sitting apart from the rest of the company, she gave a slight cry, upon which it vanished.

CLASS XII.

Special Instances which seem to point to the Agency of an Exterior Intelligence.

It has already been shown that the phenomena are governed by an intelligence. It becomes a question of importance as to the source of that intelligence. Is it the intelligence of the medium, of any of the other persons in the room, or is it an exterior intelligence? Without wishing at present to speak positively on this point, I may say that whilst I have observed many circumstances which appear to show that the will and intelligence of the medium have much to do with the phenomena,* I have observed some circumstances which seem conclusively to point to the agency of an outside intelligence, not belonging to any human being in the room. Space does not allow me to give here all the arguments which can be adduced to prove these points, but I will briefly mention one or two circumstances out of many.

I have been present when several phenomena were going on at the same time, some being unknown to the medium. I have been with Miss Fox when she has been writing a message automatically to one person present,

* I do not wish my meaning to be misunderstood. What I mean is, not that the medium's will and intelligence are actively employed in any conscious or dishonest way in the production of the phenomena, but that they sometimes appear to act in an unconscious manner.

whilst a message to another person on another subject was being given alphabetically by means of "raps," and the whole time she was conversing freely with a third person on a subject totally different from either. Perhaps a more striking instance is the following:—

During a *seance* with Mr. Home, a small lath, which I have before mentioned, moved across the table to me, in the light, and delivered a message to me by tapping my hand; I repeating the alphabet, and the lath tapping me at the right letters. The other end of the lath was resting on the table, some distance from Mr. Home's hands.

The taps were so sharp and clear, and the lath was evidently so well under control of the invisible power which was governing its movements, that I said, "Can the intelligence governing the motion of this lath change the character of the movements, and give me a telegraphic message through the Morse alphabet by taps on my hand?" (I have every reason to believe that the Morse code was quite unknown to any other person present, and it was only imperfectly known to me.) Immediately I said this, the character of the taps changed, and the message was continued in the way I had requested. The letters were given too rapidly for me to do more than catch a word here and there, and consequently I lost the message; but I heard sufficient to convince me that there was a good Morse operator at the other end of the line, wherever that might be.

Another instance. A lady was writing automatically by means of the planchette. I was trying to devise a means of proving that what she wrote was not due to "unconscious cerebration." The planchette, as it always does, insisted that, although it was moved by the hand

and arm of the lady, the *intelligence* was that of an invisible being who was playing on her brain as on a musical instrument, and thus moving her muscles. I therefore said to this intelligence, "Can you see the contents of this room?" "Yes," wrote the planchette. "Can you see to read this newspaper?" said I, putting my finger on a copy of the *Times*, which was on a table behind me, but without looking at it. "Yes," was the reply of the planchette. "Well," I said, "if you can see that, write the word which is now covered by my finger, and I will believe you." The planchette commenced to move. Slowly and with great difficulty the word "however" was written. I turned round and saw that the word "however" was covered by the tip of my finger.

I had purposely avoided looking at the newspaper when I tried this experiment, and it was impossible for the lady, had she tried, to have seen any of the printed words, for she was sitting at one table, and the paper was on another table behind, my body intervening.

CLASS XIII.

Miscellaneous Occurrences of a Complex Character.

Under this heading I propose to give several occurrences which cannot be otherwise classified owing to their complex character. Out of more than a dozen cases, I will select two. The first occurred in the presence of Miss Kate Fox. To render it intelligible I must enter into some details.

Miss Fox had promised to give me a *seance* at my house one evening in the spring of last year. Whilst waiting for her, a lady relative, with my two eldest sons, aged fourteen and eleven, were sitting in the

dining-room where the *seances* were always held, and I was sitting by myself, writing in the library. Hearing a cab drive up and the bell ring, I opened the door to Miss Fox, and took her directly into the dining-room. She said she would not go upstairs, as she could not stay very long, but laid her bonnet and shawl on a chair in the room. I then went to the dining-room door, and telling the two boys to go into the library and proceed with their lessons, I closed the door behind them, locked it, and (according to my usual custom at *seances*) put the key in my pocket.

We sat down, Miss Fox being on my right hand and the other lady on my left. An alphabetic message was soon given to turn the gas out, and we thereupon sat in total darkness, I holding Miss Fox's two hands in one of mine the whole time. Very soon a message was given in the following words: "We are going to bring something to show our power;" and almost immediately afterwards we all heard the tinkling of a bell, not stationary, but moving about in all parts of the room: at one time by the wall, at another in a further corner of the room, now touching me on the head, and now tapping against the floor. After ringing about the room in this manner for fully five minutes, it fell upon the table close to my hands.

During the time this was going on no one moved, and Miss Fox's hands were perfectly quiet. I remarked that it could not be my little hand-bell which was ringing, for I left that in the library. (Shortly before Miss Fox came I had occasion to refer to a book which was lying on a corner of a book-shelf.

The bell was on the book, and I put it on one side to get the book. That little incident had impressed on my mind the fact of the bell being in the library.) The gas was burning brightly in the hall outside the dining-room door so that this could not be opened without letting light into the room, even had there been an accomplice in the house with a duplicate key, which there certainly was not.

I struck a light. There, sure enough, was my own bell lying on the table before me. I went straight into the library. A glance showed that the bell was not where it ought to have been. I said to my eldest boy, "Do you know where my little bell is?" "Yes, papa," he replied, "there it is," pointing to where I had left it. He looked up as he said this, and then continued, "No—it's not there, but it was there a little time ago." "How do you mean?—has anyone come in and taken it?" "No," said he, "no one has been in; but I am sure it was there, because when you sent us in here out of the dining-room, J. (the youngest boy) began ringing it so that I could not go on with my lessons, and I told him to stop." J. corroborated this, and said that, after ringing it, he put the bell down where he had found it.

The second circumstance which I will relate occurred in the light, one Sunday evening, only Mr. Home and members of my family being present. My wife and I had been spending the day in the country, and had brought home a few flowers we had gathered. On reaching home, we gave them to a servant to put them in water. Mr. Home came soon after, and we at once proceeded to the dining-room. As

we were sitting down, a servant brought in the flowers which she had arranged in a vase. I placed it in the centre of the dining-table, which was without a cloth. This was the first time Mr. Home had seen these flowers.

After several phenomena had occurred, the conversation turned upon some circumstances which seemed only explicable on the assumption that matter had actually passed through a solid substance. Thereupon a message was given by means of the alphabet: "It is impossible for matter to pass through matter, but we will show you what we can do." We waited in silence. Presently a luminous appearance was seen hovering over the bouquet of flowers, and then, in full view of all present, a piece of China-grass 15 inches long, which formed the centre ornament of the bouquet, slowly rose from the other flowers, and then descended to the table in front of the vase between it and Mr. Home. It did not stop on reaching the table, but went straight through it, and we all watched it until it had entirely passed through. Immediately on the disappearance of the grass, my wife, who was sitting near Mr. Home, saw a hand come up from under the table between them, holding the piece of grass. It tapped her on the shoulder two or three times with a sound audible to all, then laid the grass on the floor, and disappeared. Only two persons saw the hand, but all in the room saw the piece of grass moving about as I have described. During the time this was taking place, Mr. Home's hands were seen by all to be quietly resting on the table in front of him. The place where the grass disappeared was 18 inches

from his hands. The table was a telescope dining-table, opening with a screw; there was no leaf in it, and the junction of the two sides formed a narrow crack down the middle. The grass had passed through this chink, which I measured, and found to be barely $\frac{1}{8}$ inch wide. The stem of the piece of grass was far too thick to enable me to force it through this crack without injuring it, yet we had all seen it pass through quietly and smoothly; and on examination, it did not show the slightest signs of pressure or abrasion.

THEORIES TO ACCOUNT FOR THE PHENOMENA OBSERVED.

First Theory.—The phenomena are all the results of tricks, clever mechanical arrangements, or legerdemain; the mediums are imposters, and the rest of the company fools.

It is obvious that this theory can only account for a very small proportion of the facts observed. I am willing to admit that some so-called mediums of whom the public have heard much are arrant imposters who have taken advantage of the public demand for spiritualistic excitement to fill their purses with easily-earned guineas; whilst others who have no pecuniary motive for imposture are tempted to cheat, it would seem, solely by a desire for notoriety. I have met with several cases of imposture, some very ingenious, others so palpable that no person who has witnessed the genuine phenomena could be taken in by them. An enquirer into the subject finding one of these cases at his first initiation is disgusted with what he detects at once to be an imposture; and he not unnaturally gives vent to his feelings, privately or in print, by a sweeping denuncia-

tion of the whole genus "medium." Again, with a thoroughly genuine medium, the first phenomena which are observed are generally slight movements of the table, and faint taps under the medium's hands or feet. These, of course, are quite easy to be imitated by the medium, or anyone at the table. If, as sometimes occurs, nothing else takes place, the sceptical observer goes away with the firm impression that his superior acuteness detected cheating on the part of the medium, who was consequently afraid to proceed with any more tricks in *his* presence. He, too, writes to the newspapers exposing the whole imposture, and probably indulges in moral sentiments about the sad spectacle of persons, apparently intelligent, being taken in by imposture which he detected at once.

There is a wide difference between the tricks of a professional conjurer, surrounded by his apparatus, and aided by any number of concealed assistants and confederates, deceiving the senses by clever sleight of hand on his own platform, and the phenomena occurring in the presence of Mr. Home, which take place in the light, in a private room that almost up to the commencement of the *seance* has been occupied as a living room, and surrounded by private friends of my own, who not only will not countenance the slightest deception, but who are watching narrowly everything that takes place. Moreover, Mr. Home has frequently been searched before and after *seances* and he *always* offers to allow it. During the most remarkable occurrences I have occasionally held both his hands, and placed my feet on his feet. On no single occasion have I proposed a

modification of arrangements for the purpose of rendering trickery less possible which he has not at once assented to, and frequently he has himself drawn attention to tests which might be tried.

I speak chiefly of Mr. Home, as he is so much more powerful than most of the mediums I have experimented with. But with all I have taken such precautions as place trickery out of the list of possible explanations.

Be it remembered that an explanation to be of any value must satisfy *all* the conditions of the problem. It is not enough for a person, who has perhaps seen only a few of the inferior phenomena, to say, "I suspect it was all cheating," or "I saw how some of the tricks could be done."

Second Theory.—The persons at a *seance* are the victims of a sort of mania or delusion, and imagine phenomena to occur which have no real objective existence.

Third Theory.—The whole is the result of conscious or unconscious cerebral action.

Fourth Theory.—The result of the spirit of the medium, perhaps in association with the spirits of some or all of the people present.

These two theories are evidently incapable of embracing more than a small portion of the phenomena, and they are improbable explanations for even those. They may be dismissed very briefly.

I now approach the "Spiritual" theories. It must be remembered that the word "spirits" is used in a very vague sense by the generality of people.

Fifth Theory.—The actions of evil spirits or devils, personifying who or what they please, in order to undermine Christianity and ruin men's souls.

Sixth Theory.—The actions of a separate order of beings, living on this earth, but invisible and immaterial to us. Able, however, occasionally to manifest their presence. Known in almost all countries and ages as demons (not necessarily bad), gnomes, fairies, kobolds, elves goblins, Puck, etc.

Seventh Theory.—The actions of departed human beings—the spiritual theory *par excellence*.

Eighth Theory.—(*The Psychic Force Theory*).—This is a necessary adjunct to the 4th, 5th, 6th, and 7th theories, rather than a theory by itself.

According to this theory the "medium," or the circle of people associated together as a whole, is supposed to possess a force, power, influence, virtue, or gift, by means of which intelligent beings are enabled to produce the phenomena observed. What these intelligent beings are is a subject for other theories.

It is obvious that a "medium" possesses a *something* which is not possessed by an ordinary being. Give this *something* a name. Call it "*x*" if you like. Mr. Serjeant Cox calls it Psychic Force. There has been so much misunderstanding on this subject that I think it best to give the following explanation in Mr. Serjeant Cox's own words:—

"The Theory of *Psychic Force* is in itself merely the recognition of the now almost undisputed fact that under certain conditions, as yet but imperfectly ascertained, and within a limited, but as yet undefined, distance from the bodies of certain persons having a special nerve organization, a Force operates by which,

without muscular contact or connection, action at a distance is caused, and visible motions and audible sounds are produced in solid substances. As the presence of such an organization is necessary to the phenomenon, it is reasonably concluded that the Force does, in some manner as yet unknown, proceed from that organization. As the organism is itself moved and directed within its structure by a Force which either is, or is controlled by, the Soul, Spirit, or Mind (call it what we may) which constitutes the individual being we term 'the Man,' it is an equally reasonable conclusion that the Force which causes the motions beyond the limits of the body is the same Force that produces motion within the limits of the body. And, inasmuch as the external force is seen to be often directed by Intelligence, it is an equally reasonable conclusion that the directing Intelligence of the external force is the same Intelligence that directs the Force internally. This is the force to which the name of *Psychic Force* has been given by me as properly designating a force which I thus contend to be traced back to the Soul or Mind of the Man as its source. But I and all who adopt this theory of *Psychic Force* as being the agent through which the phenomena are produced, do not thereby intend to assert that this *Psychic Force* may not be sometimes seized and directed by some other Intelligence than the Mind of the *Psychic*. The most ardent Spiritualists practically admit the existence of *Psychic Force* under the very inappropriate name of *Magnetism* (to which it has no affinity whatever), for they assert that the Spirits of the Dead can only do the acts attributed to them by using the *Magnetism* (that is, the *Psychic Force*) of the Medium. The difference between the advocates

of Psychic Force and the Spiritualists consists in this—that we contend that there is as yet insufficient proof of any other directing agent than the Intelligence of the Medium, and no proof whatever of the agency of Spirits of the Dead; while the Spiritualists hold it as a faith, not demanding further proof, that Spirits of the Dead are the sole agents in the production of all the phenomena. Thus the controversy resolves itself into a pure question of *fact*, only to be determined by a laborious and long-continued series of experiments and an extensive collection of psychological *facts*, which should be the first duty of the Psychological Society, the formation of which is now in progress.”



MISS FLORENCE COOK'S MEDIUMSHIP.

[The following letters appeared in the Spiritualistic journals at the dates which they bear.]

Sir—It has been my endeavor to keep as clear of controversy as possible, in writing or speaking about so inflammatory a topic as the phenomena called Spiritual. Except in very few cases, where the prominent position of my opponent would have caused my silence to be ascribed to other than the real motives, I have made no reply to the attacks and misrepresentations which my connection with this subject has entailed upon me.

The case is otherwise, however, when a few lines from me may perhaps assist in removing an unjust suspicion which is cast upon another. And when this other person is a woman—young, sensitive, and innocent—it becomes especially a duty for me to give the weight of my testimony in favour of her whom I believe to be unjustly accused.

Among all the arguments brought forward on either side touching the phenomena of Miss Cook's mediumship, I see very few *facts* stated in such a way as to lead an unprejudiced reader, provided he can trust the judgment and veracity of the narrator, to say, "Here at last is absolute proof." I see plenty of strong assertion, much unintentional exaggeration, endless conjecture and supposition, no little insinuation of fraud, and some amount of vulgar buffoonery; but no one has come forward with a positive assertion, based upon the evidence of his own senses, to the effect that when the form which calls itself "Katie" is visible in the room, the body of Miss Cook is either actually in the cabinet or is not there.

It appears to me that the whole question narrows itself into this small compass. Let either of the above alternatives be proved to be a fact, and all the other collateral questions may be dismissed. But the proof must be absolute, and not based upon inferential reasoning, or assumed upon the supposed integrity of seals, knots, and sewing; for I have reason to know that the power at work in these phenomena, like Love, "laughs at locksmiths."

I was in hopes that some of those friends of Miss Cook, who have attended her *seances* almost from the commencement, and who appear to have been highly favoured in the tests they have received, would, ere this, have borne testimony in her favour. In default, however, of evidence from those who have followed these phenomena from their beginning nearly three years ago, let me, who have only been admitted, as it were, at the eleventh hour, state a circumstance which came under my notice at a *seance* to which I was invited by the favour of Miss Cook, a few days after the disgraceful occurrence which has given rise to this controversy.

The *seance* was held at the house of Mr. Luxmore, and the "cabinet" was a back drawing-room, separated from the front room in which the company sat by a curtain.

The usual formality of searching the room and examining the fastenings having been gone through, Miss Cook entered the cabinet.

After a little time the form of Katie appeared at the side of the curtain, but soon retreated, saying her medium was not well, and could not be put into a sufficiently deep sleep to make it safe for her to be left.

I was sitting within a few feet of the curtain close behind which Miss Cook was sitting, and I could frequently hear her moan and sob, as if in pain. This uneasiness continued at intervals nearly the whole duration of the *seance*, and once, when the form of Katie was standing before me in the room, I distinctly heard a sobbing, moaning sound, identical with that which Miss Cook had been making at intervals the whole time of the *seance*, come from behind the curtain where the young lady was supposed to be sitting.

I admit that the figure was startlingly life-like and real, and, as far as I could see in the somewhat dim light, the features resembled those of Miss Cook; but still the positive evidence of one of my own senses that the moan came from Miss Cook in the cabinet, whilst the figure was outside, is too strong to be upset by a mere inference to the contrary, however well supported.

Your readers, sir, know me, and will, I hope, believe that I will not come hastily to an opinion, or ask them to agree with me on insufficient evidence. It is perhaps expecting too much to think that the little incident I have mentioned will have the same weight with them that it had with me. But this I do beg of them—Let those who are inclined to judge Miss Cook harshly suspend their judgment until I bring forward positive evidence which I think will be sufficient to settle the question.

Miss Cook is now devoting herself exclusively to a series of private *seances* with me and one or two friends. The *seances* will probably extend over some months, and I am promised that every desirable test shall be given to me. These *seances* have not been

going on many weeks, but enough has taken place to thoroughly convince me of the perfect truth and honesty of Miss Cook, and to give me every reason to expect that the promises so freely made to me by Katie will be kept.

All I now ask is that your readers will not hastily assume that everything which is *prima facie* suspicious necessarily implies deception, and that they will suspend their judgment until they hear from me again on this subject.—I am, &c.,

WILLIAM CROOKES.

20 MORNINGTON ROAD, LONDON.

February 3, 1874.

SPIRIT-FORMS.

In a letter which I wrote to this journal early in February last, speaking of the phenomena of spirit-forms which have appeared through Miss Cook's mediumship, I said, "Let those who are inclined to judge Miss Cook harshly suspend their judgment until I bring forward positive evidence which I think will be sufficient to settle the question. Miss Cook is now devoting herself exclusively to a series of private *seances* with me and one or two friends. . . . Enough has taken place to thoroughly convince me of the perfect truth and honesty of Miss Cook, and to give me every reason to expect that the promises so freely made to me by Katie will be kept."

In that letter I described an incident which, to my mind, went very far towards convincing me that Katie and Miss Cook were two separate material beings. When Katie was outside the cabinet, stand-

ing before me, I heard a moaning noise from Miss Cook in the cabinet. I am happy to say that I have at last obtained the "absolute proof" to which I referred in the above-quoted letter.

I will, for the present, pass over most of the tests which Katie has given me on the many occasions when Miss Cook has favoured me with *seances* at this house, and will only describe one or two which I have recently had. I have for some time past been experimenting with a phosphorous lamp, consisting of a 6-oz. or 8-oz. bottle, containing a little phosphorised oil, and tightly corked. I have had reason to hope that by the light of this lamp some of the mysterious phenomena of the cabinet might be rendered visible, and Katie has also expressed herself hopefully as to the same result.

On March 12th, during a *seance* here, after Katie had been walking amongst us and talking for some time, she retreated behind the curtain which separated my laboratory, where the company was sitting, from my library which did temporary duty as a cabinet. In a minute she came to the curtain and called me to her, saying, "Come into the room and lift my medium's head up, she has slipped down." Katie was then standing before me clothed in her usual white robes and turban head-dress. I immediately walked into the library up to Miss Cook, Katie stepping aside to allow me to pass. I found Miss Cook had slipped partially off the sofa, and her head was hanging in a very awkward position. I lifted her on to the sofa, and in so doing had satisfactory evidence, in spite of the darkness, that Miss Cook was not attired in the "Katie" costume, but had on her ordi-

nary black velvet dress, and was in a deep trance. Not more than three seconds elapsed between my seeing the white-robed Katie standing before me and my raising Miss Cook on to the sofa from the position into which she had fallen.

On returning to my post of observation by the curtain, Katie again appeared, and said she thought she would be able to show herself and her medium to me at the same time. The gas was then turned out and she asked for my phosphorus lamp. After exhibiting herself by it for some seconds, she handed it back to me, saying, "Now come in and see my medium." I closely followed her into the library, and by the light of my lamp saw Miss Cook lying on the sofa just as I had left her. I looked round for Katie, but she had disappeared. I called her, but there was no answer.

On resuming my place, Katie soon reappeared, and told me that she had been standing close to Miss Cook all the time. She then asked if she might try an experiment herself, and taking the phosphorus lamp from me she passed behind the curtain, asking me not to look in for the present. In a few minutes she handed the lamp back to me, saying she could not succeed, as she had used up all the power, but would try again another time. My eldest son, a lad of fourteen, who was sitting opposite me, in such a position that he could see behind the curtain, tells me he distinctly saw the phosphorus lamp apparently floating about in space over Miss Cook, illuminating her as she lay motionless on the sofa, but he could not see anyone holding the lamp.

I pass on to a *seance* held last night at Hackney. Katie never appeared to greater perfection, and for nearly two hours she walked about the room, conversing familiarly with those present. On several occasions she took my arm when walking, and the impression conveyed to my mind that it was a living woman by my side, instead of a visitor from the other world, was so strong that the temptation to repeat a recent celebrated experiment became almost irresistible. Feeling, however, that if I had not a spirit, I had at all events a *lady* close to me, I asked her permission to clasp her in my arms, so as to be able to verify the interesting observations which a bold experimentalist has recently somewhat verbosely recorded. Permission was graciously given, and I accordingly did—well, as any gentleman would do under the circumstances. Mr. Volckman will be pleased to know that I can corroborate his statement that the “ghost” (not “struggling” however) was as material a being as Miss Cook herself. But the sequel shows how wrong it is for an experimentalist, however accurate his observations may be, to venture to draw an important conclusion from an insufficient amount of evidence.

Katie now said she thought she would be able this time to show herself and Miss Cook together. I was to turn the gas out, and then come with my phosphorus lamp into the room now used as a cabinet. This I did, having previously asked a friend who was skillful in shorthand to take down any statement I might make when in the cabinet, knowing the importance attaching to first impressions, and not

wishing to leave more to memory than necessary. His notes are now before me.

I went cautiously into the room, it being dark, and felt about for Miss Cook. I found her crouching on the floor. Kneeling down, I let air enter the lamp, and by its light I saw the young lady dressed in black velvet, as she had been in the early part of the evening, and to appearance perfectly senseless; she did not move when I took her hand and held the light quite close to her face, but continued quietly breathing. Raising the lamp, I looked around and saw Katie standing close behind Miss Cook. She was robed in flowing white drapery as we had seen her previously during the *seance*. Holding one of Miss Cook's hands in mine, and still kneeling, I passed the lamp up and down so as to illuminate Katie's whole figure, and satisfy myself thoroughly that I was really looking at the veritable Katie whom I had clasped in my arms a few minutes before, and not at the phantasm of a disordered brain. She did not speak, but moved her head and smiled in recognition. Three separate times did I carefully examine Miss Cook crouching before me, to be sure that the hand I held was that of a living woman, and three separate times did I turn the lamp to Katie and examine her with steadfast scrutiny, until I had no doubt whatever of her objective reality. At last Miss Cook moved slightly, and Katie instantly motioned me to go away. I went to another part of the cabinet, and then ceased to see Katie, but did not leave the room till Miss Cook woke up, and two of the visitors came in with a light.

Before concluding this article I wish to give some of the points of difference which I have observed between Miss Cook and Katie. Katie's height varies; in my house I have seen her six inches taller than Miss Cook. Last night, with bare feet, and not "tiptoeing," she was four-and-a-half inches taller than Miss Cook. Katie's neck was bare last night; the skin was perfectly smooth both to touch and sight, whilst on Miss Cook's neck is a large blister, which under similar circumstances is distinctly visible and rough to the touch. Katie's ears are unpierced, whilst Miss Cook habitually wears earrings. Katie's complexion is very fair, while that of Miss Cook is very dark. Katie's fingers are much longer than Miss Cook's, and her face is also larger. In manners and ways of expression there are also many decided differences.

Miss Cook's health is not good enough to allow of her giving more of these test *seances* for the next few weeks, and we have, therefore, strongly advised her to take an entire rest before recommencing the experimental campaign which I have sketched out for her, and the results of which I hope to be able to record at some future day.

20 MORNINGTON ROAD, N. W.

March 30th, 1874.

THE LAST OF KATIE KING.

Having taken a very prominent part of late at Miss Cook's *seances*, and having been very successful in taking numerous photographs of Katie King by the aid of the electric light, I have thought that the publication of a few of the details would be of interest to the readers of the *Spiritualist*.

During the week before Katie took her departure she gave *seances* at my house almost nightly, to enable me to photograph her by artificial light. Five complete sets of photographic apparatus were accordingly fitted up for the purpose, consisting of five cameras, one of the whole-plate size, one half-plate, one quarter-plate, and two binocular stereoscopic cameras, which were all brought to bear upon Katie at the same time on each occasion on which she stood for her portrait. Five sensitising and five fixing baths were used, and plenty of plates were cleaned ready for use in advance, so that there might be no hitch or delay during the photographic operations, which were performed by myself, aided by one assistant.

My library was used as a dark cabinet. It has folding doors opening into the laboratory; one of these doors was taken off its hinges, and a curtain suspended in its place to enable Katie to pass in and out easily. Those of our friends who were present were seated in the laboratory facing the curtain, and the cameras were placed a little behind them, ready to photograph Katie when she came outside, and to photograph anything also inside the cabinet, whenever the curtain was withdrawn for the purpose. Each evening there were three or four exposures of

plates in the five cameras, giving at least fifteen separate pictures at each *seance*; some of these were spoilt in the developing, and some in regulating the amount of light. Although I have forty-four negatives, some inferior, some indifferent, and some excellent.

Katie instructed all the sitters but myself to keep their seats and to keep conditions, but for some time past she has given me permission to do what I liked—to touch her, and to enter and leave the cabinet almost whenever I pleased. I have frequently followed her into the cabinet, and have sometimes seen her and her medium together, but most generally I have found nobody but the entranced medium lying on the floor, Katie and her white robes having instantaneously disappeared.

During the last six months Miss Cook has been a frequent visitor at my house, remaining sometimes a week at a time. She brings nothing with her but a little hand-bag, not locked; during the day she is constantly in the presence of Mrs. Crookes, myself, or some other member of my family, and, not sleeping by herself, there is absolutely no opportunity for any preparation even of a less elaborate character than would be required for enacting Katie King. I prepare and arrange my library myself as the dark cabinet, and usually, after Miss Cook has been dining and conversing with us, and scarcely out of our sight for a minute, she walks direct into the cabinet, and I, at her request, lock its second door, and keep possession of the key all through the *seance*; the gas is then turned out, and Miss Cook is left in darkness.

On entering the cabinet, Miss Cook lies down upon the floor, with her head on a pillow, and is soon en-

tranced. During the photographic *seance*, Katie muffled her medium's head up in a shawl to prevent the light falling upon her face. I frequently drew the curtain on one side when Katie was standing near, and it was a common thing for the seven or eight of us in the laboratory to see Miss Cook and Katie at the same time, under the full blaze of the electric light. We did not on these occasions actually see the face of the medium because of the shawl, but we saw her hands and feet; we saw her move uneasily under the influence of the intense light, and we heard her moan occasionally. I have one photograph of the two together, but Katie is seated in front of Miss Cook's head.

During the time I have taken an active part in these *seances* Katie's confidence in me gradually grew, until she refused to give a *seance* unless I took charge of the arrangements. She said she always wanted me to keep close to her, and near the cabinet, and I found that after this confidence was established, and she was satisfied I would not break any promise I might make to her, the phenomena increased greatly in power, and tests were freely given that would have been unobtainable had I approached the subject in another manner. She often consulted me about persons present at the *seances*, and where they should be placed, for of late she had become very nervous, in consequence of certain ill-advised suggestions that force should be employed as an adjunct to more scientific modes of research.

One of the most interesting of the pictures is one in which I am standing by the side of Katie; she has her bare foot upon a particular part of the floor. Afterwards I dressed Miss Cook like Katie, placed her and myself in exactly the same position, and we were

photographed by the same cameras, placed exactly as in the other experiment, and illuminated by the same light. When these two pictures are placed over each other, the two photographs of myself coincide exactly as regards stature, etc., but Katie is half a head taller than Miss Cook, and looks a big woman in comparison with her. In the breadth of her face, in many of the pictures, she differs essentially in size from her medium, and the photographs show several other points of difference.

But photography is as inadequate to depict the perfect beauty of Katie's face as words are powerless to describe her charms of manner. Photography may, indeed, give a map of her countenance; but how can it reproduce the brilliant purity of her complexion, or the ever-varying expression of her most mobile features, now overshadowed with sadness when relating some of the bitter experiences of her past life, now smiling with all the innocence of happy girlhood when she had collected my children round her and was amusing them by recounting anecdotes of her adventures in India?

“Round her she made an atmosphere of life;
The very air seemed lighter from her eyes,
They were so soft and beautiful, and rife
With all we can imagine of the skies;
Her overpowering presence made you feel
It would not be idolatry to kneel.”

Having seen so much of Katie lately, when she has been illuminated by the electric light, I am enabled to add to the points of difference between her and her medium which I mentioned in a former article. I have the most absolute certainty that Miss Cook and Katie are two separate individuals so far as their bodies are concerned. Several little marks on Miss Cook's face are absent on Katie's. Miss Cook's hair is so dark a

brown as almost to appear black; a lock of Katie's, which is now before me, and which she allowed me to cut from her luxuriant tresses, having first traced it up to the scalp and satisfied myself that it actually grew there, is a rich golden auburn.

One evening I timed Katie's pulse. It beat steadily at 75, whilst Miss Cook's pulse a little time after was going at its usual rate of 90. On applying my ear to Katie's chest I hear a heart beating rhythmically inside, and pulsating even more steadily than did Miss Cook's heart when she allowed me to try a similar experiment after the *seance*. Tested in the same way, Katie's lungs were found to be sounder than her medium's, for at the time I tried my experiment Miss Cook was under medical treatment for a severe cough.

You readers may be interested in having Mrs. Ross Church's and your own accounts of the last appearance of Katie supplemented by my own narrative, as far as I can publish it. When the time came for Katie to take her farewell I asked that she would let me see the last of her. Accordingly when she had called each of the company up to her and had spoken to them a few words in private, she gave some general directions for the future guidance and protection of Miss Cook. From these, which were taken down in shorthand, I quote the following: "Mr. Crookes has done very well throughout, and I leave Florrie with the greatest confidence in his hands, feeling perfectly sure he will not abuse the trust I place in him. He can act in any emergency better than I can myself, for he has more strength." Having concluded her directions Katie invited me into the cabinet with her, and allowed me to remain there to the end.

After closing the curtain she conversed with me for some time, and then walked across the room to where Miss Cook was lying senseless on the floor. Stooping over her, Katie touched her, and said: "Wake up, Florrie, wake up! I must leave you now." Miss Cook then woke and tearfully entreated Katie to stay a little time longer. "My dear, I can't; my work is done. God bless you," Katie replied, and then continued speaking to Miss Cook. For several minutes the two were conversing with each other, till at last Miss Cook's tears prevented her speaking. Following Katie's instructions I then came forward to support Miss Cook, who was falling on the floor, sobbing hysterically. I looked round, but the white-robed Katie had gone. As soon as Miss Cook was sufficiently calmed, a light was procured and I led her out of the cabinet.

The almost daily *seances* with which Miss Cook has lately favored me have proved a severe tax upon her strength, and I wish to make the most public acknowledgment of the obligations I am under to her for her readiness to assist me in my experiments. Every test that I have proposed she has at once agreed to submit to with the utmost willingness; she is open and straightforward in speech, and I have never seen anything approaching the slightest symptom of a wish to deceive. Indeed, I do not believe she could carry on a deception if she were to try, and if she did she would certainly be found out very quickly, for such a line of action is altogether foreign to her nature. And to imagine that an innocent school-girl of fifteen should be able to conceive and then successfully carry out for three years so gigantic an imposture as this, and in that time should submit to any test which might be imposed upon her, should

bear the strictest scrutiny, should be willing to be searched at any time, either before or after the *seance*, and should meet with even better success in my own house than at that of her parents, knowing that she visited me with the express object of submitting to strict scientific tests—to imagine, I say, the Katie King of the last three years to be the result of imposture does more violence to one's reason and common sense than to believe her to be what she herself affirms.

It would not be right for me to conclude this article without also thanking Mr. and Mrs. Cook for the great facilities they have given me to carry on these observations and experiments.

SIR WILLIAM CROOKES ADDRESSES THE BRITISH ASSOCIATION.

At the annual assembly of that most representative body, the British Association, at Bristol, in 1898, Sir William Crookes again declared himself upon the subject of his researches.

Since his first utterance, in 1874, many doubters had arisen who had declared that the scientist had swerved from his former course and no longer believed in the genuineness of the manifestations witnessed. His words before the British Association leave no doubt in the mind. He said:

No incident in my scientific career is more widely known than the part I took many years ago in certain psychic researches. Thirty years have passed since I published an account of experiments tending to show that outside our scientific knowledge there exists a Force exercised by intelligence differing from the ordinary intelligence common to mortals. This fact in my

life is, of course, well understood by those who honored me with the invitation to become your President. Perhaps among my audience some may feel curious as to whether I shall speak out or be silent. I elect to speak, although briefly. To ignore the subject would be an act of cowardice—an act of cowardice I feel no temptation to commit.

I have nothing to retract. I adhere to my already published statements. Indeed, I might add much thereto. I regret only a certain crudity in those early expositions which, no doubt justly, militated against their acceptance by the scientific world. My own knowledge at that time scarcely extended beyond the fact that certain phenomena new to science had assuredly occurred, and were attested by my own sober senses, and, better still, by automatic record.

I think I see a little farther now. I have glimpses of something like coherence among the strange elusive phenomena; of something like continuity between those unexplained forces and laws already known. This advance is largely due to the labors of another Association of which I have also this year the honor to be President—the Society for Psychical Research. And were I now introducing for the first time these inquiries to the world of science I should choose a starting point different from that of old. It would be well to begin with *telepathy*; with the fundamental law, as I believe it to be, that thoughts and images may be transferred from one mind to another without the agency of the recognized organs of sense—that knowledge may enter the human mind without being communicated in any hitherto known or recognized ways.

If telepathy take place we have two physical facts—the physical change in the brain of A, the suggester, and

the analogous physical change in the brain of B, the recipient of the suggestion. Between these two physical events there must exist a train of physical causes. Whenever the connecting sequence of intermediate causes begins to be revealed the inquiry will then come within the range of one of the Sections of the British Association. Such a sequence can only occur through an intervening medium. All the phenomena of the universe are presumably in some way continuous, and it is unscientific to call in the aid of mysterious agencies when with every fresh advance in knowledge it is shown that ether vibrations have powers and attributes abundantly equal to any demand—even to the transmission of thought. It is supposed by some physiologists that the essential cells of nerves do not actually touch, but are separated by a narrow gap which widens in sleep while it narrows almost to extinction during mental activity. This condition is so singularly like that of a Branly or Lodge coherer as to suggest a further analogy. The structure of nerve and brain being similar, it is conceivable there may be present masses of such nerve coherers in the brain whose special function it may be to receive impulses brought from without through the connecting sequence of ether waves of appropriate order of magnitude. Rontgen has familiarized us with an order of vibrations of extreme minuteness compared with the smallest wave with which we have otherwise been acquainted, and of dimensions comparable with the distances between the centers of the atoms of which the material universe is built up; and there is no reason to suppose that we have here reached the limit of frequency. It is known that the action of thought is accompanied by certain molecular movements in the brain,

and here we have physical vibrations capable from their extreme minuteness of acting direct on individual molecules, while their rapidity approaches that of the internal and external movements of the atoms themselves.

Confirmation of telepathic phenomena is afforded by many converging experiments, and by many spontaneous occurrences only thus intelligible. The most varied proof, perhaps, is drawn from analysis of the sub-conscious workings of the mind, when these, whether by accident or design, are brought into conscious survey. Evidence of a region below the threshold of consciousness has been presented, since its first inception, in the "Proceedings of the Society for Psychical Research;" and its various aspects are being interpreted and welded into a comprehensive whole by the pertinacious genius of F. W. H. Myers.

A formidable range of phenomena must be scientifically sifted before we effectually grasp a faculty so strange, so bewildering, and for ages so inscrutable, as the direct action of mind on mind. This delicate task needs a rigorous employment of the method of exclusion—a constant setting aside of irrelevant phenomena that could be explained by known causes, including those far too familiar causes, conscious and unconscious fraud. The inquiry unites the difficulties inherent in all experimentation connected with *mind*, with tangled human temperaments and with observations dependent less on automatic record than on personal testimony. But difficulties are things to be overcome even in the elusory branch of research known as Experimental Psychology.

It has been said that "Nothing worth the proving can be proved, nor yet disproved." True though this may

have been in the past, it is true no longer. The science of our century has forged weapons of observation and analysis by which the veriest tyro may profit. Science has trained and fashioned the average mind into habits of exactitude and disciplined perception, and in so doing has fortified itself for tasks higher, wider, and incomparably more wonderful than even the wisest among our ancestors imagined. Like the souls in Plato's myth that follow the chariot of Zeus, it has ascended to a point of vision far above the earth. It is henceforth open to science to transcend all we now think we know of matter, and to gain new glimpses of a profounder scheme of Cosmic Law.

An eminent predecessor in this chair declared that "by an intellectual necessity he crossed the boundary of experimental evidence, and discerned in that matter, which we, in our ignorance of its latent powers, and notwithstanding our professed reverence for its Creator, have hitherto covered with opprobrium, the potency and promise of all terrestrial life." I should prefer the apophthegm, and to say that in life I see the promise and potency of all forms of matter.

In old Egyptian days a well-known inscription was carved over the portal of the temple of Isis: "I am whatever hath been, is, or ever will be; and my veil no man hath yet lifted." Not thus do modern seekers after truth confront Nature—the word that stands for the baffling mysteries of the Universe. Steadily, unflinchingly, we strive to pierce the inmost heart of Nature, from what she is to re-construct what she has been, and to prophesy what she yet shall be. Veil after veil we have lifted, and her face grows more beautiful, august, and wonderful, with every barrier that is withdrawn.