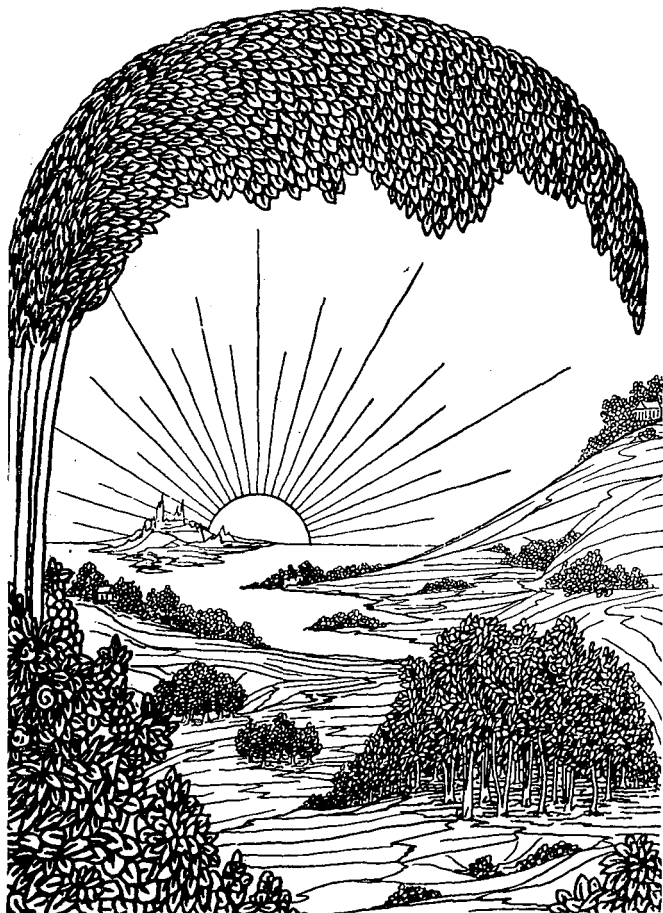


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FIFTH YEAR.

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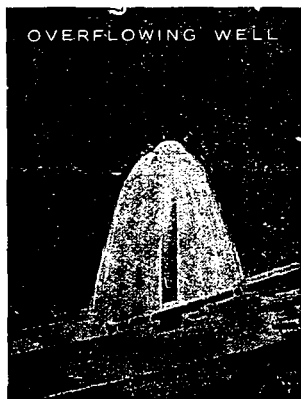
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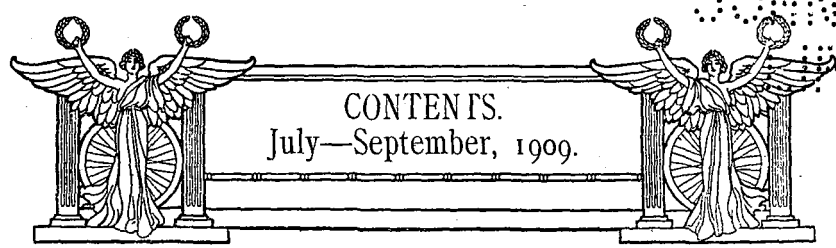
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EDITORIAL NOTICE.

All manuscripts and Editorial Communications should be addressed to the Editor, at 1, Voltastrasse, Zurich, Switzerland.]

IN accordance with the unanimously expressed desire of our subscribers—(only *five* out of all our subscribers voting for the continuance of THE ANNALS as a *monthly* as heretofore, all others desiring the journal to develop into a *Quarterly Review*)—THE ANNALS has now become a *Quarterly* publication. This change will allow THE ANNALS to become not only, as in the past, a Review devoted to the registering of authentic psychical phenomena as such occur, but *also* a Review consecrated to a deeper discussion of hypotheses and problems bearing relation to psychical research.

We hope the new *Quarterly* periodical will, in time, succeed in winning the approbation and support of those of our readers who might have preferred to see THE ANNALS continue as a *Monthly Journal*. For they will find that on the one hand, none of the former repertory, so to speak, will in any way disappear; whilst on the other hand, it will not perhaps be disagreeable to them to find so many more articles consecrated to establishing the *rappports* between the facts.

As in the past, THE ANNALS undertakes to give serious consideration to all communications which may be forwarded by readers; and again we beg them to bring to our knowledge all facts which possess an interest for psychical research.

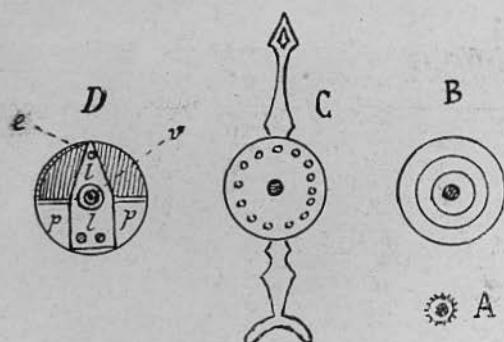


Fig. 3.



Fig. 5.

Levitation of a magnet.



Fig. 4.

Levitation of the pointer of "the magic clock."



Fig. 10.
Levitation of a lead-pencil.



Fig. 11.
Levitation of a glass globe.



Fig. 12 and 13.
Levitation of a compass.



Fig. 14.



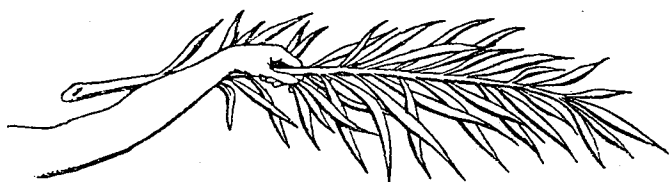
Fig. 15.



Fig. 16.
Levitatation of a lighted cigar.

THE ANNALS OF PSYCHICAL SCIENCE

FIFTH YEAR. VOLUME VIII. NUMBER 51.



A NEW MEDIUMISTIC PHENOMENON.

By DR. JULIEN OCHOROWICZ.

(Continued from the April-June ANNALS, page 284.)

VI.—CONTINUATION OF THE RESEARCH AS TO CONDITIONS.

January 11th, 1909.—After the series of experiments of which I have written, Mlle. Stanislas went to Cracow, with a lady companion, for distraction and to do some shopping. She remained there ten days. I took advantage of the absence of the medium to write the chapters which have already appeared and to reflect on the experiments which would complete the preceding observations.

As often happens in this class of research, in proportion as the moment of a direct perception recedes further and further into the past, I began to doubt it all. Not completely, because I could not find any explanation other than that of a mediumistic phenomenon; but the phenomenon itself was so very improbable,

that I said to myself : " It is not possible ! It must be an illusion, some coincidence of some kind, and it is probable that in repeating the experiments I shall find nothing." I had a presentiment based on the fluctuations peculiar to the more subtle mediumistic phenomena, that the experiments I proposed to carry out would lead to no serious result.

I became all the more impatient to commence, and after having granted the medium a day's holiday to recover from the fatigue of her journey I arranged a seance for the afternoon.

Mlle. Stanislas returned well in health and pleased with her excursion, and the conditions seemed to be excellent. I wanted to take the usual measures to ascertain her condition, but just before she came up to the first floor, while she was still in her own room on the ground floor, a log of firewood was thrown on the stairs—a useless and fatiguing phenomenon, after which she only gave momentarily to the dynamometer 20 and 20; her head ached slightly at the temples and her sensitiveness was much blunted on the left side of her body.

Little Stasia, as if she wished to make up for lost time, produced phenomena to right and left, but chaotically and unexpectedly as if she were more ungovernable than usual.

Several objects were brought from a room on the ground floor, a handful of snow fell on to the table, a metal seal was put into my pocket, a piece of charcoal was thrown at us from the stove, over three yards away, the large clock hanging on the wall was opened and stopped, the cord of an electric bell was shaken about and pressed and the bell set ringing, etc.

It goes without saying that the medium had been carefully examined just before the first *apport*, but the majority of the phenomena happened in an altogether unexpected manner, and, consequently, in spite of the light, with insufficient control. I tried in vain to impress upon them that the quantity of phenomena

was of no importance to me, that I had no desire to be convinced of the existence of *apports* but wished to study the causes and conditions; I wanted fewer phenomena, but to be able to observe them in all their details, and I asked little Stasia to continue the experiments with the magic clock. She finally consented, after demurring that we could very well amuse ourselves with the clock when the seance was finished.

My first care was to secure indubitable evidence that the changes in the position of the needle were really due to an alteration in the regulation and not to any accidental cause whatever. For this purpose, I had marked the thickness of the needle—that is, the edges of the two discs—of which one was mobile and the other immobile, by the aid of a single black line. A breakage of this line and the distance of the two broken pieces would prove if, and how many degrees, the regulation had been modified.

I tried at first with the needle without contact with the medium:

I set it on 2 and put it in motion: it marked 2 twice; taken up and embraced by the medium, it also marked 2. Then when she had given five kisses to the needle, with the view of obtaining 5, the needle stopped at 3. The desired number had not been reached, but there had been a displacement.

I examined the needle, and saw that the black line had been cut in two and altered, in accordance with the results obtained—that is to say, to 1 deg.

There was therefore no doubt that the phenomenon consisted in an alteration of the regulation. This point acquired, I decided to explain the trick to the medium.

It did not interest her much, but she tried all the same to displace the disc, but did not succeed very quickly, because this requires a delicate movement and yet a strong one at the same

time. Eventually she learned how to turn it, without, however, knowing how to arrive at a given hour. She wanted to continue the experiments after her own fashion.

I asked for 7. The dial marked 3, and again for next five times 3, although the medium tried all the *psychic* means which she had previously used, without enthusiasm, however. She complained of a headache, and little Stasia questioned, replied: "Very little force."

Set for 5, she asked for 2. The needle stopped at 4.

Set for 6, I asked for a change. The needle stopped at 6. There was the same failure with 9.

Set for 12, she asked for 2. The needle stopped at 11.

Set for 11, she asked "12—no, 10." The needle stopped on 10, 12, 12.

Seeing that there was no progress, and that the medium, in spite of her last relative success, was not in the mood, I stopped the experiments. But then, she herself asked for permission to amuse herself all by herself. I observed her at a distance, and saw that, without my scrutiny, things went better, although the medium's manœuvres continued to be correct and inoffensive. The pendulum, set for 12, successively marked 10, 1, 10, 7, 7, 7, 6, 5, 5. Seeing these frequent changes, I came near her again to try another experiment, previously conceived, and which ought to determine the kind of obstacles which prevent little Stasia from affecting the regulation.

For commencing, I chose a bell formed of very fine, close but transparent iron wire, the size of which enabled one to entirely cover the suspended clock, in one quick movement.

The apparatus was set for 5, verified and hung up by me in such a manner as to prevent any alteration, and, immediately after, covered with the wire bell, which I myself held against the wall.

The needle turned quickly, slackened its speed and stopped at 7.

I observed that there was an alteration in the regulation, in spite of the cover.

But as the medium was evidently tired and the dinner-bell then sounded, I concluded the seance.

Having put her to sleep again in the evening, in order to be sure she would have a quiet night, I influenced her (I do not say by suggestion, because an ordinary suggestion would have produced nothing) with the view of obtaining from little Stasia complete explanations and further experiments. We shall see that my hope was not disappointed.

VII.

A LITTLE GENIUS FROM THE THOUSAND AND ONE NIGHTS.

January 12th, 1909.—Hypnotised for her health at 4.30, she amused herself at first with various trifles; she walked about my room; then she said :

“Come and play with the clock, will you?”

“With pleasure.”

She placed herself, as usual, on her knees on the sofa. I took my pencil and a sheet of paper for the purpose of taking notes, and we commenced.

“Is little Stasia there?”

“Why, you have not seen her! It is precisely because she is here that I proposed the clock. She has come because of your request yesterday.”

Little Stasia was standing close to the sofa between us. She was quite naked, about 1 ft. 7 in. tall, her long hair hanging down; it is the same colour as the medium's, whom she strongly resembles, though much prettier. Unfortunately, I could not see her, but we shall see she proved her presence. The medium

was her speaking trumpet, and she often turned round the better to hear what she said.

The needle of the clock was set for 12. The medium asked for 1. She took the end of the arrow and held it in the air, lighted up by a spirit-lamp with an incandescent mantle, and covered with an ordinary lamp-shade, saying to little Stasia: "Put it at 1." . . . "It is done." She handed me the arrow, which I placed on the pivot. It stopped at 1.

"That is very good, my little Stasia. Try again."

Set for 1, the medium asked for 2. There was the same procedure. The arrow stopped at 11 (it was turned 2 deg. to the left instead of only one).

"You have gone too far. Pay attention."

Set for 11, I asked little Stasia to change the regulation, when the needle was already in movement. The first experiment failed: the arrow stopped at 11. Without moving the needle, the medium asked for 12, but the experiment again failed: the clock still indicated 11. Then the medium drew away the needle by one end, asking me to watch closely. She laid it flat on the finger-tips of her right hand, near to where little Stasia was standing, and said to her: "Set it for 12!—Oh! it is moving." And truly the arrow was entirely displaced, turning round several degrees. But I did not attach much importance to this, because it might have been a slight involuntary contraction of her fingers. The motion was stopped and the medium said: "It has already turned." The needle stopped at 10.

"You have made a mistake, little Stasia; you ought to pay attention, and not let yourself fall into error when looking at the clock. When on the dial it should go to the left; it ought to be turned to the right, and reciprocally. You have turned it one degree to the right instead of one degree to the left. Do you understand?"

"Yes," said the little genius; "I know that, but I make mistakes sometimes, and I have not always sufficient force to stop or rectify the movement."

Set for 10, the medium asked for 9. The same procedure. I set the arrow in motion; it stopped at 9.

"That is very good. Continue."

Set for 9, the medium asked for 7.

I set the needle and turned it. It stopped at $7\frac{1}{2}$.

Set for $7\frac{1}{2}$, she asked for 6. The conditions were the same. The needle stopped at $6\frac{1}{2}$.

"You have displaced it by one degree, but you should have noticed that the needle did not mark exactly seven."

Set for $6\frac{1}{2}$, I asked for 4. The needle stopped on 6, then on $3\frac{1}{2}$. (It ought to have turned $2\frac{1}{2}$ deg. to the right, but she turned it only half a degree; then probably she thought she could rectify the mistake, by pushing $2\frac{1}{2}$ deg. to the right, instead of 2 deg. in the same direction. The following experiment will again prove to us that she is not strong in fractional calculations):

Set for $3\frac{1}{2}$, I asked for 1. The needle stopped at $1\frac{3}{4}$ (it ought to have turned $2\frac{1}{2}$ to the right; she only turned it $1\frac{3}{4}$).

"I had not sufficient force to go right to the end."

Set for $1\frac{3}{4}$, the medium asked for 11, and held out her hand on which the arrow was resting, to little Stasia.

"Look at what she does," I said to the medium.

"She has made a circular movement with her finger over the arrow without touching it."

"Let us see."

The needle stopped at 11 (it ought to have gone $2\frac{3}{4}$ to the right, but only went $1\frac{3}{4}$).

"Not enough force to finish the movement," explained little Stasia. "I will begin again."

• She recommenced, and the needle stopped at 11.

"Thanks. That is very good. And now, since you are so kind, will you explain to me how you set to work to regulate on to a selected time, or, as you generally do, modify the regulation."

The medium listened to what was said by the little genius, and then repeated her words:

"I regulate by means of a force which is at the tips of my fingers, and holding my fingers over this ring (the medium points to the concentric rings on the back of the arrow) and turning them round. . . ."

"But that is simply an ornament, the movement of which does not influence the regulation in any way."

"But I do not turn this thing. I turn the disc underneath, *which has on it things which weigh.*" (It must be remembered that I had never said anything to the subject indicating the gravity principle of the apparatus.)

"But then it would be much easier to take the disc underneath between two fingers and turn it."

"I cannot do that."

"Why? You are able to take a heavy log of wood or a large piece of coal and throw them on the staircase, and yet you can't turn this little ring."

"No. I can hold a weight, but I cannot turn things because my fingers slip, they are not sufficiently consistent and would go inside the thing without exerting friction on it."

"Well, how is it you can displace the weights which are inside?"

"Without going in, by something which comes from my fingers—a force, I do not know what it is, but it acts at a distance."

"Through the plate?"

"Yes, when I have sufficient power, otherwise no."

"And what is it which augments this force?"

"When big Stasia is well, when she is happy, when the others are sympathetic . . . and not very nervous. A very nervous person stops me from working. And then everyone must get into harmony with the others, in the beginning I cannot do much."

"Where do you get this force?"

"From the medium and the others."

"Do you prefer a larger company than one only?"

"That depends. A few sympathetic people, that is better, five, six, but not more."

"Why not more?"

"Because big Stasia does not like a number of people. She is upset at once, and then I can do nothing. . . "

"Would you like to try to regulate the arrow when placed on my hand instead of on the medium's?"

"Yes. But do not put your fingers over your hand."

Set for 11, I asked for 8. I put the needle flat on the palm of my left hand and held it out to the little invisible genius. The white light from the spirit-lamp on my desk fell on my hand.

"It is done," said the medium. "I saw her turn her finger."

I placed the arrow on the dial. It stopped at 8.

"Bravo. But how was it I felt nothing?"

"She did not touch the arrow, she regulated it from a distance." This explanation did not convince me, it seemed to me, in spite of that the alteration of the disc from below should be felt in the hollow of my hand, and I decided that on the following day I would take the apparatus all to pieces to ascertain the form and manner of fastening of this additional weight, which should be found inside and which I had not yet examined, for fear of spoiling it, for up to the present the mechanism had always acted with unflinching precision.)

Set for 8, I asked for 2. The conditions were the same, that

is to say the medium did not touch the apparatus. The needle stopped at 4.

"How comes it you made a mistake?"

"I lacked the force necessary to turn so far (it ought to have turned 6 deg. but only turned 4)."

At a second attempt, the needle marked 1 (1 deg. too many).

"I am tired," said the medium.

"We will not do any more."

I put the needle back on the dial, when to my great astonishment it marked 2.

The medium laughed and said: "She has regulated it all the same."

"I am very satisfied with this seance," I said to the medium.

"And I also."

"Why?"

"Madame has made me a present of a bundle of patches of all sorts of colours. . . ."

"Ah, so much the better; we are both satisfied. And how shall I reward little Stasia, who has been so kind this evening?"

The medium turned her head towards the little genius, who replied:—

"Be good to big Stasia, and I shall be satisfied."

VIII.

LITTLE STASIA CONSIDERED FROM THE STANDPOINT OF PHYSICS.

January 13th, 1909.—I first occupied myself with taking the apparatus to pieces. It was sufficient to unscrew a small nut "A," very carefully made and which held together the three parts forming the arrow (B, C, D), which are shown separately in Fig. 3.

After having unscrewed the nut "A," the round plate "B" could be taken away, as it has a hole in the centre corresponding to a similar hole in the arrow "C." Through both of them passes the screw *v*, which is fixed to the centre of the round flat box "D," the principal part of the mechanism. This box, when the apparatus is wound up, forms the under disc, turning to right and left, and by means of which the regulating is effectuated.

The under part contains the half-disc *pp* soldered to the box and serving as additional weight. On this half-disc is fixed, by the lower end and in a way equally immovable, a blade *ll*, the lower end much larger than the higher, which latter contains the stud *e*.

When "D" is turned, this stud enters in turn into the twelve little holes of the arrow "C." This causes the feeling of opposition felt when turning "D" and is a guarantee of the stability of the regulation.

In order to put together the apparatus, "D" must be placed under "C," "B" on "C," and then the nut "A" screwed on. This latter ought to be screwed neither too tightly nor too loosely. In the first case, the mechanism will not move; in the second the stud *e* will not enter the small round holes of the arrow "C," and the regulation might get out of order during the rotatory movement. Once fixed, the screw will not move again.

After having well examined all this, and comparing the means employed by the medium with the nature of the mechanism which I have described, I had the impression that not only did I not understand the phenomenon any better but that I did not understand it at all.

Let us simply reflect for a moment! The medium, or rather her double (because the medium remains motionless), holds her fingers at a distance over the ring "B." The "double" performs

a rotatory movement more or less prolonged, and this etheric, impalpable movement is sufficient to displace the box "D," through the mobile ring "B" and the immobile ring "C."

Why does not the nearer ring "B" turn, as it is immediately influenced and much easier to turn, whilst the box "D" turns though it is heavier, further away, less mobile, and covered by two others?

And if the explanations of the medium are inaccurate, and the mediumistic action of the "double" is not exercised at a distance, but directly with her hands, on the regulating disc, how was this etheric phantom able to guess the trick, unknown to the medium in either her normal or somnambulistic states, and, relatively, in its details, to myself? How, after having guessed the trick, is an etheric, invisible hand, possessing no consistence, able to execute this delicate movement, without contact and without any leverage? . . .

In looking for as close analogies as possible in the physical world, we find very few, only one, perhaps, that of the magnet. Let us suppose that the round box "D" represents a magnet, polarised at two points, right and left. On approaching another very powerful magnet (because of the friction which must be overcome) with unlike poles opposite these points, and turning it very attentively, we can displace the other across the two interposing rings, if they are of non-magnetic metal, and if the needle is first of all immobilised, because otherwise it will turn with the magnet.

There is nothing like that here. The metals are of the same nature; the hands of little Stasia have no magnetic properties; the needle is mobile, and, consequently, an unknown physical and intelligent force must be admitted, since it is able to turn a material body intelligently; this force chooses its own leverage, and the principles of mechanics and material obstacles, at

least for a certain distance and under certain conditions, do not seem to exist. Is such an "unknown force," directed at will, possible?

It is not a matter of knowing if it be possible, but of verifying its existence and determining its nature. Now, this force exists, because it acts and because this action does not allow us to deduce any other known force. I can experiment with it as much as I like. Under certain conditions it manifests itself; in others it does not manifest itself. It presents various degrees of intensity or precision in its action, which, also, depends upon certain circumstances. This is all that is necessary to constitute an unknown natural force capable of being studied.

As to its contradiction with mechanical laws, it is perhaps only an apparent contradiction or may be it comes from other mechanical laws of which we are not yet aware and which will enlarge our knowledge. In a word, the interpretation of the nature of this force may be erroneous, but the facts remain; and, consequently, the existence of a new force or of an ensemble of unknown agents cannot be refuted by words more or less eloquent, more or less conforming to the present state of science, which would have us believe in the "impossibility of the phenomenon."

Let us therefore pursue our study.

In order to change the conditions somewhat, I did not acquaint the medium, as was my habit, of the day and hour of the seance; I invited her unexpectedly. She was happy, because someone had just sent me a "polyphone" (musical box). Up till now we had been obliged to dispense with music, which always favourably influences the phenomena, and little Stasia is very fond of it. Scarcely was she tranced, when she showed her delight, jumping about and dancing gaily.

Several *apports* were effected, under more original conditions

than usual, then we passed on to an experiment destined to complete that of yesterday. This was the stopping of a large real clock without opening the glass doors. This clock is wound up every fifteen days, and had not stopped once during the last ten years.

I had tried an analogous experiment with Eusapia Paladino at Warsaw, in 1893. It then consisted on putting into motion a very sensitive balance enclosed within a glass case. Although the medium asked that the doors might remain partly open, the experiment, repeated two or three times and during several hours, only gave very doubtful and unimportant results. To-day it was a question of stopping a heavy pendulum in motion. The chased gilt copper disc has a diameter of $4\frac{1}{2}$ inches. The glass door was closed as well as the two sides. The medium (in the somnambulistic state) placed her left hand on the wall and her right hand in front of the glass. At the end of a minute the pendulum momentarily slackened its speed, but did not stop. "There is too much light," said the medium. "Allow me to perform the experiment, for the first time, with less light, and then we can repeat it in normal light."

We removed the incandescent lamp to another room, leaving the door wide open. The light was still sufficient for us to see all over the room and to follow the oscillations of the pendulum. Two minutes afterwards, under the same conditions, the pendulum slackened and then stopped.

The medium was very fatigued. Her legs trembled, but her exhaustion passed quickly away. She manifested much joy at having succeeded. At a given moment, under the impression that the side glass to the right still admitted too much light, I wanted to cover it with my right hand, so that the disc of the pendulum might be more shaded.

"Don't do that," said the medium. "Little Stasia is

holding her right hand there; you have interrupted her action; the light is all right."

"Then is it always little Stasia who does everything?"

"Yes; she held her fluidic hands on both sides of the box and she acted through the glass doors, making the stopping movements, which slackened, as you saw, the oscillations of the pendulum."

"Do not her hands pass inside?"

"No, they cannot do that."

"Why? Can she not pass through a closed door?"

"Through the *cracks* of a closed door only, not otherwise. She cannot pass through wood, a wall, or glass."

This explanation is akin to the experiments made by M. Branly and Dr. Gustave Le Bon, which prove that when the receiver of the Hertzian rays is hermetically closed, there is no result; but that the least crack is sufficient to make the experiment successful.

A comparison is not a reason; but where all points of support fail no analogy is to be despised.

"And how does she pass through a crack?"

"She lengthens and becomes very thin. Do not forget that she is only a vapour—a kind of air. . . ."

"And how does she transport an object with her?"

"She makes it also larger and more vaporous. This is why, sometimes, when I see little Stasia carrying something, I tell you it is something very long and whitish, and you accuse me of inaccuracy on seeing a key fall. And yet, I do not lie; you know I never do that. I tell you what I see; it was long and white, that key, when she held it in her hands, but at that moment it was invisible to you just as little Stasia is. And then, when she let the object fall, is contracted and condensed and took the colour peculiar to it. *This is why appports are so often warm, sometimes*

even very warm. Not always and not all objects. An object which has not come through closed doors may remain cold, but to enable it to pass through cracks, it must first of all be rarefied and then condense again, *and the friction of its particles in contracting again produce heat.*”

“And yet we have had *apports* of a book and a box, through a closed door, and those objects were not warmer than usual?”

“Yes, paper, leather, wood are not sensibly heated, but objects in metal.”

“Why?”

“Because they are harder and denser. The particles of wood, for example, are less compact, and, consequently, produce less heat, whilst the difference between a rarefied knife and a real knife is very great.”

“And when there is transport in free air, does the object remain unchanged?”

“Yes, in darkness.”

“But if there is light, could I see it in the air during the whole of its passage?”

“No, because to transport it in full light, it must be vaporised—otherwise it will not go far.”

“And how can a hand, which is only a sort of vapour, support any object whatsoever?”

“It is condensed for the time in order to give a resisting surface.”

“You say, however, that it was not little Stasia’s hands which stopped the pendulum?”

“Not directly, because they were not able to pass inside.”

In a word, according to the medium, instructed by little Stasia, the stopping of the pendulum (through glass), like the regulating of the magic arrow, was due, not to the direct action

of the etheric hands, but to an unknown force which oozes from her hands, which acts at a distance, *and which can be concentrated on a point chosen at will*. The etheric hands themselves were not able to enter and they were not sufficiently condensed to act materially on a heavy object.

"If, for example," explained the medium, "little Stasia wanted to push the disc of the pendulum directly, it would pass through her closed hand just as it would pass through my open fingers."

It goes without saying that these remarks only refer to the etheric ("astral") body, not materialised by borrowing the atoms of the medium's material body or otherwise. Not wishing to exercise an influence on the spontaneous ideas (or apparently such) of the medium, I abstained from all dogmatic discussion.

Yet the occasion lent itself to discussion, because just before this seance, the electric bell of the house was set ringing without visible cause. Questioned on this point, the medium said that little Stasia had done this; knowing that a seance was going to be held, she wished, in this manner, to express her opinion that it was time to commence. She could therefore press the button of a bell.

Lately, we have often heard this bell-ringing, mediumistically performed; but I have not made this experiment with Mlle. Stanisława under exact conditions. I made it for the first time at Warsaw, in 1893, with Eusapia Paladino. It was then done with a bell in a closed box. Then, also, Eusapia had asked that there should be *an opening* in one of the sides of the box. I took the necessary precautions to exclude the possibility of an iron wire or a stem of any kind being pressed on the button. This was necessary, seeing that the experiment was made in total darkness. I remedied this inconvenience by placing behind the opening, on the inside, a small board which would prevent the

introduction of a stem but which, at the top, left another free space, judged to be sufficient for the passage of a fluidic hand. The experiment was successful.

I prepared a similar improved apparatus for the seances with Eusapia which were held at the *Institut Général Psychologique*, Paris, in 1907, which allowed not only the mere fact of a mechanical action at a distance to be verified, but at the same time to determine certain conditions under which it can take place. The size of the opening was regulated at will, from the interior, a convenient arrangement allowed the distance accessible to the fluidic hand in the given circumstances, to be fixed in centimetres. Finally, an array of pencils in various colours would, at the same time, indicate the distance attained by this hand and the nature of the marks which it would be capable of leaving on the prepared paper.

This apparatus, which would have sufficed of itself to give irrefutable proof of the existence of mediumistic action, was not seriously tried.

Towards the end of the seance, Mlle. Stanislas, still in trance, again tried her dynamometric force. She gave "all alone" thirty-five, and "with little Stasia" 240, equal to athletic force and indicating a pressure of eighty kilos. My dynamometer does not indicate higher than this.

She is certainly stronger, and the phenomena fatigued her much less.

IX.

THE TRICKS OF LITTLE STASIA.

January 14th, 1909.—In the afternoon, a visit caused the hypnotising of the medium to be retarded. One of the visitors when leaving looked in vain for one of her goloshes, left in the vestibule. It was found below the ceiling fastened to the electric

bell. After this trick by little Stasia the medium suffered from a headache more acute than usual. Jokes of this nature had been repeatedly played on visitors, and particularly concerned hats, which it was impossible to find for hours at a time. Not having any hats to lend to the visitors who were leaving, I begged little Stasia not to hide them so carefully, and as a reply to this request she hid the golosh where it could be seen.

In order to relieve Mlle. Stanislas's headache, I put her to sleep. Once she was off, she wanted to completely satisfy my curiosity on the subject of the magic clock and to amuse herself with it. Simply not to oppose her, which is equally prejudicial to her health, I consented to continue the experiments.

I tried at first to see if her influence on the mechanism persisted.

Set for 9, and influenced by the medium, the needle marked successively 8, 7, 6, 5, 4, 2, 1, 7, 1.

We see, in this series of numbers, a visible tendency to progress step by step, probably for practice. I then proposed to elucidate the most extraordinary point of this action: the possibility of regulation *during the movement*, and I asked the medium not to take away the needle from the dial, but only to push it after having influenced it by the momentary contact with her hands. From this moment, the regularity of the series diminished although the numbers were always very close to each other, which seemed to demonstrate a greater difficulty in regulating and show the few movements realised in the regulating disc. The apparatus being set for 1, I obtained successively 12, 11, $9\frac{1}{2}$, 7, 6, 5, $3\frac{1}{2}$, 1, $1\frac{1}{2}$, 12, 11, $8\frac{1}{2}$, 7, 4, 1, 12, $10\frac{1}{2}$, 11.

Thinking that it was the rapidity of the movement of the needle which caused this irregularity, I asked little Stasia to point out to me the exact moment when she regulated the apparatus.

"I set it," she said, "profiting by a short moment of rest,

before the hand which sets the apparatus in motion approaches the needle."

"You do not therefore regulate it when it is in full motion?"

"No, *that is impossible.*"

I made as much haste as possible after having indicated the number.

Set for 11, I asked for 4, and I immediately pushed the arrow which marked 9, 5, 4. (The first two occasions, the time lacked to finish the regulation.) Little Stasia is therefore very adroit, but the rapidity of her movements has its limits.

At all events an illusion has been dissipated! In writing my "Provisional Conclusions" (5 and 11), I was almost certain that the mediumistic regulation was accomplished *during the movement*, and it was that phenomenon which appeared to me above all most extraordinary and unheard of. It remains unheard of because it has ceased to be true. . . .

There still remained, however, another question to be elucidated: The changing of the hours being determined, not by an artificial stoppage of the needle, but by an alteration of the regulation, I wished to *see* or *feel* the execution of this change-ment. I therefore asked little Stasia to make the following experiment:

I would regulate the needle to a fixed hour; then I would hold it between my fingers, in such a manner that I could feel the displacement of the disc underneath, and little Stasia would execute the change of setting indicated by me, between my fingers.

This was agreed to. I set the clock for 4 and asked for 7 (3 deg. of difference).

I placed the centre disc and the arrow right between the thumb and index finger of my left hand, and I concentrated all my attention in order to see and feel at the same time. But I

could neither see nor feel anything. "It is done," said the medium, and I noticed that this was correct, because the needle, placed on its pivot, marked 1. A displacement of 3 deg. has therefore occurred (though in the other direction by mistake), and yet I had felt nothing, absolutely nothing! I was abashed, for in the past I had exercised myself very especially, and I am proud of the precision of my sense of touch and of my muscular sense. . . . What confusion! And I ought to add that this was repeated six times in succession! The needle marked 1, 12, 5, 1, 9, 6—that is to say, as though mocking me, little Stasia made relatively large displacements, 3, 1, 5, 4, 4, and 3 deg., and I felt nothing at all! On the last occasion, when the needle stopped on 6, the medium cried out: "That is not it. There!" (pointing with her finger to the number 7). The needle oscillated once more and stopped at 7.

I interrupted the experiment, as much not to fatigue the medium as to hide my confusion and to put my scattered ideas into order. I sat down with this depressing thought: "I can understand nothing at all about it. Regulation is impossible when in motion, and imperceptible when at rest! What then? How is it effected; when and by what means? Mystery."

The medium sat down on another armchair, by the side of the lamp.

"The light opens my eyes and hurts me," she said.

"You know well that that hurts you, and yet you sit down by the side of the lamp."

I had scarcely said these words, when I saw the lamp go out. . . . And yet it was well filled! I lit it again, shrugging my shoulders. The medium's eyes closed again, and she read the title of a magazine on my desk: "*Revue de l'Hypnotisme*"—when her eyes are opened she can see nothing, and when they are closed she sees well.

It is enough to drive one mad.

And yet, we must continue. . . .

Before I made the acquaintance of Mlle. Stanislawa, I said to myself: "Ah! if only I had a good medium at my disposal, with whom I could make experiments, have facts, plenty of facts! I have had more than enough theories." To-day, I have more facts than I ask for, and the theories have vanished. . . .

It is hard work searching for new truths! Let us keep on all the same. . . .

X.

"MENS AGITAT MOLEM."

January 15th, 1909.—The idea came to me to tell the medium all about the mechanism of the mysterious clock; and as, at the same time, I needed drawings for this article, I asked Mlle. Stanislawa—after having explained how the turn of the dial was made (for the first time in her normal condition)—to take the apparatus to pieces and to make some exact drawings (Figs. 2 and 3).

I made this proposal at lunch, and it was very willingly agreed to. A moment afterwards, the table was displaced, raised laterally at the risk of throwing everything on the floor, and knocked with its feet.

It was little Stasia who asked to speak.

In order not to fatigue the medium with this big, heavy table, we took a smaller table, when, using the alphabet, little Stasia communicated the following message: "Seance to-day at 5 o'clock; go and lie down, the medium is going to draw."

Until now, it was I who had always arranged the days and hours of the seances, with due regard to the health of the medium. She had slept badly the last two nights, and I had had no intention of holding a seance to-day. But does human reason count for

anything in these researches? Little Stasia knew better perhaps what to do. Let us therefore try—once is not custom.

At 5 o'clock in the afternoon, the drawings were ready, the apparatus put together again *by the medium herself*, who had also had time to read half of a volume by Sienkiewicz. And now she arrives.

I noticed with pleasure that, in spite of the two bad nights, she looked well. Her cutaneous sensitiveness was, for the first time, normal; the tendon reflexes exaggerated to the left only, and her muscular force much greater: with the dynamometer she gave 65 on the right and 75 on the left. (After the seance, she lost 26 to the right and 50 to the left. The two other persons present lost 4 and 11 to the right, and 20 and 5 to the left. The approximate common loss, the force utilised, was therefore 41 to the right, and 75 to the left, which corresponds to a pressure of 17 and 29 kilos.)

I was curious to know what modifications a complete knowledge of its mysteries would bring in the experiments with the magic clock. But I propose, and little Stasia disposes. The clock scarcely interested her to-day. After having produced several *apports*, she wanted to complete the experiments with the large real clock. That is to say, she proposed, in full accord, as far as that goes, with myself:—

1. To set in motion the stopped pendulum—through the glass cage;

2. To stop the pendulum when in motion only by the force of her gaze and will, the door of the cage being opened;

3. To set it in motion again in the same conditions.

Only these three things were to be done. We commenced with the same amount of light as before.

First experiment.—I stopped the pendulum. The medium was standing on the couch. In order to maintain her equilibrium

she held her left hand against the wall and her right hand lightly touched the glass in front of her. We waited longer than the last time, for it appears that it is more difficult to set a pendulum in motion than to stop it when in motion. The experiment lasted from twelve to fifteen minutes. During that time, the medium, who was fatigued but not discouraged, often changed her position. Sometimes she held her two hands in the air, and made suggestions by gestures to the pendulum which would not move, sometimes she knelt on the sofa, and lifting her arms as high as possible lightly touched the lower edge of the cage. Then, all of a sudden, she said:—

“It makes me tired to hold my arms so high; give me a piece of string.”

I gave her a piece of string which she put round the clock; she tied the string in the middle of the glass cage.

“You will not say that I opened the door: it cannot be opened now.”

The longer end of the string hung down—she took it in her left hand and seated herself comfortably, Turkish fashion, on the sofa.

A moment afterwards, we heard the clock strike. It struck, but not in its customary manner, when going normally. The sound was not so loud. This was because of a shock (according to the medium's explanations, afterwards verified by myself) of the disc of the pendulum against the striking stem, which replaces the spiral spring in other clocks. This perpendicular stem is fixed by its upper end, and the hammer striking it produces a loud pleasant sound, like that of a brass clock. But this time it was not the hammer which struck, because the clock was not yet going.

The same sound occurred again. I ask for the clock to strike four times. The clock struck 1, 2, 3, 4.

“But it must go,” said the medium.

She got up and kissed the glass several times, looking steadfastly at the pendulum; some seconds afterwards, I saw it resume its majestic course, as if nothing had happened.

The medium clapped her hands and laughed :—

“ Ah well. Now then, is that a good phenomenon? ”

“ Very good, thank you; but now rest a little.”

She lay down trembling very much, and asked to be covered with a fur rug; she felt very cold and her face was burning hot. But this all passed quickly away.

Second experiment.—The clock was going. The door of the cage was open. The medium was standing, facing the pendulum, about one foot away. She did not touch the clock. Her arms were stretched out behind her and I held her right hand in my right hand and her left in my left, and remained standing behind her. At the same time, I fixed my gaze on the pendulum and listened to the breathing of the medium. We wanted to set the pendulum in motion by sheer force of gaze. . . .

Of gaze—that is not the correct word, because she always had her eyes hermetically closed—but all the same she “ looked ” fixedly at the pendulum, concentrating on it her attention and will.

We waited for some time longer. Her hands trembled in mine, but, to my astonishment, they remained warm. (That was because I was stronger, she afterwards explained.)

Eventually, she commenced to shiver all over, and *the clock stopped*. I saw it, and I ceased to hear its “ tick-tick.” I heard nothing suspicious in the medium’s breathing. I have, however, since ascertained that by blowing hard on the pendulum, standing much closer to it, one can make the disc shake but not compel it to resume its transverse oscillations. We then rested.

Third experiment.—This was made in the same conditions. It seemed to me that it did not last so long, but I forgot to notice

the exact time. On the other hand, I fixed my attention on the gilt disc of the pendulum : it had not been put in motion gradually; I had seen it make a half-oscillation from right to left, and immediately afterwards it moved in its normal manner. Some minutes previously, there had been a feeble and incomplete oscillation, but it was not long before this stopped, and we waited several minutes longer for the sure and certain movement I have described.

Was it a hallucination?

Yes, if the whole world is only an idea of our intellect.

All that I will add as commentary, is that I am not hypnotisable, and that I have never had hallucinations.

Who will believe it?

I was forgetting the theoretic commentary of the medium : which is that all action is performed by the double. The double did not go inside the clock at the first experiment, neither it nor its fluidic hands. It acted by that force which we "know" already. The fixed gaze in the second and third experiments, only served to concentrate the action of the medium's will, to give these forces to little Stasia who did everything *with her condensed hands*. The last two experiments caused the medium much fatigue, perhaps because of the distance of her hands from the clock.

It seemed to her that the string facilitated the action in the first experiment. Throughout the seance, she saw much less clearly than usual (she was not able to read through a cardboard box, nor even a simple sheet of paper) "probably owing to the greater intensity of the other phenomena."

I ought to add that at the moment when she held the string, we heard a grating noise twice repeated in the interior of the clock. It was probably the moving of the key placed on the bottom.

XI.

THE ARROW IN THE AIR.

January 16th, 1909.—After putting the medium to sleep, I proposed two experiments to her:—

1. The regulation of the arrow, placed on my hand, and made visible by the displacement of a point marked on the disc from below. I ought to have commenced with this test, instead of putting confidence in the sensitiveness of my fingers and muscles. But these simple ideas generally come last. I had completely forgotten that this mark existed, and that it is indicated in the manufacturer's instructions. This is indeed the only means indicated. I used another because it was less perceptible to lookers on, not requiring light or good sight. But it is clear that in order to verify the moment of regulation by little Stasia, it was much handier, and above all, more certain. In order to apply it, it was enough to place the needle on my hand *from the wrong side* (presenting in place of two concentric rings a smooth disc with only one little point sunk close to the edge). The position of this sunken point corresponds exactly to the time regulated. When its position is that of 3 o'clock, on the dial of any watch whatever, the needle is regulated for 3 o'clock, and so on. I had therefore only to observe the displacement of this point, in order to know if little Stasia had executed the change. And as a general rule this method of regulation is quite handy in this connection, because there is no need to remember the last position of the needle—it is indicated by the little depression. *To see this point displaced on my hand, under the action of an invisible force*, that was what I desired to obtain.

2. The second question was that of distances accessible to the fluidic hand of the double. When repeating the first experiment at 8, 12, 16 inches from the hands of the medium, I was able to observe the differences in the effects obtained.

The medium having understood my wishes, we seated ourselves comfortably, face to face.

I placed the needle wrong side up on my left hand, or rather on the two fingers only: the fore and middle fingers slanting, supporting my elbow on my knee to assure the stability of the position of my hand, and I asked little Stasia to regulate for 5, whilst the apparatus was set by me for 3.

"Turn your back a little to the lamp," said the medium, "there is too much light."

I obeyed, and at this moment a most extraordinary thing occurred. The arrow which was lightly placed, yielded to the invisible influence exercised by little Stasia, who, instead of turning the regulating disc, turned the whole arrow. Instead of being slanting it was now parallel with my fingers. The medium, who all this time remained completely motionless, her hands on her knees, about eighteen inches away, burst out laughing.

"You see she turned it!"

"Yes, but the setting remains the same," I said, looking at the position of the sunken point.

It is impossible to describe the impression, a mixture of astonishment and satisfaction, produced on me by this unexpected phenomenon. First of all, it was the first time in my life that I had *seen* and *felt* an inert object displaced *on my hand*. Then, I was content that little Stasia, who, up to this moment, seemed to mock at all mechanical laws, had decided to respect them. Again, this phenomenon was full of promise: if little Stasia was able to turn an object lying on my hand why could she not raise it in the air?

"Let us try," said the medium.

I placed the arrow as I had done previously and awaited results.

"Do not touch it any more because I feel the current."

And she approached her outstretched hands, holding them about eighteen inches above the arrow, and inviting it, by appropriate gestures, to raise itself in the air.

At first there was no result, but a few seconds after I had a very strange impression, even stranger than that I had experienced a little while ago, in feeling and seeing the arrow make efforts to raise itself on its end. The medium insisted, and suddenly the needle rose up and went up into the air in a slightly oblique direction.

The ascension was made so abruptly that it frightened both of us. The medium who also saw this phenomenon for the first time gave a cry, and drew back. Then the arrow, interrupting its oblique movement towards the wall, fell inertly on to the floor behind the sofa. I picked it up and we commenced again.

"It must rise very high, very high," said the medium.

The conditions were the same. After a few minutes' waiting, the arrow moved, raised itself on end and rose straight into the air, sustained at a distance by the hands of the medium. It rose altogether about four feet. It was not willing to descend as slowly as it rose, and when the medium, unable to raise her arms any higher, commenced to lower them, it fell down on the sofa.

This last ascension presented a different aspect. In the second, the arrow, as I have just said, rose obliquely and did not oscillate. In the third, it mounted perpendicularly, and oscillated at the lower end, as though suspended by a thread.

Theoretical explanations of the medium.—In the first experiment, fluidic action without contact, with the view of regulating the apparatus, which, from lack of a solid support, was displaced without setting.

In the second, little Stasia, *having condensed her fingers*, in order to give them a resisting surface, though still invisible, took the needle by its pointed end, and raised it *with her two fingers*.

In the third, she suspended the arrow on one finger only by one of the teeth of the point.

These explanations correspond with the appearance of the phenomena.

I ought to add that, taking into account all possible objections, a thread or a hair, applicable to the third experiment, the medium often opened her fingers wide, raised her arms, and generally tried to convince me that there was no trick.

Afer the experiment, her hands were very cold and literally soaked with perspiration on the inside. The back of the hands remained dry.

She said that at the moment of the experiment one should not on any account touch any portion of the upper part of her body, because that would "break the current." For the same reason, the arrow should not be touched just before the phenomenon, although it remained all the time in my hand.

"How do you know that the touch would spoil the experiment, as you have never done this before?"

"Because in all my preceding seances I have noticed that if anyone touched me, either myself or the object to be acted upon, at the moment when the phenomenon was getting ready, the current was always broken, 'it went away,' and I had to wait for a long time until the . . . 'the thing' had accumulated and concentrated itself in me."

I ought to mention another significant detail:

We knew that, in the first experiment, my desire to obtain a change in the regulation (the number 5 instead of the number 3) was not realised. Nor was it done at the second experiment. But when, holding the arrow between my fingers, I placed the needle on the dial, I noticed with astonishment that the regulation had been changed, that it indicated 7 (instead of 5), no longer 3.

This mistake may be explained in the following manner.

All the preceding experiments had been made with the needle in the right position.

Little Stasia became therefore accustomed to giving to the sunken point on the disc the inverse symmetrical position (10 instead of 2, 5 instead of 7, etc.). She did the same now in spite of the position being reversed; she should have brought the sunken point into a position corresponding exactly to that of the dial. And this is probably why she obtained 7 while desiring 5.

Another important remark is this :

We know that there was no success in regulating the arrow on my hand. This did not astonish me, for two reasons : (1) The needle, lightly placed, does not present sufficient resistance to effect the regulation; (2) the light, fixed gaze and concentrated attention always constitute a depressing condition, for mediumistic manifestations in general.

Nevertheless, the change in the regulation took place. At what moment? It is evident that it was accomplished during the transport of the arrow to the dial, when I held it firmly by one of the ends, when I paid no further attention to it and when the light, shaded by my body, was very feeble.

This agrees (with a few exceptions) with the explanations of the medium, who declared it was impossible to regulate during rotation and indicated the moment the hand approached the dial as that of the mediumistic action.

This at the same time explains why in the previous experiments made expressly to see and feel the regulation on the hand, nothing was seen or felt. There was nothing for me to see or feel, because the regulation was not executed until a moment afterwards.

However, in spite of this concordance, I wanted to have an *objective* proof, and I propose to verify again :

1. The possibility of mediumistic regulation, when holding the arrow firmly by one of its ends;

2. The impossibility of regulating it in full movement.

This latter point presented certain doubts to me owing to some of the previous experiments.

January 17th, 1909.—First of all we repeated the experiment of “the mechanical action of the gaze.”

The large pendulum was certainly stopped mediumistically, then set going in the conditions of experiments 2 and 3. They were only more carefully observed. It took twenty minutes to effect the stoppage, which was almost sudden, leaving scarcely any oscillations even slight. It was the “condensed, always invisible, hand” of little Stasia, which accomplished this *tour de force*.

A moment of rest; then the motion was effected more quickly and just as suddenly. At the end of two minutes, the pendulum regained its normal oscillations without hesitancy. The respiration of the medium, which was very carefully observed, did not come into play. The medium was not very fatigued, but, strange to say, I was much more fatigued than usual.

There was one curious detail this evening: At most of the previous seances, my two dogs took part as silent witnesses, a Newfoundland and a spaniel of mixed breed. Being well behaved, they did not disturb us in any way but lay quietly on the floor near to an armchair about five yards from the couch, where the greater number of the experimenters took place.

At the moment when the medium declared that little Stasia had come and seated herself in the armchair, the spaniel, who was lying facing the chair, growled. I turned round and saw the dog's gaze fixed on the armchair. The Newfoundland slept and paid no attention. He could not see the armchair; but the spaniel repeated his growl three times, but only raised his head and did not otherwise move. He only calmed down when the medium declared that little Stasia was no longer there.

If this was not simply a coincidence, one ought perhaps to attribute the dog's impression to a greater condensation of the etheric body of the "double," manifested in the last experiments.

XII.

THE PHANTOM OF A THREAD.

After dinner, there was an unexpected phenomenon: the *apport* of a wooden ash-tray (which was in my bedroom on the first floor, and which came just at the moment when I wanted to light a cigarette) threw the medium into an auto-hypnosis, very fatiguing at first, then calmed by her active, childish somnambulism. I took advantage of this to make some experiments.

Wishing to ascertain if the force radiating from the tips of the fingers of the "double" was able to operate not only through glass (as in the first experiment with the real clock), but also through glass and empty space, I brought a Crookes radiometer (a ball of glass hermetically sealed in which there is a perfect vacuum containing a very light wheel which turns under the influence of a bright light).

The medium held her two hands on the two sides of the apparatus, without touching it, at a distance of about six inches. The light, which was sufficient to see well, was far from being sufficient to set the wheel in motion. At the end of a few minutes, the medium felt a tingling in her fingers which she called "the current."

The wheel moved and turned a little. But this movement was not caused by a direct dynamic action. It turned, because all the apparatus was being shaken by mechanical agitation—absolutely as though the medium held a thread in her hands, the pressure of which raised the radiometer laterally. Whatever this

thread was, I did not see it, and it was not found between the medium's hands.

I again tried, but the result was the same—that is to say, I did not obtain a decided mechanical action through the vacuum. I then tried to at least elucidate the causes of movement in the air. Several small objects were moved and raised under the same conditions, proving that the nature of bodies counts for nothing. Various metals, wood, glass, leather, paper, were displaced and raised with equal facility.

I observed, on the contrary, a great influence exercised by the form of the object.

After each experiment, the medium's hands were cold and the palms were quite covered with perspiration.

Another experiment: a small calendar in book form was first displaced and opened, as by a thread, the two ends of which were held by the medium. Then this thread found a good position in the middle of the pages and raised the book by the back.

The calendar rose, sustained by the hands of the medium, from a distance; it rose to a height a little above my head, and then, by the light of the lamp, I saw, yes, I saw quite distinctly, a black thread, not very thin, going from one of the medium's hands to the other, the right end of which was not stretched but hung underneath the medium's right hand in the form of an irregular spiral.

"Wait," I said to the medium. "Do not move any further."

But just at this moment she began to lower her hands, wishing to bring the object on to the table, and the calendar fell flat down, exactly as the arrow did the other day.

There was nothing between the medium's fingers. . . .

All the discussions concerning analogous phenomena, produced by Eusapia Paladino, sprang to my mind. I was the first

to make with this medium the experiment of the small bell suspended by a thread or threaded on a metallic stem, straight or curved, uncovered or sheltered behind various obstacles and screens, and I never saw anything suspicious, although in my first experiments the phenomenon in question had absolutely the appearance of being produced by a thread or hair. In one of these experiments, I had even *heard* the friction from this suspected thread, stretched horizontally, or the scratching of the nails of an invisible hand, against the perpendicular real thread, stretched by the weight of the clock. But I saw and found nothing between the medium's hands. I have therefore always regarded as an illusion the assertions of certain persons who believe they have seen the hair. Among others, M. Debiegne, the chemist; Count Boubna, the artist; and M. Otto Lund, the mechanician of the Sorbonne, during the last series of seances at the *Institut Général Psychologique*.

I was, however, now obliged to render them this justice, inasmuch as they might have really seen the hair, for I myself had now seen the thread.

What was disconcerting in this enigmatical impression, was the fact that the thread did not appear to me equally visible on every side. In spite of the rapidity of the apparition, I endeavoured, by sudden movements of my head, to ascertain the best point for observation, and I thought I had noticed that when observed not against the light but a little to one side, it was not only less visible, but rather quite invisible. And yet it was not a very fine hair; but black and rather strong sewing thread.

When repeating the experiment with six different objects, I had again occasion to observe another significant detail:

Of these six objects, four were quite easily raised; these four were somewhat curved, which rendered the application of a thread possible. The fifth, a small nickel clock, could not be raised in

the air: it had a very mobile small handle, which, instead of serving as a support for the thread, only stood out and then fell right back again. Finally, the sixth object (the lid of an oblong cardboard box, ten inches long) was easily raised, but only by one of its ends back or front. It was evident that the thread (invisible this time) sought in vain for the centre of gravity, and, unable to find equilibrium because of the length of the cover, remained content with a lateral levitation.

Seeing the futile efforts of the medium, to which, following my custom of absolute frankness, I had all along declared having seen a thread, I gave her the following advice:

"You are not able to raise this cover with one thread only; make another."

"But I have no thread. You can see that well enough, surely! . . ."

"All the same, try and have two."

At the end of a few minutes, during which the cover commenced to rise alternatively (but less quickly in the alternation), sometimes by its front end and sometimes by the other, and after having performed some oblique and feeble levitations, it eventually rose completely and horizontally, to a height of from eight to ten inches, between the hands of the medium held wide apart; exactly as though supported by two stretched-out threads, one of which had an invisible connection with the medium's four fingers and the other with her thumbs. For I should add that if, in the preceding experiments, the medium held her fingers together, she instinctively held out her thumbs, after the advice as to the two threads, as though to facilitate the attachment of this second etheric thread.

Another observation to make is this:

The position and movements of the medium's hands never completely corresponded with the position and movements of the

objects. There was, nevertheless, sufficient relative dependence between them to give birth to suspicions.

From the moment when I mentioned having seeing a thread, the medium behaved as if she wished to contradict these suspicions in various ways: the thread being no longer visible, the medium held her hands motionless for the greater part of the time, and in spite of this, objects were raised and removed, sometimes to right and sometimes to left, sometimes even turning, and when she raised her hands parallel with the object, she moved the fingers about or executed little descending and ascending movements, independent of the object. Her hands, always very cold and very wet, were, moreover, empty, and did not leave the table a single instant.

One last observation will complete the foregoing:

We had, however, the right to suspect a certain ruse in the manner of acting (unconscious) of the medium, who consciously forced herself, on the contrary, to dissipate all possible objections. Not only did she avoid (apparently for other reasons) a suitable light, but when I wished to *touch* the thread, something always happened to make this contact impossible. The more frequently, when I approached my hand, the medium's hands involuntarily went further apart, even against her expressed wishes, and then the thread apparently became thinner and the object fell to the ground. I told the medium, however, that it was absolutely necessary that I should be able, by touch, to ascertain what it was.

January 18th, 1909.—I suggested to her to raise my own hand or one of my fingers.

We were face to face, separated by a fancy table. I placed my left hand on this table and asked the medium to place her two hands on the two sides of mine and to act exactly as she did yesterday on inanimate objects.

The medium's hands were already cold and moist, and mine

were warm; in spite of that, when feeling the "current" she commenced, at my request, to open her hands slowly, to right and left, I felt:—

1. A distinct chill, and then;
2. Something like a very thin wire or a hair gliding over the back of my hand.

By degrees as the medium's hands became wider and wider apart, this wire seemed to become finer and finer, then vanished completely at a distance of six or eight inches.

This experiment was repeated with the same result.

On the third occasion, I closed my eyes in order to concentrate my attention better, and I felt the same thread, no longer perpendicularly in the direction of my fingers, but slantingly. I opened my eyes, and noticed that, without my saying anything, the medium had changed the direction of the separation of her hands, which was in accord with my tactile sensations.

These experiments caused the medium much fatigue.

General Impression.—It is possible to create mediumistically, between the medium's hands, a sort of thread, possessing for some minutes a certain consistency, which diminishes and disappears with the putting apart of the hands. The formation of the mediumistic thread is accompanied by a sensation of chill. This thread, created by the unconscious imagination of the medium, seems to present a case of *objective material ideoplasm*: the strong desire to raise a small object at a distance, brings by association the idea of a thread which would do this. This idea is realised in a moment of monoïdeism. In common life, the sight of a thread, that is to say, certain vibrations of the ether produce the *idea* of a thread—here by force of the law of reversibility, the inverse is produced: the *idea* of a thread provokes the sight, the objective phantom of a thread, that is to say, certain vibrations of the ether. We are at the boundary which separates illusion from reality—

which combines them, I would say, because this phantom is not a simple hallucination, it exists objectively, it produces palpable effects. Is it a thing created from nothing? Is it the etheric body of a real thread? Is it the idea materialised, and, if so, by the aid of what substance? Particles of ether? Atoms of the medium's body? Of her gown? Of the object? Mystery.

Provisional explanations of the medium.—"It is the 'current' which is accumulated in me by force of concentrated attention and desire.

"I know when it is coming by a shiver all over my body, by the heat of my cheeks, by the cold breath, by the numbness and tingling in my fingers.

"This current does not go from one hand to the other; it goes from my hands towards the object and there stops. It does not go through the object. If you thought that the little calendar was hung up and suspended by a thread, it was only an appearance.

"This current is not a vibration. It is something which really oozes out from my hands, from the ends of the fingers only. When we turn the gas-tap, the gas escapes with a whistling sound. Here nothing whistles, but something analogous is discharged. Not from one opening but as from a number of small holes. This current gets thin and breaks as I draw my arms apart.

"Its prolonged outflow fatigues me very much.

"When the fingers are drawn together, it forms like a skein of threads, which reach the object.

"When I open the thumbs separately, the skein doubles itself, and is able to support a much larger object.

"A foreign contact immediately cuts this current and causes me pain—so *I instinctively seek to avoid it*.

"That is all that I am able to say for the moment. I am not educated, and I do not know how to express myself properly.

Pardon me, if what I have said does not sound like common sense."

*We will ask little Stasia; perhaps she will know more.**

XIII.

CONTINUATION OF RESEARCHES AS TO CONDITIONS.

January 19th, 1909.—My medium certainly becomes stronger and stronger. Yesterday, at dinner, we had the curious spectacle of an invisible guest. We were three at table, and the fourth place at the side remained vacant. Little Stasia took possession of it, moved the chair in all possible directions, close up to the edge of the table, replying to our questions by raps, and balancing herself for amusement, etc. The medium kept her feet under her chair all the time, between the bars, and a large lamp suspended from the ceiling lighted up the table as usual.

But I have no intention to describe everything—that would require a volume; I only mention this detail in order to note the progress made by the medium during our special study.

When in trance, she still marks 130 at the right and 115 at the left with the dynamometer without little Stasia. With her assistance she registers 240 at the right and 240 at the left.

The *apport* of a dumb-bell, weighing two pounds, was effected yesterday without fatigue to a distance of more than three yards, and a handful of snow was brought from outside, *by request*, through closed doors.

I mention this *en passant*; and now let us continue our study of the principal phenomenon, which to me seems new: *the regulation at a distance of a mechanism, unknown to the medium.*

* Since the above was written I have seen the *Revue d'Etudes psychiques* for March, 1893, which contains an article by M. Ernest Bozzano on *Natural or Fluidic Thread?* I will refer later to this very interesting article of M. Bozzano, whose observations agree with mine.

Such was, in fact, the first phenomenon which attracted my attention.

To-day the conditions are changed. The medium knows this mechanism perfectly, and it is now only a matter of studying the causes and physical conditions of the phenomenon.

Well, it is strange that the only difference which can be ascertained in repetitions of this experiment, after having thoroughly instructed the medium on the mechanism, is her visible disinterestedness in the phenomena in question. She is no longer interested in it; and I was obliged to employ all sorts of psychological artifices to arouse her curiosity, without which the phenomenon itself would have been difficult to obtain.

It is understood that I only speak of the medium when she is in trance, because normally Mlle. Stanislawa is never enthusiastic over the magic clock.

I desired to-day to clear up the question of regulating the apparatus without the approach of the medium, supported firmly in my hand. We have seen how, if the needle rests lightly on the palm of my hand, mediumistic regulation seems impossible, for want of a solid support; it is not the regulating disc, it is the entire arrow which is turned.

I held it therefore firmly between my fingers, and I asked little Stasia to execute the change, making it stop at 2.

After a few minutes' wait, I felt an 'invisible force' try to turn the disc, at first without pressure, then with a sensible pressure—but these attempts remained without result.

I perceived, but only after the seance, that the movements of the disc were too hard (Mlle. Stanislawa in putting together the apparatus herself had turned the nut too tightly). I believe that, but for that, and perhaps without so bright a light, the regulation would have been accomplished.

As to the invisible force, little Stasia must have noticed this

mishap immediately, and discouraged in this direction, she raised the point of the arrow.

"Now raise the other end also," I said to little Stasia.

She did so. And when the medium approached her hands from above, the arrow rose completely in the air. When the medium held her hands immobile, it was also raised, but not so high. On the other hand, the movement, instead of being directed straight up, consecutively took different directions.

Placed on the sofa, between the motionless hands of the medium, the needle gradually approached her left hand, then turned a little to the right, then again to the left, and this change of direction was several times repeated, in spite of the immobility of the medium. In all these actions, the needle behaved exactly like a crawling reptile.

When the medium drew back, always avoiding contact with the upholstery of the sofa, the arrow followed her hands exactly, but not when the movements were directed upwards.

When the medium, instead of drawing back, brought her hands towards the arrow, it allowed itself to be raised but immediately fell.

When, during a more marked levitation, I approached, at the invitation of the medium, to better see the suspected thread, the arrow fell so that I could see nothing.

This repeated failure so irritated the medium that she almost burst into tears and a violent pain in the head seized her.

"Wake me," she said.

"That would be contrary to principles; it would be better to wait until the pain has passed."

"No; because if I remain entranced, I shall force myself to continue the experiment, and that will make me worse."

I, however, begged her to rest for a time. She remained half reclining on the sofa, and turned her back to me. Suddenly

she burst out laughing.

“What is it?”

“Little Stasia said that she will pull your beard.”

“Very well, let us see.”

After waiting some minutes, I felt a feeble touch as with a thread which went over my beard (the medium held her two hands in front of my chest without touching it).

Then she raised her hands, saying that little Stasia was going to touch my hair. Some minutes passed without any sensation. Then I had the same impression as previously, as though a thread glided over my head.

She was astonished that I did not feel more, because she said that my hair rose and then fell back. She asked me to hold my hand over my head in order to feel the contact with the hair which she was going to raise. And really I felt, not the movement of my hair but their contact with my hand—always as if the hairs had been raised by a thread passing transversely in the direction of the forehead.

Then I felt a larger touch, but so feeble and vague that I do not know how to define it. At all events, it was different; it was no longer like a thread, but like a hand (or something larger) without stability or decided form.

At dinner, I felt these contacts more clearly on my right knee, under the table. It was not yet a hand, but more like a finger at first, then a foot. The pressure was, however, pretty strong: little Stasia is beginning to *materialise*. I do not use this word, because I wish to obtain later on spontaneous explanations from the medium. At this moment she was in her normal state. At the exact moment of the touching, I saw a small effort, a small synchronous but unconscious movement in the right thigh of the medium, who, however, could not reach me with her foot. This is the first time I have witnessed this (so frequent with Eusapia

Paladino), because Mlle. Stanislawka has good control over her mediumistic reflexes.

The beginnings of the materialisation of the "double" appeared to be confirmed by the attitude of a white cat which was in the dining-room. She fixed her eyes in visible fright on the spot under the table where little Stasia ought to be; several times she looked that way, then she ran away frightened, and hid herself in a corner, a thing she never does.

There was another indication of the beginning of the materialisation of little Stasia.

Up to now I had not been able to make the experiment with the magic clock which would determine the influence on the phenomenon of the aloofness of the medium. I made it to-day with another apparatus: a child's trumpet, 15 inches long, which emitted two tones: the one, a low note, by blowing; the other, higher, by drawing. Little Stasia's mouth and lungs already allowed this experiment. Hidden behind an open door, in order to secure a little darkness, she sounded the trumpet several times, the instrument being held in the medium's left hand, who remained standing near the door and holding her left hand on the other side. But the sound we heard was always the same: the blowing noise. She did not seem able to make the other. Why? Little Stasia said she was not able to touch the metal with her mouth; she blew into it at a distance of several millimetres, and to sound the other note it would be absolutely necessary to place her mouth against the mouthpiece.

We tried the influence of the distance of the medium, in another position: little Stasia was behind my desk where the trumpet was placed on the floor, and gradually moved away from the medium, seated on the floor to the right of the desk. She stretched out her right hand behind the bureau, in the direction of the trumpet.

The instrument was gradually moved further away by degrees; it sounded always with almost the same force.

Then little Stasia herself put the trumpet further away still, and blew inside it with enthusiasm. The mouth of the trumpet was now about fifteen inches from the tips of the outstretched fingers of the medium, and thirty-five inches from the mouth of the medium. Then little Stasia pushed the instrument to three feet eight inches, but did not blow any more as she said she was tired.

January 25th, 1909.—In order to clear up two questions at a time, I contrived the following experiment :

A metallic support was plunged into a Leyden jar. Its lateral end carried a silk thread, which hung vertically and terminated a few inches lower in a very light tassel.

When the jar was electrically charged, this little pendulum straightened out and receded from the bottle. By the side of this silk thread another thread twice as long is suspended, on the end of which a small metal bell is hung.

The object was to put this bell into motion, by holding the hands immobile, placed on the table, on the two sides of the bell ("A" and "B"), at a distance of about five inches (Fig. 4).

The medium gave me her hands to inspect and then placed them in an easy pose in the position indicated.

After waiting several minutes, a certain oscillation of the bell was produced; but it was insufficient and the impatient medium preferred to do another experiment with the magic clock first of all.

I consented; we made the experiment, which I will describe later, and then returned to the bell.

The "current" being already formed, things went better now.

The bell was shaken by an invisible force in different directions and rung several times, without the thread supporting it being much moved out of the perpendicular line.

At the same time the tassel straightened itself, rose, but instead of going away from the Leyden jar, it drew near to it and held itself there, partly fell and then rose up again, keeping for some time an immobile position whilst the bell was feverishly shaken.

The movement of the tassel, quasi-attractive towards the jar, and quasi-repulsive in regard to the medium, was not desired by the latter, who had not noticed its existence, being solely occupied with the bell.

At all events, the current "being developed," I said to the medium that I was going to place my hand between hers in order to see if I could feel anything. I put my hand close to her left hand, which remained immobile, but *I could not feel anything*. Mme. M. S. (sensitive to the hypnoscope) did the same after me, and she distinctly felt intense cold and some disagreeable pricking sensations at the end of the fingers.

But these attempts had an unpleasant sequence. The medium uttered a cry of pain, and showed me her right arm contracted and hypersthesised at the same time. I removed this state, not without some difficulty, and begged the medium to take a rest.

While waiting I collected my ideas.

I had neither seen nor felt the thread. The suspended bell had been directly shaken several times, in spite of the immobility of the medium's hands. It had been shaken in different directions. I had not felt the cold breath, which I distinctly felt the other day, at the same time as the contact with the etheric thread.

Mme. M. S., sensitive, did not feel the thread either, but

had a clear impression of the cold breath, or at least of intense external cold, in no definite direction.

The medium felt the current as usual. She underwent a very painful shock after the abrupt breaking of this current, by the introduction of our hands into the "mediumistic field."

The upward movement of the silk thread and tassel could not be connected with any of these phenomena. It was not produced by the respiration of the medium.

The dependence of the cold breath, felt by the medium and by Mme. M. S., is difficult to admit, because the tassel was suspended five or six inches above the medium's hands and six or seven from the spot where this breath was felt.

The nature of this persistent rising was not electrical: the jar had not been charged, and a very sensitive electroscope placed at the side did not show the least change of potential. The medium's hands do not act on the Bonnenberger electroscope, neither by influence, contact, nor friction: her hair, lightly rubbed against the disc of the electroscope, gives a negative electrical charge, as with other persons including myself.

The fact that the medium made no comment on the levitation of the tassel is explained by the exceptional weakness of the somnambulistic vision (the eyes closed) throughout that seance. In order to see anything distinctly, she was obliged to go right up to the object. She was only able to distinguish figures at a distance of a few centimetres.

Let us now come back to the experiment with the magic clock.

My intention was to verify whether mediumistic regulation, impossible (some previous experiments seem to prove the contrary) on my hand, without an immobile support, was possible on the dial, where the arrow, slipped on to the pivot, would be able to freely

turn, though equally deprived of a support sufficiently resistant to effect the setting.

In order to do this myself in this position I am obliged to hold the needle in one hand, turning the regulator disc with the help of the other, or *à la rigueur*, with only one, using three fingers for holding it and two to regulate.

The needle indicated 7 and I asked that it should be set for 2.

The medium placed the ends of her fingers on the rim of the glass dial, her left hand opposite the position taken by the arrow ($7\frac{1}{4}$), the right hand further away nearest to the figure 5.

Some minutes afterwards the needle moved, slowly going towards the right; it indicated $6\frac{1}{2}$, came back to 7, returned to $6\frac{1}{2}$, advanced to 6, and finally decided to continue its way in the same direction.

But the medium, who up to now had remained motionless, put her hands forward parallel with the needle, when the point rose successively to 5, 4, 3, 2, and stopped.

The medium was very pleased, clapped her hands—and *the arrow fell back on 7.*

The setting had not been changed. The needle had merely been displaced and momentarily stopped on 2 by an invisible force. I concluded that after the vain efforts at the commencement (7, $6\frac{1}{2}$, 7, $6\frac{1}{2}$, 6) she had recognised the mechanical impossibility of the regulation and had contented herself with a temporary displacement.

Supplementary explanations of little Stasia.

“In this last experiment I did not have sufficient power to effect the regulation. (She did not speak of the mechanical difficulty mentioned above.)

“The displacement was executed by the assistance of two forces: that of my *finger* applied to the other end of the arrow against the half-circle which terminated it and that of the *current*

of the medium, applied to the point, which was displaced parallel with the hands, being sustained by the current.

“With regard to the previous experiment, the principal part was played by the current of the medium alone, because my hands were too rarefied to act. There was no thread as you suspected. The current goes from the medium’s fingers right up to the object. When the medium spread out her thumbs the current was divided: there were two which crossed each other on the object. Then they traversed it, *penetrating* and sustaining it better. The variations in the power of these currents, to right and left, in front and behind, determine the movements of the object, so long as the medium’s hands remain immobile (Fig. 5). But it is much easier to produce the movements by moving the hands, conformably to the oscillations which one wants to obtain. That is why the displacement of the needle of the clock, in the second experiment, was effected much more quickly. The crossing of the currents also produces another effect: when the object is traversed and not only touched by them, each line (it should be called scientifically “line of force”) of the current becomes double, being composed of a departing current and an entering current. It is not an *attraction* which sustains the object in the air. It is rather *pushed* from two sides and maintained by this double contrary pressure. This something which escapes from the fingers becomes more dense and more resistant when the currents cross, and that is why you believed you saw a thread, but it was much thicker than a thread and then it was not black. If it appeared black to you, it was because of the light; if there had not been any light you would have had, on the contrary, a luminous impression. The medium will show you this luminous current and you will see that rubbing her skin will produce sparks.”

D This last declaration was made by little Stasia in the middle

of the seance. (She based it, as I learned later, on an experiment made by big Stasia, in the middle of the previous night: not being able to sleep, she had amused herself by rubbing her hands, and she obtained, it appeared, some luminous effluvia.) But after hearing this declaration, I said that it was impossible, because electricity obtained through rubbing the hands escapes from the body into the earth. The medium, not wishing to contradict my "science," did not reply, and tried in vain to obtain an action on the electroscope, by vigorously rubbing her hands, and to show me the sparks from her skin after the lamp had been extinguished.

Yet, nevertheless, this experiment was successful the next day. In the darkness we saw—Mme. M. S. and myself—some momentary sparks, produced by rubbing the ends of her fingers on her forearm. I saw only the brightest sparks; Mme. M. S., and particularly the medium, saw a much larger number. This time her skin was very warm, and under the skin we could clearly perceive the vibrations and pulsations of the muscles. *They resembled absolutely very rapid beatings of the heart.* This sensation was already known to me, for I had observed it in an English medium, known as the "Little Magnet."* Having obtained, with Eusapia, some great changes in the electrical conductivity of her body, I now imagined that the electrical sparks produced by Mme. Stanislaw Tomczyk, were due to the abnormal friction of the muscles as well as to the friction of the skin, in the condition of *an exceptional augmentation of the electrical resistance* of her body.

On the question as to whether it is possible to create a real

* The following fact is akin to this observation: An excellent medium, Mme. M. G., invited by me to observe what took place during a seance with Eusapia, told me amongst others: "The touchings of John's hands are absolutely similar to those of Eusapia's hands, with this difference, sometimes at the moment of the contact of John, I do not feel anything under her skin, whilst under Eusapia's skin I feel a sort of vibration or pulsation, *something continually moving under her skin.*"

thread, between the medium's fingers, little Stasia replied philosophically : " I do not know."

She again explained the cause of the painful contraction of the medium in the following manner :—

" The current being established, nothing ought to be introduced between the medium's hands, or between the hands and the object of the action. You introduced yours, then she gave you hers and the current was completely broken. The medium's left hand, close to which the rupture of the current took place, stood the shock better, because the current here was simply stopped; but the force accumulated round the bell and near the medium's right hand went entirely and unexpectedly on her right arm. It was *this excess of accumulated force* (in the mediumistic field) which caused the painful cramp in her arm."

" Speaking generally, can you tell me which side of the medium was principally active throughout this seance."

" The right side."

That was also my impression, particularly during the *apports*, which always come from the medium's right side.

Now there was a contradiction in this detail which perplexed me.

All the three persons present at this seance lost almost twice as much force on the left as on the right :—

—18—10—5 total = 33 on the right and

—28—30—13 total = 61 on the left.

In short, the medium lost 46, Mme. M. S. 40, and myself 18.

At the commencement of the seance, the medium (for moral reasons) was ill-disposed, very nervous (she was frightened at the sight of a bell on a steel wire), and relatively weak : 35 to right, 40 to left. There was therefore more power to the left. Why, then, was it the right side which was principally active, and why with us all was it the left side which suffered the greater loss?

Little Stasia was not able to reply to this question. And it is not impossible that we both made a mistake: the phenomena took place principally to the right, perhaps precisely for this reason that it was the left hand which provoked them. But I prejudge nothing.

My object being to facilitate for other researchers the study of these perplexing questions, I will mention yet another point of view:—

According to M. L. Barzini's observation, the action of a fluidic left hand may be accompanied by a very pronounced effort of the medium's right hand; that is not the rule, but it happens. It is therefore still possible that a mediumistic action stronger to the right may correspond with greater fatigue on the left.

Distinctly "unilateral" seances being rather rare, it is not easy to specify those dependencies which, moreover, are never absolute.

There was still another question put to little Stasia, who could not answer it:—

"What is the nature of the particles which compose the emanation from the fingers?"

She did not understand the question, though I put it in very simple terms and substituted for the word "emanation" that of "outflow," which she herself used. She did not understand, because according to her, a gas or a liquid cannot have particles.

Not wishing to influence her own conceptions before I had seized all the *nuances*, I contented myself with a general recommendation, saying that she was quite right in not wishing to reply to questions she did not quite understand, but that she ought always to pay attention to the sensations she experienced, in order to give me all possible light concerning the phenomena.

XIV.

A LESSON FROM JOHN KING.

My last experiments with Mlle. Tomczyk and the explanations given by her and her little domestic genius, remind me that fifteen years previously I received an analogous theoretical and experimental lesson from John King, the celebrated "guide" of Eusapia Paladino.

In my report of her sojourn at my home at Warsaw in 1893 and 1894, a report which has not yet been published, but which was drawn up immediately, I find amongst others the following details:—

December 31st, 1893.—After having explained the duplication of the medium's hands in the fluidic *attouchements*, John, that is to say, Eusapia, in complete trance, gave me still further explanations as to the transport of slates. With the view of obtaining some sign by writing, we had prepared two slates tied together and placed in the centre of the table.

When John was explaining to me that it was easier for him to materialise the tips of the fingers and the nails than any other part of the arm, I felt something hard tapping lightly on my head.

"Those are the slates," said John.

In answer to my question as to how he was able to hold them in the air, he gave me all his theory, which I will try to reproduce as faithfully as possible:—

The hands of all present, and principally the medium's, release an emanation which John simply called fluid. This fluid forms bundles of straight rays, which are like stretched threads and support the slates. When these threads or rays are sufficiently strong, the object may perhaps be raised above the heads, because then the rays converge on to a surface or a point of the object, becoming, so to speak, rigid, and the object rests

on them as on shafts. But their power depends upon certain conditions, and, above all, on the harmony established between the various fluids. By suddenly changing the conditions, for example, by breaking the chain of hands, you cut the current and the power from the fluidic rays is dispersed.

In order to verify this assertion of John's, I suddenly withdrew my hand from my neighbour on my left, and immediately the slates fell on to the table.

"That is true," I said to John; "but do you know that I had an impression as if the slates had fallen from the medium's head?"

"I shall prove to you by-and-by that you made a mistake."

We re-formed the chain, as he directed, and a few minutes afterwards the slates were again in the air, above our heads. "And now lift up your hand," said John. We raised our hands, Eusapia and I, as high as it was possible without letting go of each other's hands, and the slates manifested their presence at that height several times by touching our hands.

It was evident:—

1. That the slates were much higher than the medium's head;

2. That the raising of both our hands, without breaking the chain, did not in any way interfere with the mechanical action of John's rays.

When, several seconds afterwards, I unexpectedly left go my left hand neighbour's hand, the slates fell with a crash.

John's assertions were thus confirmed by experiment. The same thing occurred on the occasion of a complete levitation of the medium, whom John wished to raise in her chair and put on the table.

At my request, this levitation which, like all the previous

experiments with Eusapia, took place in total darkness, had to be accomplished *slowly*, in order to facilitate observation.

When the medium sitting on her chair was levitated to the height of the table, one of the controllers, M. Prus, loosed his hold of Eusapia's hand ; her chair fell to the floor immediately, and she herself fell on to the edge of the table uttering a cry of pain.

On another similar occasion, when the medium (without a chair) was already on the table, she gave suddenly a cry of distress, asking that we place our hands, without breaking the chain, *underneath her*.

It therefore seems that even in a levitation of the medium, executed by the hands of her double, the rays from John and the currents of little Stasia come in play.

Their theories accord, moreover, in principle, and I ought to add that neither one nor the other has been inspired by my personal views.

For our special purpose, we should emphasise this detail that, according to two special informers from the "Beyond," the "emanations" from the hands can, under certain conditions, present a density and a solidity sufficient to sustain a heavy object, and consequently *exert a pressure and mechanical friction at a distance*.

I also find in my notes for 1894, the enumeration of the sensations experienced by Eusapia Paladino, during the experiment with the bell which we will compare with those which Mlle. Stanislawa presents in analogous circumstances :—

With Eusapia Paladino :—

1. From the first she felt a shiver passing down her back by the arms, up to the fingers, which became numbed;
2. Then came disagreeable *pricking* in the fingers;

3. A *cold breeze* was felt between her hands or about them;
4. The skin of her hands became *very dry*;
5. Finally, synchronising with the phenomenon, she felt a sharp *pain* in her arms.

The cold breeze, mentioned above, could be felt by all present.

With Mlle. Tomczyk:—

1. An analogous *shiver*, which she calls: the “formation of the current.”
2. *Prickings*.
3. *Cold breeze*, felt only by the sensitives.
4. *Cold sweat* on the palms of the hands.
5. There was no *pain*, properly so-called, unless the current happens to be broken by a strange contact.

This last difference might depend upon the condition in which the experiments are made, because in somnambulism the phenomena are generally easier and less painful than in the normal condition.

With regard to point 4, this seems to constitute a real personal difference—allied with the following general difference:

After the seances, Eusapia's head is generally *cold* and without thermal reaction; it does not become warm again by the action of the hand.

With Mlle. Stanislaw Tomczyk, the head is *warm*, though equally deprived of thermal reaction (a hand, however cold, placed on the head does not feel any increase in warmth, though it may remain there for some minutes), which always signifies nervous exhaustion.

In concluding this recital of the lesson given me by John, I ought to mention another experiment with the scales. Though

it had failed two or three times and was even suspicious, it had, however, succeeded just before the medium left Warsaw.

It is interesting in this respect for us to note that Eusapia's hands did not surround the two sides of the object as all the previous experiments, but *only one hand* approached it *laterally* and remained almost immobile at a distance of two or three centimetres away from the cage.

Under these conditions the scales were put into movement :

1. *Gradually*, which eliminated the use of a steel wire, for example, because, with a steel wire acting momentarily, we always obtained the maximum oscillation from the first.

2. *Suddenly*, but with a certainty which could not be if a wire were used.

Then the oscillating scales were stopped suddenly by the same mediumistic action.

These experiments prove that the "fluidic" emanation of one single hand may still form a mediumistic field between it and the object, and that the lines of force which constitute this field may, in certain conditions, acquire the properties of a thread or of a sheaf of *quasi-rigid* rays.

With regard to the influence of the rupture of the chain on the disappearance of this quasi-rigidity, it should be stated that with Mlle. Stanislaw Tomczyk we do not form the chain, but the same disappearance or rupture of current takes place : (1) By drawing the medium's hands away; (2) By the approach of a strange hand.

XV.

VERIFICATIONS.

February 10th, 1909.—The reader will doubtless consider that this method of publication and the diary-form of my notes offer him advantages; instead of imposing on him the author's

definite conclusions, my notes allow him to form a personal opinion, to follow step by step the incidents of the study, and thus to grasp more quickly its defects, and that is generally more instructive than if the author had from the first insisted on the value of the results definitely obtained. But at the same time, the reader must not be surprised at finding in such a work certain hesitations, even contradictions, which spring necessarily from a sincere and complete exposition of all the experiments and of all the temporary generalisations in such a very delicate subject.

I have no intention of leaving this line of conduct just as I approach the end of this study, and, as I am writing these lines, I do not yet know what my definite conclusions will be.

However, in order to avoid repetitions and to make the generalisations more clear, I will sum up in a single exposition the experiments which complete one another without taking their chronological order into account.

My first care, after the doubts raised by the unexpected vision of the etheric thread, was to obtain an objective proof of the non-existence of a material thread. Notwithstanding my personal conviction that the latter had nothing to do with the production of the phenomena, it was, nevertheless, necessary to verify this subjective conviction. Three methods appeared to me as likely to produce this proof :—

1. The choice of objects, the construction of which made it impossible to employ any hair or thread whatsoever;
2. The production of movements the form of which excluded employing the same means, under the given conditions;
3. Photography.

The first two points were elucidated on February 3rd :—

1. A burnt *match* was raised in the air, quite straight, perpendicularly and almost without oscillation;

2. The arrow of the magic timepiece was turned right round the dial-plate, the medium's hands remaining unmoved;

3. A mariner's *compass*, offering no support for any thread, was raised between the medium's hands which followed it, the fingers wide apart, and held over the compass;

4. A cylindrical *glass bell*, broad and smooth, was raised in the same conditions, with this difference, that the medium's hands were held *under the object*;

5. The *needle of a compass* hermetically closed by a glass, has been visibly set in vibration and oscillation through the glass and without contact of the medium with the table;

6. A *thermometer, barometer and hygrometer*, suspended from the wall, were drawn by the medium's hands held *in front*;

7. The *glass bell* placed on the table, travels forward *away from the medium's hands* which have not moved;

8. Two boxes of matches approach each other under the same conditions;

9. Finally the experiment of the little *bell* is repeated three times in the following circumstances :

- (a) The medium turns her back on the apparatus;
- (b) The distance from her back to the bell is 38 inches;
- (c) Her hands remain motionless within mine;
- (d) The light is more than sufficient.

At the command of the medium, who was much amused at this new manner of working the apparatus, the bell set itself into motion, rang several times, threw down the Leyden jar by its rapid oscillations, then, also at command, suddenly stopped.

Under these conditions—that is to say, except for the personal current of the medium, the tassel betrayed no action.

I ought also to mention a slightly different experiment :—

1. The ivory handle of a Choubersky frying pan was raised and lowered slowly according to order. It was at this moment

so hot that one could not be touched without burning one's self.

"Could you lift up a hot coal from the stove?"

"Not such a fool as all that," replied little Stasia.

She is, however, very proud of these exploits, and gives the following explanations:—

Three forces have been put in motion in the last experiments: 1, the personal *current* of the *medium* who is able to act alone at a short distance; 2, the etheric *hands* of her *double* who acts at a longer distance, but not without the assistance of the personal current of the medium, which renders the double's hands stronger, denser, and less resisting; 3, *the analogous current of the double's hands*, which alone can act through the glass at a very short distance.

She then gave me a demonstration of the difference which exists between the movements of the bell when they are occasioned only by the current of the medium and when they are produced by the hands of the double: in the first case, the action is directed only on to the *metal* of the bell, which is pushed and moved, almost independently of the wire which supports it; in the second case, the action takes place more easily on the *wire*, which is *drawn* by the fingers of the double, and is bent, in consequence, out of the perpendicular and shakes the bell indirectly by its oscillations. It was in the last case that the Leyden jar was thrown over. The current of the medium would not be able by itself to produce this effect at such a distance (38 ins.). But the hands of the double, *apart from the emanations of the medium, which condense them*, would remain equally ineffective. In the previous experiment with the bell, the repulsive and persistent raising of the tassel was not occasioned by the double's hand, nor even by the voluntary direct action of the medium. It was an accessory phenomenon of the persistence of a personal current of the medium, at that moment very strong:

it was therefore an objective sign of the existence of the current and of the cold breeze, which accompanies it when it is strong.

The reader will remember that this explanation is contrary to my previous suppositions. If it is correct, we may perhaps eventually find a means of physically seizing this important phenomenon of the cold breeze, which I look upon as the Gordian knot of the physical phenomena in mediumship. It appears that this is also the opinion of M. Curie, who even constructed a small anemometer destined to mechanically measure the intensity of this breeze. I have seen this apparatus, which is very ingenious, but I believe that despite its exceedingly light construction in aluminium, it is still too resistant for the average manifestations of mediumistic breeze. Be that as it may, this question exceeds the limits of this article, and I must leave it for a later work.

February 7th, 1909.—I arranged a photographic seance in a hurry, in order to take advantage of the good disposition of the medium: but if she was favourably disposed, it was not so with my magnesium lights and cartridges, which suffered from the weather, and would only light by fits and starts. Nevertheless, in view of the persistence of the somnambulist and the solemn promises of little Stasia to do her very utmost to ensure success, I risked the experiment.

Four cameras were turned on to the medium at short distances from her, from one to two yards, in order to take the levitation on all sides and remove every doubt.

Three objects had been fixed upon for levitation and photography when in the air: the magic arrow, the mariner's compass, and a rather large, though light, glass bell. Little Stasia had scarcely arrived when she asked me suddenly:

“Do you want the current to be visible or invisible?”

“Most certainly invisible,” I replied, “as it is a question of verifying the fact objectively. It would certainly not be worth

the trouble to send the ANNALS photographs on which a black thread holding objects in the air could be seen! . . . But I will keep your offer for another day, when I may wish to see again and examine this mysterious thread. For the moment, you must only try to give me the phenomenon."

"I understand," said the little one; and she has kept her word.

All the photographs were more or less spoiled by the oscillations of the light, but in spite of this, they prove sufficiently clearly the reality of the phenomenon.

The arrow and the compass are raised as high as the medium's neck, and are maintained in the air without any material support. The fact that the medium's face was displaced between the two irruptions of the light, presents even, in its artistic defect, a certain scientific interest: the arrow floating in the air was less displaced than the medium's body; it was scarcely changed, while the alteration in the medium is clearly distinguished.

The levitation of the small objects was effected in the following manner:—

After having examined the medium's hands, I asked her to sit on the sofa, and I placed the object on her knees. She placed her hands on each side of the object at about four inches away, and raised it, rising up herself gradually and carefully so as not to break the current; then, when it had risen as high as her neck, she compelled herself to maintain it motionless as long as it was necessary until the cartridges went off. As I had not an automatic lamp, I was not able to seize the propitious moment, which made it harder and very fatiguing for the medium, particularly in the experiment with the bell glass, which it was necessary to let down with the same precautions, in order not to break it by falling (see Fig. 11).

In the experiment with the compass, little Stasia tried to

make it take a position parallel with the line of sight, but as the experiment lasted for several minutes she was not able to maintain that attitude, and on the photograph we see already the disc of the compass in profile. It seems, therefore, that this last position is easier on account of the lateral pressure of the currents (see Figs. 12 and 13).

The magic arrow, however, remained parallel with the plane of the camera.

The best photograph (see Fig. 14) allows us to see the whole of the contour lighted up laterally (the principal camera placed right in front unfortunately did not act through a mistake).

The smaller photograph (see Fig. 15), taken at the same time from the opposite side, shows the object too close to the medium's left hand, but it is in a better light and we can observe its independence of the medium's fingers.

Nevertheless, one detail is suspicious: in examining the larger photograph by means of a magnifying glass, we see on the forefinger of the medium's left hand a small ray which does not respond to the natural bend of the phalanx and which might come from a hair or a thread stretched out and pressing into the skin. We do not see this thread, either in the spot indicated, or on the black background of this print, or on the white background of the other print; nevertheless, the skin of this finger is marked *as by the pressure of a thread*.

How can this suspicious incident be explained, accentuated by this other circumstance that, the middle finger resting against the forefinger, the suspected thread might have been held between the two? . . .

In accordance with my usual frankness, I made my observations to Mlle. Stanislawa. She admitted their justice and said that we must try to eliminate all these doubts in future photographs (which was done).

I particularly regret that the third photograph failed completely (the levitation of the bell glass),* because in this case a thread or a hair was not applicable.

This experiment was also interesting from another standpoint.

As I have just said, the bell came down "mediumistically" on to the medium's knees (the table not being in front of her) after the flash of magnesium. Now, unless I am mistaken, this is a new fact, because in all the photographs taken up to the present, the object in levitation fell immediately after the light was produced. Here, on the contrary, the object descended again slowly on to the medium's knees. This fact proves that when the light is momentary and expected, it does not necessarily impede the mechanical action of an invisible hand.

I speak of a hand, and not of a "current," because according to the explanations of the medium, it is little Stasia who holds this bell suspended by its upper rim *on her finger* which is partly materialised or "condensed."

In all these experiments, the eyes of the medium remained closed, according to her habit. Despite her sensitiveness to the light, she did not suffer from the magnesium flash "because all her attention being concentrated on the object, *she forgot she had any eyes.*"

Immediately after this photographic seance, I ordered everything which is necessary to ensure greater success in the future.

With reference to the magic pendulum, I ought to note the following :—

* It has since been repeated successfully. With regard to the question of the thread on the medium's finger, I believe that it was a materialised thread partially visible, because it certainly did exist in reality, and in the other photographs it is not at all visible, whilst a real thread, however fine, would be clearly seen in the same conditions of light.—AUTHOR'S NOTE.

1. Once when the pendulum was set for 12, I asked for 11, having the needle on my hand.

"It is done," said the medium, repeating the words of little Stasia.

"But I have felt nothing."

"Because the current of little Stasia's hands being directed against yours, *had momentarily insensibilised it.*"

This explanation does not appear to me admissible. Nevertheless, in replacing the needle I noticed that it had stopped at 11.

2. "You try," I said to the medium.

She held the needle on her hand and I asked that the hands might be pushed, if possible, up to 10.

"It is done," she said.

"Did you feel the displacement?"

"No, but little Stasia says it is done."

"Did you see her turn it?"

"Not this time, I only heard her say she had done it."

It was correct: the needle indicated 10.

3. "Try again with my hand: go up to 9."

I placed the needle on my hand and waited.

"It is done," said little Stasia.

It was not, however. The needle still marked 10 and little Stasia had made a mistake. Why?

Probably because, without saying anything, I had placed the arrow inversely: uppermost, the light, mobile disc, which turns easily but which does not influence the regulating. The double had turned it at a distance, believing that it was the same as a little while ago.

It appears, then, that it is not possible to regulate through the disc; or, at least, it is certain that this time it was not effected.

It is possible that by resting on the hand—that is, without a lateral point of support—the displacement of the needle is

prevented? I do not think so. It seems to me that little Stasia, a moment later, regulated the apparatus when, holding it firmly by one end, I carried it towards the dial.

Can it be effected on the dial, when the arrow turns freely, suspended on its point, in a state of variable equilibrium? I do not believe this either, because this experiment has never succeeded under precise conditions.

It seems to me, therefore, that outside of the unknown force acting intelligently at a distance, the admission of which we are obliged to make, no mechanical law is contradicted by the application of this force.

Up to the present, in our experiments with the magic pendulum, two functions have been reserved for the medium and myself: the placing of the needle on its point and setting it in motion. Little Stasia regulated the apparatus under various conditions, or slowly displaced the arrow on the dial, but she has not yet tried to give the arrow a sharp blow, to set it in rotation. It was this task which I wished to set her. The medium's hands should remain motionless on the edge of the dial.

The experiment was rather a delicate one for two reasons: (1) by reason of the fluidity of the double's hands; (2) because of a flagrant opposition between the immobility of the medium's hands and the vivacity of the movement demanded.

Nevertheless, little Stasia succeeded three times:—

1. She succeeded at first in oscillating the needle a few degrees;
2. A moment afterwards, she made it go completely round the dial, three times in succession, and gradually increasing in speed;
3. Finally, she succeeded in turning the arrow so quickly that it no longer seemed to preserve its shape and form as an arrow.

This question was therefore decided: the double's hand, in spite of its fluidity in full light, is able to give to a resisting body, when freely suspended and movable, the quick necessary blow to set it in rotation. How?

"By a local and always invisible condensation (materialisation) of her etheric finger," explained little Stasia.

"Is this condensation made by a simple act of the will, or otherwise?"

"It is always at the expense of the force and emanation of the medium."

It should be noted that this time the medium felt nothing.

"Sometimes I feel, but sometimes not," she said.

I imagine that because of the opposition between the immobility of the medium and the vivacity of the movement of her double, it is necessary that the *dédoublement* between them should be complete, and when this is so, the medium no longer feels the action of the double but would only suffer, as a consequence, from ultimate fatigue, when the etheric (or "astral") body returned to its place and blended with the material body.

At the same time, it became comprehensible that the regulation of the arrow could be effected in this manner.

"But how did you guess the trick?"

"I guessed nothing: I only found out your manner of acting, and I imitated it the best I could, with or without the contact of my hands, according to the occasion."

Here is another illusion gone! Invention is reduced to imitation. What remains as acquired fact, is the aptitude possessed by the double to make clandestine observations on her own account, not only outside the normal consciousness but even outside of the somnambulistic sub-consciousness.

I have observed this fact on many occasions.

(To be Continued.)



THE REPORT ON THE SEANCES WITH EUSAPIA
PALADINO AT THE INSTITUT GÉNÉRAL PSYCHO-
LOGIQUE IN 1905, 1906, 1907, AND 1908.

By DR. LEON DEMONCHY.

WITH regard to the phenomena which at the present are attracting so much attention and penetrating so profoundly the human conscience, we are and wish to remain students. Yes, students, and not manufacturers of systems, founders of sects, or builders-up of preconceived explanations. But students in the scientific sense of the word; that is to say, if we examine these phenomena we do so by the aid of an exact and rigorous method, so that we may assure ourselves whether after all these phenomena are true. The era of explanations is not yet open.

The task is a difficult one. We must teach ourselves to doubt, to desire, and to know how to arm ourselves with scientific doubt. And if I be allowed to speak, not only as a doctor of medicine, but also as medical practitioner, and, what is more, as a medical psychologist who has made psychology a daily occupation, I may say that in my studies I have learned to doubt not only others, but even, and before all, myself.

Our eyes have not yet acquired the sensitiveness of the

photographic plate; our touch has not yet the rapidity of electrical contact. It is necessary, therefore, to regard our special organs as imperfect instruments in the face of these questions, and consequently to replace them by a more perfect organism, by instruments which will impassively and implacably record the phenomena produced.

To register the phenomena, independently of ourselves, everything lies in that.

And that is the method, not only of the future, but even already of the present, a remarkable proof of which we find in the report of M. Jules Courtier, just published by the *Institut Général Psychologique* of Paris.

Let us turn our attention to this report.

Eusapia Paladino gave forty-three sittings to the *Institut Général Psychologique* during the years 1905, 1906, and 1907. To record the phenomena and connect them with known laws was the constant pre-occupation of the experimenters. The phenomena may be classed under two headings: (1) Mechanical actions on objects and persons in contact with or in the vicinity of the subject; (2) Luminous phenomena, lights, hands, limbs, phosphorescent and dark shadows, apparently human.

As early as 1905, MM. Courtier and Youriévitich prepared a general scheme for these researches: (1) Observation, control, and registration of the phenomena; (2) Physical researches; (3) Psycho-physiological researches.

Since the first seance was held at Naples, the aim has been to determine the *general conditions of the seances* for the production of phenomena, according to the different points of view of the instruments necessary for graphic registration: the table and its electrical supports, the light and the cabinet.

At the *Institut* use has been made, according to the room chosen for the seance, either of a cabinet 8 ft. 4 in. high, 4 ft.

6 in. wide, and 12 in. deep, hung with black woollen curtains, or of a cabinet formed by two curtains suspended in a corner of the room 2 ft. 6 in. in depth. The table was 3 ft. long, 1 ft. 6 in. wide, and 2 ft. 8 in. high, without projecting edges.

The light was first furnished by a gas burner, regulated at will, with wooden shutters reflecting the light on the walls and ceiling; afterwards by an oil lamp placed on a table at the entrance of the adjoining room, or again by a cluster of electric lights, placed in a wooden reflector closed at the bottom hanging 12 in. from the ceiling on which was reflected the light which was regulated as desired. The instruments placed in an adjoining room communicated by electrical wires and tubes through the walls.

In 1903, some seances were held at the house of M. Yourié-vitch. Eusapia was seated at the lower end, her knees between the feet of the table, on which she placed the thumbs held and thus controlled by the persons seated to right and left of her, her feet resting on their feet. A chain was formed by the five or six persons present, thus establishing an unbroken circle of hands to right and left of the subject. The raps were held to indicate: 2, no; 3, yes; 4, speak; 5, less light.

Inside the cabinet were placed a light fancy table, some smoked papers or articles, a basin filled with modelling clay or mastic for impressions, and a zither.

To the left of the cabinet was placed, at about a yard from the subject, a three-legged table of poplar wood, weighing three and a half pounds, having three crossed legs and standing 2 ft. 9 in. high.

They began with the light fully turned on and gradually lowered it, and they observed in succession, as the darkness increased, the raising of the table, the inflation and movements of

the curtain, contacts, displacement of objects in the cabinet, forms, dark and luminous human limbs coming out of the cabinet towards Eusapia through the opening of the curtains, luminous specks and sparks.

A shorthand writer took down all words said and noted all the particulars of the phenomena; an electrical signal marked each minute on Marey's cylinder, and in thus studying the graphical registrations and the shorthand report, we are able to receive an exact interpretation of the seances.

PART I.—RESEARCHES.

THE PHENOMENA.

A.—The Study of the MECHANICAL PHENOMENA bore upon the following points:—

I. *Raps.*—Produced most frequently after a feigned, movement on the part of Eusapia, controlled at different seances by MM. d'Arsonval, G. Ballet, Courtier, Youriévitsh, Debiegne, Richet, Perrin, Charpentier, Ochorowicz, Bergson, M. and Mme. Curie;* they are reproduced in the table, sometimes strong, sometimes weak, two or three seconds after the feigned movement made by Eusapia and sometimes also by one of those present. For example: Eusapia will strike some blows in the air, or on the shoulder of one of those present, or scratch the hands of one of them, or will bend her head towards the table three times, and this sometimes at the request of the controllers and at a distance:

* M. d'Arsonval is professor at the College de France; MM. Gilbert Ballet, Richet, Perrin, Bergson, Mme. Curie are professors at the University of Paris, as was also the late M. Curie; M. Charpentier is professor at the Nancy Lyceum, M. Debiegne is principal at the Sorbonne, M. Youriévitsh, secretary to the Russian Ambassador at Paris, is general secretary of the Institut Général Psychologique.

the blows will be heard an equal number of times in the cabinet or in the table; Eusapia will give a blow with her fist on the top of the table, an assistant will feel a blow in the table under his hand; lighter blows given by Eusapia on M. Ballet's back will be repeated an equal number of times on M. d'Arsonval's hand, or on the fancy table placed a yard away to the left of the subject. A sitter will strike three blows on the table, scrape or scratch it, and the same number and same kind of noises will be reproduced in the table. And though the localisation of the noises may be erroneous, it is correct to say that the blows are accompanied by a tremulous motion in the top of the table.

2. *Movements and raisings of the table.*

(a) *Partial*.—Eusapia moved her hands and touched the table: lateral movements of the table. Eusapia made a gesture as though to draw the table to her: the table moved forward. Eusapia crossed her hands on her chest: the first and second feet of the table were raised. Eusapia placed her hands on her knees: three feet of the table rose. M. Youriévitich knelt on the table facing the curtain: the first and second feet rose. At the request of Eusapia, the Countess de Gramont seated herself opposite to Eusapia: the two feet on that side rose, one foot broke in falling down again.

(b) *Complete*.—The two hands, feet, and knees of Eusapia being controlled, the table is raised suddenly, all four feet leaving the ground, then two and again four feet; Eusapia closes her fists, and holds them towards the table, which is then completely raised from the floor five times in succession, five raps being also given. It is again completely raised, whilst each of Eusapia's hands is on the head of a sitter. It is raised to the height of one foot from the floor and suspended in the air for seven seconds while Eusapia kept her hand on the table and a lighted candle was placed under

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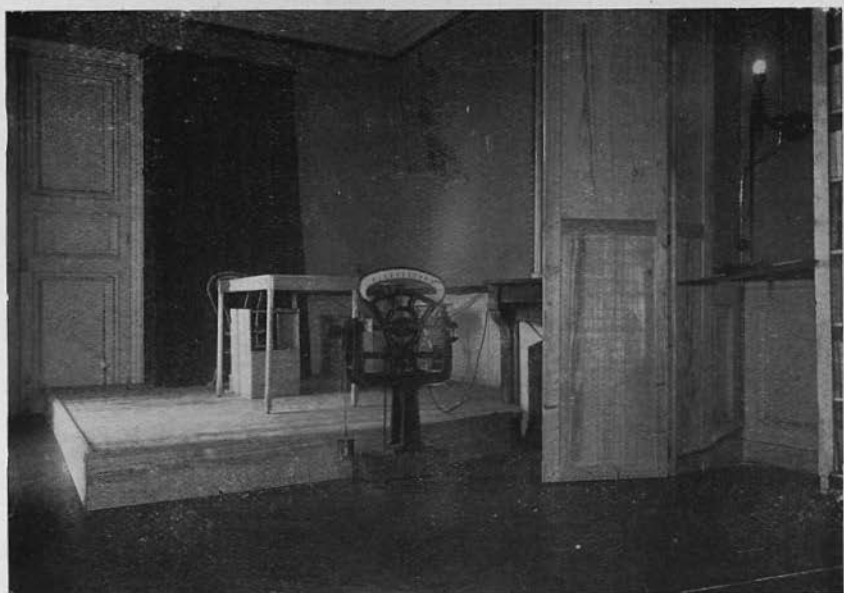


Fig. 1.

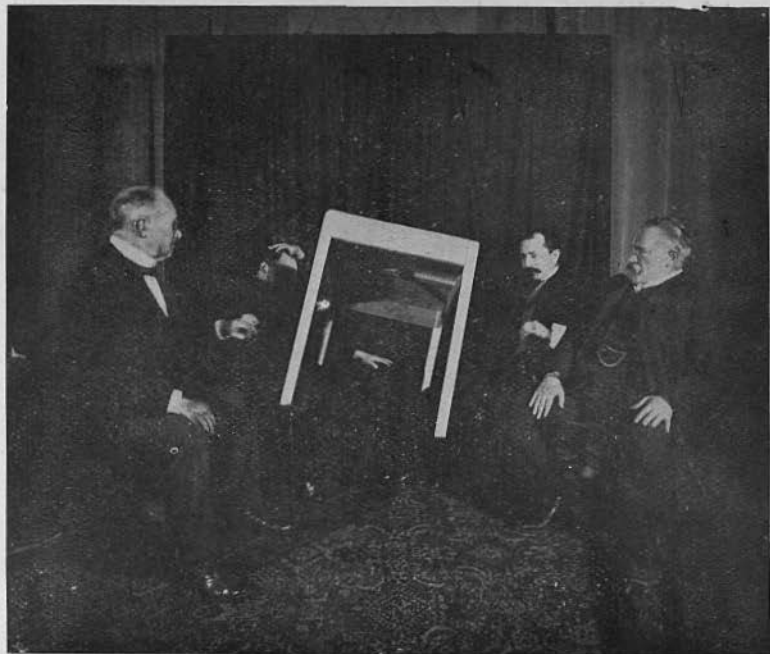


Fig. 2.

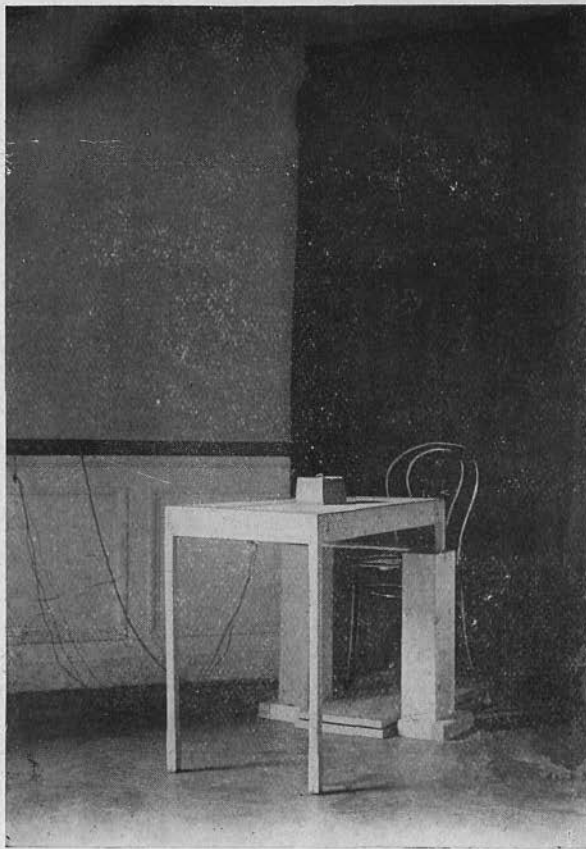


Fig. 3.
The wooden "leggings" enclosing the legs of the table
near the medium.

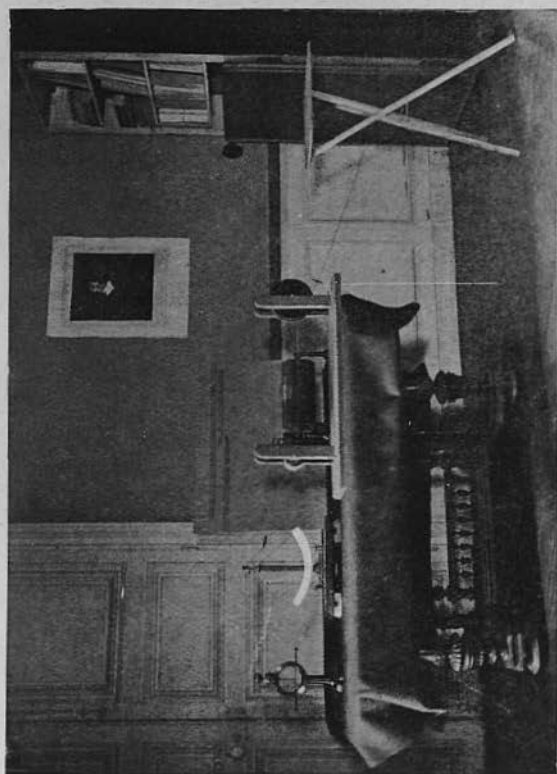
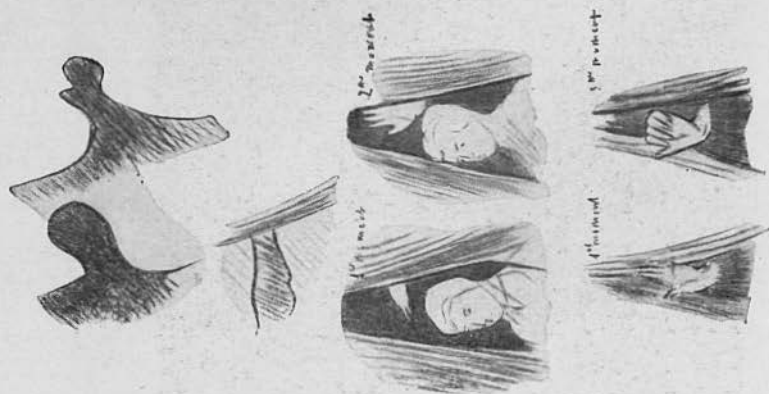


Fig. 5.
Drawing showing simultaneous levitation of
the four feet of the table.

Enregistrement des déplacements du guéridon.

E. P. 12 Juin 1905.

Fig. 6.



The cocoon-weigher and other apparatus.

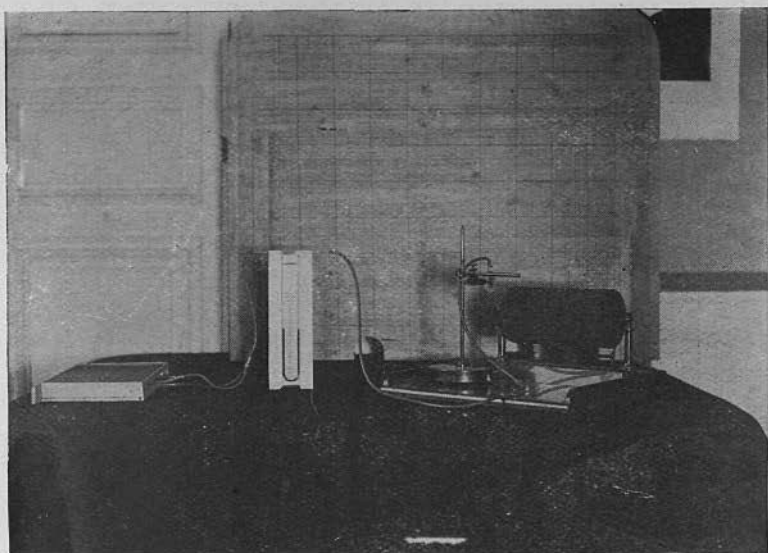


Fig. 9.

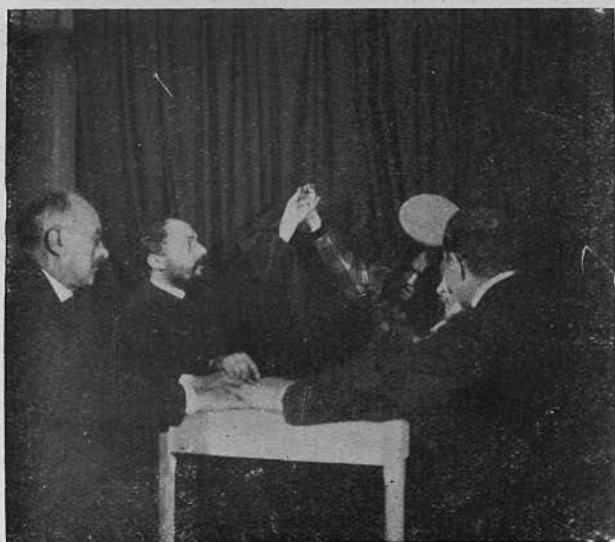


Fig. 10.



Fig. 11.



Fig. 12.

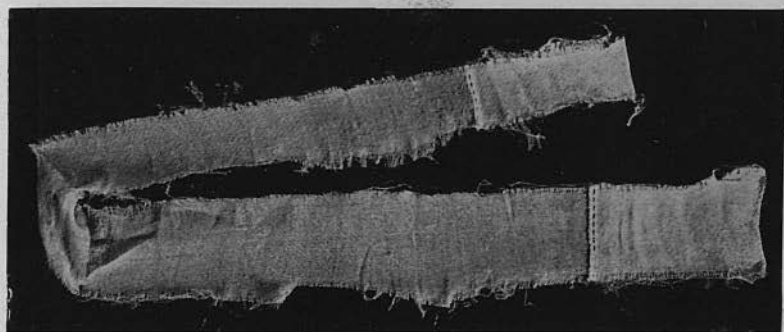


Fig. 13.

the table; it was completely raised to a height of ten inches from the floor and suspended in the air for four seconds, M. Curie only having his hand on the table, Eusapia's hand being placed on top of his. It was completely raised when M. Curie had his hand on Eusapia's knees and Eusapia had one hand on the table and the other on M. Curie's hand, her feet tied to the chair on which she was sitting. Two and then four feet of the table were raised when a weight of ten kilogrammes was placed on the table, the hands, feet, and knees of Eusapia being thoroughly controlled. It was completely raised when touched by no one, not even Eusapia, she being under perfect control.

All present rose and formed a chain; the Count de Gramont held Eusapia's two legs on Marey's balance; control also being exercised over Eusapia's two hands: the table was raised so high that it almost came right out from the sheaths covering the two legs nearest the medium. At the second complete raising some one said: "Higher, out of the sheaths." The table rose a great height and then fell down outside the sheaths. At another complete levitation, all standing up, the table rose to eighteen inches from the floor: someone asked the table to break: one leg was broken; there were rhythmic oscillations when the table was completely raised as the number of seconds was counted aloud.

Certain experimental arrangements of control and measure were made in order to register the levitations of the table graphically by means of electrical contacts placed under each of the legs of the table. A foot placed under the table would have stopped the working of the signals. They were therefore sure each time that the signals from the four feet worked together that the levitation was really effected *without any contact under the feet of the table*. (Figs. 4 and 5.)

Further, Eusapia's chair rested on a Marey balance, and later a registering Roman balance was used. Thus these various

arrangements for control were all recorded graphically. Now, the result was that everything took place, both in the case of the increase as well as in the diminution of pressure, as though *the fulcrum of the force was the subject herself*, an important result, conforming to the laws of mechanics.

Eusapia seated, controlled, her chair held, said that she could diminish her weight: a diminution of weight was registered.

Another time, there was an increase of weight for the displacement and raising of the fancy table effected without apparent contact.

The wooden sheaths placed round the legs of the table were joined by transverse bars in such a manner that the feet and knees of Eusapia could not come into contact with the table. The synchronism of the movements of the four feet was more remarkable and more perfect than when out of these wooden leggings.

The top of the table was made loose: and the table was raised without the top moving out of its groove. A small table with a movable top was placed on the larger table: Eusapia bent her head, the movable top was raised, Mme. Curie's hand being between the table and Eusapia's head.

3. *The curtain of the cabinet and the subject's dress.*—The curtain is of black wool and quite light in weight; after several levitations of the table, it commenced to swell out in response to Eusapia's command: "Come, come." The swelled part offered a resistance. Her gown also swelled out to such a degree that M. Curie wondered if they would be able, as it were, to canalise, in tubes of black wool, the force emanating from Eusapia. An apparatus made, according to the suggestions of M. Curie, of black stuff and a wooden frame, was brought to the next seance. It displeased Eusapia, who criticised it severely: it was strongly

shaken and finally destroyed; when this occurred, Eusapia was controlled by M. Curie on the left, M. Richet on the right, and her two feet by M. Youriévitich.

4. *Movements and transportations of objects placed in the cabinet.*—Some porcelain saucers, some small wooden boxes covered with lamp-black, a zither, a violin, placed in the cabinet were touched, transported on to the table, thrown on the floor; also the zither resounded as though played by a hand. A basin of wet clay, weighing fifteen pounds, fourteen inches long and eleven inches wide, was brought on to the table, and the stool on which this basin rested was raised on to M. Curie's shoulder.

Further, certain objects were broken : a pencil, an indiarubber tube connecting the Marey balance with a registering drum, which was eighteen inches from Eusapia; finally, a wooden lath supporting an iron palette intended to check the cold wind which comes from the scar of an old wound on Eusapia's skull. The latter instrument highly displeased Eusapia. The lath was several times seized and transported into the cabinet. Eventually, at a moment when M. Courtier held it tightly in his hand, and behind Eusapia's chair, the lath was drawn violently by the opposite end and then broken in M. Courtier's hand. Eusapia declared that it was broken into three pieces, which was found to be correct, although the lath was behind her chair: how did she know the number of pieces?

5. *Transportations and levitations of the small tables. Their apparent variation in weight.*—A three-legged wooden table, placed at a distance of a yard from Eusapia, and connected with a registering apparatus, came forward or went backwards at Eusapia's command; it was even pushed and thrown against the wall, Eusapia's feet being tied by laces to the legs of her chair,

and her wrists tied to those of her controllers. It was raised as high as M. Curie's shoulders, turned upside down so that the top rested on the top of the other table. M. Curie was astonished at the precision which marked its ascent: "It made a pretty curve in placing itself on the table, but it didn't touch me at all."

We also noticed the difference in the weight of the small table. It was as though nailed to the floor. "Become lighter," said Eusapia: it was lifted without effort. It was raised on another occasion, despite the pressure, about six pounds, exerted by those present.

6. *Contacts with the sitters.*—Close to the cabinet, those present experienced touchings on the arms, body, face, as though with the tips of fingers and the hands. Shoulders were taken hold of. You were as though pinched with nails, the contact was painful; hands slipped out and pulled the hair, ears, untied knots in cravats, drew away your chair, turning it sometimes even to the top of the middle opening of the curtain. Sometimes there was a double contact, two sitters being touched at the same time, or the same sitter on two different parts of the body.

B.—LUMINOUS PHENOMENA.

1. Blueish phosphorescent *lights* appeared and disappeared in turn about Eusapia's forehead, on her right side, on the black background of the curtain, and on the table.

Eusapia was lying in the cabinet on a long chair, to which she was tied from head to foot and her sleeves hooked on to her dress. M. Courtier, seated inside the cabinet at the foot of the long chair, announced that lights were rising out of the centre of Eusapia's body and in the direction of the middle opening in the curtain: those outside said they saw a light resembling a hand.

2. *Sparks and shining specks.*—A kind of electric spark, but larger and more spread out, of rosy colour, was observed in the legging enclosing the feet of the table; two very bright luminous specks appeared over Eusapia's head. From an electrical machine placed six feet in front of Eusapia, three sparks were drawn; three luminous specks imitating the electrical sparks and accompanied by the same peculiar sharp sound, were seen successively at a level with Eusapia's head, who claimed to have appropriated and given back the electricity. Eusapia drew some sparks from the hands, hair, and head of those present. Some luminous points were examined very closely by M. Jarry-Desloges, who gives the following description of them: "The brilliant points shine out like nebulous rings on the left side, but these nebulosities appeared to stop suddenly at the lower part on the same line, as though the spark was placed on an opaque support."

3. *Various forms.*—Forms of hands, luminous fingers, were seen at the same time that contacts were felt. Sometimes these forms were like black limbs, like silhouettes. One time even, Eusapia being tied on to the long chair in the cabinet, the experimenters saw at the opening in the curtain a dark head and the bust of a man covered with white linen (see Fig. 7).

II.

THE SUBJECT.

PSYCHO-PHYSIOLOGICAL RESEARCHES.

The psycho-physiological researches made on Eusapia have related to her recollection of figures, words, forms, and colours; certain experiments of optical illusions, mental calculation,

association of ideas, of reasoning, times of reaction, dynamometric force, etc. The two most interesting things to note are : on her sensibility at a distance, the results have been absolutely negative; and as to her dynamometric force, the fall has always been instantaneous, recalling thus the abrupt falls of the table on the floor after it has been raised.

In seance, Eusapia pretends that it is the force of the medium's will which produces the phenomena. She demands active co-operation from those present, the concentration of their will, their wish to attract the curtain, to raise the table, etc.; she announces beforehand the phenomena to be produced, she shows great activity of will: contraction of the muscles; her impressions beforehand as to the phenomena prove the intervention of her own ideation. We may believe that there is a certain amount of sensitiveness at a distance: appreciation of the hardness of the clay, of the number of pieces of broken lath; she complains if the objects are touched, if the fluid or current is broken. Music impresses her unfavourably. The chain, the moral dispositions of the sitters, the light, have an influence on her. She shows amnesia, a variable condition of hypnosis: she will enter into conversation with those around her when she is supposed to be in trance; hyperesthesia, sometimes localised and sometimes generalised, and often persisting after the seances. Contacts to her then are painful, she says, like burns.

From the psychological point of view, her radial circulation, capillary pulse, respiration which is, on the average, higher by two respirations than in women of her age, and her temperature have been registered. The urinary analysis discloses the presence of a large quantity of glucose.

III.

INVESTIGATION OF PHYSICAL ACTION NEAR THE SUBJECT.

In the third place, the investigators wished to see what action Eusapia exercised on physical instruments, and experiments were made as to weight, heat, electricity, magnetism, and chemical surroundings during the seances.

Weight.—A small recording scale constructed by M. Youriévitich was used which could be protected by a wooden frame or by a wooden box lined with stuff. Eusapia raising and lowering her outstretched hands alternately to right and left of the table top, palms downward, was able to move the scales without the detection of fraud, but only after all protecting enclosures had been removed.

With regard to the Roman scale, Eusapia's hands and feet were guarded; a tail-end of her gown was placed on the weighing plate: the pointer marked three pounds. A chain was formed, and the pointer marked six, then fourteen, then twenty pounds, when the pointer was thrown right to the end of the register.

A letter-weigher, the plate of which had been replaced by a hollow piece of cardboard, on which was stretched a thin sheet of paper, was placed inside a wooden frame. *Eusapia's efforts to move this were fruitless* except on one occasion—her hands were then held by M. Debierne—but on this occasion a noise was heard on the paper disc of the apparatus.

A cocoon-weigher, capable of registering the weight of a centigramme, was enclosed between four glass sides. It was necessary to take away the four sides before Eusapia could lower the scale, which was done several times, without *apparent* contact, by extending her hands to right and left and making the gesture of depressing the plate; a silk handkerchief was placed across her nose and mouth and held there by M. Youriévitich, to prevent

her breath lowering the sensitive scale. In order to show if any contact took place, the plate, beam, and index of the weigher were covered with lamp-black; after this was done, Eusapia was not able to produce any movement on this instrument.

A manometric arrangement composed of a small board resting on indiarubber bulbs and connected with a registering apparatus, was devised by M. Courtier. Experiments were made, of which we shall speak later.

Electricity, Magnetism, Heat.—Eusapia succeeded in discharging at a distance three electroscopes of different construction, but she was not able to charge the electroscope by means of the cold breath coming from the scar in her skull. No phenomena of ionisation were observed. An electroscope of which the charging disc was inside a cupboard in the cabinet to the left and about twenty inches from Eusapia's chair, did not register any noticeable variation during any seance. Other experiments made with the view of determining if Eusapia's muscular efforts were accompanied by phenomena of abnormal temperature or the production of a magnetic area, were without result.

Sonorous waves.—A glass placed in full light between her hands, at a distance of three millimetres, was made to vibrate without apparent contact as though a moist finger had been placed on the edge; then following the rhythm of her hands, which began to tremble in a jerky manner, it glided forwards and backwards, fell on to the table and broke.

The examination of the chemical conditions of the air surrounding the medium was productive of only negative results: the composition did not show anything abnormal.

PART II.—CRITICAL CONSIDERATIONS.

The registrations by various apparatus without doubt set

aside all illusions of a passing or hallucinatory character of which the investigators might have been accused.

But of what nature were the phenomena? Laws seemed to be contradicted, facts to be without known cause. But to-day the "Supernatural" is banished, and savants no longer scorn these researches; they force themselves to study the phenomena in order to connect them, if real, with phenomena already known and to bring them within the system of natural law. We must beware of hypotheses. We must above all things analyse, in a precise manner, the conditions of control and observation of the phenomena and subject the severely controlled facts to still more severe criticism.

CONTROL.

Sight is subject to error by reason of the incessantly increasing darkness, *all the more so as Eusapia claims that her skin becomes more and more sensitive to touch and she is less and less able to bear being held by the controllers in measure as the darkness deepens.*

Again, the controller has control over only one hand and side, for which he can use only one of his hands, his other hand forming part of the chain.

The control of the hands is only good if the thumb of the medium is held, and held in good light. Now, Eusapia's hands are in constant movement, and constantly escape. Further, if she can get her thumb free, she places her hand on yours, sometimes even tapping it, and between the taps an exceptionally agile hand (such as hers undoubtedly is) is able to execute movements of great amplitude. Still less effective is the control through the curtain.

The control of foot and knee is another difficulty for the

controller. Eusapia places her feet on top of yours so that supervision is extremely precarious, if not impossible.

Finally, Eusapia's constant opposition to certain kinds of control, was significantly manifested one day when a proposition was made to sew two cotton ribbons, eight inches long, one end to the sleeve of her controller and the other end on her own sleeve. She had accepted it on three previous occasions (no phenomena occurred), then she declared that she would not have it again, having seen, she said, in a lunatic asylum, mad people fastened in the same manner. This recollection was unsupportable to her, she said.

THE OBSERVATION OF PHENOMENA

The same person controls and observes, Eusapia not allowing anyone who is outside the chain to come near her, because in such a case the phenomena are rare; "for the sake of one, a hundred suffer," she says. This double care induces a perpetual state of *divided attention*, which is complicated by a continual condition of *expectancy*, in face of the phenomena which present themselves now here, now there, in an *instantaneous* and *transient* manner. Then there is also the *condition of surprise* which takes from the observer his character of precision. The phenomena are diverse and complex; the controllers must be continually on the watch and must keep each other constantly informed as to the control of the hands and feet as well as to the nature and peculiarities of the phenomena. The causes of *distraction* are numerous: conversation, raps, etc. The condition of *suggestion* is very pronounced, and one is tempted to complete a phenomenon imperfectly perceived; if we add to this the emotions liable to be experienced, it will be seen how far removed all this is from the patient experiments of the laboratory, where

everything is regulated and calculated beforehand, and where only one fact is observed at a time attentively and silently.

FRAUD.

The Hair.—Eusapia being unable to succeed in lowering the plate of the cocoon-weigher after it had been covered with lamp-black, went, one evening before the seance, close to an india-rubber plant, and turning away her head to show that it was not a question of her breath, she caused one of the leaves of the plant to oscillate several times without apparent contact, her hands held open to right and left of one of the larger leaves, and she repeated this experiment at the following seance. But, on this occasion, a favourable light enabled one of those present to distinctly perceive a hair by means of which she pressed on the leaf. Someone else had seen a hair hanging from her hand.

Before another seance, someone who was working near by found her exercising herself, with the help of a white hair, in making the cocoon-weigher oscillate; he saw something like a luminous ray come from the extremity of her fingers; watching carefully, however, he saw that it came from a hair held between her fingers and which set in motion the plate of the cocoon-weigher.

The Nail.—The manometric arrangement of M. Courtier, of which we have previously spoken, communicated with a U-tube, inside which a coloured liquid oscillated under a very light pressure of the board; this tube was connected with the Marey drum. The board was covered with smoked paper (see Fig. 9). Eusapia was asked to act on this at a distance and the light was lowered. Some movements in the tube were witnessed, and later Eusapia, who held out her hands to act at a distance, said that she had just touched the board without

wishing to do so. The small board on which the sheet of blackened paper was placed was examined and was seen to have some light marks such as would have been produced by means of the finger-nail of someone who had tried to work the manometer by this means. M. Courtier sat down to the right of Eusapia, who had remained at the table, and held her right hand. A moment afterwards, a small nail, six or seven millimetres long (a tack really) rolled on the top of the table, as if it had fallen from Eusapia's left hand. She pretended to be surprised; it did not fall from a height, and it appeared to come from her left hand. The point left some dots on the smoked paper similar to others we had previously received.

The levitations of the table.—Towards the latter part of the seances, Eusapia's powers seemed to diminish. At a seance held elsewhere, the feet of the table nearest to Eusapia were raised, M. Courtier ineffectually using strong pressure on the table. The controller on the right passing his hand under the table, felt Eusapia's knee against the edge, and concluded that she put her right foot on her left leg to resist the pressure exerted on the table.

The depth of the cabinets.—The action of Eusapia is easily exercised in cabinets of a depth of fifteen inches and, without wishing to prejudice anything, it does not appear to extend beyond the reach of her hands.

The substitution of hands was one day very clearly observed by M. Courtier at a seance held elsewhere.

Contacts and apparitions.—In the case of the apparition of a head followed by the contact of two arms, Eusapia's silhouette was seen in the same direction; and Eusapia had quickly freed herself from her two controls.

Photographs were taken only at the request of Eusapia, by means of an apparatus invented by M. Courtier, which gave an

intense light without smoke. Only one photograph was taken unexpectedly; it was at the levitation of a table, and it looks as though the palm of her left hand touched the corner of the table top which she was claiming to levitate, and four fingers of her right hand are pressed hard against the table on the opposite side.

Other photographs taken from one side at the moment the small fancy table was brought out of the cabinet, show the similarity of position in three different instances. The small table is supported on the hair of the subject. Perhaps even one of the feet of this feather-weight table is supported between Eusapia's neck and collar.

When Eusapia learned about this photograph, the smaller table was not transported out of the cabinet.

Imprints—Spirit Veiling.—Various observations show us how very little reliance can be placed on these, and particularly the strong resemblance between the two moulds—one obtained before the seance and the other asked of Eusapia after the seance—as to the dimensions and the size of the hand and to the folds of the skin at the joint of the ring-finger (see Fig. 12).

In comparing several moulds, it was noticed that they bore traces of a similar tissue, ornamented by what is called in the language of “fashions,” “bars.” On M. Youriévitich's carpet a bit of rag was discovered cut into strips; this rag had the same “bars” as those observed in the imprints (see Fig. 13).

To be sometimes deceived by a medium does not mean that we are always deceived; but it should make us very circumspect and cautious. We put forth all our efforts to control, but how can a conjuror be satisfactorily controlled, even if he be tied to his chair? Further, mediums over-excited by the seance and fatigue, may let themselves yield to certain tendencies, particularly suggestions from the persons assembled. Finally, they grow old, lose their power, and are not able to resign themselves to this loss.

They are poor. We must pity rather than blame them, and try to minimise as much as possible the sorrows of painful old age.

THE PHENOMENA CONSIDERED BY THEMSELVES.

The table.—A table weighing fourteen pounds and weighted with twenty pounds was, in 1905, twice completely raised during several seconds, and again, on another occasion, when the feet of the table were in “leggings.”

MM. Courtier and Youriévitich both tried to perform a similar feat, with one hand, with two hands, with the feet and knees without the help of the hands, with the feet and hands, and obtained some success. But Eusapia is not an athlete,* nor has she the power and stature of MM. Courtier or Youriévitich, and the shorthand report says that there was no contact, that the feet and knees were controlled, that the table remained suspended in the air a certain number of seconds, that the phenomena were produced when all were standing.

The fancy table.—The small table placed on Eusapia's left at a yard from her chair, could, *à la rigueur*, be drawn by an invisible thread, but how can the recoil be explained? And the slowness or rapidity of the displacements, the position of the medium fastened by cords to her chair and her wrists fastened to those of her controls.

A prestidigitator has with him the necessary material and he performs his tricks on small, light objects, or else with the assistance of concealed apparatus. There is nothing of that here.

* Neither Eusapia nor M. Courtier nor M. Youriévitich is an athlete. But I can personally testify to Eusapia's great physical strength, and certainly if M. Youriévitich was capable of raising a table with hands or feet, so would Eusapia be able to accomplish the same feat.—EDITOR.

CONCLUSION OF THE REPORT.

1. The displacements (forward and backward), the levitations (partial or complete) of certain heavy objects (tables) close to Eusapia during the seances are proved by the registers.

2. Certain of these movements seem to be produced by the simple contact of the hands or of the clothing of the subject and even without contact.

During the complete levitations of the table, in front of which she was seated, or the lighter tables placed close to her, the subject for the greater part of the time powerfully contracts her muscles. But a direct action of her efforts on the objects thus raised was not observed, similar to that which would be exerted in like instances by others—that is to say, the subject was not seen to act as a lever on these objects.

3. The fulcrum of the force which raises, in various ways, these objects, appears to reside in the subject herself, since the balance on which she was placed marked the increase and diminution of pressure, conformably with the laws of mechanics, during the levitations.

4. The subject appears to discharge electroscopes at a distance.

5. She appears to produce at a distance molecular vibrations in objects (raps, sonorous vibrations).

6. Luminous phenomena have been seen near to her during the seances, the causes of which have yet to be determined. Some of these phenomena have had the experience of electric sparks.

7. We must also point out the vision of apparitions apparently human in form, and the sensations of touch experienced by those seated near Eusapia, and, while doing so, let us remember that Eusapia has been proved to have resorted to fraud in some manifestations of this character.

8. Eusapia, in the course of the seance, enters into a secondary state of variable degrees. She exhibited cutaneous hyperesthesia during a large number of the seances, and more or less for a long time after each seance. She manifests partial amnesia, as to the phenomena which occur during the seance.

9. The ideation and will of the subject have an effect on the nature and character of the phenomena.

10. The sitters are victims of fraud the extent of which they are not able to determine.

(M. Courtier means by this that if *some* fraud has been observed, it is not claimed that *all* the fraud perpetrated by E. P. during these seances was discovered. At the same time he does not wish to say that everything was due to fraud.)

The most elementary prudence demands correctives. Fraud prevents one from being more affirmative; and we have only one pressing desire, that is to find truthful loyal subjects who are willing to submit themselves to the necessary severe control, sure of being treated with the deference which is their right. Conditions are not imposed in advance on the phenomena. A table of twenty pounds in weight is raised by Eusapia,* who, on the other hand, uses a hair to move a leaf or a cocoon-weigher. We can only think that there are special conditions, as yet unknown, in the one case as well as in the other. We make no hypothesis; we look for no explanation. The first thing to do is to well establish the phenomena.

Before attempting theories we must try to attach new facts to known facts by bringing them within the range of natural law, because only thus can we explain and understand them.

* Where is the photograph in support of this affirmation? Eusapia's invariable recourse to fraud will not allow prudent students to accept any testimony other than that corroborated by the camera.—EDITOR.

Here ends M. Courtier's report.

But before concluding it will be well to add one thing concerning the comments which M. Youriévitich made on the enormous difficulty of studying such phenomena. The subject could scarcely be examined more than twice a week, and, in the interval between the seances, there must be three or four persons working day and night to prepare the instruments and arrange the room in favourable conditions.

The cost is very high. First of all the medium has to be paid.

Then, special mechanics, well trained and accustomed to the construction of laboratory apparatus, are required. They must hold themselves in constant readiness to repair, alter, and construct even during the seance, and sometimes make fresh apparatus adapted to the phenomena which are being produced.

Further, a stenographer must be present: a necessary, useful, and expensive innovation.

Altogether, those forty-three seances have cost more than 25,000 francs (£1,000).

M. Youriévitich's desire is to have some young people who are trained to laboratory work, who will receive a fixed salary per annum. They should be attached to the subject under observation with the sole object of controlling the various phenomena which may be forthcoming.

Another point: those who contribute generously to the expenses of these researches should do so without imposing their presence at the seances, which can only be held with a very limited number of people, who should, in principle, be always the same.

From all this work, one important conclusion is arrived at: a great step in advance has been taken. The phenomena can, and ought to be registered. The savants can, and ought to occupy

themselves with these phenomena without any false shame, restrained neither by derision, ignorance, nor prejudice. As to the explanations, the years to come, by multiplying the experiments, by stimulating the experimenters and producing subjects, hold the reply in reserve.

DR. LEON DEMONCHY.*

* The very important number of the *Bulletin de l'Institut Général Psychologique*, containing M. Courtier's full report, can be obtained for the sum of 3s. from the Institut Général Psychologique, 14, Rue de Condé, Paris.

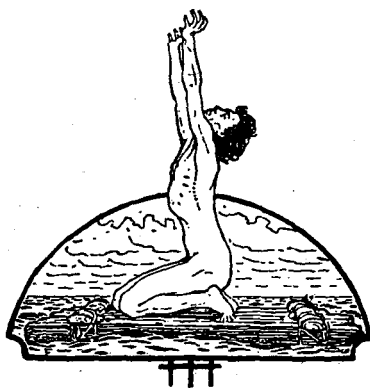
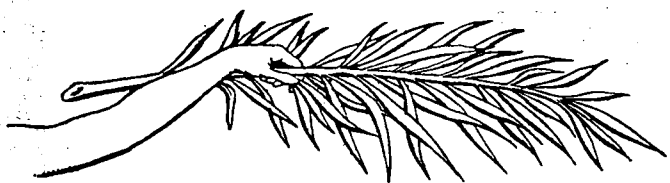




Fig. 1.



Fig. 2.



CHARACTERISTICS OF EUSAPIA PALADINO'S MEDIUMSHIP.

By SIGNOR ANGELO MARZORATI, Editor of *Luce e Ombra*.

(To Mrs. Laura I. Finch, Editor of THE ANNALS OF PSYCHICAL
SCIENCE.)

You ask me to express in writing the opinion which I have already had occasion to give you verbally as to the characteristics of Eusapia Paladino's mediumship, and I willingly comply with your request. I do not remember the precise terms I used during our conversation but, as my opinion about Eusapia has not changed since I saw you, I have only to express what I think of her at present.

Of the three important mediumships for physical effects which I have had the opportunity to study during recent years, that of Paladino is certainly the most complex, by reason not only of the phenomena presented, but also of the personality of the subject herself, who is highly interesting from a psychological point of view. Now the peculiarity of her personality, generally neglected in view of the startling character of the phenomena, if it has afforded me the elements for establishing a point of contact between the passive and unconscious forms of mediumship, as it

is now understood, and those active ones which were ascribed in the Middle Ages to witches and wizards, has also left me perplexed as to the consistency and value of the phenomena forming the repertoire of the famous Neapolitan medium.

Here may I be allowed to make a comparison?

Charles Bailey, the Australian, whom, like Paladino, I was able to study for two consecutive months, both at the sittings and in private life, since he lived with me and shared my table, is of a timid and suspicious character. Long and lean, his figure sometimes assumes simian poses, and his constitutional weakness renders necessary the presence and assistance of his wife, who completely dominates him. Half wondering, half sly, with a primitive and infantile slyness, he had sometimes, like children, sudden inconsistencies, unjustified stubbornness, fits of confusion which left him absorbed for hours. And this fundamental character did not leave him in more important matters, so that he had sudden resolutions, obstinate fits of opposition, which gave place to panic and were highly detrimental to him. Thus I explained to myself his pertinacity in not allowing himself to be searched, a treatment which he had suffered unexpectedly at Sydney, at a seance which, however, succeeded excellently, his ridiculous fear of catching cold, and his sudden departure from Rome, which aroused so much suspicion, and really appeared like a flight.

When the hour for the sitting approached, Bailey became nervous, and not only when a seance took place, but even when on occasion it was put off or abandoned. He ate little, left the table early, and, as the experiments took place soon after dinner, he rested for half-an-hour and presented himself at the sitting already under the influence of incipient trance, almost completely dominated by the mysterious agency which held him in possession. During the search he seemed limp as a rag, and lent himself

passively to all the manipulations. On being placed in the bag, seated on his chair, and the net which separated him from the spectators let down, he displayed a succession of different and very characteristic personalities, which occupied the hour or more of duration of the trance, and which, in all the seventeen sittings, were never confused with each other nor contradicted themselves. The personality of the medium himself never showed itself during the trance.

I do not desire to enter into a discussion of Bailey's sincerity or of the value of his phenomena. To speak only of those who *saw*, none of us had the opportunity that I had, of attending seventeen consecutive sittings and of establishing those relations, often so slight, which form the elements of conviction; but as we are still in a phase of the research in which it is a question of names and sympathies, more even than of facts, I prefer to wait until others bring new contributions of experience in support of the mediumistic value of Charles Bailey.

Politi, with whom we had more than a hundred sittings, is of a character similar to that of Bailey. Like him, he is timid; moreover, he is apathetic, and almost always lends himself to the sittings unwillingly; but he has not the inconsistencies and obstinacy of the Australian medium. He goes into trance with greater difficulty, and at its approach he seems somewhat restless. Physically he is very strong; when the chain is made, and while waiting for the trance, he rarely converses; he allows himself to be tested, even roughly, without rousing up or protesting. The phenomena of touchings often commence while the medium is still awake; he is surprised at them, and when anyone mentions having felt them, he seems to be almost afraid of them. Once, in a moment of unusual restlessness, he came out comically with this phrase, as though whispered to himself: "*I had better go to sleep,*" as though hoping to find in the trance a refuge from his

apprehensions. The normal personality of Politi has few characteristic notes, and the others which manifest during trance have no salient features. Even the one who calls himself the guide of the medium (Alfredo), the only one which presents himself normally and the most consistent of all, rarely assumes any determinate moral physiognomy. The personality of the medium sometimes makes its appearance during the trance.

Eusapia Paladino, on the contrary, shows herself intelligent and courageous. In private life, in surroundings in which she feels at ease, and where conventional reserve is not imposed, she often shows, in spite of much vulgarity, noble sentiments, certainly superior to her bringing-up and education, and which do not seem to me to be assumed, as someone has said, but the fruit of natural intuition and reflection. Eusapia is very communicative and her speech is coloured with all the Neapolitan *verve*, but she often insists with excessive complacency on certain particulars of her life, on incidents which have greatly impressed her, whether favourably or otherwise.

Sometimes she also reveals the infantile character which I have remarked in the two other subjects, but milder and less primitive, such as one attributes to her feminine and decidedly erotic nature. Then she needs to feel herself compassionated and caressed, and she is moved to tears over her own or others' misadventures. She also permits herself to indulge in small jokes, piquant allusions, or sly remarks, and winks knowingly, as though pluming herself on her wit and penetration. With new acquaintances she is so reserved as to appear diffident and suspicious, but as soon as she has penetrated their character she assumes a decided attitude with them which goes straight to its purpose and leads one to suppose that she is endowed with an exquisite tact such as is rarely found even in educated persons.

This character is preserved and accentuated in the sittings,

at which she has the lordly habit of keeping the sitters waiting. During the first part of them—some of them last for three hours—she keeps up a lively conversation, interspersed with witticisms, when she finds that she is among friends. She rarely goes into complete trance, and only towards the end of the sitting is she overtaken by a semi-trance, characterised by an incoherent babbling and a strongly marked alteration of her countenance,* but more often her face seems to acquire a glassy clearness, as though something extra-human was watching within her. Sometimes, in pursuit of the phenomena, by the pale gleam which came from the antechamber, I caught the watchful, keen glance of the *witch*,† and had the impression that of all those present, believers or sceptics, she was the one who had the greatest presence of mind; that she dominated all the rest, with the full power of the unknown which is within and around us.

With the character above described, it is natural that, notwithstanding the abundance of phenomena and the indisputable evidence for some of them, Paladino is the most difficult to understand of all the mediums that I have studied. When acting as guardian, I have had the impression of a substitution of hands, that substitution of which so much is made by the incredulous, and which I do not exclude. But it must still be admitted that the medium possesses an exceptional intuition, for before even I had done anything to assure myself of it, the confirmation came of itself from Eusapia, who grasped me firmly with her own hand, the *real* one.

While Politi remains at some distance from the cabinet, Paladino always places herself quite close to it, with her back to it; at the slightest hint the curtains are thrown over the table as though by a powerful hand; they cover Eusapia's hands, and

* See Fig. 1.

† See Fig. 2.

sometimes enfold her entire person, and from that dark laboratory of human limbs and forms there issue impressive phenomena. On to the table come the heavy blocks of moist clay prepared for receiving impressions, the musical instruments, the chairs and small tables; and over all Paladino—held hand and foot, and sometimes even bound—dominates and, I was about to say, creates the surroundings.

This occurs in good seances—there are also negative ones—and such is my impression of those that were held with us. But I do not wish anyone to infer from what I have said that I throw doubt on the genuineness or the real objectivity of some of the phenomena; I only wish to point out the custom of some people who, theorising *mal à propos*, refer to the “one and only” Paladino as though she were not only the prototype, but also the compendium of all mediums, the most certain and the most sincere of them all!

Of all the mediums whom I have studied with the calmness of daily observation, none recalls more than she the *maya* of Indian theology; none, in my opinion, knows better than she how to *fascinate* those around her, and with her most especially should I like to apply photography as a means of verification and never to content myself with mental reconstructions except by way of comparison; and I hope to be able to do this on the occasion of a series of sittings with Eusapia which is about to be commenced by our Society at Milan.*

For all this, I can assert that I have seen phenomena of hers as to which I could have no doubts. Although rarely, Paladino falls into a truly feminine languor and calls upon her John :

* Since writing the above, these seances have been held. We have a collection of about a hundred very interesting photographs of them, among which are those published in illustration of the present article.

"Come, my father, come!" Her voice then trembles with a strange and moving passion; one *feels* behind the curtain the presence of *someone*;* shadows flit rapidly between the curtains, raising the outer edges, and sometimes stopping long enough for us to see the characteristic features. I remember also clearly, at a distance of two years, the diaphanous figure and sweet face of "Katie," and I also remember those black shadows of various forms and densities which, in a sitting at Genoa, came right up to my face, and which seemed mere empty appearances, for they offered no solid resistance. I remember also how I once stood erect, holding both Eusapia's hands firmly on the table in my left hand, and introduced my right into the opening of the curtains, where, at a height of more than two yards, which my stature allowed me to reach, it was shaken by a vigorous and gigantic hand. Paladino was seated, I was standing, and no deception was possible. Another time, while I was standing outside the chain, isolated and at least two yards from Paladino, to my great surprise an electric lamp was repeatedly lighted, of which I had the switch in my pocket—I say *repeatedly* because, being placed on my guard by the first lighting, I was a more careful and conscientious observer the second time.

* See Fig. 3. Although the photograph has lost something in reproduction, there can still be distinguished, in front of Eusapia's profile, which is seen over the bald head of the guardian on her left, the outline of a gigantic brown face, which seems to be fashioned out of the very material of the curtain. The forehead is very high, the eyelids lowered, and the nose strongly aquiline; the lower part is lost in the shadow.

The seance had been without result, and Eusapia, as a last resource, had asked to be tied hand and foot to her chair. This was done very firmly, and I, who was sitting on guard at her right, was careful to verify the binding. I was frequently touched at the level of the left temple, always through the curtain, and at one moment, while the latter was sharply moved, I fired the magnesium flash-light more by an instinctive movement than with the idea of registering anything interesting.

There were also present at the sitting Signor Ceccoletti and the Hon. R. S.; Signori Baccigaluppi and Redaelli acted as secretaries, and Engineer Ambrosini was the photographer, and in this capacity rendered effective assistance during the whole course of the sittings.

I ought also to say that, at the close of a sitting, Paladino is exhausted, done up, even more than other mediums. She looks around savagely, like a wounded animal, and clutches at the objects around her, as though attracted by them; at other times she has fits of weeping, of which she feels the effects the next day. Not unfrequently, when in this state, she is impelled to simulate a few phenomena, but in so childish a manner as to render it doubtful whether she is aware of it.

This is as much as I feel disposed to say, for the moment, about Eusapia Paladino's mediumship; excuse the delay, and believe me,

Yours,
A. MARZORATI.

Milan, *December 5th*, 1908.

Reply to SIGNOR MARZORATI'S LETTER.

LONDON.

May 30th, 1909.

DEAR SIGNOR MARZORATI,

Your letter recalls to my mind one of the pleasantest afternoons among the many I have spent in your lovely country. And often since then have I gone over our conversation on that particular day, because it was then, for the first time since I had seen her five years previously, that my scattered thoughts and opinions and knowledge touching E. Paladino suddenly became co-ordinated and took definite form. Two years have passed since then, and events have singularly favoured me in many ways, though perhaps in none so much as in my study of E. Paladino.

The precise form which my knowledge of her took whilst you were speaking to me has but grown more and more precise in the light of further observations and studies which I have since been able to make—particularly during a six months'

residence in Italy last year. And now M. Courtier's recently published report of forty-three seances held with E. Paladino at the *Institut Général Psychologique*, Paris, comes to me as a further confirmation of my opinion. Perhaps you will allow me by way of answer to your letter, to give expression to that opinion.

An apology first of all. I will at once ask you and our readers to pardon me if what I am going to say should shock their sense of what is proper. I must beg you to allow me to take the standpoint of a critical observer who may consider nothing save that which touches the subject in hand, and who can allow nothing—no false modesty or prudery especially—to interfere with the examination in hand.

*
* *

Eusapia Paladino is held by many to be the only medium in existence capable of producing important phenomena. All others are false and should be mercilessly banished from our respectable societies; on Eusapia alone is the palm of greatness bestowed.

My personal experience of her mediumship revealed to me an accomplished mistress in the art of trickery; and such a repellent character, such intense vulgarity, that, having gone to her steeped in an absolute faith built upon the opinion of some—and especially of one person of officially recognised authority—who had often experimented with her, my first feeling was one of inexpressible astonishment and profound and most painful disillusionment. For some months, even years, afterwards, I could not react against the shock of my discovery—for it meant much to me. I sometimes asked myself *how* could so many, apparently sane and careful observers, have been so deceived? And I soon became aware of one fact, that the key to the mystery

was only to be found in the sitters themselves, in the admirers and supporters of E. Paladino, in the vouchers for her genuineness, and that therefore a close study of the mentality and psychology of these students should be made. We have turned our attention too much on the woman herself, whose psychology is easily grasped if we have accustomed ourselves to observing men and women; and we have forgotten that, at least in this particular case (and personally I think in all psychical research), it is the experimenter himself who should be put under the scorching blaze of criticism and observation.

Let me say at once that I am convinced that E. Paladino *can*, or has been able to, produce *some* abnormal phenomena; but these phenomena are in reality so infinitesimal (important for all that, just as a tiny rap without contact is always extremely important because the force producing raps is still unknown), so inferior to the remarkable phenomena which were received through Home, Slade, Florence Cook, and Mme. d'Espérance; they are so polluted, so hidden in the quagmire of deliberate fraud, that they are most difficult to pick out; and it is well-nigh impossible to affirm the extent of the true, so much being born of deception and delusion.

For example: At a seance I had with her (a code of signals arranged between myself on her left and the sitter on her right allowed me to control the trick of the substitution of hands and feet) every phenomenon was given with the view of obtaining possession of a certain ring I had—which, as it happens, has a history. (Eusapia wanted this ring, I afterwards learned, because she considered that its magical properties would enable her to *kill*—by magic—another woman whom she looked upon as her enemy.) Two people were present at this seance who had formed part of a group who had just completed a long series of experiments with her. These two people—who seemed to look upon the “phenomena”

received this evening as genuine—informed me that the phenomena then received had been of the same nature as that witnessed by me this night. Now, I affirm positively, that *every* phenomenon produced that night—(and there were many : raps, levitations of the table, touchings, hands)—was fraudulently produced; moreover the fraud was premeditated. I had gone to Genoa to bring Eusapia to Munich where it had been arranged to hold a series of seances; and it had been decided to avoid all seances in the meanwhile in order to allow her to recuperate her mediumistic forces after the previous eight weeks' strain. However, from the moment she saw the ring in question and found that her broad hints for me to give it to her fell on deaf ears, she insisted on giving me a seance. At the time, I saw no connection between the ring and the seance; it was the seance itself and after-reflection which brought out all the links.

Now, at the end of this seance, I saw a small spark of bright blueish light at about a foot above Eusapia's head. The light was very mobile, remained for above ten seconds, and disappeared suddenly apparently into the cabinet against which Eusapia was sitting. This speck of light, seen at the end of the seance and when, thinking all was over, I had relaxed my attention, this is all I have, *through experience*, to go upon to suppose any abnormal power in E. Paladino. And my conviction of the possibility of phenomena being obtained through her repose chiefly on the published reports of experiments made with her by responsible persons. However, the close study of these reports, and especially of the writers, and of the persons present at the seances—in short, the study of the psychological elements composing the seances in question, has shown me that only one-tenth (if that) of what the investigators believed they received, only one-tenth was really genuine : such a small percentage, in fact, and of such relatively simple and easily obtained phenomena, that one feels amazed these

busy men should have spent so much time in running after a Will-o'-the-wisp when better, truer subjects were easy to find. They have, at least, served to show to what an extent desire and delusion may lead us in this perilous domain of psychical research.

*
* *

I think you have touched upon one of the principal keynotes to E. Paladino's reputation as "the one and only medium" when you speak of her "*decidedly erotic nature*"; and this is the point on which I must ask our readers' indulgence whilst discussing it.

The sex question is the most serious, the most acute, the most universal problem which modern psychology and ethical societies have to face. The alarming extent and pitch to which the sex passion has grown is plainly apparent in the inevitable accompaniment of unnatural relations—which now and then our law courts and newspapers drag forth to our startled gaze.

And because we are one and all the keepers, nay the makers, of our neighbours, very few of us are able to hold ourselves aloof, clear of the current, and escape from the thralldom of sexuality. The security of the home is menaced, and probably* existing marriage laws will have to be changed if we wish to save the race and stem the tide of debauchery and immorality now eating at the very heart of society, practised under the cloak of tradition, conventionality and appearances and threatening to drag us down to unspeakable depths of bestiality and moral ruin.

I have traced this characteristic of the age in many a medium, in many a sensitive. The tales of *incubi et succubi* handed down to us from the dark Middle Ages pale beside some of the tales

* I say "probably" because it is possible we are on the eve of important revelations of fundamental (absolute) truth, which would inevitably influence present modes of thought and living.

which French (and also English) sensitives have related to me: erotic madness holds them in its grip of demoralising thought, winds its octopus arms around them, blinds them to all else, destroys all idealism and drags them down even below the level of the brute. The true meaning of Love, its true function: the helping up the steep incline of evolution to ever greater heights of goodness and purity, the loss of all self-interest and even selfhood in that wonderful blending and fusion of self with the beloved, the continual striving for the spiritual welfare of the beloved—this is unknown to the slaves of the sexual passion. Sexuality has awakened and developed the brute dormant in them and killed the spirit, the true spark of nobility.

And the greater sum of the attraction felt to-day by man for woman and woman for man has its origin in this universal wave of unbridled sexual passion: rare indeed are those exceptions where union is one of heart and soul.

“I am afraid of the man of one book,” said someone. That is on the intellectual plane. On the plane of present everyday life, we might say: “Preserve me from the man of one passion.” E. Paladino has “one passion”; not only has she a “decidedly erotic nature,” but I am inclined to believe that she thinks of little else. Everyone knows the story she tells of her invisible “lover” (as in the incubi legends). Her nature alone accounts for this fruit of her imagination, which puts her on a par with many an inmate of our lunatic asylums.

In many respects she appears to me as one of those “elementals” we hear so much of, which obsess the insane; one would seem to have, by some means, been born into this human body. . . .

From the standpoint of serious investigation, Eusapia has one decided advantage over her experimenters (whose sensibilities may be held in check by intellectualism). She is illiterate; she

does not know how to read or write; she has therefore no means, even if she had the desire, to give herself to other interests; her mind has been left unclogged, as it were, free to learn the psychology of human nature, untrammelled in her observations by the opinions of intellectuals. A child of Nature by birth, she has grown into a servant of Nature, retaining a most primitive morality, and has unconsciously identified her being with that great procreative agency which we call Nature. Moreover, she has passed her life in the slums of Naples, a spot eminently calculated to nurture sexual tendencies and habits.

When young, her appearance was no doubt very striking: dark, lustrous eyes, good features and complexion, tall and well-made; and she must early have realised the power of feminine beauty (she had, as you certainly must know, a child at the age of sixteen, before she was married to her first husband*). To-day (she is nearly 60), her good looks have disappeared; and the lines on her face are too eloquent in their revelation of her past to charm us with that sweet peculiar charm which the wrinkles of old age so often bring with them.

I have studied the photographs taken of E. Paladino throughout the different periods of her life; and it is interesting to note that the most important period, from 40 to 55—important from the standpoint of psychical research because of the nature and intensity of the phenomena she is said to have then produced—is exactly the period of great and increasing physical ugliness: she had lost all her good looks, she had become unloveable, untractable, suspicious, violent in temper, yielding to the most outrageous impulses. (Tales are told of her generosity; but when

* I feel I may mention this delicate matter, for Eusapia herself often speaks of it. I had scarcely known her for an hour when she told me of it. But then, there was nothing unusual in this, given her surroundings and education. I refer to it simply as proof of the tendency of her being even from her earliest years. This one is enough; I might give many others.

investigated, her generosity becomes one practised with other people's money, and even then most sporadic, and disclosing no innate sense of doing good for good's sake). Being no longer young and handsome, the usual necessities to feminine fascination, how could she touch the abysmal depths of sexual passion? No longer able to fascinate and so cast around her the most dangerous of all glammers, the father of delusion, how could her phenomena (which I attribute to delusion)—*unless genuine*—received during the ages of 40 to 55 years, have assumed such proportions as those vouched for by many well-known names?

But was she, *is she*, no longer able to handle the weapons which sharpen the sexual instincts? I maintain that practice, knowledge of human nature and intuition have combined to bring her a dowry in her middle and old age—a dowry which renders her just as much, if not more, an object to avoid—as far as psychical research is concerned—as in her youth. And, I venture to say, this is practically your opinion when you compare her to the Indian *maya*.

Let us notice the manner in which she conducts the seances (for it is *she* who conducts them, and not the experimenters). Nothing of an indisputably genuine nature occurs in the light (we must make the camera corroborate our statements if we think otherwise); for a few minutes, her penetrating gaze is, you feel, probing you to find out your weaknesses and, maybe, serpent-like, to fascinate you; she allows the fullest control, but nothing happens; then she demands darkness which increases until the little light left is worse than none, for it throws queer shadows about the room, awakens the primitive imagination and recalls to mind the nursery tales of the marvellous, we are under the fascination of expectancy, of the unknown; then, when the darkness is great, begins the display of Eusapia's agility, and the phenomena also begin—all within reach of her limbs; she will not now allow you

to hold her hands firmly nor place your feet on hers; from now to the end of the seance she is in perpetual movement, her hands, arms, legs, body are scarcely ever still when phenomena are being produced, and her attention is, you feel, stretched to the utmost limit of human endurance (which is enough to account for her fatigue at the end of a seance). She is also endowed with great physical strength; and the fact that the camera revealed her, and a witness caught her, in the act of holding a table in the air with her hands or legs (see pages 416 and 417) when it was thought to be levitated without contact and a strong man tried in vain to lower it, and when the control was supposed to be perfect (!), these recent facts go to support my contention that E. Paladino is gifted with great physical strength.

Then the marvellous agility of her body, her extreme cleverness in the substitution of hands and feet, her experience of the great deal one can do with a hair or with a small tack hidden under a finger-nail—all this rather suggests to me that she has profited by some knowledge possessed by her first husband (who died two years ago, Eusapia, as you know, marrying a young man of 25 a few months afterwards), who was latterly a workman attached to a theatre in Naples but who, in his earlier days, was (as a signed document I possess testifies) a sort of travelling showman whose attraction lay in the performance of sleight-of-hand tricks.

All this (and do not let us forget Eusapia has now had forty years' practice in the arts of mediumship, whether true or feigned) might not serve her eternally to hoodwink everyone, but she has brought to bear on them another and, in a sense, irresistible weapon: her erotic nature, aided by her strong hypnotic powers, which makes it that the two persons seated on her either side are *incapable* of criticism, *incapable* of judgment, incapable of giving an independent and, from the point of view

of science, trustworthy report. She is always very careful in her choice of the sitters beside her: she knows she should have persons whom she can influence, for on her management of them depends the successful liberation of her hands and feet.

Remember the nature and effects of the darkness: you can hardly see the medium. You are under the suspense of the unknown, and a woman's hands are stroking yours, caressing yours; she lays her head on your shoulder; *you feel the presence of woman, of the female*, your calm objectiveness as a critical observer and all your higher senses are gradually blunted under the action of Nature which, only concerned with the conservation of species, subtly (not necessarily, in this particular case, on the conscious plane; it is enough that the sub-consciousness be taken into captivity) commands you to obey her laws and dictates; and without your knowing it, the woman's head lying on your shoulder, her breath mingling with yours, the warm touch of her hands—this it is which brings you into the realm of delusion to keep you there as long as it suits a given purpose.

She has made dupes of women also *in the same way*. But enough.

You will perhaps object your experience of a "big rough hand" and of a "beautiful female's fair face." If ever the camera should corroborate like accounts, it will not perhaps be a proof of the power and purity of E. Paladino's mediumship so much as of her ability to recognise and assimilate the mediumistic power, latent or active, of her sitters and to exteriorise their own recollections.

The casts obtained through her (M. Courtier's report of the forty-three seances held with her more than ever make us doubt the materialising power of E. Paladino in herself, and the genuineness of the casts hitherto obtained) do not

authorise us to credit Eusapia with the power of producing a "beautiful woman's fair face": the casts are one and all hideous and depraved in feature and expression, and bear a startling resemblance to Eusapia herself. And I for one—when anyone tells me of having seen a good, gentle face through Eusapia's mediumship—I echo Morselli's cry: "Can a soul so pure (his mother's) breathe in so foul an atmosphere?"

Some writer in the French edition of *THE ANNALS* (the editor of this edition often *seems* only to exist—I do not say *does*—to extol Eusapia and condemn every other medium) says, perhaps to soften the effect of M. Courtier's report, that Eusapia Paladino's personality is so "winning" that everyone who approaches her comes under her charm. This is not the opinion of the majority who have seen her; and, moreover, we have seen in what consists the "charm"; many persons, and none more than I, for I have had to suffer through it, have deeply grieved to have to recognise the truth. She is astute, vainglorious, a slave to every passing impulse, calculating. (A little while ago, when asked to give a month's series of seances to some friends of mine in the South of France, all of them spiritists, she stipulated for expenses, 3,000 francs the month, and "a big present" at the end of the series.)

Finally, I would repeat, if my long letter has not wearied you, that where Eusapia is concerned, no man's account of her phenomena should be accepted—no matter who he may be—unless he can corroborate his account with photographs.

After all that has been printed and published on this woman—(if she has aroused so much interest, it is because she has touched the well-spring of Nature in her *maya*-like hold and fascination of her experimenters)—it is possible that only two reports exist in which the unprejudiced seeker can have implicit faith: the Cambridge report and the report of the *Institut Général Psychologique* at Paris so ably and carefully edited by M. Courtier.

And we who are giving our lives and sacrificing all things for this research, if we wish to reserve our strength and deal wisely with the forces at our command, we will leave off this vain research for the true in such a mint of false coin as is presented to us by E. Paladino, and we will turn our attention and hopes elsewhere: *e.g.*, to the young girl recently discovered and developed by Dr. Ocherowicz, as well as to the many private sources willing to submit to investigation.

A last word. You refer to one way Eusapia has of tricking: the childish way. Yes, she does some stupid tricks which take no one in, which truly make us wonder and which have led many experimenters to conclude that these are her sole repertory of tricks and that she must be in a secondary state of consciousness, therefore irresponsible, when she performs them. May not the childishness be assumed as a cloak for the more serious trickery? But without stopping to point out the innumerable weaknesses in the testimony in her favour published up to the present, it will suffice to give a glance through M. Courtier's conclusions published in this same issue of *THE ANNALS*, pages 419-20, to the photographic incidents referred to on pages 416 and 417; not to speak of the failure to obtain any movements of the scales when the latter were properly protected and her moving of the same easily when, the protection being removed upon her persistent demands for this to be done, she was able to make use of a hair (page 415); whilst the use of a tack elsewhere (page 415) invalidates all previous testimony in support of this phenomenon of tracings, of records by instruments.

Thus do all the marvellous tales told of Eusapia Paladino's mediumship—and remember, none have been satisfactorily corroborated by photography—dwindle down to sorry, microscopic proportions under the flood-light of impartial criticism.

Yours, LAURA I. FINCH.



HUMAN RADIO-ACTIVITY.

ACTION OF INK ON THE PHOTOGRAPHIC PLATE.

By COMMANDANT DARGET AND M. GUILLAUME DE FONTENAY.

(Note by M. Guillaume de Fontenay, presented by M. d'Arsonval to the *Academie des Sciences*, Paris, 11th January, 1909.)

COMMANDANT DARGET has recently communicated to the Academy of Sciences a series of experiments from which he concludes that the human organism is a source of radiations acting on gelatino-bromide of silver, somewhat after the manner of the X-rays or the β and γ rays of radium.

The following is the principal fact on which this observer bases his assertion :

“ We apply to the sensitive side of a gelatino-bromide plate the blank side of a sheet of paper, the other side of which has writing or printing on it. The whole is enclosed, first in black then in red paper. Finally, the plate thus prepared is held against the forehead by means of a bandage for thirty minutes or an hour, care being taken that the back of the plate is placed nearest the bandage, and consequently the emulsion next to the forehead, from which it is separated by a thickness each of red and black paper, and, finally, by the printed or written sheet. After development the plate very frequently bears a more or less exact reproduction of the characters or marks on the paper.”

As it appears to me scarcely probable, and in any case, it was by no means proved that such a result was produced by any radiation from the human organism, I have taken up the experiments of Commandant Darget in the light of an altogether different hypothesis, that of a chemical action of the ink on the sensitive film.

This point of view has proved valuable, for I have been able even from my first attempts, to eliminate the hypothesis of the pretended radiations. In fact, while placing a plate against my forehead according to the Darget method, I submitted another plate at the same time, to an artificial source of moist heat, and I obtained, after development in the same bath, two negatives absolutely corresponding.

This is probably what happened :

The insensible perspiration of the skin (which may be imitated artificially by means of a very simple arrangement which I will not here describe) distils in some manner through the envelopes and condenses on the gelatine of the relatively cold plate, after having passed lastly the sheet of printed paper. It is easily understood that the molecules which have traversed an inked portion of the surface have a very different action from those which have traversed the white paper, and that in this way the characters are reproduced. It is now twelve years since Captain Colson described to us the action of dry ink on gelatino-bromide plates.*

Nevertheless, without going into the details of well-known observations, I will call attention to certain differences which I have noticed between the Colson facts and the new experiments. The principal ones are as follows :—

* R. Colson, *La plaque photographique*, 1897, pp. 14, 15, 16 et *passim*.

1. The contact is considerably shortened. From two or three days it has been reduced to two or three quarters of an hour; but Captain Colson worked in the cold and in the dry; it is not surprising that the kind of distillation of which I have just spoken should considerably increase the action of the ink.

2. It is no longer necessary that the ink should be in contact with the sensitive film. The characters may be either on the back or on the front of the paper to be printed from. Nevertheless, especially with papers of considerable thickness, the action is more energetic in the case of characters traced on the front side—that is to say, in contact with the gelatino-bromide.

3. It is useless to fog the plate before submitting it to the action of the ink or after having exposed it and before developing it (the preliminary and subsequent fogging of Colson).

But the most interesting point, to which I would particularly draw attention, is the following: In these experiments the ink does not act, as in the experiments of Captain Colson, by always giving a negative. It sometimes gives a negative, sometimes a positive.

In the course of the very few experiments which I have made, I was not able to determine the causes of this double action. Sometimes the reason why a positive was obtained was very clear. By excessive moisture a transmission of ink from the paper to the plate was produced; this is a true transfer, as if we had used copying ink. But very often it did not appear that this side phenomenon was produced, and nevertheless the impression was still positive. Sometimes also one portion of the impressions was positive, another negative. I have even obtained a black portion corresponding to the writing on the negative paper or to the central part of it, and a sort of clear negative impression to right and left, as if the gelatine had soaked up moisture.

The causes which come into play in these phenomena are so manifold and complex that we should really make a series of absolutely methodical experiments, which I have not been able to do. Account should be taken of the nature and composition of the ink,* its state of freshness or oxidation, the hygrometric condition of the paper, and the black and red envelopes. The plate itself may be more or less dry. Finally the degree of pressure may also not be without influence on the result. Observers who have the time and patience to continue this study, not changing only one of these different factors at a time, will certainly succeed in defining the causes of these curious divergences.

I will remark in conclusion that I have never been able to obtain two of the results announced by M. Darget. Printers' ink has always remained inactive in my experiments. Captain Colson also found it inactive.

On the other hand, Commandant Darget has obtained the reproduction of papers which were placed at the back of the plate, thus excluding all chemical action.

As regards printers' ink, I must confine myself to stating this difference of results. I have, however, tried with very old inks taken from ancient works and with fresh inks taken from current newspapers; but I willingly admit that these greasy inks are not all of the same composition, and I may have been unlucky.

Nevertheless the fact of plates being impressed through the glass causes me to think that perhaps Commandant Darget had omitted to take certain indispensable precautions, such as keeping the negative papers in darkness for several days before using them. If such precautions were neglected, if papers exposed to sunlight were used for the experiments, or if again the lighting of

* The ink which I used is that manufactured by Herbin, and known in commerce as *La perle des encres*.

the laboratory was not free from actinic rays at the moment of the preparation of the envelopes, the results obtained by this observer would not be so very astonishing.

It will not be useless to complete, for the benefit of physicists, what was left incomplete in the above note, because it was addressed to physicists, and because on the other hand I must not exceed the space assigned to me.

It is unfortunately certain—and not merely probable—that the experiments of Commandant Darget, conducted without sufficient method, in no way prove the existence of organic radiations.

(a) In the first place none of the experiments in which the paper was applied to the sensitive surface prove anything at all, since the same results have been obtained with an artificial source of moist heat.

(b) It remains to consider the cases in which there was an impression, when the paper was placed on the back of the plate. Here, a large number of causes of error, admitted by Commandant Darget himself, come in.

1. A number of plates were entrusted to third parties and sent even to America. It is, therefore, impossible to take account of documents which may have undergone, unknown to the sender, the most extraordinary treatment (the X-rays of the Customs, for example, or simply among private individuals, there are always to be found those who are inclined to play a good trick on the investigator).

2. Commandant Darget has admitted having used any paper, the first that came to hand, and, amongst others, some handbills distributed in the street. It is therefore impossible to accept such experiments because of the exposure to sunlight probably undergone by such papers.

3. On December 16th, in the presence of Drs. Allain,

Demonchy, and Chambrette, Commandant Darget experimented at the French Photographic Society. We wished to repeat the only one of these experiments which could prove anything—that is, the reproduction of a negative paper placed at the back of the plate. One of these gentlemen brought the plates in an unopened box. I brought the negative papers covered with manuscript and printed letters, papers which I had been careful to keep in darkness for several days. Finally, Commandant Darget brought the developer in order that he might not reproach us with having used a badly prepared bath or ineffective chemicals. It was also by agreement with him that we used *Lumière* plates with the blue label.

We had the chagrin—as we expected, however—of not being able to see any result on the development of these plates.

For the present, therefore, we are justified in saying that the facts reported by Commandant Darget in no way prove the existence of organic radiations. That such radiations exist is possible and even probable: but if we reflect we shall find on the other hand that it is very improbable that the present photographic plates, of commercial manufacture, are able to disclose such radiations through three thicknesses of paper—black, red, and white. In fact, from the preparation of the gelatine emulsion, down to the placing in the frame and the final development, through how many hands has each plate passed? If we normally emit such energetic radio-activity, the plates should be delivered to the customers fogged and useless. The very force of things and commercial necessities therefore compel the manufacturers to employ only emulsions practically insensible to human effluvia.

I give full credit to the indefatigable ardour and zeal of Commandant Darget. It is most to be desired that many researchers had his perseverance and activity, but I consider it necessary that psychists should be the first to protest against the faulty methods

which exist amongst them. Although the researches to which they devote themselves are beginning to emerge from the period of complete discredit through which they have passed, the public, learned, or ignorant, is still too quick to accuse us of voluntary blindness because we do not ourselves execute justice on the mistakes we see around us and do not prevent to the best of our ability their production and propagation.

I need scarcely say that I only speak and have only the right to speak in my own name, but I know well that a large number of psychists think exactly as I do on this point.

G. DE FONTENAY.

January 11th, 1909.

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HUMAN RADIO-ACTIVITY, V (VITAL) RAYS.

Reply to M. DE FONTENAY, by M. DARGET.

In reply to the note of M. de Fontenay, read by M. d'Arsonval at the *Académie des Sciences*, I will begin by saying that M. de Fontenay has had to admit not having furnished any photograph of his pseudo-radio activity along with his note.

Since he has only been able to enunciate hypotheses, I will take them one by one and demonstrate their inanity.

I will first give the reply which I made to the Academy and which was inserted in *L'Eclair* of January 31st :

“ To the Secretary :

“ M. de Fontenay presented on Monday last at the Academy, through M. d'Arsonval, a note on human radio-activity, stating in substance that the photographs obtained by radiations were subject to two causes of error :—

“ 1. Humidity from the forehead at the temperature of the human body.

“ 2. Previous ‘illumination’ of the papers in which the films were wrapped.

"Now, I had myself anticipated these objections, and made some experiments, even with paper exposed for a long time to the sun. In none of these experiments had I been able to obtain any impression whatever.

"M. de Fontenay, himself, has only hypotheses; he has not been able to obtain any impression.

"These two hypotheses cannot therefore modify in any degree the action of human radiations or any previous conclusions.

"I wish to point this out without delay.

"COMMANDANT DARGET."

I now take up the prime argument of M. de Fontenay, who explains the phenomenon in question :

"This is probably what happened :

"The insensible perspiration of the skin (which may be imitated artificially by means of a very simple arrangement which I will not here describe) distils in some manner through the envelopes and condenses on the gelatine of the relatively cold plates, having passed, lastly, the sheet of printed paper. It is easily understood that the molecules which have traversed an inked portion of the surface have a very different action from those which have traversed white paper, and that in this way the characters are reproduced. It is now twelve years since Captain Colson described to us the action of dry ink on gelatino-bromide plates."

In reply I would say to M. de Fontenay that beyond these experiments with manuscript writing, I have made some with printed papers, which give an equally good impression on plates, although M. Colson and himself declare they were not successful.

Lately, at the Salpêtrière Hospital, in the laboratory of the director of the radiographic service, Mlle. B. reproduced on her forehead a portion of the word *merveilleux*, cut from the review *L'Echo du Merveilleux*.

Now I had placed a sheet of white paper between the paper bearing the word *merveilleux* and the plate. The word was inscribed on the plate as well as a mark which I had made with ordinary ink on the intervening sheet of paper. These two papers are undeniable witnesses. It should be noted that no

infiltration of ink, no trace of black, can be seen on the middle sheet.

Moreover, I have shown the plates and the papers which have the imprints to the editor of the *ANNALS*, as well as to the editors of the various reviews.

In the experiments which we have made together M. de Fontenay required that they should all be made on the glass side of the plate, despite my protestations, as Dr. Allain and others will bear witness.

If M. de Fontenay, a good amateur photographer, will agree to make with me a series of experiments at the Salpêtrière, he will very quickly be convinced of the existence of human radio-activity. As I have to leave for Belgium and Holland to give four lectures on this subject of radio-activity, taking with me a hundred plates in illustration, including my photographic plates of thought forms and diseases, I beg to inform him that I shall be at his disposal on my return on February 20th.

Since he speaks of moist heat being able to produce these letters, I reply that having already produced some very clear and deep letters by placing a plate in the pit of the stomach—all the parts of the body emit radio-activity in varying degrees—I placed a second plate on the same part of the body for four hours, with a damp cloth in between. There was no impression of letters.

M. de Fontenay should know, since he calls himself a psychist, that moisture absorbs the vital fluid, and does not allow it to pass.

I conclude, for I am unwilling to weary the reader with the "mistakes admitted by M. Darget himself"; with my plates "sent even to America"; with the "X-rays of the customs-house," which might have influenced the plates which I sent or received; with a "good trick," apart from the Customs, which a private person might have played me; with "hand-bills" collected

in the street for the purpose of my experiments; with my "experiments conducted without method," and other nice things to which M. de Fontenay has treated me.

I did not expect to find an adversary among the men who have studied these psychic questions for a long time; for their opinion ought to be formed in accordance with the photographic experiments of Pio Foà with Eusapia, who discharged the electroscope at a distance, a fact which scientifically established radio-activity by a procedure different from mine.

My discovery has been presented and read to the *Académie des Sciences* under the denomination of V-Rays.

M. d'Arsonval has been instructed to make a report on these rays.

COMMANDANT DARGET.

11, rue Berthollet, Paris.

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THE DISCUSSION ON THE PHOTOGRAPHS OF COMMANDANT DARGET.

Reply by M. DE FONTENAY.

It is quite incorrect to say that I have not "been able," as Commandant Darget claims, to produce photographs in support of my statements. On the contrary, I have not put forward anything in my note to the Academy which was not based on negatives obtained by me, either organically or artificially (by means of a water-bath). I do not know what has made Commandant Darget suppose any such thing. I told him that M. d'Arsonval having confidence in me, did not ask to see my plates, and as I do not usually go about with my pockets filled with photographs, it is true that I have not produced any

document. That is quite another thing from not being *able* to do so, as you will see.

Need I add that M. d'Arsonval, in not asking for the production of my plates, has acted like a true savant? A photographic document (and, above all, a radiographic one, like those in question) has a value precisely corresponding to the character and technical ability of the operator who obtains it. If this operator is a dishonest man it will be more than easy for him to manipulate the results to make them prove what he wishes. If he is merely an ignorant or unskilful man, the document will also present anomalies—involuntary ones—which will lead to false conclusions. The result is that M. d'Arsonval would not have been much "forwarder" if he had seen my documents. Also, all the papers, plates, etc., exhibited with such zeal by Commandant Darget give rise to very slight convictions—at least with scientific men. A photographic document, I contend, cannot of itself prove anything. It is useless to see it *made*. We must see it *in the making*, or else from every point of view, have absolute confidence in the operator.

I identify myself therefore entirely with the expressed wish "that both the disputants should go on with their contradictory experiments—the only ones which may, perhaps, enable us to decide the question."

For my part there will be no self-denial in this, but much pleasure. But I hope there will be no misunderstanding. Commandant Darget, in his reply, speaks of inviting me to a series of experiments at the Salpêtrière. Do not let us mix up two questions. Neither in his lecture of December 7th nor in his articles in *L'Eclair* and *L'Echo de Paris*, not in any of his communications to the Institute, I think, has Commandant Darget said that it was necessary to be mediumistic or hysterical in order to obtain the phenomena in question. That subjects of this

character may sometimes be radio-active, I do not dispute, because I have not been able to observe this class of person sufficiently, and I can only speak according to knowledge.

Here are the clear and precise terms, in which I placed, on February 10th last, at M. d'Arsonval's disposal for counter-experiments to those of Commandant Darget:—

From my own attempts, both negative and positive, I deduce the provisional conviction that the Vital rays, of which Commandant Darget speaks, do not exist; in any case, they are inactive on commercial emulsions, at least when they are furnished by normal, sane persons, exclusive of mediums for physical phenomena or of special subjects.

If you think proper, I will offer, before any persons you may please to nominate, to reproduce (or, at least, to try to reproduce) artificially—that is to say, without the intermediary of a living organism—all the experiments, which, before these same persons and myself, Commandant Darget shall produce *organically*—I mean by employing his own organism, since he is so radio-active!

That is the ground I take, as well as in my previous note. I attack Commandant Darget's theory because I believe it to be false, and will experiment with him when he pleases under the above conditions.

G. DE FONTENAY.

PARIS, *February 25th*, 1909.

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COMMANDANT DARGET'S REPLY.

M. de Fontenay says that he has obtained negatives, leaving it to be supposed that he has obtained letters, “either organically or artificially by means of a water-bath.”

But has he obtained letters in white and black through an intermediate sheet of white paper, on the side opposite to the gelatino-bromide, all things which constitute a discovery?

He then says that M. d'Arsonval has acted like a "true savant" in not asking for the negatives as proof!

Would the Academy have concerned itself with my discovery if I had not produced the photographs as tangible proofs? The problem may be stated as follows:—

Commandant Darget affirms a phenomenon because he has obtained it and seen it obtained by several people.

M. de Fontenay denies this same phenomenon because he, alone by himself, has not obtained it. It is quite clear that the affirmation in the present instance has a positive value not possessed by the negation.

I shall be happy to receive M. de Fontenay as an experimenter if he asks to see my experiments; but he must admit that it is not for me to seek him in order to make the demonstration, as he seemed to ask when he said that he had been at my disposal since December 16th.

When I was in Holland, I was invited to stay at Antwerp and Brussels on my return journey.

At Antwerp there has been founded by M. Le Clément de Saint-Marcq, Doctor of Science, Director of the Belgian Military Ærostatic Department, an institute for transcendental photography at which the same phenomena of human radio-activity have been obtained which I have communicated to the Paris Academy of Sciences.

At Brussels, the same has been done by Mr. P., engineer, who gave me some very fine specimens.

These men are the real researchers, not those who remain stationary, or move slowly: they are willing and dare to go on ahead. Let M. de Fontenay take as models these gladiators of

thought, and he will become one of those, who, as far as science is concerned, make the world go round.

COMMANDANT DARGET.

PARIS, *April 12th*, 1909.

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NOTE ON THE FOREGOING BY DR. SAINT-ALBIN.

On reading the discussion between M. de Fontenay and Commandant Darget on the subject of the reproduction of printed characters on photographic plates, my memory went back to a negative of this character obtained by me twelve years ago. I had at this time made no experiments of this character, and it was altogether by chance that I obtained the photograph of which I send you a copy.

The following are the conditions under which I operated: After having taken some photographs I wrapped the negatives in red printed paper and placed them in a box, keeping them there for several months before trying to develop them.

When I developed them I was much surprised to see some printed characters on one of the negatives. I attributed this result to the direct action of the printers' ink on the gelatino-bromide, and although the photograph was not a good one I preserved this negative as a curiosity.

This proves that, contrary to the negative results obtained by M. de Fontenay and Captain Colson, it is possible to obtain an impression with printer's ink. The long time which has elapsed since this event and its purely accidental character naturally do not enable me to say if the paper came into direct contact with the gelatine. But, in view of the absence of the similar characters on the other negatives we may well suppose that it did.

It may also be noted that this negative being placed in a box with several others had been submitted to a certain degree of pressure.

It seems, therefore, to result from this small fact that the conditions favourable to the success of this experiment are the preliminary exposure of the plate, prolonged contact and pressure.

In any case, it seems interesting to acquaint you with this positive fact, for the explanation of which it is useless to infer the action of any psychic force whatever. It certainly seems to me as the result of the documents produced by the disputant and the discussion which they have aroused that we have the right to hold to a purely physical-chemical explanation without bringing in any unknown force.

DR. E. DE SAINT-ALBIN.

ASNIERES, *February 28th*, 1909.

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NOTE BY MRS. LAURA I. FINCH.

The foregoing discussion recalls to me a "phenomenon" which I myself produced ten years ago (in February, 1899).

For some weeks, three of my friends and I had been trying to impress photographic plates without the aid of a camera. We received a few interesting results, one touching this very question of the action of ink on the photographic plate.

Most of the plates, when developed, showed curious white streaks and cloud-like effects, which we feared, notwithstanding our care, might be due to the action of actinic rays or faulty development (though we always experimented in a red light, used fresh plates on each occasion, and developed them carefully immediately after the experiment). We therefore decided to try with an unopened box of six $\frac{1}{4}$ -plates (Ilford's rapid), purchased that same afternoon.

Not only had the box not been opened, but it was kept in the brown-paper wrapper in which it left the shop.

The experiment lasted nearly an hour. My notes, taken at the time, say that I felt unusual fatigue after this experiment; as a matter of fact, I fainted. (I held the box between my hands, occasionally asking my friends to lay their hands on mine.)

After the experiment, we opened (it goes without saying in a red light) the box carefully, and developed all six plates separately, one by one. Out of the six plates, the four outside ones (those nearest to my hands consequently) bore not a trace of any mark, whatsoever. The two remaining ones, the ones in the centre of the box, bore: on one, a large white mark the size and shape of a small hen's egg; on the other, printed characters.

On holding the latter to a mirror we found it was the reproduction of some of the words on Ilford's announcement of directions, contained on a thin slip of paper inside the box. This slip of paper never touches the plates, as all know who have handled Ilford's plates, but is simply inside the box.

From the fact that I felt unusual fatigue after this experiment, that while it lasted, though I felt very cold, my face was bathed in perspiration, and because of other abnormal physical signs, such as "raps," I am led to believe I was actually transmitting energy from my body on to the plates. And I am, consequently—such is the power of personal experience—quite ready to endorse Commandant Darget's opinions and to believe in the reality of his V-rays.

That the four outside plates were not marked may point to a centralising of the energy emitted, and action rendered possible only when polarisation and contact of the currents issuing from both hands were established: the left-hand current which had encountered no printing or image on its way leaves a thick white blotch like the explosion of an electric spark, while the right-hand

current, having passed through the printed sheet, carried that image on to the plate where polarity and contact were established. This is but a tentative explanation; a better one will, no doubt, suggest itself to readers.

LAURA I. FINCH.

May 18th, 1909.

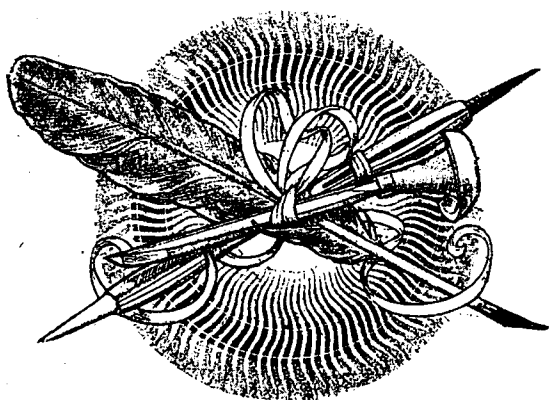




Fig. A.



Fig. B.

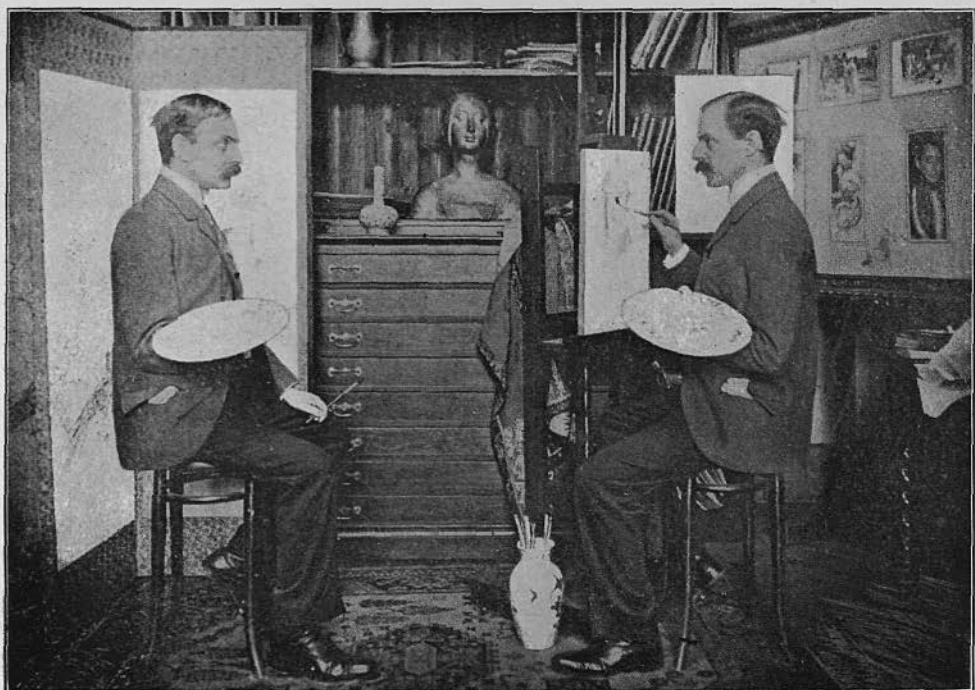


Fig. 1.



Fig. 2.

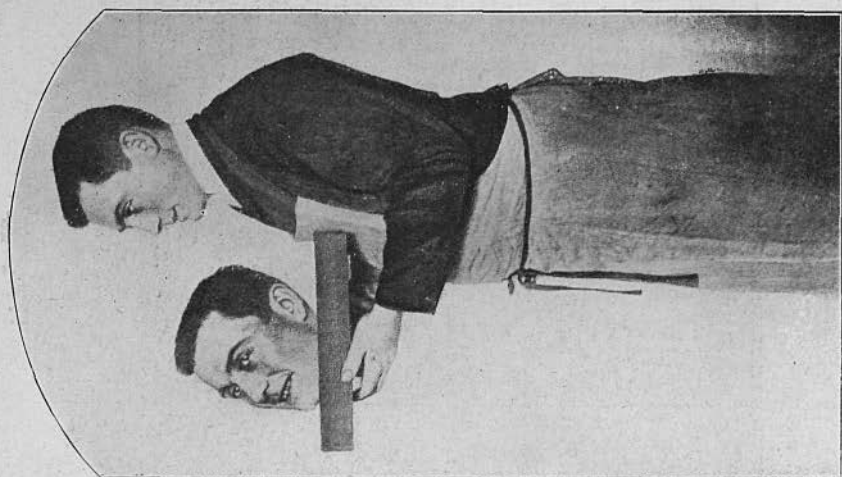


Fig. 3.



Fig. 4.

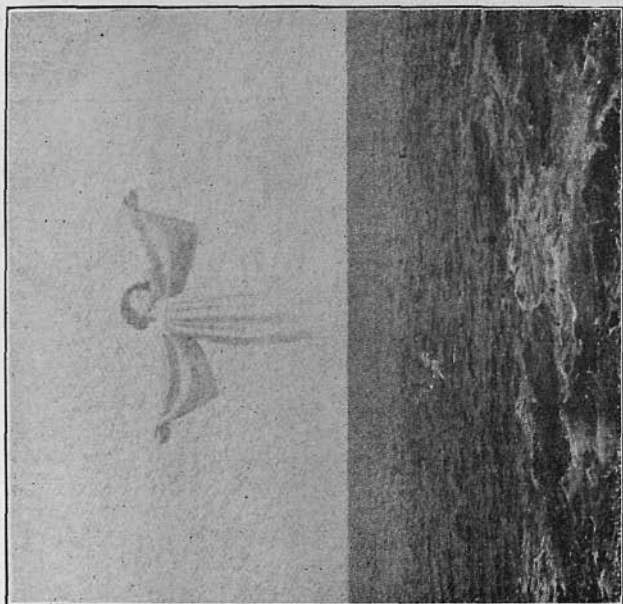


Fig. 5.

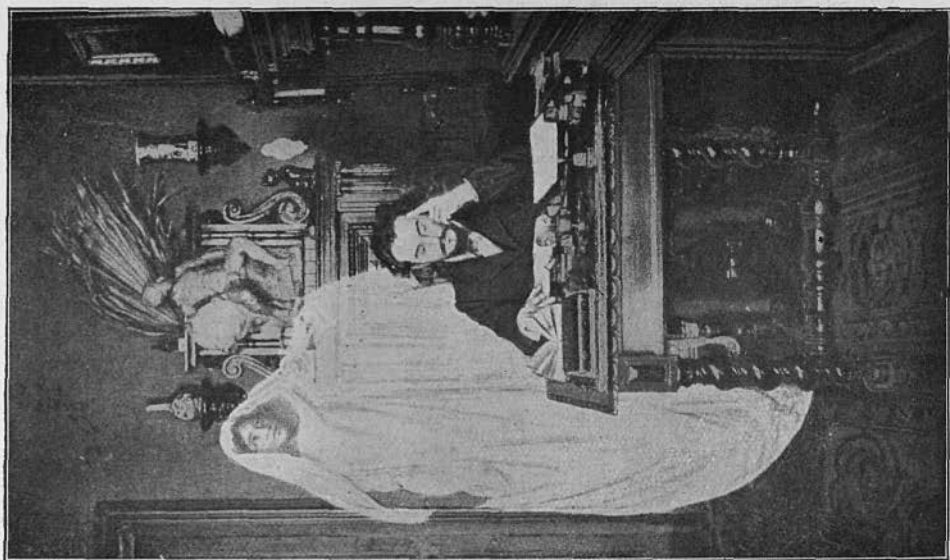


Fig. 6.



HUMBUG IN PHOTOGRAPHY.

(From the Standpoint of a Psychical Researcher.)

By M. X . . .

FOR a long time it has been admitted that the testimony of photography was above all contestation, removed from every discussion. The word itself, "photography," was synonymous with faithful accuracy and undeniable truth. How could it be admitted that a process of reproduction reproduced that which did not exist?

Nevertheless, that which only a little while ago would have appeared absurd is to-day an acquired fact. Without doubt, it is true that a photograph executed in good faith is a document of the first order; but, on the other hand, it is proved that one can represent photographically that which is not in reality. Photography can lead us into error, and we should not allow ourselves to trust in it without knowing well what we are doing.

These trickeries in photography might well take us in, for they are due to most different causes and give the most unexpected results. Several of them are simple amusements, but others may be the origin of the most injurious errors.

The least complicated process for the taking of a false

photograph is the juxtaposition of two proofs different from one another. For example: do you wish to put a head on a body which does not belong to it? To do this, you expose two plates, taking care that they are on the same scale and in the same light; then make a proof of each. That on which is the first body will be gummed on to a piece of thick cardboard, and the head on the other proof will be carefully cut off and gummed over the first head. You must be careful to cover the first head thoroughly, and especially the joint at the neck must be carefully dealt with. This is a delicate point. Is it the photograph of a woman? A collar or a ribbon tied round the neck will here be of great service. For a man, the beard simplifies the question. These piecings together and gummings finished, there is nothing else to be done but to photograph again the arranged proof, reducing it to half its size so that the slight imperfections of the work may be effaced. You will thus have a unique plate from which as many proofs as you like to have can be made.

In this fashion, the head of an old man will be placed on the body of a young girl, etc.

At the exhibition of 1900, one of the principal photographers in Paris offered to the members of the jury a celebrated picture by Rembrandt in which all the heads of the personages had been carefully replaced by those of the persons composing the jury. In this case it was but an innocent amusement, to which photographic trickery had lent itself.

But here is something more serious. Some honest country folk have given their consent to the marriage of their daughter to a young fellow of good family; they are not quite clear about his past, but it seems satisfactory. The banns are published, and the wedding-day is near at hand, when one evening the young fellow finds the whole family gathered together with the severe airs of a jury. The future father-in-law rises and discourses

indignantly on what he calls an infamous being who has crept into an honest home to make dupes of them all. . . . Vehement protestations on his part, and finally, in face of his refusal to "confess everything," he is told that they know everything, that an anonymous letter has warned them that he is already married. And the proof consists in a photograph enclosed in this anonymous letter; this photograph represents him coming out of a church with a bride on his arm; it is a photograph, not a doubt about it. What has he done with his wife? Has he killed her, or is he going to commit bigamy? If he was a widower, why did he not say so? In short, he is forbidden to come near the house again, and he is threatened with legal proceedings. The unfortunate man has but one resource—that of laying a complaint against the unknown author of the mystification of which he is the victim.

The law courts often have affairs of this nature to deal with. They are generally accompanied by attempts to extort money. Again, mistrust photography, and do not believe all she tells you.

It is evident, for example, that the man who is carrying his own head on a plate was not photographed by the camera in that uncomfortable position; and that the young woman who is floating above the waves with outstretched arms, as in some strange dream-vision, has not "stood" thus in front of the camera above the waters nor hooked on to the sky.

The results in this new case become more surprising, more honestly disconcerting. This time it is not two proofs but two plates which have been placed in juxtaposition. Now if, in the first manner of operating, it is difficult to hide the trick from an experienced eye aided by a strong magnifying glass, it is not the same thing with this second method of manipulation where, in reality, no joining exists.

For this method of operation, the principal condition is that the subjects to be photographed should both pose *on a white*

absolutely clear background, so that the second plate may come and print itself freely on the first.

Let us take the decapitated man. He first of all poses, holding the plate in his hand, against a wall or a stretched curtain or no matter what provided it is of a light colour; then, in front of this white surface, we take a second photograph of his head with whatever expression we wish, and we cut it on the plate itself, after development, by a bar of opaque water-colour. We print the first plate on the sensitive paper, then the head of the second, at the desired spot, and we fix the whole sheet. It is impossible to see anything if the two impressions are exactly joined.

It is the same thing with the woman who appears to be floating in the sky; she has been photographed on a sky-background and afterwards brought on to a plate representing a sea-scape; as to the end of her dress, a simple "grading" has melted it into the surrounding atmosphere.

In the same way, to obtain the photograph of a man throwing himself down from a tower, we must first of all photograph the personage on a white background, then print it head downwards, on the white of the sky. The system does not vary, but its applications are infinite.

Here is a case where the trickery ceases completely to be visible; this is when it is produced, not by the juxtaposition of two plates, but by a unique and direct plate.

Look at this woman who is represented seated before a table playing at cards; in front of her is her partner—who is no other than herself, her double. Look at this artist working before his easel, brush in hand; the model is posing in his presence, and this model is none other than himself.

Must we admit that each of these has a living "double" ? Or rather—for such absolute identity of the two faces and the two bodies is impossible—have we before us one of those strange

phenomena of the double personality which modern science talks so much about? Are we going to say we can perceive ourselves in front of ourselves? Musset's lines, in his *Nuit de Décembre*, comes back to our memory :—

*En face de moi vint s'asseoir
Un étranger vêtu de noir
Qui me ressemblait comme un frère.*

And if you believe that there has been a fixing together of proofs, a superposition of the plates, here is the plate, only one plate, which you may examine with the strongest of magnifying glasses without discovering anything abnormal. Nevertheless, that man could not have posed twice at the same time! If he was at the right, he could not have been at the left. . . .

The process is inconceivably simple; only it has to be found out.

As a matter of fact, it suffices to establish in front of the lens a little system of slide shutters which allows one to conceal successively each half of the plate; a first exposure impresses the sensitive plate on its right half; the lens is covered, the sitter changes his seat; the shutter is changed, the camera uncovered, and the left half of the plate is in its turn impressed. The farce is played. On the plate there is no line of demarkation, no joint, no "*flou*," if one has previously specified the operation on ground glass, and if the camera has been solidly fixed in such a way as not to move.

We may add that a behind-lens shutter is necessary, as in front of this same lens should be placed those little sliding shutters which anyone can make with a simple box of cardboard lined with black paper. Of all photographic trickeries, this is the most astonishing and the most perfect.

How "spirits" are photographed.
(*A Phantom in front of the camera.*)

A few years ago a well-known American newspaper published a sensational announcement. It said that a certain Mr. X. . . ., a well-known photographer, had made an extraordinary discovery—he had found a way to photograph the Invisible. Whoever had lost a dear one, or was separated from some loved one, could go to his studio in all confidence, and "evoke" the dead or absent one who would be seized by the sensitive plate under the aspect of a soul, of a spirit, rather dim, it is true, but for all that quite recognisable. Price: ten dollars.

Ten dollars, that is two pounds, a rather high price; but in exchange for such a photograph it was nothing. Amateurs flocked to his studio.

They found a sumptuous residence, servants in livery. So many came that each had to await his turn in a little drawing-room where, to help them to be patient, the photographer's wife came and kept them company, and spoke to them about their dear departed ones. Finally, the studio opened to them. The operator invited them to sit in a chair in front of the camera, and to think with all their energy and will-power, of the person whose soul they wished to evoke; at the end of a time, more or less long, the photographer exclaimed: "The apparition is forming. . . . I see it floating above your head like a phantom. . . . That is right, . . . it is well. . . . You may leave."

Three weeks later the client, who was prudently asked to pay in advance, received his portrait above which was sketched a white and nebulous form in which, with the help of faith, he persuaded himself that he recognised the longed-for face.

This man operated in the following fashion. Before setting up, he had bought a considerable stock of old photographic plates,

men, women, and children of every age and type. His wife cleverly set the client talking whilst he was waiting his turn; added to this, the photographer picked up information during the three weeks' delay he asked for before delivering the photographs. He then chose among his plates the type which seemed to resemble most the person in question, and he fabricated a hazy phantom which he juxtaposed on the record plate.

Unfortunately things soon went wrong; some clients recognised in the "spirit," which this time was a little too well defined, the head of a living person; others mistrusted the little interrogation which they were made to undergo and expressly led the photographer into error, so much so that the soul of a deceased person who never wore a beard appeared on the plate with a patriarch's beard. The swindler felt the time had come to shut up shop, and one fine morning he noiselessly disappeared.

Recently in France, a pretended "medium" also photographed the invisible like his American colleague. The phantom was fabricated with a kind of shroud enveloping a cardboard head which he shaped according to circumstances. One day he was haled up before the public courts, and condemned to a year's imprisonment and a fine of 500 francs.

As to the spectral transparence of these supernatural beings, this is obtained by means of a double exposure. Place a person, man or woman, in front of any background—a landscape or a room, make one rapid exposure, then close the camera whilst the person goes away; open the camera again *without anyone in front of it*, and make a second exposure to take in the surrounding objects. When developing, you will find a transparent body *through which* every object is clearly transparent.

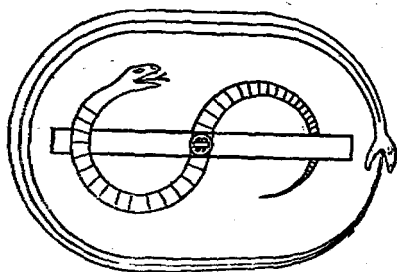
In conclusion, let us be careful to add that all we have just said in no way invalidates the value of photographic information when the photographs are taken and presented in good faith.

Photography remains one of the most precious means of obtaining irrefutable documents. Science possesses no more useful auxiliary.

The only thing proved by the examples we have given and the processes we have described, is that bad faith can enter into everything, and also . . . that fun never yields its rights.

X . . .

P.S.—Figures A and B were published in *Human Nature*, Vol. IX., February, 1875, as illustrative of genuine spirit photography. When compared with Figures IV., V., VI., is it to be wondered if the sceptic has doubts?





CONCERNING PHYSICAL PHENOMENA IN MEDIUMSHIP.

By COUNT A. DE COUDENHOVE.

A contribution to the study of the energy manifested in the production of objective effects in metapsychical phenomena: in mediumistic seances, in spontaneous cases (Hauntings), in telepathic occurrences, etc.

THE law of the conservation of energy is one of the most stable laws in physics, one of those which is most absolute in the extent of its application.*

It is therefore very improbable that it should not hold good in metapsychism; and it is desirable to make careful research in order to ascertain whence the energy is derived, the presence of which is revealed by the objective results of these manifestations.

Whether it be the displacement of objects which appear to have become automata, or whether it be some operation effected

* M. L. Poincaré says in *La physique moderne* with regard to this subject: "The law of the conservation of energy is the one which has most effectually resisted the audacious attempt made by certain theorists to overthrow the general principles of physics. At the present time, it seems uncontroverted. Even the extraordinary properties of radium do not seriously contradict it (*La physique moderne, son évolution*, 1906, p. 57).

by materialised phantoms, the necessary energy must have been borrowed somewhere; it has not been created.

Obviously, all the physical phenomena which are produced—sound, words, light—involve in some degree an expenditure of energy; but the cases which most clearly demonstrate this are those of movement of objects without contact, and notably levitations without contact, manifestations of mere mechanical force.

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I.—*The Origin or Source of this Energy.*

For all movements without contact, not only those in mediumistic seances, but also hauntings and telepathic occurrences, it is highly probable that the necessary energy is drawn from some individual, either a medium or someone else; or at least is communicated by this means. All impartial and observant investigators recognise this, no doubt, those who regard psychical research as a scientific subject, and not as some sort of religion and mysticism, those who see in it, at least in most cases, phenomena of sub-consciousness and psychological automatism, and not extra-human intervention.

Dr. Geley says* :—

“With regard to the force in action, it is evident that it is a force exteriorised from the subject. Everything proves that this is so. The indispensable presence of a medium, his great fatigue after the seance, the observation of associated movements (synchronous), etc., the something which can thus exteriorise, carries with it not only sensibility but also force.”

Moreover, this fact of a motor action at a distance, caused by something emanating from the human organism, can be observed elsewhere, and not only in this kind of phenomena, the

* *Essai de revue générale du spiritisme*, by Dr. E. Geley.

mechanism of which is still mysterious; numerous examples are to be found even with normal persons and with everyone. For instance, in the instruments, called by various names, in which a needle is put into motion by approaching the hand: such as biometers, magnetometers, sthenometers, etc.

This is particularly well demonstrated in the remarkable studies of Dr. Joire, on exteriorised nervous force. He proves by his experiments with the sthenometer as he has reported them,* the existence of a peculiar force emanating from living beings, acting very definitely on the needle, every cause of error (such for instance as the influence of the heat of the body) having been eliminated.

The same may be observed in the action of certain persons on a compass; thus Mlle. Couédon, who, a few years ago, won a more or less justifiable celebrity, caused, it is said, the compass to move thirteen degrees. Zöllner relates that, in 1877, he observed in the case of Slade, very marked action on the compass, even to a complete rotation of the needle; this influence, however, was not constant, and sometimes if two compasses were together one only was sensitive, or one and the other alternately.

Cases have also been observed of the attraction of light bodies; thus objects adhered to the fingers of a woman in Bicêtre; the same thing was mentioned of Mlle. Couédon with regard to heavy objects.

All these occurrences in which the source of the energy acting at a distance is indisputably in the human organism, leads us to think that the source is the same in metapsychical cases, and the energy is analogous in both instances. This conclusion is the more legitimate because mediums out of seance, in their normal state, often possess, in a considerable degree, this power of motion

* ANNALS OF PSYCHICAL SCIENCE, July, 1906, p. 30.

without contact. Here is an example: in the account given by Colonel de Rochas of seances with Eusapia, we find that on one occasion, outside the seance, Eusapia, in her normal state and not in trance, tried to move a letter-weight without contact by simply placing her hands a few inches from the scale; this was at first unsuccessful. "Joining the tips of the fingers of both hands, she concentrated her will on them and made a few slight movements up and down; soon the scale oscillated synchronously with the hands; then Eusapia lowered her hands and the scale fell to the bottom, its full weight corresponding to fifty grammes. The experiment was repeated immediately, then again later with different methods of control; it always succeeded."

The observation, made with a registering apparatus, that a medium can, under certain conditions, triple the weight of bodies or diminish it by half, is attributed to Sir Wm. Crookes.

It is, therefore, legitimate and rational to think that this faculty of mediums is brought into play in mediumistic seances, and is instrumental in effecting the movements without contact which are produced.

If the facts themselves which occur in mediumistic seances are studied, they often reveal tokens that the force used comes from the medium.

Thus in the account of the seances at Genoa, with Eusapia,* it is said:

"At one time the medium invited M. Barzini to kneel on the table. . . . Stretching his hand up to the cabinet, M. Barzini was able almost to touch the top of the curtain—that is to say, he reached to a distance of nearly 4 ft. from the medium's head, and about 7ft. 6 in. from the floor. At this height his hand was touched from behind the curtain, but very slightly, as if by a vaporous body. As he lowered his hand, the touch became firmer; when he held his arm out horizontally he was able to recognise that the object which touched him was a hand, which feebly grasped his own, through the material

* ANNALS OF PSYCHICAL SCIENCE, March, 1907, p. 209.

of the curtain. When he lowered his arm still more, towards the head of the medium, the pressure became firm and resolute—the mysterious hand acquired force and energy. He raised his arm, and the pressure lost consistency until, when he reached the top of the curtain, the experimenter again only felt the uncertain and vaporous touch which he had felt at first.”

Another class of observations strongly supports the hypothesis that the source of the energy is in the medium. The limbs of the medium frequently make movements which synchronise with those of the objects which are not contacted; “directed,” as Dr. Geley says, “as they would be in order to actually produce these movements.”

It is also stated,* *a propos* of Eusapia’s seances in Genoa: “We have almost always observed this isochronism between the phenomena and the gestures of the medium”; and elsewhere† we are informed that the movements of the hands of Eusapia synchronised with the sound of raps when there was no movement of objects.

It has become well known, and is a characteristic worth noting from the point of view we are now considering, that after the seances, the medium is more or less fatigued, prostrated, spent. This has often been remarked; for example: the *Figaro* reported, in December, 1901, a statement by Sully-Prudhomme, concerning the seances held at Auteuil with Eusapia, to the effect that she suffered each time phenomena were produced.

It is necessary, moreover, to distinguish between power developed and work done, as in mechanical work—the force which can be employed at one time; the number of kilogrammetres producible per second, for instance, is the power ordinarily reckoned in mechanics as horse-power; whilst the sum of the kilogrammetres developed throughout the seance is the work

* *Essai de revue générale du spiritisme*, by E. Geley, p. 54.

† ANNALS OF PSYCHICAL SCIENCE, February, 1907, p. 121.

effected, independently of the length of time occupied in the production. The exhaustion of the medium should therefore be proportional rather to the total operation produced than to the power developed.*

But it is difficult to form any exact appreciation of exhaustion; other causes may introduce variations.

A more exact and decisive method of investigating the sources of the energy displayed would be to endeavour, on the one hand, to estimate the work effected mediumistically within a certain time, or, on the other hand, to measure the loss of potential energy of the medium; this it should be possible to do by making an examination, before and afterwards, of the blood, of the carbonic acid produced, and the amount of heat liberated, etc.

Observations of the maximum power are also interesting; if there are cases in which the power displayed is obviously greater than that which the organism of the medium could in this way normally produce, it may, perhaps, be necessary to admit that this form of energy can accumulate, like electricity in accumulators to be displayed with greater power, but for shorter periods. And, moreover, we cannot be very sure what part the muscles play in producing this energy, and consequently, the mediumistic power need not necessarily correspond to the muscular power of the subject. This mediumistic energy probably originates directly in chemical changes in the blood or in the tissues, as I shall show further.

Here is a case, involving great power, which occurred with the medium Slade.† “Two wooden uprights, three centimetres

* A manifestation even of a very considerable amount of power may not correspond to much work, if its duration is very short; whilst the production of less power applied during a considerable length of time, or frequently repeated, will produce a higher sum-total of kilogrammetres.

† Séance with Zöllner, November 16th, 1877.

square, were torn out longitudinally, and it was possible to verify the fact that the traction was made longitudinally only. Under these circumstances calculation shows that the traction requisite to break each of the pieces would be 4.957 kilogs." The fact is curious, but it suggests the question, Is it accurately reported?

Force may be supplied also by *the assistants united in harmony*, the participation of whom is rendered evident by the universal recognition of the importance for obtaining a good seance, of forming circles of a homogeneous kind, the elements of which are almost unchanged, and also, by the custom of singing in unison to produce the desired harmony.

These conditions on the part of the assistants being psychical in character, may be regarded as ministering not to the supply of the physical force necessary but to the intelligent direction of the phenomena; but another custom, that of forming a chain of hands, indicates clearly that there is a fluid, a physical agent of some sort to be concentrated or conducted. "It is understood," says Colonel de Rochas, "that the chain of hands enables the medium to utilise the force of the sitters." And the sort of whitish cord which connected the two mediums in the seances of Villa Carmen* seems also to point to the possible co-operation of many persons. Dr. Ségard also writes†: "There is the fatigue, the prostration of the medium at the close of the séance, and this in spite of the supplementary force which has been taken from the sitters, as we proved at Carqueiranne by means of the dynamometer."

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II.—*How this energy is produced in the human organism.*

If we admit that the mediumistic energy originates really in

* ANNALS OF PSYCHICAL SCIENCE, November, 1905.

ANNALS OF PSYCHICAL SCIENCE, March, 1906, p. 146.

the organism of the medium and the sitters, we have still to inquire how it acquires in them this particular form, in which it is transmitted, what laws regulate its transmission, in what organs it is generated. Obviously, like all other forces manifesting in the body, it is the result of chemical activity (combustion of hydrates of carbon); but do the activities which generate the energy which is emitted in this manner take place in the muscles or directly in the blood, or are we to suppose that it emanates from the brain like thought, which is sometimes considered to be an undulatory movement, therefore a physical force?*

Perhaps it is more correct to regard the medium simply as a sort of accumulator which stores extraordinary psychical energy or vibrations of the ether of an unknown kind which may exist in space,† and elaborates it, as mediumistic energy. It seems to me impossible at present to quit the domain of mere hypotheses on this point. Perhaps we may soon obtain a few further indications of the causes which determine the production and the manner in which it occurs. Mr. Cox wrote in 1871‡: "I have

* The disintegration of nerve-substance might also be a source of energy, whether it occurs simply as the decomposition of its elements, or as a disorganisation among these elements themselves by a kind of radio-activity.

Various experiments—those, for instance, of Dr. Le Bon, reported by Sir William Ramsay and M. Spencer—have proved the universality of radio-activity as a source of energy by disintegration of matter (Report made to the Académie des Sciences, Paris, October, 1906, tome cxliii., p. 648).

Elsewhere M. Curie estimated that at 100 calories an hour the amount of energy liberated by a gramme of radium would be 30,000 times greater than that produced by the combination of an atom of hydrogen with an atom of oxygen (Poincaré, *Physique moderne*, p. 270); and Dr. Gustave Le Bon considers that the complete disintegration of a one-centime coin would represent as great an amount of energy as the combustion of 68,000 francs worth of oil (*L'Evolution de la matière*, 1905.)

† We may cite the following as an analogy: "To explain the paradoxical properties of radium, certain physicists have had recourse to the hypothesis that it borrows unknown energy from its environment; that it condenses and reflects new forms of energy" (Poincaré, *La Physique moderne*, p. 69).

Letter to Sir W. Crookes *à propos* of experiments with the dynamometer, made with Home under complete control. (Quoted in the *Revue*, March 1st, 1907, p. 33).

observed that this force was emitted in intermittent pulsations and not as a fixed and continuous pressure, for the indicator of the instrument was raised and lowered incessantly during the experiment."

Sir W. Crookes observed in the case of Home that the force varied greatly from week to week, and even from hour to hour; that it could even act at a distance of two or three feet from Home, but was always at its strongest near to him.

Finally, the phenomenon observed in 1878 when Slade, with his hand on a magnet, caused it to turn or remain motionless, indicates that the will has some influence in regulating the emission of the energy.

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III.—*Under what form is this energy transmitted?—The Agent of transmission; The Laws regulating it.*

One might think, *a priori*, by comparison with other known forms of energy, that this is a form of ethereal vibration. Researches into the origin of this energy has led us to consider it as analogous to that displayed by the action of certain subjects on the compass, the needles of various instruments, and light bodies; this view would lead us to suppose that it is somewhat analogous to electricity, and produces similar effects. Slade was even able, we are told, to transmit persistent energy* to an inert needle. The properties of the force produced may serve to determine its nature; with this in view, they should be carefully noted. Therefore it seems, first of all, according to the experiments of Dr. Joire,† "that the energy which appears to emanate from the nervous system and is capable of acting at a distance, *can*

* Seance with Zöllner, December 14th, 1877.

† ANNALS OF PSYCHICAL SCIENCE, January, 1906, pp. 30-37.

be stored by certain bodies, since certain objects, at first without influence on the needle of the sthenometer, subsequently put it in movement after they have been held for a certain length of time in the hand."

According to the theories of Colonel de Rochas, "this force can also be projected on to an object and permeate it."

The usual custom of making a chain indicates perhaps the passage or concentration of a kind of *current* or *emanation*. As the living chain enables this current to pass, it shows that the human body is a good conductor of this force.

But without this conductor the force can be transmitted through the air, occasioning sometimes a sort of *effluvia*, or link of a fluidic appearance uniting the medium to the objects moved, or to the phantoms materialised. This link, which seems to be the vehicle of the matter transmitted* would also be that of the energy necessary for the other objective activities which the phantom accomplishes, such as the transportation of its own body or of objects.

This communication between the medium and the spot in which his operations are carried out must exist even when nothing reveals it to our senses, according to the following occurrence† :

"Eusapia, not yet entranced, stood up before the short end of the table, and held her closed fists, her nails turned outwards, at a distance of about fifteen centimetres from the table, which was completely without contact with her person. The table recoiled, slipping along the carpet. At that moment, I quickly brought my hands between the table and Eusapia's fists, and I pinched the air forcibly. Eusapia uttered a cry of pain, and hit me angrily, saying I had hurt her. There was therefore between her and the object an invisible link which was connected with her brain, and the force was revealed

* The transmission of matter from the medium to form the materialised figures is a fact often verified and a very interesting subject of study. This transmission of matter, more evident than the transmission of force, is a strong argument in favour of the origin being the same for the force itself.

† Report by Col. de Rochas of a seance with Eusapia, October 8th, 1896.

naked, so to speak, between the point of emission and the point of application.”*

Perhaps we should place, as belonging to the same order of considerations, the fact also reported by Colonel de Rochas,† that Eusapia often previously went up to and touched the objects to be displaced, “as if to establish between herself and it a fluidic invisible link.”

Du Vernet, in his *Journal* of marvellous facts, also says that in the haunting of the presbytery of Cideville, the shepherd Chorel, who boasted that he was the cause of the occurrences, first had to touch the person who was the victim of his obsessions, in order to produce them, and “having succeeded a second time in touching the child there was a recrudescence of the phenomena.”

Does not this fact of, on one hand, going first to touch, on the other hand, this sort of effluvia which is emitted by the medium, seem somewhat to recall the way in which the electric circuit is fed by approaching the two poles, and can be subsequently lengthened according to the tension?

Finally, conclusions may probably be drawn as to the mode of transmission of mediumistic energy from the fact of those *cold currents of air* which are often said to accompany the phenomena: “The movements,” says Sir W. Crookes,‡ “and I might say the same of almost all kinds of manifestations, are generally preceded by a current of cold air. I have seen this breeze make a sheet of paper flutter and lower the thermometer by several degrees.”

A cold breeze has also been observed to emanate from a scar

* I admit entirely the possible objection that the presence of exteriorised sensibility in that spot does not absolutely prove a coinciding transmission of force; nevertheless, it is very probable, and the incident is of some importance.

† Seance of October, 1896.

‡ At a seance in the Villa Carmen a similar link was observed uniting the two mediums present.—ANNALS OF PSYCHICAL SCIENCE, November, 1905.

caused by a wound, which Eusapia bears in the left parietal region.*

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IV.—*The Manner in which this force acts on bodies.*

It is a well established law of mechanics† that the setting in motion of a body must always have a starting point.

If an inert body is set in motion by a force outside of itself, the starting point will be the spot where the foot of the person who draws or pushes it rests, or in the supports of the axle which lifts it. If it has motor energy in itself, whether it be a living body or a piece of mechanism, its starting-point is one of the portions which rests on the ground in the opposite direction to where the action is effected—in the feet if it is an animal, if it is a bird on the surface of the wings which is large enough to find in the air sufficient resistance; in automobile carriages it is in the parts of the wheels in contact with the earth on which the action of the chauffeur makes them exert a pressure which advances the vehicle in the opposite direction.

This condition of a starting-point is mathematically absolute; thus for objects of which all the portions are rigid, immovable except together, such as a table, whatever energy may be in it, it cannot move without a starting point, or some attachment exterior to itself, something which pushes or pulls it.

* Reported in the ANNALS OF PSYCHICAL SCIENCE, April, 1907, p. 306, and November, 1905. Other instances of cold breezes are to be found in the report of the Villa Carmen seances, ANNALS, April, 1906, p. 227; and in the case of haunting at Louviers in 1591, to which reference will be made later.

† There is a case which seems at first sight to be an exception: that of attractions at a distance, such as the action of a magnet or of gravitation. But in the case of the magnet the starting-point is only carried forward to the link of the magnet, whilst in the case of gravitation there is no real support. The two bodies are displaced, in relation to each other, in ratio inverse to their masses; it is not actually the displacement of isolated bodies, but internal movements of the system.

In the case, then, of mediumistic movements without contact it should not be supposed that the table has acquired a faculty of motion of its own: this is impossible. One of two things must be true. Either some link, perhaps invisible, but physical, is connected with the object to be moved, at a fixed point, which moves the object by contraction like a muscle; or it is a case of attraction and repulsion at a distance like that of a magnet and gravitation.

Therefore all the more would an inert body, floating freely in the air, without having like birds the means of making of the air an effectual starting-point, be unable to displace itself unless it were connected by something with a fixed point; the table, however, maintained in the air without contact at the seances with Eusapia, moved for some seconds.* But if the medium is the author of these tactile bonds, or of these attractions and repulsions, the movements could not, it seems, be executed except as rays from a sphere of which he is the centre; it sometimes happens so. For instance, in the cases cited in which a letter weight and a table retired before the hands of Eusapia, but more frequently the motions seem to occur in every direction.

We are obliged, therefore, to admit, in addition, that the medium can produce centres of attraction outside her organism, by communicating this property to fixed points suitably situated. And would even this suffice to explain the agility shown by some objects which moved in all directions, in various capricious ways? It is true that we can produce many movements, quite as varied, with our limbs, by bringing into play and into combination muscles which acting separately could only produce motion in one direction.

The hypothesis which associates this activity with modes of

* ANNALS OF PSYCHICAL SCIENCE, February, 1907.

electrical attraction seems to find elsewhere serious support: the study of the origin of the agent in question had already led us to suppose that its nature is analogous to electricity; it would then be natural that it should operate by analogous methods; "by a mechanism as unknown," writes Colonel de Rochas, "as the attractions and repulsions of electricity."

This is all the more probable, inasmuch as we have already seen that there is in the human organism a force which behaves like electricity in relation to the compass and needles.

The case of Françoise Fontaine at Louviers in 1591* seems to be fairly well established, in spite of its antiquity. In the levitations of her body, when her head was downwards her skirts so clung to her body that they did not fall back. This fact, and others also, indicate that some force exterior to the object raised, intervenes, and that the levitation is not due to some property of lightness or of repulsion towards the earth, acquired by the organism itself, for this should not produce effects also on the clothes; and exterior action is also attested by the fact that "the levitations were made by the hair, and they ceased when her hair was cut off." With regard to the clinging of the clothes, we must assume a sort of complete enclosure in a fluidic network which acts on all points at once.

Moreover, this case is not at all exceptional; these are the usual characteristics of hauntings: "Raps on the walls, the transport of objects, levitation of the body of the patient, so rough that she and those present were often severely hurt."

Note also several cases of levitation† in which the person was carried away in her chair, if she was sitting in it.

* Quoted by Col. de Rochas in *Cosmos*, 1898, p. 306. Guaranteed by the official statement of lawyers of the period.

† Reported by Sir W. Crookes in relation to these researches.

† Reported by Sir W. Crookes in the *Quarterly Journal of Science*, 1870 and 1873.

There still remains to be studied another category of movements: that in which the moving body seems to have itself acquired the motor energy, like that of a living body, and seems to have become auto-motor.

This is not the case generally with rigid objects—or, at least, it is only possible in the case of that thread, for instance, which seemed to move like a tail.*

But this is indeed what happens in the case of the materialisation of complete objective phantoms. When they move their own limbs or the objects which they seize, which also proves their objectivity. The starting-points seem indeed to be, as for a real being, in the feet, and the work is, at least apparently, done in the muscles of the phantom. This force in the muscles must also come from the medium, or persons present, but does he store in the phantom a provision which this fugitive individuality and temporary autonomy can dispense as it chooses? or is there constant communication between the medium and the phantom, and can the latter only execute an operation in measure as the forces of the medium reach it?

Finally, other phenomena occur concerning which it is very difficult to understand how the force in operation can have been applied, for instance, in the case of haunting,† in which bottles exploded spontaneously without contact.

We must also admit that the mediumistic agent can produce directly all the phenomena of light, sound, words even without a vocal organ, which are the usual manifestations of a seance. Note also the suspension of the influence of fire often said to occur with Home, as also in the phenomena of the incombustibility of mediums.‡

* ANNALS OF PSYCHICAL SCIENCE, March, 1907.

† ANNALS OF PSYCHICAL SCIENCE, April, 1906.

‡ ANNALS OF PSYCHICAL SCIENCE, April, 1907, p. 284; and analogous phenomena, January, 1907, p. 72.

V.—*The Legitimacy of attributing telepathic and spontaneous cases to a similar source of energy.*

These explanations, which seem to be almost the only possible ones, lead to strange conclusions even in the case of mediumistic phenomena, when, however, the fact of the necessity for the medium's presence and his evident activity in the manifestations make it more easy to admit them.

The difficulty is greater for the phenomena of telepathy and hauntings; in these cases also, however, since there are really objective phenomena, hence work, it is necessary to seek in some direction for the source of the energy; we cannot at all admit as a sufficient explanation the intervention of a psychic world which is foreign to us, the hypothesis of the subconscious seeming, moreover, to be greatly preferable, except in certain cases.

For cases of telepathy, coming from the living and the dying, we have sufficient indication to lead us to ascribe the source of the energy to the transmitter, without, however, its being possible to deny that the percipients may themselves contribute to the result without being aware of doing so.

In cases of hauntings, there is doubtless always a subject who is the unconscious cause of the phenomena, and produces the necessary force; in some cases, this subject is easy to discover,* and this affords reason for thinking that this subject exists also in those cases in which nothing reveals it.

The facts which are most difficult to explain, but also most interesting from the point of view of their philosophic deductions, are those whose initiative can be traced, not to the dying, but to the dead, whether they are produced by what is called delayed

* For instance, ANNALS OF PSYCHICAL SCIENCE, August, 1905, case of Karin.

telepathy,* or in mediumistic seances if there are any, where the purported intervention of the dead seems to be real.

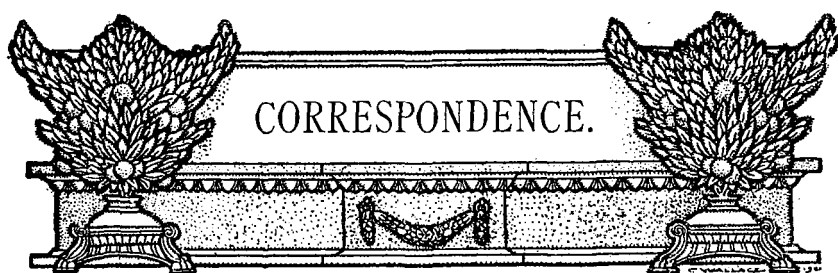
It is certain that all this is contrary to the convenient way of regarding matters without going to the root and into details, but as soon as there is certain *objective* manifestations,† physical laws indisputably resume their rights; and we must arrange our hypotheses accordingly. I do not find similar cases sufficiently well controlled with notable objective results; but it is possible that such exist; the energy and the necessary matter would in that case be borrowed from the percipients (or from the medium if they occur in a seance) under the influence and the direction of the psychic individuality surviving the death of the body; individuality whose presence sometimes seems very probable.

A. DE COUDENHOVE.

Château de Fléville par Grandpré, Ardennes.

* See note on p. 475.

† The objectivity is very evident in spontaneous cases of hauntings. For objective cases of telepathy from the living or from the dying, see *L'Inconnu et les problèmes psychiques*, Cases I., II., XIV., XXXV., XXXVI., XLI., XLV.



Kant and Telepathy.

GENTLEMEN,

May I be permitted to thank Dr. Kelly for his courteous and modest explanation of my glaring misunderstanding of Kant?*

His letter, however, appears to me to constitute an attack on Kant rather than on myself, so a refuge is left to me in the shadow of one of the greatest men that ever lived.

While it would be supererogatory to suggest that Kant is right and Dr. Kelly wrong, may I point out that at the very beginning of his Critique Kant says: "For that which of necessity impels us to transcend the limits of experience and of all phenomena, is *the unconditioned*, which reason absolutely requires in things as they are in themselves, in order to complete the series of conditions"? And may I further point out that it is barely possible that more than one of Kant's commentators have confused the manifold with the manifold *in our apprehension*? I am weak-minded enough to hold that this confusion has existed in the minds of even great commentators so that they have missed the fact that while Kant "relies on the manifold as the unconditioned," he treats the manifold *in our apprehension* as a loose or mere manifold or a sum of particulars which requires *for us* a synthesis for self-apperception.

The whole question raised by Dr. Kelly is, however, too vast to be compassed in a letter. In detail I would only refer to Dr. Kelly's statement that: "To examine ourselves we must decompose into subject and object." I deny the possibility of this. Dr. Kelly himself admits "the partition between the object and subject is growing thin in places." The intuitive self is the subject: the human personality is not an object of the subject, it is a phenomenal part or manifestation of the subject.

F. C. CONSTABLE.

* See THE ANNALS for April-June, 1909.

A Telepathic Incident.

GENTLEMEN,

I ENCLOSE a portion of a letter I lately received from a lady friend whom I have known as of estimable Christian character for the last twenty-five years. If you find it of sufficient interest for publication, I should prefer, as she does, to be anonymous.—Yours very faithfully, . . .*

March 6th, 1909.

“ I had one of my peculiar experiences very lately, at 7 a.m. on Saturday, February 13th, I awoke, feeling sad and depressed. I got up, dressed and proceeded to the dining-room, where, after attending to the wants of a pet bird, just as I was returning to my bedroom, I distinctly heard ‘Emily, Emily,’ in Spanish. I turned round, but saw no one. When I entered the bedroom, my husband, who was awake, asked me what was the matter, and I told him I could not shake off the depression, and was sure something was happening somewhere. I then made a note of the date and hour.

“ On Sunday, February 21st, I received the numbers of a Spanish paper for the previous week, and the first thing that met my eye was the notice of the death of my life-long friend, Mrs. B., which had occurred at Malaga, at 8 p.m., on Saturday, February 13th. We were very dear to each other, and always corresponded in Spanish.”

That Paris Seance.

GENTLEMEN,

THE April-June number of THE ANNALS presents an interesting article by M. de Fremery describing a private seance held in Paris for the invited guests of the hostess, Mme. Letort, in the library of her apartment. M. de Fremery explains his critique by the fact that the medium, Mr. Miller, though acting on this occasion in a private capacity, is really a public character, and thus legitimately open to criticism. Be that as it may, Mme Letort's guests were not present in any public capacity, or as public characters! My own words, as quoted, are so detached from their relations that I beg to correct the distorted impression that is conveyed.

Before the seance opened my hostess invited me out into an adjoining room to meet Mr. Miller. Almost at once he (taking the initiative) spoke very frankly of having met Miss Kate Field, and, I gathered, knowing her rather

* The writer is one of our most honoured and esteemed clergymen in the Church of England.—EDITOR.

well; so that, if I spoke of her, later, in the seance room, it was in some casual continuation of this conversation. Until I read the account of M. de Fremery, it had not occurred to me that I was especially "impressed" by her alleged appearance as an (alleged) materialisation. And I confess that, even if a remark of a guest on a private occasion is to be publicly reported by a fellow-guest, one may legitimately object to his mental states being imagined and then this startling divination added to the public report. My own conviction, with all deference to M. de Fremery's powers of mind-reading, would be that I was not "impressed" at all. As the writer states, I was placed by the side of Mr. Miller, and on the appearance of this wraith, whatever it was, he said to me, "Speak to her"; and I suppose some vague instinct of courtesy impelled the impromptu, idiotic question, "Are you happy?" which M. de Fremery reports me as asking. As, even if Mr. Miller is a public character, I am not, it did not occur to me that night as possible that any remark made would be served up in public.

So far as the Mrs. Stowe incident is concerned, here are the facts, which, naturally, your esteemed contributor did not, and could not, know. And while (under the circumstances of having been Mme. Letort's invited guest) I am not now expressing my personal convictions regarding the medium, one way or the other, yet I was confronted by this extraordinary coincidence.

I do not propose to pass any personal judgment on it, one way or the other, but merely set down the facts:—

Mrs. Stowe's seventieth birthday had been celebrated by her Boston publishers and her friends with tributes and poems in her honour by Dr. Oliver Wendell Holmes, John T. Trowbridge, Elizabeth Stuart Phelps (now Mrs. Herbert R. Ward), Whittier, and many others of the Boston group. At the close, when Mrs. Stowe made her response, after alluding to her great work, "Uncle Tom's Cabin," and to the abolition of slavery, she concluded her remarks by saying:

"My friends, always believe one thing: everything that ought to happen is always going to happen. God bless you, friends; God bless you. God bless you all."

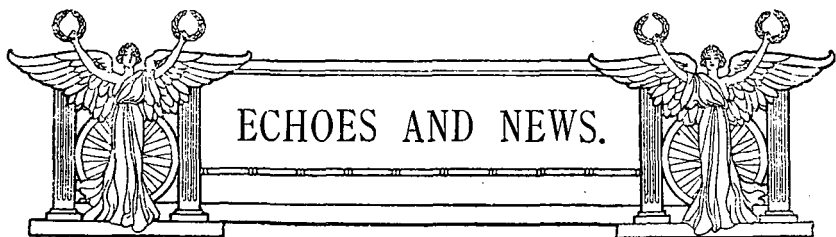
I confess that when this phantom, this real or alleged materialisation, spoke so earnestly the concluding, identical words of Mrs. Stowe, which had always persisted in my memory, with the vivid picture of the delicate, swaying little figure of the aged lady as she uttered them, framed in the leafy background of the trees, at the garden-party, that June day—I was, I confess, startled at the coincidence, even if only that. I was, doubtless, the only person present who knew, or had ever heard, of this episode in the life of Mrs. Stowe. **I think I was the only American present, and in the interests of fairness, and**

as a curious thing, I begged Mme. Letort's permission to relate this incident.

To merely say that Mrs. Stowe "had used the very words"—an expression so common as that of "God bless you!"—is to make the assertion absurd; but taken in its wholeness, it seems at the least rather singular. I had never seen Mr. Miller before that night; and no one, whatever his personal convictions, could regard such a seance as illuminating. There were no test conditions. The very fact of the occasion being one of private and invited guests precluded any such scrutiny as would have enabled the sitters to form an intelligent opinion from authoritative data.

LILIAN WHITING.





Lecture by Prof. Flournoy.

THE lecture given at Paris by Professor Flournoy, of the University of Geneva, on March 25th, on the invitation of the Institute of General Psychology, was probably one of the best yet given on metapsychical questions. It was entitled, "Mediums and Spirits," and it would not be easy to give within the compass of a lecture a better résumé of the present position of the question, the result of sixty years of a research in which the eminent author of *Des Indes à la planète Mars* has played so considerable a part.

He commenced by dealing with the intellectual phenomena of mediumship. He stated that in order to explain it fully, one must begin with the duplication of the personality, a phenomenon not confined to hypnotism, but witnessed also in several spontaneous cases of multiple personality, one of which, that of Miss Beauchamp, studied by Dr. Morton Prince, is one of the most extraordinary and most characteristic; but these phenomena also occur in all of us to a much less extent, as shown by the careful studies of the eminent psychologist Ralph, of Vienna.

What Professor Flournoy has observed personally leads him to believe that the greater number of mediumship-phenomena have in fact no other origin. He showed this by examples of automatic writing, of which it is quite easy to discover the source—namely, subconscious cerebration, due sometimes to facts scarcely noticeable. One instance appeared particularly significant: a professor had become interested in spiritism, and had begun to practise it, and soon began to obtain automatic writing. One day he learned to his sorrow, by this means, that his son had been accused of stealing cigarettes from the office in which he was employed. He went to see his son's principal, who declared that he was perfectly satisfied with his conduct. There was absolutely no foundation for the story.

What had happened was the unconscious result of the father's imagination. The son smoked a great deal, and his father had spoken to him about it. The son replied that those at the office smoked as much, and that his employer

even left his box of cigarettes open. They could help themselves: they could even steal them. It was this last remark that gave a start for the father's imagination. Some days afterwards he learned from a third person that his employer was looking for another clerk. This was true; yet it was not to replace one of those already in his service, but an additional clerk. Of this, however, the father was ignorant. On this fact, as well as on the first, the sub-conscious mind worked. Being timid and scrupulous, it elaborated little by little the story given forth by the writing. It all came from himself, elaborated by the sub-conscious mind from correct facts wrongly interpreted. He believed that it was a spirit who wrote through his hand: in reality it was himself expressing his deductions and apprehensions. But there are also causes of complication which sometimes render it very difficult to discover the origin of mediumistic messages; first the imagination of the subject, which builds up extraordinary subliminal romances, and the unconsciousness of certain perceptions, then telepathy, which may be sometimes explained by the unconscious whispering of the agent, or quite other causes of error, but also sometimes coming through an extra-sensorial channel.

It is only after having taken account of these possible sources of mediumistic messages that we are able to concern ourselves with these remaining facts which do not come under these hypotheses, and to which a spiritistic explanation may, perhaps, be given.

The lecturer then went on to speak of the physical phenomena of mediumship, which have been particularly studied of late by means of the powers presented by Eusapia Paladino. The time has long passed by when, as the result of the experiments made at Cambridge, the phenomena of this medium fell into discredit. Many savants of the first rank, particularly in Italy, have recognised in turn the authenticity of these facts, and even recently Prof. Morselli wrote a very important work on these phenomena—the most important, perhaps, which has yet appeared on the subject.

"As for myself," added M. Flournoy, "if I have not yet been able to come to a definite conclusion as to the physical phenomena of mediumship. I have never been inclined to absolutely deny them, their reality having been recognised by my excellent master, M. Thury, Professor of Physics at the University of Geneva, who invented ingenious apparatus to prevent all causes of error as to levitation of tables, etc."

Now the time has arrived when we can ask on which side are the hallucinated: whether among those who affirm or those who deny. Yet, as the lecturer pointed out, it is very difficult to pronounce on the mechanism of these facts, materialisations included, the psychology of which ought to be the subject of a very close study and comparison with that of the medium.

For all that, M. Flournoy does not dispute that spiritists may at last be proved to be in the right. Already several points are known which appear to be in their favour. There are, for example, the complex instances of cross correspondences, to which high rank has been given for some years, particularly by the English. Suppose that a single intelligent phrase is divided into four portions, and that each is obtained by a different medium at great distances from each other about the same time, the phrase only becoming intelligible when some investigator, having all the fragments, puts them together—does it not seem as though a spirit had inspired each of the four subjects in turn?

But this might also be the case of telepathy or of some hitherto unsuspected form of clairvoyance. Therefore we must only accept the spiritistic explanation after all other hypotheses have been tried in vain.

A case of Paramnesia, apparently of telepathic origin.

THE following letter appears to us a valuable document in favour of the hypothesis first upheld by Prof. Lalande, according to which certain instances of paramnesia may be due to telepathy :—

“ It was New Year's Day, 1907. I was at that time justice of the peace at Staïti, a small town hidden away in the Calabrian mountains. Towards 11 o'clock, I found myself in the Square listening to the music in company with Lieut. Firmin Favaro and a commissary of police, whose name I have forgotten : both had come to prevent the disturbance expected to arise owing to the proposal to transfer the magistrate's court from Staïti to Brancaleone-Marina. M. Vincenzo Lopriore, Brigadier of the Carabinieri, in charge of this post, wished to take me aside to make a communication to me. Thinking that it was only an ordinary routine matter, I asked him to speak in presence of the Lieutenant and the Commissioner, when he said :—

“ ‘ Monsieur le juge, I have come to ask your advice. So-and-so, while hunting——’

“ ‘ Ah, I understand,’ I said, interrupting him immediately he had pronounced these words : ‘ while hunting, his gun was discharged and blew off the thumb of his right hand. I know of this because yesterday the information came to me from the Brigadier of Brancaleone-Marina, and I may say that I was unfavourably impressed by the zeal of this official, for he wanted to prosecute, for the carrying of arms without a licence, an unfortunate man who has already been sufficiently punished.’

“ M. Lopriore seemed surprised at these words, and observed that it could not be his colleague at Brancaleone who drew up this information as the

accident occurred near Bruzzano, within his own jurisdiction; and, in order to be sure, he asked me to let him read it.

"We at once returned to my office, but, although we made a thorough search, we could not find the official information. I called the registrar, M. D. Lobo, the deputy-registrar, another official, M. Pascal Loggio, and I asked them all in the excitement of the search where the missing document was. All replied that not only did they know nothing of the matter, but that they were entirely ignorant of the accident sustained by this person, although he was one of the most prominent men of Monticella.

"I was speechless, especially because I did not wish the Brigadier to think that I could lose an official paper in my office. I then reconstructed the scene, and related to all present how, on entering my office about ten o'clock on the previous day, I found my correspondence on my desk, and looked through it before removing my hat, overcoat, or even my gloves. Among other things I found this report. I even remembered that at the time of reading it I had my right foot on a chair, and in this attitude I had made this comment as to the zeal of the official. Anyhow, to save appearances, I told the Brigadier that probably the document had been placed between the leaves of a magazine and taken to my house, and that when I found it the next day I would let him read it. Indeed, I went home at once, but all search was in vain.

"On the following day, making the excuse that I wanted to verify the register of birth of the individual, I went to Brancaleone, and my first care was to go to the barracks in order to procure from the Brigadier a duplicate copy of the document. To my great astonishment, I learned that no one there knew anything of this contravention, and that the imaginary information had never been sent.

"What is the explanation of this strange phenomenon?

"I believe that M. Lopriore, at the very moment when he was about to ask my advice, telepathically transmitted his thoughts to me, and I was thus able to forestall his account of the accident, which I had not learned from anyone else, because it was quite unknown in Staiti. What I cannot understand is the assurance I had of the existence of the report, which I could swear to having read and even commented upon; a document which, moreover, was afterwards drawn up by M. Lopriore, and on which I still commented unfavourably because I thought it quite just to acquit this unfortunate huntsman, as well as Dr. Vincent Tommasini, who had been denounced for not having informed the authorities of this wound which he had dressed.

SALVATORE RUSSO.

Molecular attraction at the Académie des Sciences in Paris.

THE immense power of cohesion possessed by atoms, molecular attraction, though admitted in theory by savants, had not been demonstrated in a concrete and positive manner. This demonstration, however, has just been supplied, not by any physical experiment, but, curiously enough, through mechanical operations in the industrial world.

At the recent meeting of the Academy of Sciences of Paris, M. Carpentier, the learned mechanical engineer, demonstrated this force by exhibiting a series of test surfaces absolutely plane and parallel, executed by a Swedish mechanic, M. Johansson. It is the wonderful perfection of these plane surfaces, almost amounting to absolute exactitude, which has enabled the power of molecular attraction to be *seen*. It had hitherto been difficult to obtain absolutely plane surfaces. It only needed a few slight inequalities, invisible even to the eye, to prevent the two surfaces from adhering when brought into contact and to keep their molecules at a distance, one from the other.

The surfaces obtained by M. Johansson were so perfectly polished that a complete adhesion was manifested between two of these plane surfaces when placed together. Two of these pieces of steel, even several, may thus be said to have formed only one piece. When held vertically the pieces of steel did not come apart, yet no electro-magnetic current was passing through them. These heavy pieces of steel were no longer obedient to the laws of gravity.

"This," says M. Carpentier, "is because the force of attraction between the molecular atoms which touch each other owing to the perfect contact of the two surfaces, is superior to that of gravitation."

The pieces of steel remained united. This adherence increased with the duration of the contact. Two pieces having a surface of half a square inch in area, placed one upon the other for several minutes, could not be separated by a tractive force of eighty pounds applied for forty minutes. At the end of a longer period the molecular cohesion is so strong that the joined pieces form a solid block and become inseparable.

"Practically," concluded M. Carpentier, "M. Johansson has obtained test surfaces only differing by one-tenth of a micron—that is, by one hundred-thousandth part of a millimetre, or two-and-a-half-millionth of an inch."

Everyone will understand the interest presented by this new demonstration of the disaggregation of the molecules composing bodies, and of their successive re-cohesion, from the point of view of certain mediumistic phenomena—particularly the "apports" and the "materialisations" and "dematerialisations" of human forms, etc.

(NOTE.—Whitworth's planes were so perfect that one of them would lift another, as a boy's sucker lifts a stone, and probably for the same reason : they had to be separated by sliding them over one another—Ed.)

A Singular Instance of Clairaudience.

ONE of our friends, who, for special reasons, does not desire us to have his name published, but whose sincerity we absolutely guarantee—he is a well-known and distinguished composer—wrote to us under date of January 15th last, giving particulars of the following phenomenon :—

“ Last week here at Rome I was engaged in correcting the proofs of a portion of my new work, and my wife was at my side. She possesses the singular gift of clairaudience. She often hears quite plainly the voices of deceased relatives or friends; she perceives the words as clearly as if they were pronounced by living persons, and that without her nervous system being in any way disturbed or shaken.

“ I had finished correcting the first proof and was preparing to undertake the second when my wife said to me : ‘ Sir Julius Benedict is here. He says *bravo* to you; he is delighted; but he adds that you have not properly corrected this proof. Look again at the fourth bar, in the arpeggio there is a false note which you have missed.’ (I ought to state that Sir Julius Benedict, who was a German, was the intimate friend of my father, and knew me well in my childhood. My father, knowing him to be an excellent pianist and composer, persuaded him to go to London, where he gave him excellent recommendations, and where, in fact, he acquired great renown; he was permanent conductor of the orchestra at Covent Garden for thirty years, and was so appreciated that he was knighted by Queen Victoria in 1871. He died in London about 1885.)

“ Greatly astonished at such an intervention, I took up the proof again, looked at the fourth bar, and noticed that in the arpeggio a ‘ B ’ had been printed instead of an ‘ A,’ and I immediately corrected the mistake I had overlooked.

“ My wife does not know harmony, and had not handled nor even looked at the proof, which had only just arrived from the printers. I leave you to make your own comments.”

The Little Seeress of Orrouy.

THE *Petit Parisien* recently published the following letter from Compiègne, together with the accompanying engraving. We reproduce them because they form a fresh contribution to the study of visions seen by persons who appear to be of sound mind :—

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Little Suzanne Bertin, who was ten years of age on May 16th (1909), was born at Condé-sur-Suippe (Aisne), but has been brought up by her grandparents, well-to-do farmers living at Orrouy, a few kilometres from Compiègne. Her father, who is a mechanic, lives at Boulogne-sur-Seine.

Last year, on July 14th, Suzanne Bertin was tending a goat which was browsing in a field adjoining her grandmother's house, when, according to the child's own words, she saw in an old elm on the farm first a blinding flash of lightning, then a human form perched on a branch.

Suzanne, greatly frightened at this strange apparition, ran as fast as her little legs could carry her and told her grandparents that she would not in future take the goat to that spot. On being closely questioned she at last gave the reason for her refusal, and, trembling all over, related what she had seen. The grandparents laughed at her, and attached no importance to what she said.

Eight or ten days afterwards Suzanne ventured to return to the tree, and, for the second time, she claimed to have seen "the lady" whom she had already seen in the branches of the old elm. Afterwards the apparition was frequently repeated, according to the girl's statement. The small town of Orrouy, situated not far from the ruins of Champieu, stands on a hill. The spot is rendered very picturesque by the woods which run up to the forest of Compiègne.

On the top of the village, in a house on the slope overlooking the country, we found Suzanne Bertin with her grandparents. She is a pretty little girl, with refined features, her chestnut hair falling loosely and encircling the perfectly oval face lit up by two very wide-awake blue eyes. Suzanne replied to our interrogations; she did not at all give the impression of being an imaginative girl, and her religious instruction has been much neglected. The child is in no way ecstatic; she reserves her transports for a ferret which plays at hide-and-seek among the furniture, and seems as frolicsome as its young mistress. We asked Suzanne Bertin for precise details, though nothing can be less precise than the unreal.

The little girl first pointed out the exact branch of the tree on which she saw Joan of Arc—for it was Joan of Arc who appeared to her. She then related in detail the phenomenon of which she was the sole witness, at once fascinated and frightened. The following are her exact statements:—

"The first time I saw 'the lady' I was very frightened, and each time I saw her afterwards my heart beat very quickly."

"Did the lady speak to you?"

"Yes, sir; she said to me last year on her second appearance: 'Suzanne, Suzanne, there will be a great war; this will be followed by cholera, yellow

fever, black fever, and infectious flies (*sic*). Rome, Messina, and all the neighbouring towns will be swallowed up. Suzanne, I command you to go and bless the French flag and the weapons of war."

"Is that all she said?"

"Yes, sir; she repeated it frequently."

After having noted that ~~there~~ was not much variety in the conversation of the pretended Joan of Arc, I put some other questions to the child.

"How many times have you seen the apparition?"

"Fifteen times since the commencement of the year."

"Have you questioned 'the lady'?"

"Yes; I have asked her, 'Who are you?' and she replied, 'I am Joan of Arc, the martyr.' Then, after five minutes, she disappears, as she comes, in a flash of light. It is generally about half-past three in the afternoon that I see her."

"And how is Joan of Arc dressed?"

"She has armour which one would say was made of lead. Her hair falls on to her shoulders, with a parting in the middle. She holds a sabre in her hand with the point in the air, a crown made like the teeth of a saw, and a branch of laurel."

"Has she never spoken of anything else?"

"Yes; but I did not understand."

"What sort of a voice has she?"

"Like a child's; it is shrill; one might say that she sings."

I have seen the elm, covered with ivy, on which the good Lorraine appeared; but I only saw a mocking sparrow, and I waited in vain under the elm for the apparition which never came.

We should not forget that here, at Orrouy, we are in the country where the heroine was made prisoner, and that the memory of her who said that she was "sent by God to put the English out of sweet France" is very vivid in this region.

The young seeress, at all events, is not shy. If it amuses you she will herself relate her hallucinations, as she narrated them to me yesterday in her bird-like voice and pretty childish chatter.

H. MONTCLAR.

A writer in *L'Echo du Merveilleux* who has been making an investigation on the spot thus concludes his account:—

"No one at Orrouy, from the peasants to the doctor and the curé, believes in the reality of the apparitions. No one even believes in the sincerity of the child. As I have gathered from the conversations which I have heard and reported, the prevalent opinion is that someone has suggested to Suzanne the

idea which she would not have been able to make up for herself, making people believe that Joan of Arc had appeared to her."

Visual Hallucinations in little children.

WE find in two foreign publications two cases of visual hallucinations which, if they are not satisfactory examples of veridical hallucinations, are not the less interesting as examples of "visions" seen by little children.

Monthly Bulletin of the Antwerp Spiritistic Society, January.

M. Conick (of 47 Marché au Lait, Antwerp) has communicated to us, in a letter dated December 22nd, the story of a series of visions which are the more remarkable because the subject is not yet three years of age. The proper names are known to us; we replace them by initials at the request of those concerned.

"I am happy to be able to tell you something which should please you as much as it does me.

"M.A. . . ., connected with my family, married again some years ago. By his second marriage with a Miss B., of Antwerp, he has had five children, one of whom, a girl named Isabelle, died a few months ago.

"About two months ago, one morning Mme. A.'s youngest child was playing in a room opening on to the staircase when suddenly she said to her mother: 'Maman, Belle is there.' 'Where?' asked her mother. 'There, on the landing. Do you not see her?' The mother asked how the child was dressed and what she was doing. 'She is dressed in pink and she is laughing,' was the reply.

"Another time the mother caught the same child throwing kisses in the air. The mother asked her what she was doing and to whom she was throwing the kisses, and the little one replied: 'Why, mother, can't you see Belleke? She is sitting on the roof there; she can't come down.'

"About six weeks ago the mother was in her bedroom, in which two of her children were playing, when suddenly the little one stopped playing and called out to her mother: 'Maman, Belleke is there.' 'Where?' asked the mother. 'There, at the foot of the bed. Can't you see her? She is dressed in pink, and she is pretty, pretty, and she laughs.' The child pointed to the place at the foot of the bed where the mother was in the habit of praying every night for her deceased child.

"Ten days ago it was Mme. A.'s birthday, and in the evening she was sitting in the room off the staircase along with her children and another person, eighteen years of age.

"The children were playing, the young woman was reading the newspaper, and Mme. A., while pretending to read, was praying to God for her little child. She asked in her prayer why God had taken away her child. Just now, on her birthday, her joy would have been greater if she had had all her five children around her.

"Suddenly the little one said: 'Maman, Belleke is there, behind you.' 'Where?' 'There, she is sitting on the piano; she isn't alone. She has a friend with her; they are holding each other's hands. She is dressed in pink and she has some flowers; she is smiling.' Then the mother asked her: 'Are you sure you see her?' 'Oh, yes, maman, there on the piano.' Then the mother took the little one, and placing her on the piano said to her: 'Give her your hand then.' At that the child stretched out her arm and kept it in that position, as though holding another by the hand.

"The child is not yet two-and-a-half years of age, therefore she is not able to invent these things.

"I have seen the child, and my relative has made her repeat the scene before me. The child told me she had seen Belleke on the piano and made the same motion which she made when she gave her her hand.

Ultra, Rome, February, 1909.

"In a house at Rome—No. 21, Via Reggio—inhabited by the Nasca family, there lived also as sub-tenants Mr. G. Notari, a married man and father of a family, and his widowed mother. On December 6th, M. Notari lost an infant of four months at a quarter to eleven in the evening. Around the bed of the dying child were the father, mother, grandmother, the mistress of the house, Mme. Julia Nasca, and the child's little sister, Hippolyta, aged three years, and half paralysed, who, seated on the little bed of the dying baby, looked upon her compassionately.

"At a certain moment, and exactly a quarter of an hour before death took place, little Hippolyta held out her arms towards a corner of the room and cried: 'Maman, do you see Aunt Olga there?' And she tried to get off the bed and go to her. The others were astonished, and asked the child in agitation: 'Where, where?' And the child repeated: 'There she is; there she is,' and tried hard to get off the bed. Her father helped her to get down, and she went towards a vacant chair, but seemed a little perplexed because the vision had moved towards another corner of the room. The child held out her arms, repeating: 'There she is; there's aunt Olga.'

"Then she became calm as the sick child passed away.

"This aunt Olga, sister of Hippolyta's mother, poisoned herself a year ago through a love affair.

"I guarantee the authenticity of the facts which have been told me this evening by the Nasca family and by the grandmother of the little clairvoyante.

"M. PELUSI,

"Employé at the Victor Emanuel Royal Library.

"Rome, December 12th, 1908."

Some "Spirits" at a Breton Farm.

(By a correspondent of the "Matin," Paris, March 1st, 1909.)

FOR some time there has been a report in the district of Morlaix (Brittany) that near Pleyberchrist there is a haunted farm where each evening at nightfall the "spirits" carry on terrible revels. Wandering souls? Werewolves? No one knew; and, therefore, being desirous of having some more precise information as to these new manifestations, I yesterday went to the Ker-Rolland Farm.

Situated on the Commana Road, on the north side of a deep, picturesque valley, two kilometres from the town of Pleyberchrist, the farm is held by M. Olivier Quémener, sixty years of age, and his wife. They are assisted by their son Jean-Yves, twenty-eight years of age, his young wife, and a farm lad. The young people have four children, the eldest being six years of age.

The following is a faithful report of the conversation I had with them:—

QUEMENER, SENIOR. "It is now nineteen years last Michaelmas since I took the farm, and almost every evening we hear noises; sometimes they move the key of the cupboard, of which both the doors are suddenly opened and an invisible hand throws the doors one against the other with a dreadful noise. Sometimes I throw my wooden shoe against the cupboard, but a minute afterwards the disturbance recommences."

"Have you not tried to find out what is the cause?"

QUEMENER, SENIOR. "Yes; several times I lighted my candle, but I had scarcely lighted it when I distinctly perceived a blowing as though from a human mouth, which extinguished it."

"And did you not try to light it again?"

QUEMENER, SENIOR. "Yes; but when I looked for my matches I could not find them. The spirit had carried them off, and the noise recommenced. I again threw my sabot or something else. There was silence for a moment, and then it began again. We could not sleep."

QUEMENER, JUNIOR. "In the evening I have several times felt what seemed to be two hands pressed on my stomach, almost stopping my breathing."

"And did you not try to see who it was?"

QUEMENER, JUNIOR. "Yes, I stretched out my hands, but they only went out into space."

THE DAUGHTER-IN-LAW. "Since I have been here I have heard the noise in the night particularly. There were knocks on the door as though made with a hammer."

"And were you not frightened?"

THE DAUGHTER-IN-LAW. "My goodness, no. It often prevents my husband, father and mother-in-law from sleeping, but I care nothing about them. They can knock as much as they like, it does not keep me from sleeping."

THE MANSERVANT. "I have often heard noises in the house, but particularly in the stable. This is about thirty yards from the house, and I sleep there because of the horses. I hear the noise of a hammer, as if they were knocking nails into the wood."

"Have you not tried to find out what it is?"

THE SERVANT. "Why should I? They would have blown my candle out as they did my master's."

"And can you sleep?"

THE SERVANT. "Not much. I have often had very bad nights, but not so bad as my brother. He worked for some time at the farm with me, and sometimes slept alone in the stable, but could not stop, and now he has finally left this farm, saying that things happen here which are not natural."

QUEMENER, SENIOR. "Our neighbour at Kergoat-Bihan Farm, which adjoins this, spent a night in the room, where we left him quite alone, while we slept downstairs. The following morning he came down looking very pale, his nightshirt all wet with perspiration, and in a voice broken by deep emotion, caused by his night's stay in the room, he said to us: 'If you were to give me all the gold in the world I would not do it again. I am trembling still. It was horrible!'"

"Do the noises still continue?"

QUEMENER, SENIOR. "Yes, almost daily. But now they are only heard outside. The Vicar, M. Merrett, came, and since then the spirits have left the house. He exorcised them. He said some prayers and they left. They have made no more noise in the house. They content themselves with merely knocking outside at the south door during the night."

"And are you not having the Vicar again to make them go away altogether?"

QUEMENER, SENIOR. "What is the good, since they have left the house?"

"And you don't think of leaving the farm?"

QUEMENER, SENIOR. "Oh, no. We are used to it now. And even if the spirits are noisy, they do us no harm, unless their pressing my son on the stomach a little may be called harm."

An Apparition in a Church.

THE following is the authentic relation of a curious fact which recently happened near Birmania (Asia) in a church of the Foreign Missionary Society of Paris.

Father Pelletier's letter is inserted in the *Echo religieux de la ville d'Aurillac*, founded about ten years ago by Abbé Adrien Simon, an Apostolic Missionary.

The Rev. Father Delort, whom this letter concerns, was a pupil at the Seminary of St. Flour, whilst Abbé Simon was a professor in the same establishment. He entered the Foreign Missionary Society in 1895.

For some years he had been a missionary in Birmania, where he died suddenly in 1906. His father and mother are still alive, and dwell at Arpajon, near to Aurillac. It is to them that this letter was addressed. One of his uncles is Honorary Canon of St. Flour and Langres. Two of his brothers, also priests, occupy important positions in the diocese of St. Flour. The eldest, Abbé Raymond Delort, is the Director of the Apostolic School, and the second, Abbé Antoine Delort, General Secretary of the Bishopric.

This account of the incident was written on the spot immediately after the fact occurred.

PALEIK,

December 12th, 1907.

DEAR SIR AND MADAME,

I am again taking the liberty of writing to you, acting on my privilege of having been the close friend of your dear son Francis, as well as on the strength of having been your guest one day, several years ago.

The circumstance which causes me to write you to-day is rather extraordinary; nevertheless, as it is also most consoling, I like to think you will feel happy, you and the members of your dear family, in learning of the facts in question. Here they are in all their simplicity:—

On the 2nd November last, All Souls' Day, at Maymyo, a spot which serves as a sanatorium for our tired brothers, four missionaries, and a native priest were gathered together. They had just sat down to table, towards half-past six in the evening, when the cook (a Catholic Birman, about twenty-five years old, a very simple and good-natured youth) came in and told them that he had just seen an individual dressed in white, who had passed close

by him, beside the house, and who had not replied to his questions; he did not know where he had disappeared to, he could not find him anywhere, and he was afraid it might be a thief. The Fathers paid no attention to the story, thinking that it was some Indian who did not know the Birman and who had passed that way, as often happens, and, as night was drawing on, it was not surprising if he had quickly disappeared.

Nevertheless, the cook, thinking always of some thief, wanted the chapel to be closed sooner than usual (generally the soldiers come and play the harmonium until 9 o'clock, the hour at which the chapel is closed). But this day the young man wanted to close the chapel earlier. After having served the Fathers, he went to the chapel, but from outside he saw someone in white kneeling in the first form beside the pulpit.

Seeing thus someone engaged in prayer, he went away; in a few minutes he returned, and saw the same person in the same position.

Finally, a third time (it was then about half-past seven), seeing this person always in the same place, he looked at him attentively, thanks to the lantern he carried, and distinguished a white cassock (priests in this country often wear white gowns). Knowing that all the Fathers, having just dined, were still at table, the idea came to his mind that it was some prowler dressed up as a priest so as the better to pass unnoticed. At once—always from outside but to the side of the door, so that the person could not escape—he called aloud to the Fathers, who all five came out to see what was wrong.

When they came to the door of the chapel, notwithstanding the affirmations of the youth, the priests could see nothing, which rather astonished them. "But surely you can see him there in the first form? He is kneeling, and has a book in his hands."

Everyone entered the church and went to the spot indicated, but could see nothing, to the great surprise of the youth, who continued to see the person in the same place. A cat had followed the Fathers. "Don't you see the cat passing between his legs and rubbing up against him?"

One of the Fathers then asked the youth to take hold of the person's arm. The youth stretched out his hand to seize the arm, but to his surprise, seized hold of nothing; his hand closed on itself though the vision had not stirred.

The Fathers then asked him if he knew him. What's he like? etc. "I cannot distinguish his face," he said; "don't you see that he is turning towards the tabernacle?"

It was then that the Fathers wished to pass in front of the vision, so that the youth might see his face. It was with much fear and trembling that the youth consented to follow the Fathers to the other side. As soon as he

was between the tabernacle and the vision, seeing the figure in front, he called out : " Yes, indeed, it is the Father who died last year at Bambo ; it is Father Delort, who the last time he was here gave me five rupees." The vision continued in the same position, kneeling, his book closed, his eyes turned towards the tabernacle, and looking at no one.

More and more puzzled, the Fathers still saw nothing, though there was sufficient light, thanks to the lamp on the sanctuary and to the light carried by the youth. The latter, on the contrary, more and more troubled because he was the only one to see the person whom he could not seize, shook again with fear. One of the Fathers then went for some holy water, and sprinkled the spot indicated. At that moment the apparition made a large sign of the cross, opened his book, and his face seemed to smile, said the youth ; but he looked at no one. The Fathers recited a *de Profundis*, and, whilst this was being said, the apparition rose up with an air of contentment.

Then one of the Fathers placed himself behind the apparition to see if the youth could see through the vision : " Do you see me ?" he asked. " Oh, yes, I see you all ; only you, you are not like the other, your face is dark and ugly, while his face is beautiful—very beautiful. It is all shining like the rising sun."

The Fathers recited another *de Profundis*, during which the apparition seemed still happier. Then one of the Fathers told the youth to ask the vision what it wanted. But the youth was so afraid that he knew not what to say. The Father then made him repeat these words : " Father, what do you want ?" The gaze of the apparition was then directed to the youth, but only to him. " Well, what does he reply ?" " But do you not hear for yourselves ?" said the youth, who believed that everyone could hear what he alone heard ; " but surely you hear what he says : ' Masses.' " " How many does he want ?" the youth was bidden to ask. " Each one, one," was the reply—a reply heard only by the youth.

At that moment, coming up to the chapel and seeing so many people gathered together, a soldier approached to see what was the matter. Then, according to the child, the apparition made a movement as though to send away the soldier. The youth said : " Stop the soldier from approaching ; he is frightening him." Soon afterwards the youth said : " It seems to me as though he wishes to go away." And as a matter of fact the apparition, which until then was about in the middle of the form, made as though he wished to go out ; that is to say, he turned completely round to the right—he had been kneeling to the left, his back turned to the right—then slowly the vision left the form and walked down the middle aisle. There it advanced a few steps up to the lamp of the sanctuary ; arrived there, it suddenly disappeared.

There, dear M. and Mme. Delort, in all their details, but in all simplicity, are the facts such as the different Brothers then present at Maymyo each related them to me. Though none of them saw anything, they are absolutely convinced of the truth of the facts. The extreme surprise of the young man when he knew he was the only one who saw and heard, the fear which seized him and made him tremble again, are all convincing testimony in the sense of the reality.

For my part, I know the young man well enough to be able to affirm that I believe him absolutely incapable of imposture. Moreover, he would have no motive, and even if he had one, he would be incapable of inventing this. The scene in the chapel lasted about twenty minutes or half an hour. The next day each of the Fathers said a Mass for the dear departed one; and for several days afterwards the youth returned to the chapel to see if there was anything unusual; but there was nothing.

Naturally, I do not venture to infer anything positive from all this, but my personal conviction is well made up.

My dear friend, having need of a little spiritual help, obtained God's permission to ask for this directly, and to-day I consider he has arrived definitely at the place of eternal rest.

The different changes of attitude, with an air ever more and more satisfied at each religious act accomplished, then the countenance shining as the rising sun; all this seems to me as so many certain proofs.

. . . . I would have written sooner had it been possible. I have been ill for several months, and have come here to look for a cure and health in a cooler spot than Birmania. I have not had the strength to write sooner. . . .

I am, etc.,

P. PELLETIER, Missionary.

A Significant Legal Judgment.

THE judgment in a recent trial of a medium in Germany, which is reported by the *Journal* of December 12th, Berlin, and is published in full in *Die Uebersinnliche Welt*, is interesting as showing the extent to which legal decisions are affected by scientific advance in relation to psychic matters.

A medium, Mme. Winter, living at a small town near Glatz (Prussian Silesia), was visited by the son of a local official, M. Samneck, when a daughter of the same official spoke through her and said that she would like to say something to her father, whose earthly career was nearly at an end, and who had used his public position to make money unlawfully.

The medium was prosecuted for slander, and condemned by the local magistrates to three months' imprisonment.

An appeal to the superior court at Glatz was drawn up by Dr. Erich Bohn, a Breslau advocate (who, by the way, played an important part in exposing the fraudulent practices of Anna Rothe, the German flower-medium), setting forth the view that a trance medium was in a condition analogous to that of a person in a dream, but with this difference, that she spoke out her dream as it was going on, and did not remember it on awaking; he referred to the opinions of specialists and asked that they be called (if necessary) to testify that the medium, when in trance, was not in a responsible state of consciousness. The court at Glatz held that "the correctness of this assertion is rendered highly probable by the opinions of the experts, Drs. Häusler, Henneberg, and Moll"; and as the medium was not responsible for her utterances while in the trance state, the sentence was annulled.

An important fact which is recorded in the judgment is that the official implicated had confessed that he had been in the habit of charging small sums for preparing documents and giving receipts which it was his duty to do gratuitously.

Weird Experiences in Zululand.

THE following account of what appears to be a genuine case of spirit haunting reaches us through an Englishman residing in Zululand. The narrator, who occupies an official position, and is, therefore, desirous that his name should not be published, says: "The facts are as I shall relate them." Our correspondent, who transmits the account, says that although, as a rule, he disregards all such tales, he believes that this is a bare recital of facts, and both he and the actual narrator will be glad to corroborate them privately. The report is as follows:—

Some three years ago last September a certain Dutch farmer reported the fact of a skeleton having been discovered on his farm under extraordinary circumstances, and asked that the matter should be officially investigated. I went over to this man's farm and interviewed him, but it was only after much hesitation on his part that I managed to elicit the following details. His hesitation was due to the fact of his being a particularly sensitive man, and consequently afraid of ridicule. People who know him well say that he is exceedingly honourable, upright, and also well educated. I mention this because, had it been otherwise, I should never have put the slightest credence in the story he told me, but, knowing him to be the man he is, I must say that I certainly believe that he only told me what he himself absolutely believed

to be the truth. I give you this version, drawn from him, as I say, only by great patience and, if I may say so, the exercise of tact.

He told me that some years ago, before the Boer War, two white men worked for him and were accustomed to camp out in a certain place on his farm for the purpose of attending to the lambing of his sheep and goats. One day they came to him in a great fright and reported that they had been very much disturbed by uncanny noises and supernatural lights near their camp. I will describe the site of the camp as I saw it. There is a small river some three miles from the house, which, at this particular place, makes a bend forming a large semi-circle. The outer edge, or further bank, is steep and rocky, but the land within the semi-circle is quite low and consequently sheltered; the rock side is in the nature of a succession of kranzes from eighty to one hundred feet high. Under one of the kranzes the ground slopes up from the edge of the river, not very steeply, ending at the top in a sort of natural platform, which is completely overhung by the kranz. I should say it comes like a roof for about twenty feet. It is hardly a cave, for it is quite open at the front.

I can best describe it as a magnificent shelter about thirty feet above the river. It is about twenty yards long and, as I say, about twenty feet broad. I am a bad hand at descriptions, and am afraid this is rather vague, but I hope you can realise it in your mind. Well, under this natural roof and on this platform these white men always pitched their tent. According to their account, a noise arose, which they described as being like the wailing of a woman, succeeded by that of a child, just behind their tent and consequently right at the back and near to the rock wall. It crossed either right through the tent or sometimes just outside the tent, and ceased at a point on the front edge of the platform. This, they said, had happened on several nights, and sometimes they had seen a sort of light appearing slightly above the ground, which moved in the same direction as the noise and disappeared at the place where the noise ceased; occasionally this light went floating out over the river and hovered round there, but it always returned to this one place at the edge of the platform. These appearances were also accompanied by much shaking of the beds and the articles they had in the tent. To cut it short, the farmer said that he had decided to go himself the next September and investigate. But the war came and he did not return for some years.

Now comes the sequel. At the time I have mentioned two men were there as usual, but after staying one night they came up to the farmer and refused to return to the place. Thereupon he got together a party of neighbours—Dutchmen—and went down that night with the intention of investigating thoroughly.

The noises generally started about 9 p.m., so about then they put out all lights, etc., and waited. Soon they heard the noise of wailing, and almost immediately a light rushed in from the back of the tent and one man felt a heavy blow dealt, subsequently finding that his arm was broken; another got a terrific smash in the mouth, loosening some of his teeth, and the "thing" then passed out of the front of the tent. The inquirers naturally rushed out, too, and saw that the light passed across the rock and hovered round; it then rapidly returned and disappeared at a place just on the edge. All this time the wild wailing continued. They all cleared off after that, and the next day returned and started digging at the place where the light disappeared. It was just loose, sandy soil, and barely two feet underground they came across the skeleton of a woman and also of a wee child—evidently, from the position of the bones, an unborn child. On this discovery being made the farmer ordered the bones to be covered up again, and immediately went and reported it to the police. I went over with him and we dug at the place he indicated, and there was the skeleton—or, rather, the skeletons. An official report was made, but as there was no evidence of foul play, the district surgeon was unable to come out. I kept the skull and several bones and showed them to him at a later date, and he gave it as his opinion that they were those of a young, pregnant woman. The cause of death, of course, was unknown, and he could not make even a guess at the date. He was inclined to think that the body could not have been underground less than ten years, although it might have been fifty, or it might have been five, so no satisfaction could be got out of it. The farmer's reason for wishing to know whether the doctor could tell how long it had been buried was to see whether the time corresponded with the earliest reports he had had from men working down there. His theory was that the woman had been done to death at the place behind the tent and buried, of course, where the bones were found.

The farm has been in his and his ancestors' possession for many years, and there is no record or tradition of any body, European or native, having been buried there. Also, I may say, the place had a bad name amongst the natives; there is no kraal within a considerable distance, and no native would dream of passing the place after dark. It was "Tagati."—*Light*, May 15th, 1909.

Radium Divining.

ON Friday morning, May 14th, some unique tests with diviners were carried out at Caxton Hall, Westminster, S.W. The proceedings were in charge of Mr. Beeby Thompson, F.C.S., F.G.S., and among those present

were Prof. Barrett, F.R.S., Mr. W. J. Dibdin, F.I.C., F.C.S., Mr. R. F. Duke, F.G.S., Mr. M. A. Ockenden, A.M.I.M.E., Mr. R. W. A. Brewer, C.E., Messrs. H. May, Arthur E. Best, etc.

Mr. Beeby Thompson stated that, as consulting geologist, he had had much to do with divining, which he had found a decided failure, though, in view of the evidence accumulated by Prof. Barrett and others, it could not be denied that there was something in it, and it was proposed to continue a test already made with one of the diviners present (Mr. Ede) to see if diviners were affected by radium.

It should be stated that the three diviners—Mr. J. Foot-Young, late of Llanelly; Mr. Ede, of Arundel; and Mr. H. Farndell, of Littlehampton—were not present when the method of making the test was discussed, nor did any of them know for what purpose they were present. They only knew it was to test their powers of divining in some way or the other, but they did not know, and they were not told until the conclusion of the proceedings, what they had been expected to find, save in the case of the gold test, to be referred to presently.

Fifteen milligrammes of radium were kindly lent for the purpose by Mr. F. Harrison Glew, of Clapham, who was also present.

Mr. Ede first came into the room, and his twig was set in motion when he reached the left-hand side of the platform. Ten milligrammes of radium were, however, hidden under the *right* end of the platform. When he came into the room the second time, he felt nothing unusual on getting to the platform, but there had been no alteration made in the location of the radium. He experienced a strong attraction towards a hat on the right side of the fireplace, where, as a matter of fact, the smaller quantity of radium (five milligrammes) was hidden. This happened when he came into the room on both the first and second occasions.

Mr. Foot-Young experienced no unusual sensation at the fireplace, but was attracted towards the same end of the platform as was Mr. Ede, and also to the radiator on the right of the platform, about four or five feet away from the hiding-place. He said there was a sensation between his finger-tips like holding the ends of an induction coil.

Mr. Thompson pointed out, after the diviners had left the room, that he had found that time must be given for the radiations to permeate, and, in the meanwhile, it was decided to test the diviners' powers in finding gold. It was decided to hide a sovereign in some part of the room by one of the number present, the remainder looking out of the window during the operation, and the one hiding to leave the room immediately he had accomplished his task, so as to eliminate as far as possible all suggestion. The first two

sovereigns were hidden by Prof. Barrett, and quickly found by Mr. Foot-Young. The third was hidden by Mr. Best, first under a bag on a chair, but afterwards removed elsewhere. Mr. Foot-Young stopped at the bag and declared that to be the spot. Mr. Best was called in and explained how he had changed the position of the sovereign. The fourth sovereign was hidden by Mr. May under a newspaper and found by Mr. Young. Meanwhile, Mr. Farndell had been called in, but strangely enough his twigs broke regularly at the bag just mentioned. He broke six twigs in all, and seemed unable to pass the chair without this accident occurring, though nothing had been hidden there with the exception of the sovereign. The fifth sovereign was hidden under the leg of a chair by Mr. Duke, and the spot quickly located by Mr. Ede.

Another point should be mentioned : All three diviners spoke of the strong sensations of attraction which they experienced near a certain coat which was upon one of the chairs. Eventually, it was found that the coat belonged to Mr. Glew, and the radium had been carried in the pocket that was uppermost. The radium had, however, been conveyed in leaden tubes, so that it is difficult to see what effect it could have had on the coat.

The experiments with the radium were then resumed, and all three diviners were now attracted to the right side of the platform, exactly over the spot where the radium was hidden. The first time Mr. Farndell went over the platform, his twig turned up suddenly right over the radium, and also at the old place on the left of the platform. On walking over the platform the second time, he remained stationary over the real place. Mr. Ede was also attracted to the left side of the platform as well as to the right.

A few further tests were made to note the effect of radium on individuals by moving the radium laterally close to the spinal cord without touching the individual, who held the twig in his hands all the time. In the case of Mr. Foot-Young, the twig moved when the radium was passed up and down enclosed in its leaden case, but had no effect when it was uncovered. Mr. Ede experienced violent contraction of the muscles when the box was uncovered and again when the box was covered, so that it looks as though unconscious suggestion had played the principal part in this experiment. Mr. Farndell begged to be excused from this test.

45,000 francs for Supernormal Photography.

THE subscription in support of the development of supernormal photography has reached the sum of 45,000 francs, 4,162 francs having been received from England, the United States, and Australia.

In a note published recently, M. Eminanuel Vauchez complained of the

"restricted success" of the subscription, and regretted that specialists and men of means all over the world are not more eager to forward discoveries which seem to offer consequences of such incalculable value for the future of humanity.

But it is precisely because we are so well aware of the culpable indifference manifested towards the researches in question that the result obtained by M. Vauchez appears already so considerable, and proves the esteem in which this idealist agitator is held.

L'Institut de Psychologie Générale.

M. SERGE YOURIEVITCH, Secretary of the Institut de Psychologie Générale, was elected Vice-President at the last general meeting of the members, which, however, will not prevent him from actively engaging in the work of this institution, of which he was the founder and moving spirit. The choice of his successor to the general secretaryship will be made at a later date.

The Congress of Psychology at Geneva.

THE Sixth International Congress of Psychology will be held at Geneva from August 3rd to 7th. Professor Th. Flournoy is President of the Executive Committee, and M. Ed. Claparède General Secretary; both being well-known writers on metapsychical subjects. Among the reports which will be presented one will be on the "Sub-conscious Mind," by Professors Max Dessoir (Berlin), Pierre Janet (Paris), and Morton Prince (Boston).



The Perfect Way. By Dr. Anna Bonus Kingsford, M.D. (Paris), and Edward Maitland, B.A. (Cantab). (John M. Watkins, 21, Cecil Court, Charing Cross Road, London).

MR. WATKINS has conferred a benefit on all students of the divine in bringing out a new edition of *The Perfect Way*, a book which is unique in the world of religion, and has won recognition in all countries, irrespective of creed or race.

Anna Kingsford's life, as related by Edward Maitland, reveals her to have been a seeress of unsurpassed lucidity, a prophetess who drew from the purest fountains of inspiration; and this book, built up on her visions and discourses, is truly a monument of inspired genius.

Its very harmony and logic tend to fill the troubled and inquiring mind with that quiet and peace which, descending to the innermost depths of the soul, make us proof against the surprises of life in giving us a fuller understanding of the meaning of things, and a clearer sense of the blessedness of sorrow and suffering.

"For to know perfectly is to love perfectly, and so to love is to be partaker in the pain of the beloved.

"And inasmuch as a man loves and succours and saves even the least of God's creatures, he ministers unto the Lord.

"O Passion of Love, that givest thyself freely, even unto death!

"For no man can do Love's perfect work unless love thrust him through and through.

"But, if he love perfectly, he shall be able to redeem; for strong love is a net what shall draw all souls to him.

"Because unto Love is given all power, both in heaven and in earth;

"Seeing that the will of him who loves perfectly is one with the will of God:

"And unto God and Love all things are possible."

—"The Perfect Way," p. 115.

Progressive Creation: A Reconciliation of Religion with Science. By Rev. Holden E. Sampson. In two demy 8vo. vols. 500pp. each. Price 21s. net. (Published by Rebman Ltd., 129, Shaftesbury Avenue, London, W.C.)

WE received this book as we were going to press. It is not possible to give a suitable review of 1,000 pages after a preliminary glance through a still, for the greater part, uncut work; we therefore postpone reviewing it to our next issue. In the meantime, the enumeration of the various chapters will perhaps give some enlightenment to our readers at all events as to the general tenure of the work, and lead them to purchase it for themselves, for it appears to be a most remarkable book. It claims to be an advance of the Evolutionary Theory, guiding the scientific mind through the portals of psychology (as Darwin himself prophesied would be the case) into the wider regions of the so-called "supernatural" and spiritual planes, breaking down the barriers which have been reared up between the spiritual and the material, and between science and religion.

Book 1, Chapter I.: Reincarnation and Evolution; II.: Degeneration and Abnormalism; III.: Evolution and the Law of Permanence and Continuity of Being; IV. (Part 1): The Law of the Sexual Segregation of the Species; IV. (Part 2): Regeneration and Religion, Superstition and Individualism, Citizenship and Civilisation; V.: The Law of Devolution and Progressive Redemption; VI.: Denudation; VII.: Devolution and Ethnology; VIII.: Species Fusion and Confusion, Deterioration and Metamorphosis; IX.: Government and Catholicity; X.: Devolution and Pre-Destiny.

Book 2, Chapter I.: Dual Heredity; II.: Being and Existence; III.: Sidereal and Astral States, The Heliocentricity of the Universe; IV.: The Wider Concentricity of the Heavens in Evolution; V.: The Evidential Value of Modern Spiritualism to Supernaturalism; VI.: Occultism and Apostolicism; VII.: The Phenomena of Death and its Conquest; VIII.: Jesus Christ and the Dynamic Chain of Life; IX.: The Catholic Idea of Death, Purgatory and the Church; X.: Incarnate Demons, Incarnate Astrals; XI. and XII.: Incarnate Purgatorial Beings.

Life after Death. By **Rev. S. C. Gayford, M.A.** (London: Masters and Co. 2s. 6d. net.)

THE author discards the speculative historical ideas of a future existence, as well as the investigations of spiritists and psychical researchers, mainly by reason of their inconclusiveness and questionable morality. He bases his arguments upon the Bible. He is an advocate of the system of praying for the dead, and well states the arguments for and against conditional immortality. It concisely states the historical growth of many doctrines and practices in the Christian Church.

One Immortality. By **H. Feilding Hall.** (Macmillan and Co. Ltd., St. Martin's Street, London.)

WHEN we were young we "skipped" scenery and "reflections" in our novel, impatient to take up the thread of the story, looking upon aught else as tangles in the skein. In reading *One Immortality*, we discover in our mind something like a regret that there is any "story" at all, not that it is exactly superfluous or uninteresting; but many tell a far better story, and yet how few write with the charm which illumines these pages.

Mr. Fielding Hall has the poetic vision, which is to say that he sees life in a perspective of imagination, not as a series of happenings, or a text-book of facts. Always he treats of "the things that matter."

The theme is stated in the first few lines of the book: "There are three loves that make and keep the world—the love that binds man and woman into one flesh and soul, the love that draws families into nations, the love that holds the world to God."

"Each love is justified in its own immortality."

Not only is the perspective poetic, but the proportions are artistic, and the life in the thought atmosphere is felt in rhythm, as a musician feels a symphony.

The book is strewn with many a happy sketch in words such as "we (English) live upon an island, and we make islands of ourselves. We make a cold and misty sea about our own personalities."

But it is in the presentation of the Eastern way of regarding life that is perhaps the chief attraction to those of us who feel the Call of the East in a far distant hemisphere. And this sympathetic understanding pervades the entire book, so much so, that brief quotations are difficult and almost invidious, yet necessary in any attempt to illustrate our meaning. "You know," he said, "the Eastern way of looking at the world. They see it whole. We

all belong to one great life, as all waterdrops are of the sea. Therefore everyone and all life is part of our wider self."

"It is hard to understand," she answered.

"It is not so hard," he answered, "if you understand that everyone has within him a little of everyone else."

The author elaborates this, with a sympathetic insight compounded, surely, of "wisdom and understanding, of knowledge and true godliness"; a quality universal as the sky, wide as the sea, yet all too rare among the sons of men.

The necessity for personal exertion, the impossibility of one man hewing out the way for another, is insisted upon everywhere. The author does not take that fatalistic and non-comprehensive view of Eastern teaching too often adopted by Western "little critics." He sees that all ancient sages agree that man can and does, with every thought, desire and action, modify his environment himself, and that we must delve deeply into our own hearts to find "the Secret," which is never exactly the same for any two mortals. "The world is various, and to everyone there is a truth never quite the same as that of others. There is a ray of light that, added to the others, makes the white light of God. It is in your own heart, in the heart of every man and every woman. There only will you find it. How to find it and keep it is the secret of all happiness."

We cannot imagine a book more calculated to lead thoughtful minds to the study of Eastern thought, instead of ignorant abuse, than this theme with variations by Mr. Fielding Hall.

A book to buy, to linger over, to love, and, if we are philanthropically-inclined, to lend!

L. N. DUDDINGTON.

Sermons on Modern Spiritualism. By Rev. A. V. Miller, O.S.C. (London: Kegan Paul, Trench, Trübner and Co. Ltd. 2s. 6d. net.)

A VOLUME of the sermons delivered during last year which at that time were the subject of considerable notice in the English press. The author admits the reality of the phenomena, has due regard to the fraud and trickery practised, admits the many analogous phenomena in the Christian Scriptures, acknowledges that Spiritualism is a religion, but contends that it is in open warfare against the Christian (that is, Roman) Church, and that it has for its object to destroy Christianity root and branch. The author, unlike many who essay to attack Spiritualism, has a thorough knowledge of his subject, and is careful to give his authority for all his quotations and statements regarding Spiritualism (or more correctly speaking "Spiritism"), with few exceptions,

but not for his contention in favour of historical Christianity from the dogmatic standpoint. He finds an affinity between Spiritualism and the Modernist movement in Roman Catholicism. The case for the Roman Catholic Church could not have been placed in better hands, though perhaps no one outside that Church will agree with what Father Miller has written.

The Aquarian Gospel of Jesus the Christ. (London : Higher Thought Centre. 8s. 6d.)

THIS curious work is said to be a revelation now for the first time given to the world and transcribed from the Akashic or Etheric Records by one "Levi"; and the Hon. H. A. Coffeen, who writes the introduction, states that he believes the work could not have been produced "without help from the higher planes of vision." The Aquarian age is said to be the age or dispensation of the world upon which we are now entering, and this new gospel is ordained to supply the higher needs of the people of the new time, and held to be a supplementary and fuller record of the life of Jesus to that contained in the four gospels.

Whence, Why and Whither. By Frederick Francis Cook. (New York : United Charities Building. 3s.)

THIS work is divided into two parts—The Logic of Existence and Persistence, and the Rationale of Spiritualism. In the latter section the author claims that Spiritualism in its present state is a structure of phenomenalism, and that, though it may operate to disintegrate some unvital parts of the Christian body, it will never supplant it as an organism. The author, however, believes that from one point of view Spiritualism is a rational adjustment to a dissonant *mélange* of earth conditions, and this is the view which he seeks to expound in this work.

The History of a Strange Case. By David P. Abbott. (London : Kegan Paul, Trench, Trübner & Co. 6d.)

IN the author's own words, this is "an account of the most remarkable case that it has ever been my fortune to investigate," and Dr. Paul Carus admits that it is assuredly most noteworthy.

Mind the Builder. By A. A. Lindsay, M.D. Portland, Oregon. (Lindsay Publishing Company.)

A RATIONAL and explicit booklet on the training of the mind, the acquirement of the power of concentration, and the art of character building or soul culture.