

## SHORTER CONTRIBUTIONS AND DISCUSSIONS.

### A LECTURE EXPERIMENT IN HALLUCINATIONS.

An experiment to illustrate a popular lecture must be striking, quick and sure to work. As it is not always easy to tell beforehand whether an experiment will answer these requirements, the following scheme for the production of a hallucination of smell may be worth recording. I had prepared a bottle filled with distilled water carefully wrapped in cotton and packed in a box. After some other experiments I stated that I wished to see how rapidly an odor would be diffused through the air, and requested that as soon as anyone perceived the odor he should raise his hand. I then unpacked the bottle in the front of the hall, poured the water over the cotton, holding my head away during the operation and started a stop-watch. While awaiting results I explained that I was quite sure that no one in the audience had ever smelled the chemical compound which I had poured out, and expressed the hope that, while they might find the odor strong and peculiar, it would not be too disagreeable to anyone. In fifteen seconds most of those in the front row had raised their hands, and in forty seconds the 'odor' had spread to the back of the hall, keeping a pretty regular 'wave front' as it passed on. About three-fourths of the audience claimed to perceive the smell, the obstinate minority including more men than the average of the whole. More would probably have succumbed to the suggestion, but at the end of a minute I was obliged to stop the experiment, for some on the front seats were being unpleasantly affected and were about to leave the room. No one in the audience seemed offended when it was explained that the real object of the experiment was the production of a hallucination.

Hallucinations of temperature or pain are easily induced by suggestion in susceptible individuals by the use of magnets, though the experiment is not suitable for lecture purposes. It is, of course, necessary that the subject should have hazy ideas about magnetism, but it is unfortunately only too easy to find such persons. The 'magnet' need not be magnetized, but should have plainly marked poles and the suggestion be conveyed by suitable 'patter', to use a conjurer's phrase. Sensations of heat may be produced by the north pole of the magnet,

and cold by the south, or one pole may be made to give a tingling or smarting pain in the right hand and side of the body, and the south pole on the left, or any other such scheme not too complicated. The illustrated magazine articles of the effects produced on hypnotized subjects by Luys, with magnets and sealed tubes of chemicals, are useful to reinforce the suggestions. Of course, the deception should be thoroughly explained after the experiment, not only because otherwise the subject sometimes complains of pain in the hand worked upon, but also in order that the experiment may serve as a lesson to the subject no less than to the spectators.

Slight hallucinations of sound are easily induced; but I have never succeeded in getting unhypnotized subjects to see red and blue flames on the poles of a magnet, or in obtaining any similar hallucinations of sight. Simple experiments in suggestion on persons in a normal state are generally better for demonstration than the more striking results obtained in hypnosis.

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#### PROFESSOR HYSLOP ON MYSTICISM.

In the last number of *THE PSYCHOLOGICAL REVIEW* Professor Hyslop criticises a paper on Psychology and Mysticism which I published in the *Atlantic Monthly*, and have since reprinted as the last essay of my recently published book 'Psychology and Life.' My paper was for him 'one of the most amusing documents that he has ever had the pleasure of reading.' I have not the slightest desire to disturb this happy mood of amusement by a serious defence against his attacks. A scientific defence or discussion must have as its aim that the opponent shall understand and agree with me; but I feel myself so absolutely free from this ambitious aim that a discussion is really superfluous. In regard to only one passage of my paper does he claim that he does understand what I wish to say and would agree with me; it is my reference to communication. "As to what Professor Muensterberg may intend by this description of the communication of ideas I can well imagine. But I can do it only by having some knowledge of the process myself, and not from any statement that he makes." And then he goes on to interpret my meaning in a way which is, in every respect, the exact opposite of my thought, and which would deprive my arguments of all meaning. If he had not found anything in the paper which he believed himself to understand, I