

SCIENCE

FRIDAY, NOVEMBER 11, 1887.

THE ANNOUNCEMENT which has been going the rounds of the press, of the perfecting by Mr. Edison of his phonograph, certainly seems startling, and one which might be denied without arousing surprise; but it now appears as if the world were soon to be treated to another great fruit of inventive genius, and that one of the great R's may soon be displaced. Mr. Edison, in a letter to the editor of *The Engineering and Mining Journal*, has expressed in his frank and usual hearty way such utter confidence in the successful performance of all, or even more than all, that is hoped for, that we look forward to the receipt of our first phonograph with anxious curiosity. Those who remember the phonograph of ten years ago will recall that it was next to impossible to reproduce tones that were absolutely distinct; that is, sufficiently distinct to be recognized without difficulty or mistake by some person who had not heard the original utterances. To-day these difficulties have been overcome; and the sender of a message, after setting the machine in motion, need only talk into the machine with his natural and usual voice, then withdraw the phonogram, which corresponds to the old sheet of tinfoil, which could not be withdrawn, and mail to his friends in this way his verbatim utterances. These phonograms will cost but little more than an ordinary sheet of letter-paper, and will be made in various sizes to accommodate messages varying in length from eight hundred to four thousand words. On the receipt of such a phonogram, it can readily be placed in the apparatus of the receiving instrument, and it will at once speak out with distinctness and clearness equal to that of the human voice at the same rate of speed at which it was originally dictated. These phonograms will not be obliterated by the first use, but may be kept on file, ready for reproduction whenever necessary.

THE OCTOBER NUMBER of the *Journal of the Society for Psychical Research* contains this statement; "It will be remembered that the earliest experiments in thought-transference described in the society's Proceedings were made with some sisters of the name of Creery; and that, though stress was never laid on any trials where a chance of collusion was afforded by one or more of the sisters sharing in the 'agency,' nevertheless some results obtained under such conditions were included in the records. In a series of experiments recently made at Cambridge, two of the sisters, acting as 'agent' and 'percipient,' were detected in the use of a code of signals; and a third has confessed to a certain amount of signalling in the earlier series to which I have referred. This fact throws discredit on the results of all former trials conducted under similar conditions. How far the proved willingness to deceive can be held to affect the experiments on which we relied, where collusion was excluded, must of course depend on the degree of stringency of the precautions taken against trickery of other sorts, as to which every reader will form his own opinion." The prompt publication of this damaging discovery, and it is a very damaging one, is only another evidence of the thorough candor and fair-mindedness with which Messrs. Myers and Gurney have conducted the experiments in behalf of the society. These Creery girls, daughters of a Devonshire clergyman, and from ten to seventeen years of age when the experiments were originally tried, were among the first in whom the so-called 'telepathy' was discovered. The record of the experiments with these girls was one of the most interesting chapters in the society's early history. It is extremely mortifying,

therefore, to find them tainted with fraud; and the exclamations, "I told you so!" will be numerous. Yet it does not follow that all the experiments were worthless. A searching revision of them must, however, be made, and we may rest assured that the able and untiring executive officers of the society will make it.

AN INVESTIGATION OF DREAMS.

THE American Society for Psychical Research is collecting accounts of cases where one person has had some remarkable experience, such as an exceptionally vivid and disturbing dream, or a strong waking impression amounting to a distinct hallucination, concerning another person at a distance, who was, at the time, passing through some crisis, such as death, or illness, or some other calamity. It appears that coincidences of this sort have occurred, but it may be alleged that they are due to mere *chance*. For the determination of this, it is desirable to ascertain the proportion between (a) the number of persons in the community who have not had any such experiences at all; (b) the number of persons who have had such experiences coinciding with real events; (c) the number of persons who have had experiences which, though similar to the foregoing in other respects, did *not* coincide with real events.

The society has therefore issued a circular requesting every one who receives it in the course of the next six months to repeat the questions given below, *verbatim*, to as many trustworthy persons as possible, from whom he does not know which answer to expect, and who have not already been interrogated by some one else, and communicate the results. The questions are so framed as to require no answer but 'yes' or 'no.' Special attention is drawn to the fact that the object of the inquiry would be defeated if replies were received only from persons who have had remarkable experiences of the kind referred to (whether coincident with real events or not); and there should be no selection whatever of persons who have had such experiences. In case of negative answers only, it will be sufficient if the collector will send (not for publication) his own name and address, with the replies which he has received.

If there are any affirmative answers, the society desire to receive also (not for publication) the name and address of any person who answers 'yes.' If the experience has been coincident with a real event, they specially request the percipient to send an account of it.

All communications should be sent to the secretary, Richard Hodgson, 5 Boylston Place, Boston, Mass., from whom additional copies of the circular may be obtained. It is of the utmost importance to obtain answers from a very large number of persons, and it is hoped that many thousands of replies will be received. The questions are as follows:—

I. Have you, within the past year, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least as long as an hour after you rose in the morning?

II. Have you, within the past three years but not within the past year, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least as long as an hour after you rose in the morning?

III. Have you, within the past twelve years but not within the past three years, when in good health, had a dream of the death of some person known to you (about whom you were not anxious at the time), which dream you marked as an exceptionally vivid one, and of which the distressing impression lasted for at least as long as an hour after you rose in the morning?

IV. Have you, at any time during your life but not within the past twelve years, when in good health, had a dream of the death of