

attention, will produce sufficient action to accomplish the expected result.

In order to demonstrate the true character of these phenomena, we ourselves performed some experiments, the particulars of which are subjoined.

June 3, 1853.—*First Experiment*.—Four medical gentlemen sat round a small table, having a stem with three legs, but without castors. Each person placed his fingers lightly on the table, the little fingers of one person touching the little fingers of the person next him, and the thumbs separated by a considerable interval. In this experiment, it was determined that no expectant idea should be entertained, that the attention should not be fixed upon the table, and that ordinary conversation should be freely carried on. After sitting for twenty minutes, no effect whatever was produced. The experiment was commenced at 25 minutes past 7, and was continued until 45 minutes past 7.

*2nd Experiment*.—The same gentlemen placed themselves round the table, in exactly the same position as in the last experiment. In this experiment, however, it was determined, that perfect silence should be maintained, that the thoughts should be concentrated upon some result, whatever it might be, but that no expectant idea should be entertained as to the direction which the table should take. The experiment was commenced at 12 minutes to 8; at 6 minutes to 8 the table began to move from right to left. After it had moved for some little time, the experiment was abandoned, as it was not thought necessary to follow its circulations. Dr. C—— felt that his left arm was in a state of muscular tension before the table commenced moving. Dr. J—— felt pressure on his right little finger from Dr. C——'s left little finger, the pressure appearing to increase up to the time when the table began to move. Mr. N—— felt a tingling in the skin, as, also, a somewhat painful sense of muscular tension before the table began to move. After it began to move, his fingers and hands unintentionally, but instinctively, accommodated themselves to the movements of the table, the involuntary muscular actions being directed in the axis of movement of the table. Dr. S—— was not conscious of any movement whatever of his own muscles, or of those of the gentlemen to his right and left, and his mind was wholly indifferent as to the direction which the table would take.

*3rd Experiment*.—It was now determined that perfect silence should be maintained, that the thoughts should be concentrated upon the movement of the table, and that an expectant idea should be entertained of the table moving from left to right. The experiment was performed by the same gentlemen as before, and in the same positions. It was commenced at 7 minutes past 8, and at 15 minutes past 8 the table began to turn from left to right, but in two minutes it suddenly reversed its direction, and turned from right to left. This latter phenomenon was owing to Mr. N——, (without mentioning the circumstance to the rest,) exerting a distinct voluntary force in the opposite direction to that in which the table was moving.

*4th Experiment*.—The same gentlemen sat down in the same positions as before; but on this occasion it was determined that Dr. C—— and Mr. N—— should anticipate a movement of the table from right to left, but that Dr. J—— and Dr. S—— should entertain the contrary idea. The experiment was commenced at 25 minutes past 8, and it was continued till 20 minutes to 9, but no effect whatever was produced.

June 4th, 1853.—*5th Experiment*.—This experiment was made upon a large, round, drawing-room table, moving upon castors. Eight ladies stood round it, with their fingers resting upon the table, and their little fingers in contact with the little fingers of those standing to their right and left. It was deter-

mined to will that the table should move from left to right. In one minute and a half it moved from left to right.

*6th Experiment*.—A lady placed both her hands flat on the table, which in this case was a small and light one; and it moved in two minutes from left to right.

*7th Experiment*.—Four gentlemen and four ladies placed themselves round the large drawing-room table mentioned in the 5th experiment. They assumed successively the standing, the kneeling, and the sitting postures; but, after waiting for twenty-five minutes, no result whatever was produced. The four gentlemen then withdrew, and four ladies then took their places, thus placing eight ladies round the table. It moved in two minutes.

These experiments we consider to be so conclusive, that comment is hardly necessary. The conditions of the bodies to be moved, and of the human forces by which the movement is to be accomplished, are precisely those which, *a priori*, we should have anticipated. A small table is moved more readily than a large one, and it is moved more easily upon an oil-cloth than upon a carpet; it is moved more easily by females than by males, because, in the former, the muscles are more mobile, *the will less strong*, the emotions more acute, the ideas more vivid. It is said that young persons succeed better than persons advanced in years,—a fact which may be readily explained upon the same principles.

We would especially call attention to the few words in the last sentence but one, which state our opinion, that it is *weakness* and not *strength* of will which readiness to assume these involuntary actions testifies. The more powerful the higher faculties of the mind, the less quickly do the muscles act on the impulsion of the ideas only. In men, where the intellect is naturally stronger, and in adults, where it is strengthened by use, the manifestations of ideomotor acts are repressed. And we would call attention to this fact for a practical purpose, viz., with the object of cautioning the public, through our readers, against trying these sort of experiments too often. It is very certain, that each trial renders the "table mover" more ready at exhibiting the required phenomena, more under the dominion of ideas, and less under the dominion of rational will. Each trial then must weaken the intellectual powers, must make the experimenter less a man, and more an instinct governed animal. The peculiar state of mind induced, is not, perhaps, either hysteria or insanity; but it is akin to both.

The experiment, now so often repeated, of suspending a ring by a thread coiled around the finger, placing the ring within a tumbler, and hearing it strike the glass as many times as correspond to the hour, is a phenomenon analogous to table moving, and very interesting in a physiological point of view. The person who performs the experiment exercises no *voluntary* action upon the movements of the ring; but he knows the hour, and, this acting unconsciously upon the organization, a series of involuntary muscular vibrations are produced, which result in striking the glass the required number of times.

#### The Progress of Geology.\*

Geology is in the ascendant. It counts in its ranks some of the most energetic and able men of science of the day; it claims for its service the only Scientific Society that can bring together a considerable congregation of attentive and intelligent listeners; it occupies and fills, at the annual gathering of the British Association, the largest meeting hall of all the sections, and wins admiration in the Provinces by a yearly sitting of six almost consecutive days, distinguished for the liveliness of the debate and the interest of the subjects discussed; it enforces its importance

\* *Westminster Review*.