

## WHAT IS ELECTRICITY?

**E**LECTRICITY is the most stupendous force in nature, apparently active throughout the universe, the cause of the phenomena described as attraction, gravitation, and magnetism, and most probably of heat and light. It is incessantly active, and maintains, it would seem, the physical life of the world. Science can only appreciate some of its results, and apply it on a very limited scale to practical purposes; but knowledge of its adaptability is growing every day, and what a few years since was little more than material for brilliant laboratory experiment, or the production of scientific toys, is now becoming a gigantic motive power available for the service of practical science and the progress of civilization.

Already it provides a means of instantaneous communication between portions of the earth's surface, most remote from each other. It is gradually superseding all other methods of artificial illumination, and it promises to make steam obsolete as a motive power. What other aid it may give we know not, and we scarcely dare conjecture, although it would seem that the most vivid imagination must fail to apprehend its possibilities. It is in the earth beneath us, known as terrestrial magnetism; it is in the atmosphere around us, and its energy is seen in the lightning flashes which mark the discharge of force between clouds, each of which is a storage of force; and in the vast—indeed, inconceivable—cosmos, electricity maintains the relations of suns and systems moving with enormous velocity and unvarying regularity through space. It is a force which, so far as human intellect can appreciate it, knows no cessation, diminution, or deterioration. It can be summoned, but not created by any skill of man—made apparent in the results of friction or chemical action, but made apparent only, not produced. A spark the eighth of an inch long, produced by contact with the small electric machine in the lecture-room, is precisely similar in character to the terrible flash which splits a