ELIHU THOMSON¹
1853–1937

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For one destined to apply his genius largely toward harnessing electricity for the work and comfort of man, the decade beginning with 1850 was a timely period in which to be born. The preceding half century had witnessed the fundamental discoveries which underlie the utilization of electricity, and imaginative minds had begun to direct these discoveries into the broad channels of practical and commercial employment.

In the development of the electrical art this first half of the nineteenth century was a remarkable fifty years, and because it provided the foundation for the practical achievements which came in the second half, a review of it helps to give perspective to this memoir on Elihu Thomson.

The century opened auspiciously with Volta's discovery of the voltaic cell, and with the demonstration by Nicholson and Carlisle of electrolysis. In 1820 Oersted announced his discovery that an electric current has the power to deflect a magnetic needle. In this same year Ampere brilliantly elucidated Oersted's discovery by giving mathematical expression to the forces produced by electric currents. Six years later Ohm announced the formulation of his law that current is proportional to the electromotive force, and

¹ Condensed from a memoir presented to the National Academy of Sciences.