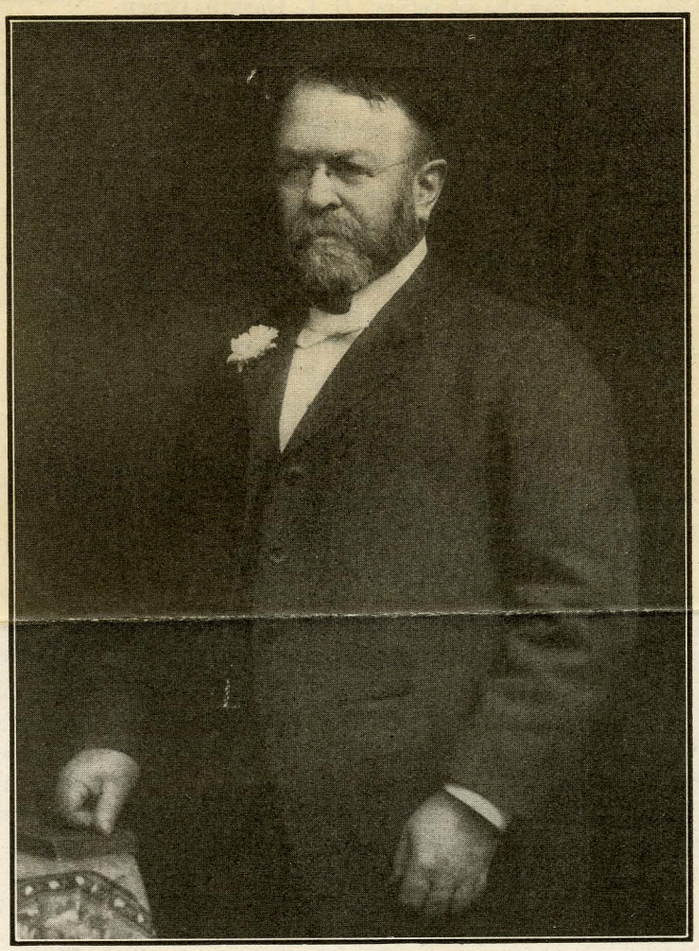
Edwin James Houston.

From the earliest days of the practical application of discoveries relating to electrical phenomena, the name of Houston has borne great prominence. Associated with Elihu Thomson in the invention and development of the Thomson-Houston system of arc lighting, Mr. Houston has stamped his name and fame indelibly upon all of the records having to do with progress in our field.

Edwin James Houston was born at Alexandria, Va., July 9, 1844, the son of John Mason and Mary (Larmour) Houston. He received the degree of Bachelor of Arts from the Central High School of Philadelphia in 1864, later receiving from the same institution the Master's degree. He is an honorary Ph. D. of Princeton University. He is emeritus professor of physical geography and natural philosophy in the Central High School, emeritus professor of physics of Franklin Institute, professor of physics of the Medico-Chirurgical College, and also engaged as an electrical expert and consulting engineer.



EDWIN J. HOUSTON,
Professor, Inventor, Author.

Dr. Houston was a member of the United States Electrical Commission and chief electrician of the International Electrical Exhibition in Philadelphia in 1884. He is a member of the American Institute of Mining Engineers, the American Philosophical Society and many other scientific and engineering organizations, and was president for two terms of the American Institute of Electrical Engineers.

Dr. Houston has contributed very liberally to technical literature and his bent in this direction is remarkable. His work as an author covers a wide range of topics and the appended list indicates only in part the many contributions from this versatile mind: Outlines of Natural Philosophy; Easy Lessons in Natural Philosophy; The Electric Transmission of Intelligence; The Measurement of Electric Current; Electricity and Magnetism; Electricity One Hundred Years Ago and Today; Electricity Made Easy; Electro-Dynamic Machinery; Recent Types of Dynamo-Electric Machinery; Elements of Physical Geography, 1878, 1904; Intermediate Lessons in Natural Philosophy, 1881; Primers of Electricity, 1884; International Electric Exhibition of 1884; Short Course in Chemistry, 1884; Electric Furnaces, 1888; Primers of Forestry, 1891; Outlines of Forestry, 1893; Dictionary of Electrical Words Terms and Phrases, 1894; Electric Engineering Leaflets, 1895; Elements of Natural Philosophy, 1897; Algebra Made Easy (with Arthur E. Kennelly), 1897; Alternating Currents, 1897, 1906; Arc Lighting, 1897, 1906; Electric Heating, 1897, 1906; Electric Motors, 1897, 1906; Electric Railways, 1897, 1906; Electro-Therapeutics, 1897, 1906; Incandescent Lighting, 1897, 1906; Magnetism, 1897, 1906; Telegraphy, 1897, 1906; Telephony, 1897, 1906; Elements of Chemistry, 1898; Pocket Electrical Dictionary, 1898; Interpretation of Mathematical Formulæ, 1898; Electricity in Every-Day Life, 1904; Franklin as a Man of Science, 1906; The Boy Geologist, 1907; The Boy Electrician, 1907; The Wonder Book of Volcanoes and Earthquakes, 1907; Wonder Book of the Atmosphere, 1907; The Search for the North Pole, 1907; The Discovery of the North Pole, 1907; Cast Away at the North Pole, 1907; In Captivity in the Pacific, 1907; Wonder Book of Light, 1908; Wonder Book of Magnetism, 1908; Five Months on a Derelict, 1908; Wrecked on a Coral Island, 1908; At School in the Cannibal Islands, 1909; A Chip of the Old Block, 1910. Other works are in preparation at the present time.

The Electricity of Rain.

Extensive observations made by G. C. Simpson in India lead to the following conclusions: (1) The electricity brought down by rain is sometimes positive and sometimes negative. (2) The total quantity of positive electricity brought down is 3.2 times the total quantity of negative. (3) The period during which positively charged rain fell was 2.5 times the period during which negatively charged rain fell. (4) Treating charged rain as equivalent to a vertical current of electricity, the current densities were generally smaller than 4×10^{-15} amperes per square centimeter, but on a few occasions greater current densities, both positive and negative, were recorded. (5) During periods of rainfall the potential gradient was more often negative than positive, but there were no clear indications of a relationship between sign of charge on the rain and the sign of the potential gradient. (6) Negative currents occurred less frequently than positive currents. (7) The charge carried by the rain was generally less than six C. G. S. electrostatic units per cubic centimeter of water, but larger charges were occasionally recorded. (8) The data do not suggest that negative electricity occurs more frequently during any particular period of a storm than during any other. (9) With rainfall of greater intensity than 0.3 millimeter per minute the positive charge carried was independent of the rate of fall.