

**CLINICAL ELECTRO-THERAPEUTICS,
MEDICAL AND SURGICAL. A
HAND-BOOK FOR PHYSICIANS IN
THE TREATMENT OF NERVOUS AND
OTHER DISEASES**

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Clinical Electro-Therapeutics, Medical and Surgical. A Hand-Book for Physicians in the Treatment of Nervous and Other Diseases by Allan McLane Hamilton

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ALLAN MCLANE HAMILTON

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HAND-BOOK FOR PHYSICIANS IN
THE TREATMENT OF NERVOUS AND
OTHER DISEASES**

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1873

TO

Dr. WILLIAM A. HAMMOND,

PHYSICIAN-IN-CHIEF OF THE NEW YORK STATE HOSPITAL FOR DISEASES
OF THE NERVOUS SYSTEM, ETC., ETC.

THIS WORK

IS DEDICATED AS A PROOF OF THE AUTHOR'S GRATITUDE FOR THE
MANY KINDNESSES OF THE PAST.

P R E F A C E.

THE need of a simple guide for the general practitioner has prompted the production of the following pages. I have endeavored to make them as practical as possible by avoiding as many of the confusing theories, technical terms, and unproved statements, as I was able. In presenting this little book to the profession, I intend to indorse electricity only as a *very* valuable remedy in certain diseases, not as a specific for every human ill, mental and physical. As a therapeutical means in nearly all forms of Nervous disease, Electricity is invaluable.

I have not mentioned several new modes of application, only because I think they have not been sufficiently or generally tested. My book is the compilation of well-tried measures and reported cases.

I do not enter into the detailed description of the various diseases I allude to, as there are many elaborate and concise works upon this subject, that may be consulted by the reader.

I am indebted to Drs. Frankel, Piffard, Murray, Fisher, Rankin, and others, for their kindness in furnishing me with reports of cases and other data.

ALLAN McLANE HAMILTON.

110 EAST THIRTIETH STREET, April 10, 1873.

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ELECTRO-PHYSICS.

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History of Electricity.—Frictional Electricity.—Conductors and Non-conductors.—Static and Current Electricity.—Electro-negative and Electro-positive.—Intensity and Quantity.—Ohm's Law.—Galvanometer.—Batteries, simple and compound.—Voltaic Pile.—Smee's, Grove's, Grenet's, and Bunsen's Batteries.—Hammond's Battery.—Foreign Batteries.—Stöhrer's Batteries.—Galvano-Faradic Company and Curt W. Meyer's Batteries.—Brenner Batteries.—Pulvermacher's Chains.—Garret's Disks, etc.—Rheotome, Rheostat, Current-Selector, etc.

It is unnecessary to follow up the history of electricity; suffice it to say that Thales, many centuries ago, demonstrated the first rudiments of this force, and, since his day, Galvani, Volta, Ampère, Franklin, Faraday, and many others, have groped in the darkness and uncertainty of the subject, and have successively brought new facts to light to astonish the world and advance the knowledge of electric science.

Thales, who lived six centuries before Christ, knew that, when amber was rubbed with silk, it acquired the property of attracting light bodies, but not till several hundred years afterward was it known that other substances possessed a like quality; and these were sulphur, wax, glass, etc. Dr. Gilbert, physician to Queen Elizabeth, was the demonstrator of these facts. In the year 1789 contact electricity was discovered by Galvani, and in the year 1831 induction electricity was given to the world by Faraday.

When a glass rod or stick of sealing-wax is rubbed with a piece of flannel or fur, it will be found to have acquired the power to attract some very light body—for instance, a pith-ball,