## ESSENTIALS OF MODERN ELECTRO-THERAPEUTICS. AN ELEMENTARY TEXT-BOOK ON THE SCIENTIFIC THERAPEUTIC USE OF ELECTRICITY AND RADIANT ENERGY

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Essentials of Modern Electro-Therapeutics. An Elementary Text-Book on the Scientific Therapeutic Use of Electricity and Radiant Energy by Frederick Finch Strong

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### FREDERICK FINCH STRONG

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# Essentials of Modern Electro-Therapeutics

An Elementary Text-Book on the Scientific Therapeutic Use of Electricity and Radiant Energy

Second Edition. Rewritten and Enlarged

by

Frederick Finch Strong, M.D.

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102 Illustrations in the Text



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### PREFACE TO THE FIRST EDITION

Physicians who are familiar with the remarkable results which have been obtained from the scientific therapeutic use of electricity, often express surprise at the ignorance of this subject on the part of the majority of general practitioners. In lecturing on electro-therapeutics at Tufts Medical School the author has frequently been interrogated by his students as to the reason for the intense prejudice often freely expressed by prominent members of the profession against electricity as a therapeutic agent. He has also been asked, "Why do so few medical colleges include courses in electro-therapeutics in their curricula?" and, "Why are so many physicians uninformed regarding the wonderful advances which are being made in our knowledge of electricity and its relation to biology and medicine?" After mature consideration the author has arrived at the following conclusions, or reasons for the professional prejudice against electro-therapeutics:

First.—Many consider electro-therapy as a special school or form of sectarianism and avoid it as irregular practice.

Second.—The extravagant claims of quacks and misguided enthusiasts, and the unscientific character of many of the articles on electro-therapeutics which have appeared in contemporary medical journals, have disgusted many of the more conservative members of the profession.

Third.—The absence of a simple and reliable elementary text-book has been the greatest, and in some cases, the only reason for the exclusion of electro-therapeutics from the curricula of medical schools.

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In the present work the author has endeavored to produce a text-book of the above character, not only for students in medical schools, but for the individual practitioner who wishes to learn the theory and practice of electro-therapeutics.

The advent of the electron theory has given us a new standpoint from which to study our environment, and has proven that all phenomena, whether physical, physiological or chemical, are in reality due to the movement of electrical charges, or electrons. In the chapter on "Physiology from an electrical standpoint," the author has endeavored to present old facts in this new light which has recently illuminated the whole domain of science.

That this little book may help some of his professional brethren to the understanding of many practical problems which he has been obliged to work out in the course of ten years devoted to the study of electro-therapeutics, is the earnest hope and desire of

THE AUTHOR.

Boston, Mass.,

### PREFACE TO THE SECOND EDITION

It is now over ten years since the publication of the first edition of this book. In preparing the present edition the work has been entirely rewritten, corrected and modernized. Much additional matter has been added which it is hoped will make the work a practical handbook for the general practitioner as well as a text-book for medical students.

The author acknowledges his indebtedness to the many authorities consulted, especially the works of Neiswanger, Snow, DeKrafft, Eberhart, Sturridge, Morse and Tousey. He wishes also to tender his thanks to the various firms who have supplied illustrations of apparatus, and especially to Mr. Jacob J. Lowe, who kindly furnished the illustrations and material used in the description of the use of the X-rays in Dentistry.

FREDERICK FINCH STRONG.

BOSTON, MASS.



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