A POPULAR TREATISE ON MEDICAL ELECTRICITY

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649352340

A Popular Treatise on Medical Electricity by Henry Woodward

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

HENRY WOODWARD

A POPULAR TREATISE ON MEDICAL ELECTRICITY

Trieste

A POPULAR TREATISE

22

ON

MEDICAL ELECTRICITY;

SHOWING THE INFLUENCE OF

ELECTRICITY AS A REMEDY FOR DISEASES;

AND

PLAIN & PRACTICAL DIRECTIONS

FOR ITS APPLICATION TO VARIOUS DISORDERS.

BY

HENRY WOODWARD, Medical Electrician.

WITH ILLUSTRATIONS.

London: SIMPKIN, MARSHALL & CO, 4, STATIONERS' HALL COURT.

1885. [All rights reserved.] 1696. e. 3.



CONTENTS. .

PREFACE

CHAPTER I .- THE NATURE OF ELECTRICITY (ELECTRO-PHYSICS).

.

Its exact nature not known. The word "current" not scientifically exact. Close resemblance of Electricity to nervous force. But not identical with it. Electricity is perceived only by its effects. Several kinds of Electricity. Frictional Electricity.-How produced. Formerly used for medical purposes. But now dis-continued. *Galvanic Electricity*.—Its continuous action. Its properties. Various names applied to it. Its electro-tonic effects. Its use in nervous affections. How produced. Faradic Electricity .- Various names How produced. Paradic Encludy, and an applied to it. What is meant by "induction," and induction " coils." The large coil at the old Polytechnic. "Intermittent " action of the Faradic current. The action of Galvanism contrasted with Faradism. Rapidity of Faradic action regulated by a "contact-breaker." Physiological effects of Faradisation. 1-12. . 10.00

CHAPTER II .- INFLUENCE OF ELECTRICITY ON THE HUMAN BODY (ELECTRO-PHYSIOLOGY).

Early history of Electro-Physiology. Progress in modern times. Hindrances from extravagant pretensions of its advocates. Its true limitations. Unequal sensitiveness of different parts of the human body. Reasons for this. The current travels through the body in the directions of curves. Practical use of knowledge of these curves. "Motor points" de-fined and illustrated. Individual muscles may be treated without affecting others. Strict regard to "motor points," though not always necessary, is absolutely necessary in certain diseases. Means of verifying the precise "motor points" in individuals, Differing degrees of sensitiveness in various parts of the body. Importance of special attention to this, Relative sensitiveness of the body as affected by (a) moistened Faradisation, (b) dry Faradisation, (c) Galvanisation. 13-22.

CONTENTS.

CHAPTER III.—GENERAL RULES OF APPLICATION (ELECTRO-THERAPEUTICS).

Former neglect of the study of Electricity by the medical profession. Evil results from ignorant applications. It is now, however, a recognised branch of medical study. Practical Rules and Cautions. Cleanliness of the apparatus. Use of lowest power at commencement. Regulations of dose according to (a) strength of current, (b) thoroughness of application, (c) length of time. Rule as to general application, although with reference to special organs. Approximate estimate of proportionate time for different parts of the body. Rules for repetition of the applications. Persistence in treatment. Use of the moistened hand as an electrode. APPLICATIONS TO DIFFERENT PARTS OF THE BODY .- 1. The head. 2. The Eye. 3. The Ear. 4. The Face. 5. The Neck and Throat. 6. The Arms and Hands. 7. The Spine. 8. The Lungs and Hearts. 9. Stomach and Digestive Organs. 10. The Legs and Feet . . 1 23-47.

CHAPTER IV .- ELECTRO-MEDICAL APPARATUS. Different kinds of apparatus corresponding to different kinds of Electricity. Plate machine. Galvanic and Voltaic-pile machines. Magneto-Electric Machines. Galvano-Faradic machines. A good mechanic not necessarily able to construct a good medical apparatus. Medical experience required for its construction. THE WOODWARD ELECTRO-MEDICAL APPARATUS. Its advantages: 1. A wide range of power. 2. Smoothness and equability. 3. Freedom from obnoxious fumes. 4. Variable powers at control of the operator. 48-51. 100 . 16 +1 .

CHAPTER V.-DIRECTIONS FOR DOMESTIC USE OF THE WOODWARD APPARATUS.

iv

PREFACE.

It is necessary, at the outset, to say that this little work does not pretend to do more than convey, in the simplest and clearest language possible, an outline of the advantages which may be gained from the proper use of Electricity, as a remedy for human diseases; and of the best practicable means whereby those who, from various causes, are unable or unwilling to employ a medical practitioner, may themselves apply this wonderful remedial and curative agent.

Not being intended for the medical profession (who already possess fully elaborate treatises in the scientific works of Julius Althaus, Roberts Bartholow, Moritz Meyer, Allan McLane Hamilton, G. V. Poore, A. C. Garratt, Charles E. Morgan, Herbert Tibbitts, G. B. Duchenne, and Drs. Beard and Rockwell, with others), the use of scientific and technical terms is avoided as far as possible; and where there is no escape from using them, their meaning is sufficiently explained.

The writer is fully convinced that, in many maladies, the symptoms are so clearly marked, and the mode of applying Electricity is so simple, and has been so thoroughly established by experience, that it may be safely employed by persons with a very moderate amount of knowledge, if they will use ordinary care, without recourse to a

PREFACE.

medical practitioner. At the same time, he would be sorry to kindle a thought in the minds of his readers that it may be used by anyone who is ignorant, either of the effects produced by Electricity, of the nature of the human frame to which it is applied, or of the particular disease which they may propose to remedy by its use. Some elementary knowledge under each of these heads is absolutely necessary to its safe and effectual use. Such knowledge it is the object of the present little work to supply.

During the course of more than twenty years' successful practice in the United States and Canada, the writer, having experience of various kinds of Medical-Electric machines, has been led to effect certain improvements, in the direction both of efficiency and economy, which will be found fully described in the account of the "WOODWARD ELECTRO-MEDICAL MACHINE" in the pages following, and to which he begs to direct special attention.

20, Macfarlane Road, Shepherd's Bush, London.

vi

A POPULAR TREATISE

MEDICAL ELECTRICITY.

CHAPTER I.

THE NATURE OF ELECTRICITY (ELECTRO-PHYSICS).

IF the question, "What is Electricity?" were propounded in its naked simplicity to the whole body of scientific men of the present day, their candid answer must be, "We don't know." It is not a substance, either solid, liquid, or gaseous. It can neither be handled, poured out, nor dissolved in vapour. It is without weight, and is invisible. For want of a better name it is called "a force." The early discoverers of Electricity supposed it to be a fluid, which, they said, permeated all bodies. This idea is no longer entertained, but yet the phrase "an electric current," which arose out of it, is still used, although somewhat incorrectly; and the force passes into and through bodies adapted thereto, just as though it actually were a "current" of the "electric fluid" as it was supposed to be. It is well, however, to understand at the beginning that although these terms