THE PHILOSOPHY OF VITAL MOTION

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649670628

The Philosophy of Vital Motion by Charles Bland Radcliffe

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

CHARLES BLAND RADCLIFFE

THE PHILOSOPHY OF VITAL MOTION

Trieste

THE PHILOSOPHY

CHARLES BLAND RADCLIFFE, M.B.

BY

.

LICENTIATE OF THE ROTAL COLLEGE OF PHYSICIANS; LECTUBER ON VEGETABLE PHYSICIOGY AND BOTANY AT THE WESTMINSTER HOSPITAL, ETC.



LONDON : JOHN CHURCHILL, PRINCES STREET, SOHO. MOCCCLI.

10.5

÷.

HARVARD MEDICAL LIBRARY IN THE FRANCIS A. COUNTWAY LIBRARY OF MEDICINE

126.2

1

24

1.50

12

CONTENTS.

PAGE

CHAPTER I.

PRELIMINARY CONSIDERATIONS RESPECTING VITAL MOTION . 1

2.5

.

1÷

CHAPTER II.

OF VITAL MOVEMENTS.

A. OF VITAL MOVEMENTS IN VESSELS AND CELLS . . . 10

SECTION I.

| OF | VITAL MOVEMENTS IN THE VESSELS, CELLS, AND INTER- | |
|----|--|-----------|
| | CELLULAR PASSAGES OF THE PLANT | 11 |
| | I. In the laticiferous vessels (cyclosis) | 14 |
| | II. In simple cells, (including the phenomena of | |
| | "rotation") | 20 |
| | III. In the plant generally (circulation of the sap) | 27 |

SECTION II.

| OF | VITAL | MOVEMEN | OVEMENTS | | IN T | | VESSELS | | | AND | | CELLS | | 8 | OF | | |
|----|--------|-------------|----------|----|------|--|---------|--|--|-----|---|-------|--|---|---------------|----|--|
| | ANTHAL | BODIËS | 2 | •3 | | | | | | | 2 | • | | | | 32 | |
| | I, I | n capillary | V | | ls | | | | | 18 | | • | | | а са 8. •8 | 33 | |
| | | n cells . | | | | | | | | | | | | | | | |

CHAPTER III.

| В, | OF | VIT | AL MO | OVEMI | ENTS | SUC | H | AS | ARE | SE SE | EN | IN | 1 | THE | |
|----|----|------|-------|-------|------|-----|-----|----|------|-------|-----|------|----|-----|----|
| | ្ប | RRIT | ABLE | TUM | URS | OF | TH | E | SENS | TIVE | P | LANT | r, | IN | |
| | 3 | HE | COATS | OF | THE | AI | IME | NT | ABY | CAN. | ۸L, | AN | D | IN | |
| | 1 | OLU | NTARY | MUS | CLES | | | | | | | | | | 52 |

CONTENTS.

SECTION I.

IN THE IRRITABLE TUMOURS OF THE SENSITIVE PLANT. . 52

SECTION II.

| IN | THE | COATS | OF | TH | IE | AL | ME | NT. | RY | C/ | NA | L | AND | IN | VC | DLU | N- | |
|----|------|--------|------|-----|-----|-----|----|------|-----|----|----|---|-----|----|----|-----|----|----|
| | TABY | MUSC | LES | | | | | * | | | | | | • | • | • | | 56 |
| | | . In t | | | | | | | | | | | | | | | | |
| | 11 | . In t | he v | olu | int | ary | m | uscl | les | 2 | i. | 4 | 2 | • | | | | 71 |

CHAPTER IV.

CHAPTER V.

CHAPTER VI.

OF THE ACTION OF MIND IN VITAL MOVEMENT 128

. e) t

L

iv

PREFACE.

In a work lately published under the title of "Proteus; or, the Law of Nature," I have endeavoured to realize that unity, or ro ev, which is said to ensoul the diversities of things, and bind them together in one. I have traced this principle in plant and animal, not merely as a vague generality, but as pervading the entire structure-from a simple organ to a perfect organism, and from the complicated nervous, vascular, or osseous systems, to the more rudimentary parts of the economy. I have traced, also, the same principle into inorganic bodies; - so that in relation to form, we may conclude that there is one archetypal law in all created things, whether animate or inanimate. Heat, light, chemical affinity, electricity, motion, and other physical agencies, have also been found to be connected with each other, and with the more recondite vital influences, as correlative aspects of one central force; so that the unity of creation is reflected in force as well as form. And finally, this principle

î

PREFACE.

has seemed to be absolute, for on proceeding onwards it is seen to be impossible to separate form from force, and to regard the one as a mere lifeless image, or the other as a mere "naked essence."

But it may be objected that all these ideas are mere philosophical abstractions, and that this unity of nature is not a practical truth to be realized in the problems of every-day physiology. If there be this oneness of which you speak, it may be asked, how is it that the body is obedient to a law which is totally different to anything we find in inorganic nature? Will it explain the hitherto inexplicable capillary movements of the blood? - will it solve the oftperplexed, and still unread riddle of muscular action? -will it tell us why the heart continues its mysterious beatings ?---will it give the clue to a hundred acts and movements which are distinctive of life, and which we are obliged to refer to an incomprehensible and potent essence which is shut up in every living body ?--- for, except it will help to do these things, the doctrine is of no practical value. An objection like this is just and right, for no one can be expected to receive an opinion which is based merely on transcendental facts and arguments, especially when it is belied (or seems to be) by his own daily experience.

PREFACE.

Let us encounter, then, this objection on the grounds that are here indicated, and inquire whether the phenomena of vital motion will not receive light and interpretation from the doctrine they seem to con-Remembering the arguments for a common tradict. law, let us not seek the explanation in the body alone in which the movements are manifested, but in a wider range of causes. Let us treat unity as a reality and not as a fiction, and wait patiently for the result. If we do this, every phenomenon will be found to point to this truth; and this truth, on the other hand, by enlarging our ideas to receive the comprehensiveness of nature, will enable us to advance far towards the explanation of vital motion. If we do this, the movements of blood or other nutrient fluids in vessels independently of any cardiac impulse, the action of muscle, the beating of the heart, and many other mysteries of life, will no longer perplex us, for each will interpret the other, and all will refer to a common law-cosmical-one.

 Henrietta-street, Cavendish-square. January 1st, 1851. vii