

**MANUALS OF  
HEALTH. ON HEALTH  
AND OCCUPATION**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649508938

Manuals of Health. On Health and Occupation by Benjamin Ward Richardson

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](http://www.triestepublishing.com)

**BENJAMIN WARD RICHARDSON**

**MANUALS OF  
HEALTH. ON HEALTH  
AND OCCUPATION**



**MANUALS OF HEALTH.**

---

**ON**

**HEALTH AND OCCUPATION,**

**BY**

**BENJAMIN WARD RICHARDSON, M.D., F.R.S.**  
**M.A., LL.D., F.S.A.,**  
FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, AND HONORARY  
PHYSICIAN TO THE ROYAL LITERARY FUND.

---

PUBLISHED UNDER THE DIRECTION OF  
THE COMMITTEE OF GENERAL LITERATURE AND EDUCATION  
APPOINTED BY THE SOCIETY FOR PROMOTING  
CHRISTIAN KNOWLEDGE.

TENTH THOUSAND.

LONDON:  
SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE,  
NORTHUMBERLAND AVENUE, CHARING CROSS;  
& ROYAL EXCHANGE; 48, FICCADILLY.

NEW YORK: POTT, YOUNG, & CO.

1879. *W*



18963.

Memoriam.

TO

E. PARKES, M.D. F.R.S.

LATE PROFESSOR OF MILITARY HYGIENE IN THE ARMY MEDICAL  
SCHOOL, NETLEY,

AND

ONE OF THE GREAT PIONEERS OF SANITARY SCIENCE OF THIS CEN

**This little Book,**

IN REMEMBRANCE OF A LONG-CHERISHED FRIENDSHIP,  
IS REVERENTLY AND AFFECTIONATELY  
INSCRIBED.

## PREFATORY NOTE.

---

THE space at my command is very limited. I shall therefore waste little time in prefatory observation.

The Manual is divided into four parts.

The first part describes the workers of the community in general, their numbers and the character of their occupations.

The second part indicates some of the injuries to health *indirectly* connected with the occupations of the different classes of workers.

The third part treats on the injuries to health and life *directly* connected with the occupations of the different classes of workers.

The last part endeavours to point out some practical methods by which the life of the different classes of workers may be rendered healthier and longer.

Should the reader become sufficiently interested in the subject of these pages to desire for more detailed information than could be given in so small a work as is here presented, I would refer him to my Lectures on Occupations in Relation to Health and Disease, delivered before the Society of Arts and Manufactures in the Session of 1876; and to my works entitled respectively, "Diseases of Modern Life," "Health and Life," and "A Ministry of Health."

## CONTENTS.

---

### PART I.—THE OCCUPIED IN ENGLAND AND WALES. NUMERICALLY, SOCIALLY, AND PHYSICALLY CONSIDERED.

<i>Chap.</i>	<i>P</i>
I. The Study of Health and Occupation . . . . .	P
II. The Grand Divisions of Occupations in England . . . . .	.
III. The Health of the Different Classes of the Occupied . . . . .	.

### PART II.—ON INJURIES TO HEALTH INDIRECTLY CONNECTED WITH OCCUPATION.

IV. Indirect Injuries—Posture, Bad Air, and Damp . . . . .	.
V. Season and Occupation . . . . .	.
VI. Physical Overwork . . . . .	.
VII. Mental Overwork . . . . .	.

### PART III.—ON INJURIES TO HEALTH AND LIFE DIRECTLY CONNECTED WITH THE WORK OF DIFFERENT WORKING CLASSES:

VIII. Injuries from Mechanical Concussions . . . . .	.
IX. Injuries from Dusts . . . . .	.
X. Injuries from Contact with Soluble Chemical Compounds . . . . .	.
XI. Injuries from Noxious Vapours . . . . .	.
Dr. Farr's Summary of Health and Work . . . . .	.

### PART IV.—GENERAL RULES IN RELATION TO HEALTH AND WORK, TO MAKE WORK HEALTHIER AND LIFE LONGER.

XII. Will and Work . . . . .	.
XIII. Hours for Work . . . . .	.
XIV. Food and Drink for Work . . . . .	.
XV. Tobacco in Relation to Work . . . . .	.
XVI. Clothing and Work . . . . .	.
XVII. Cleanliness and Work . . . . .	.
XVIII. Special Rules for Mental Workers . . . . .	.
XIX. On Work in Early Life . . . . .	.
XX. On the Reduction of some of the Physical Injuries incident to Occupation . . . . .	.



# ON HEALTH AND OCCUPATION.

---

## PART I.—THE OCCUPIED,

NUMERICALLY, SOCIALLY, AND PHYSICALLY  
CONSIDERED.

---

### CHAPTER I.

#### THE STUDY OF HEALTH AND OCCUPATION.

**W**HEN we consider the workers in such a great hive of industry as England we find that what may be called the hard workers are engaged in pursuits so widely different in character that no rule bearing on health and occupation can be drawn of a general kind, or which admits of any general application. We are obliged to enter into an immense number of details before we can arrive at such facts as are calculated to give us a clear view of the relationships of life to labour, and we must have a most comprehensive view of the whole subject before we can venture to draw any safe conclusions or to give any sound advice or instruction.

Without entering at any great length into the method of study, I may state that many leading lines of inquiry have to be pursued by the sanitary scholar who would be fairly master of the matter under review.

In the first place he must know how a community, *such as that in which we live and labour, is made up,*

what are the elements of life and labour in it; how are the ranks of labour laid out and drilled, and how are they supplied and maintained.

In the second place it is necessary to discriminate between the different classes of labour in respect to those kinds which are of themselves injurious to health and life, and those which are not injurious, or which need not be injurious to the employed.

In the third place, in studying the nature and effects of those occupations which are considered to be invariably injurious to health and life, it is essential to know whether the injury that is inflicted is a necessary or unnecessary result of the employment. For it is often found, on close inquiry, that certain occupations which are reputed to be most dangerous, and which from the returns of mortality are rightly considered most dangerous, are rendered so not by any true necessity, but by some removable error which through ignorance or prejudice is suffered to remain.

These three lines of inquiry are of first consequence in the method of study. To them must be added the influences of a purely personal kind which interfere with many views and estimates relating to trades, callings, and professions in their effects on vitality and health. It constantly occurs that many of the evils attributed to a trade or calling, or profession, are found not to belong to it at all when the causes of the evils are carefully looked into. In many instances the work may actually be of itself healthy, while something which the worker does and which has nothing to do with the work at all in the strict and necessary sense of the word, gives to the work an unenviable notoriety.

*Once more*, in these studies too much thought cannot be given to the circumstances under which the

*The Grand Divisions of Occupations in England. 7*

labour of everyday workers is carried on, I mean to the surroundings of labour of every sort and of every kind. It has happened constantly to me and to other sanitarians to trace the most serious evils to some circumstance which lies outside the work altogether, and which often is removable so soon as it is detected.

Without following any plan that shall make the reading of the present little book so rigidly systematic as to be hard and formal, I shall follow in a general way the outline of study sketched forth in this short chapter. Confining my observations mainly to English workers, I shall try first to present a view of the division of such workers, general and special. From that point I shall enter into particulars respecting some different classes of workers, and bearing upon the circumstances under which such classes are rendered healthy or unhealthy.



## CHAPTER II.

### THE GRAND DIVISIONS OF OCCUPATIONS IN ENGLAND.

IN England all men and women are workers. In the last returns of the census in 1871, out of the 22,712,266 persons who made up the population of England and Wales, 168,895 persons only returned themselves as persons of rank and property; that is to say, as persons who had no professed occupation, and who lived entirely on their means. Of course, in so large a population there are a great many who are not able to work, owing to feebleness of age or infirmity. But amongst those who are able to work so many are *willing to work* that the small number I have named, *and no more*, can fairly be called idlers. Many even