HEREDITY

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I DEDICATE THIS BOOK

WITH THEIR KIND PERMISSION

TO

FRANCIS GALTON AND AUGUST WEISMANN

WHOSE

MAGISTRAL STUDIES ON HEREDITY

HAVE MADE US ALL THEIR DEBTORS

PREFACE

This book is intended as an introduction to the study of heredity, which every one admits to be a subject of fascinating interest and of great practical importance. In recent years much progress has been made in the scientific study of heredity, and, as the literature is widely scattered, and often very technical, there may be utility in an exposition which aims at being comprehensive and accurate, without being exhaustive or mathe-Simple the exposition cannot be, if one has any ambition for thoroughness, but it is probably simple enough for those who have got beyond the pottering, platitudinarian stage, which deals in heredity with a capital H. My stacks of unused manuscript remind me sadly of how much I have had to leave out, to keep the volume approximately within the limits of the series to which it belongs; but the bibliography will enable serious students to fill in details, and follow up the clues I have given. It is arranged with a subject-index, so that the literature dealing with particular points can be seen at a glance. I have tried to avoid partisan handling of any theme, though I have been at no pains to conceal my general adherence to what is called Weismannism, or—to take a particular case my conviction that we do not know of any instance of the transmission of an acquired character. I have also tried throughout to keep the practical side of the study in view, but I have refrained from making many suggestions, in the belief that the

inquiry is not ripe for more than a general recommendation to take thought for the morrow by considering the ideal of Eugenics.

A glance at the book will show that much prominence has been given to three kinds of conclusions—those reached by microscopic study of the germ-cells, those reached by the application of statistical methods, and those reached through experiment. I have equal sympathy with all these ways of attacking the mysterious problems, and since I have not, to my lasting regret, found any opportunity, amid the continuous claims of professional duties, of working along any one of them, I can, without seeming to recommend my own wares, press a consideration of the results which have been achieved on the attention of all thoughtful men and women. The new facts are of especial interest to medical practitioners, to educationists, including clergymen, to social reformers, and to actual or prospective parents.

I have, throughout, acknowledged my indebtedness to authorities, and the bibliography (which is merely representative) shows how many fields there are from which to glean. In particular, I have been indebted to the works of Galton, Weismann, Pearson, Bateson, and De Vries.

I have to thank my friends Mr. E. S. Russell and Dr. John Rennie for going over the proofs, and saving the pages from many mistakes. Dr. Leslie Mackenzie was kind enough to read the chapter on Heredity and Disease, and some of his helpful suggestions have been incorporated. I have to thank Professor C. Correns and Professor H. E. Ziegler for generously allowing me to copy four admirable diagrams; also Mr. Young Pentland and the Walter Scott Publishing Company for allowing

me the use of a number of figures which have done duty in other books of mine. My thanks are also due to Mr. Murray, who has encouraged me in a work which I was often tempted to abandon, whose good-humoured patience over many delays I should long since have exhausted had he been as many men are.

J. A. T.

THE University of Aberdeen,

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