

**GROWTH IN LENGTH:
EMBRYOLOGICAL
ESSAYS**

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Growth in Length: Embryological Essays by Richard Assheton

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RICHARD ASSHETON

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GROWTH IN LENGTH

EMBRYOLOGICAL ESSAYS

BY

RICHARD ASSHETON, M.A., Sc.D., F.R.S.

Trinity College, Cambridge

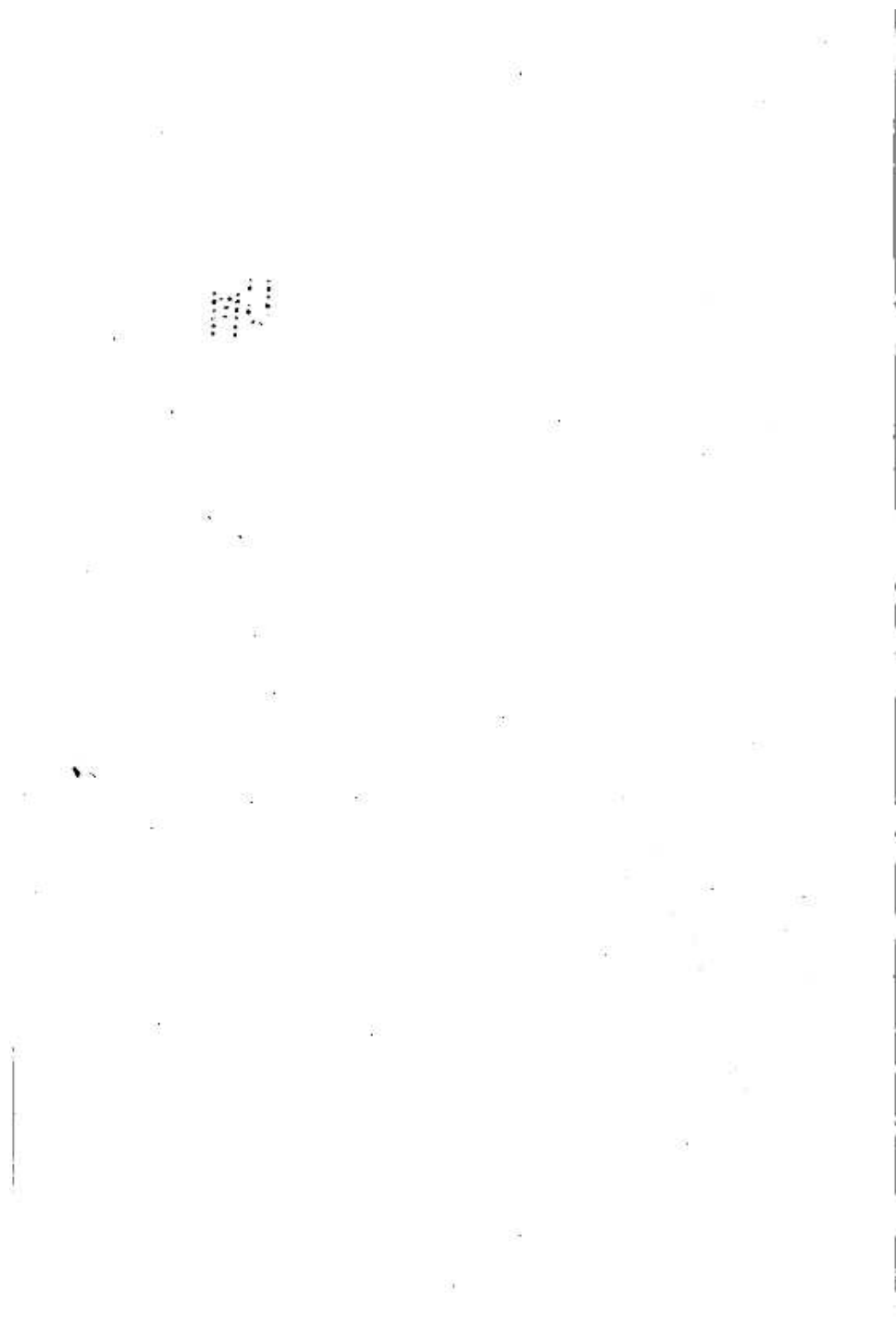
Lecturer in Biology at Guy's Hospital in the University of London

Lecturer in Embryology at the Imperial College

Lecturer in Animal Embryology in the
University of Cambridge

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PREFACE

THE three Lectures forming the first part of this book were given as one of the "Advanced Courses in Zoology" in the University of London. They were delivered at Guy's Hospital on January 23rd, January 30th and February 6th, 1913, under the title "The Growth in Length of the Vertebrate Embryo." They are now published in accordance with the known intention of the author, and in response to the expressed wish of some of those who heard them.

Although my husband had destined this work for publication, he had not actually prepared it for the press; but the Lectures were typewritten and some corrections and notes had been added to them. For help in arranging them for print I am greatly indebted to Professor Stanley Gardiner, F.R.S., and to Professor J. P. Hill, F.R.S., who have most kindly read the ms; and to the latter especially for valuable suggestions as to some alterations in the original wording, which while adapted for lecturing purposes might not always have been clear to the reader.

The figures have been drawn by Miss D. Thursby-Pelham from the sketches given in the ms referring to lantern slides and diagrams displayed during the lectures.

The cost of publication is partly defrayed by a grant from the Royal Society.

The second part of the book consists of a reprint of a paper on the Mechanics of Gastrulation which appeared in the *Archiv für Entwicklungsmechanik der Organismen* in 1910. It is here included as the subject is kindred to that of the lectures and also because it is often in demand and further copies are unobtainable.

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As these "Growth Problems" occupied my husband's studies and interests perhaps to a greater extent than did any other of the varied Biological work undertaken by him, this small memorial volume may be of special interest to those who knew him as researcher and teacher. It is now published in the hope that it may fulfil his constant wish to inspire others to delve into this, to him, fascinating field of research. It represents the summation of work and thought carried on for more than twenty years.

FRANCES A. E. ASSHETON.

GRANTCHESTER,
April, 1916.

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