CAMBRIDGE LIBRARY COLLECTION

Books of enduring scholarly value

Life Sciences

Until the nineteenth century, the various subjects now known as the life sciences were regarded either as arcane studies which had little impact on ordinary daily life, or as a genteel hobby for the leisured classes. The increasing academic rigour and systematisation brought to the study of botany, zoology and other disciplines, and their adoption in university curricula, are reflected in the books reissued in this series.

English Naturalists from Neckam to Ray

C.E. Raven (1885–1964) was an academic theologian elected Regius Professor of Divinity at the University of Cambridge in 1932, who developed an interest in natural history and the history of scientific thought. First published in 1947, this volume demonstrates how changing attitudes to the natural world reflected and influenced the transformations in scientific thought between the medieval period and the eighteenth century. Raven's focus on the field of 'natural history' reveals how the scientific ideas behind modern biological studies developed from the richly illustrated and often fantastical bestiaries of the medieval world. The subjects of this volume are grouped chronologically into Pioneers, Explorers and Popularisers, with biographical details woven together with discussions of their academic work. The book provided a wealth of new information concerning the founders of natural history and remains a valuable contribution to this subject.

English Naturalists from Neckam to Ray

A Study of the Making of the Modern World

Charles E. Raven

CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore,
São Paolo, Delhi, Dubai, Tokyo, Mexico City

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9781108016346

This edition first published 1947
This digitally printed version 2010

ISBN 978-1-108-01634-6 Paperback

ENGLISH NATURALISTS FROM NECKAM TO RAY

ENGLISH NATURALISTS FROM NECKAM TO RAY

A Study of the Making of the Modern World

BY

CHARLES E. RAVEN, D.D.

Master of Christ's College and Regius Professor of Divinity in the University of Cambridge

CAMBRIDGE
AT THE UNIVERSITY PRESS
1947

Printed in Great Britain at the University Press, Cambridge
(Brooke Crutchley, University Printer)
and published by the Cambridge University Press
(Cambridge, and Bentley House, London)

Agents for U.S.A., Canada, and India: Macmillan

FOR MY WIFE—ALWAYS

ζηλῶ φθιμένους, κείνων ἔραμαι,
κεῖν' ἐπιθυμῶ δώματα ναίειν.

Contents

INDEXES

Preface

This book owes its existence to the kindness with which my study of John Ray was received by men and women whose opinion carries weight, to the suggestions put forward by many of them that a similar study of other early naturalists would be welcome, and to my own conviction of the interest and importance of the subject. It began as a series of biographies; and this is still its obvious characteristic. But very soon it became clear that the succession of 'lives' not only formed a very definite pattern but that this illustrated, and for me at least illuminated, the change in Western civilisation from the medieval to the modern world.

That a history of man's attitude to nature and especially to the flora and fauna of his environment would be important for the student of social development and of religious and speculative thought, has been frequently emphasised—and not least by one of the most eminent of recent philosophical theologians, Dr John Oman. But it has been something of a surprise to discover how very obviously this attitude reflected and by its alteration influenced the momentous changes taking place in the period under review. Such surprise is no doubt due partly to my own ignorance; if I had known these centuries better I might have realised the significance of their naturalists. But, indeed, the subject has never (to my knowledge) been fully treated either by the historians of science, who almost without exception pay little heed to botany and zoology, or by the students of literature and philosophy. That it richly repays investigation will I hope be evident even from so limited a survey as I have here undertaken.

My obligations are very numerous. Before expressing them in detail I may perhaps be allowed to say how deeply I have been touched by the continuous kindness and immediate help given to me by the botanists, zoologists, historians and librarians to whom I have appealed. Although in some sense an interloper and, very certainly, a nuisance to busy men and women, I have been welcomed and assisted everywhere. My recent illness and bereavement have only enlarged the circle of this generosity.

Of particular debts the following are some of the largest. To Mrs Agnes Arber whose criticism of *John Ray* in *Isis* set me upon a fresh investigation of his forerunners and whose encouragement is a continual inspiration; to Dr Julian Huxley and his colleagues who suggested to me the writing of *A History of Natural History in Britain* for which this book is a preliminary; to Mr H. Gilbert-Carter and other members of the Cambridge Botany School whose help in the identification of plants recorded by Penny and his contemporaries has been invaluable; to Dr W. H. Thorpe of the Zoological Department for similar help in other directions; to

Mr H. L. Pink and other members of the staff of the Cambridge University Library; to Mr S. Savage of the Linnean Society, Mr C. T. Onions of Magdalen College, Oxford, and to many other College Librarians; to Air-Vice-Marshal Geoffrey Keynes, especially for help over Sir Thomas Browne; to Professor A. B. Cook for the lines under the dedication; and to my own colleagues, especially Mr B. W. Downs, Dr F. H. A. Marshall and Dr C. P. Snow. In particular, I owe special gratitude to the Vice-Master of our College, Mr S. W. Grose, and to the Bursar, Mr T. C. Wyatt, who in these very difficult days have carried the chief responsibility for its welfare, freeing me from all anxiety on its account and making it possible for me to carry through a long and absorbing research.

C.E.R.

1945