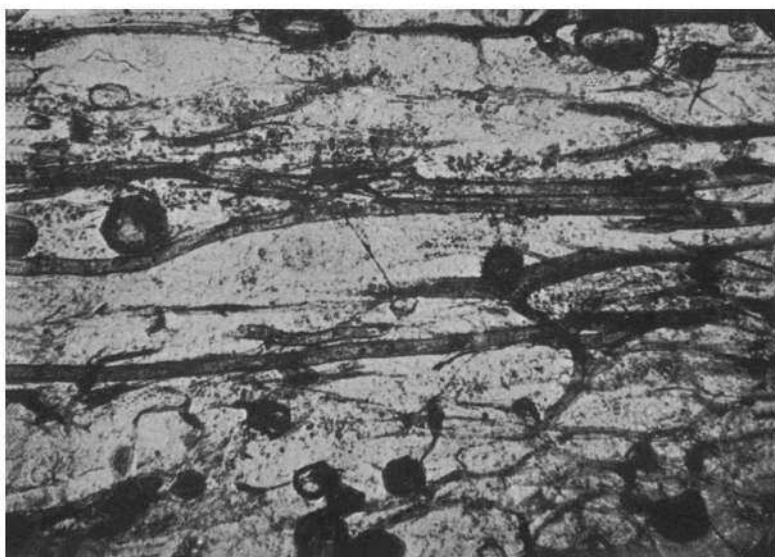
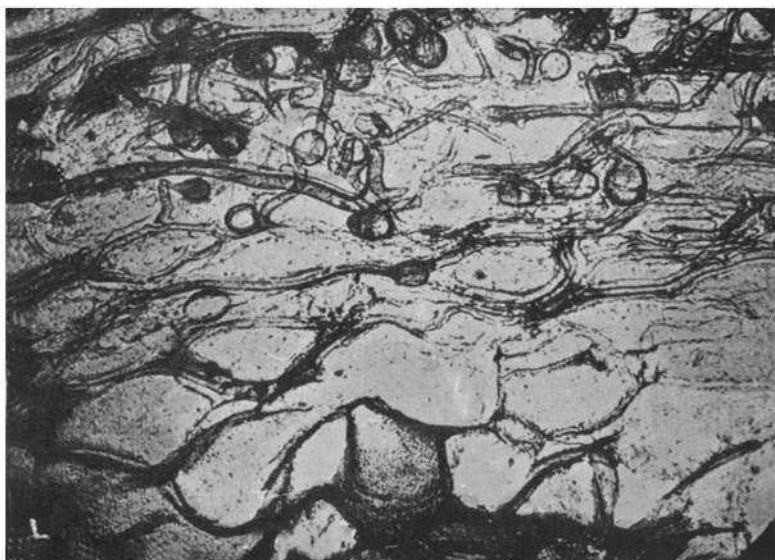


THE
STRUCTURE AND DEVELOPMENT
OF THE FUNGI



PALEOMYCES ASTEROXYLI

from the Old Red Sandstone, Muir of Rhynie, Aberdeenshire, $\times 100$;
after Kidston and Lang

THE STRUCTURE
AND DEVELOPMENT OF
THE FUNGI

BY

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To
THE STUDENTS OF
THE DEPARTMENT OF BOTANY
BIRKBECK COLLEGE

PREFACE TO FIRST EDITION

THIS book is in some sense a development of the volume on Fungi prepared by one of us and published in 1922 in the series of Cambridge Botanical Handbooks, for the text and figures have been freely drawn upon and the material revised and brought up to date. But it is also a new book; it includes the whole of the Fungi, not merely selected classes, and it is addressed to the student rather than to the investigator, with the consequence that the material has been somewhat abbreviated. It has been designed to meet the need for such a textbook in our own Department, and we hope it may be equally useful elsewhere.

Most of the illustrations are from published researches, and we desire to thank those authors whose figures we have copied. Illustrations the source of which is not stated are original. In the case of original figures the magnification and the authority for the specific name are given; this has also been done in other cases when the information was available.

We have appended a bibliography which makes no attempt to be exhaustive, it is rather a selection from mycological literature, and we have referred page by page to the relevant papers. There is a vast literature of pathology which we have left almost untouched, it is fully dealt with elsewhere; we are concerned primarily with the fungus, and only secondarily with its effect on other organisms.

It is a pleasure to express our indebtedness to several of our colleagues and to past and present students for specimens and information, and especially to those whose research or suggestions have helped us in the preparation of this book; wherever possible we have acknowledged their help in the text.

H. C. I. GWYNNE-VAUGHAN
B. BARNES

BIRKBECK COLLEGE
LONDON

December 1926

PREFACE TO SECOND EDITION

IN the ten years that have passed since this volume first appeared, considerable advances have been made in the investigation of the fungi, and much new material has therefore been included in the present edition. In particular, the importance of flagellation as a guide to the interrelationships of the Phycomycetes has been emphasised, heterothallism has been discovered in the rusts, and many new life histories have been followed. To some extent the study of fungi is thereby simplified, but very much remains to be done.

We should like, once again, to express our thanks to those who have permitted us to use their figures; we hope that the book may be of use both to research students and undergraduates.

H. C. I. GWYNNE-VAUGHAN
B. BARNES

June 1937

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