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#### Herbals: Their Origin and Evolution

Agnes Arber (1879–1960) was a prominent British botanist specialising in plant morphology and the history of botany. In 1946 she became the first female botanist to be elected a Fellow of the Royal Society. First published in 1912 and issued in an expanded second edition in 1938, this volume traces the history and development of printed herbals between 1470 and 1670. This two-hundred-year period was the most prolific for the publication of herbals, and significantly saw the emergence of botany as a scientific discipline within the study of natural history. Although Arber mentions the medical aspects of the herbal, her analysis remains focused on investigating herbals from a botanical view, with chapters devoted to the evolution of plant descriptions, classifications and illustrations. Her book remains the standard work on this subject. The text of this volume is taken from a 1953 reissue of the 1938 second edition.



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# Herbals: Their Origin and Evolution

A Chapter in the History of Botany, 1470-1670

AGNES ARBER





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#### **HERBALS**

THEIR ORIGIN AND EVOLUTION

A CHAPTER IN THE HISTORY OF BOTANY 1470-1670





 $\Lambda$  physician using a herbal

[After a picture by Adrian van Ostade, 1665, Der Arzt in seinem Studier-zimmer, 855c, in the Kaiser-Friedrich-Museum, Berlin] Reduced



## HERBALS THEIR ORIGIN AND EVOLUTION

A CHAPTER IN THE HISTORY OF BOTANY
1470-1670

BY

AGNES ARBER M.A., D.Sc., F.R.S., F.L.S.

SECOND EDITION
REWRITTEN AND ENLARGED

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TO THE MEMORY OF





#### PREFACE TO THE SECOND EDITION

In recent years marked advances have been made in the study of the history of botany, and I am grateful to the Syndics of the Cambridge University Press for giving me the opportunity of revising this book in the light of newer knowledge. In the process of rewriting I have experienced, to the full, both how essential and how difficult it is to follow Flaubert's advice: "Quant aux corrections, avant d'en faire une seule, remédite l'ensemble." In the attempt to refashion the book into greater wholeness, I have been helped by my daughter Muriel's criticism.

I have kept the general plan of the volume unaltered, but I have repaired certain omissions in Chapter IV by adding sections dealing with botany in Spain and Portugal, and with the origin of herbaria. Now that the literature of the history of science has become a world in itself, I should have liked to give references, page by page, for all the facts or opinions which I owe to previous writers, but this would have involved increasing the size of the book unduly, and burdening the text with an apparatus of footnotes, which would have been oppressive to the general reader. I have, however, trebled the number of works mentioned in the list of sources (Appendix II), and I have indexed it under subjects (Appendix III); students will thus, I hope, be enabled to check and amplify my statements.

My study of herbals has now extended over so long a period, that to recall all those who have given me help would lengthen this introduction beyond measure; all that I can do is to supplement the acknowledgments in my former preface by alluding to the most outstanding of my present debts. In the first place, I must name Prof. Sir Albert C. Seward, F.R.S.; it was out of a suggestion of his that this



#### Preface to the Second Edition

book originally arose, and the second version owes no less to him. I should also like to express my gratitude to my friend, Gulielma Lister, for the stimulus of her encouragement and critical interest, without which this edition would not have come into being.

One cannot bear a subject in mind for a quarter of a century without discovering at the end of that time that some reorientation of one's outlook has taken place. In this connection I owe much to Charles and Dorothea Singer, since it is largely through countless discussions with them, and with the biologists who foregather in their hospitable library, that I have come to see the history of the herbal in juster perspective. Amongst others who have given me invaluable help, and saved me from many errors, I must mention Dr T. A. Sprague, Deputy Keeper of the Herbarium and Library, Royal Botanic Gardens, Kew, who has allowed me to draw repeatedly upon his expert knowledge both of modern botany, and of botany in the sixteenth century; and Dr A. C. Klebs, of Nyon, to whom I have been able to appeal on points connected with the incunabula. I wish also to express my gratitude to Mr A. F. Scholfield, Cambridge University Librarian, for giving me every assistance in my work; and to Bodley's Librarian, Oxford, as well as to the authorities of the Preussische Staatsbibliothek, Berlin, and of the Bibliothèque Nationale, Paris, for the courtesy with which they have answered my enquiries. It is a pleasure, moreover, to thank Prof. F. T. Brooks, F.R.S., who has permitted me to use the herbals in the Botany School, Cambridge; Prof. W. Rytz, of Bern, who has helped me by the communication of his discoveries concerning Weiditz; Dr B. Milt, of Zurich, who has been so kind as to give me unpublished information about Gesner; and Mr W. T. Stearn, of the Lindley Library, Royal Horticultural Society, who has allowed me to take advantage of his special studies in the history of systematics. For aid in bibliographical matters, as well as facilities for

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#### Preface to the Second Edition

examining books under their care, I am indebted to Mr H. M. Adams, Librarian of Trinity College, Cambridge; Mr J. Ardagh, Librarian of the Department of Botany, British Museum (Nat. Hist.); Mr H. R. Creswick, of the University Library, Cambridge; Mr G. R. Driver, Librarian of Magdalen College, Oxford; Mr H. Guppy, John Rylands Library; Drs M. Sabbe and Bouchery of Antwerp; Mr Spencer Savage, of the Linnean Society; Miss E. M. Smelt, Librarian of the Pharmaceutical Society; Dr H. Bramley Taylor, the Worshipful Society of Apothecaries; Dr B. E. J. Timmer, the Universiteits-Bibliotheek, Amsterdam; and Mr Aubrey F. G. Bell.

I am obliged to the Clarendon Press, Oxford, for permission to use a quotation from *The Turkish Letters of Ogier Ghiselin de Busbecq*, translated by Mr E. S. Forster; and to the Editors of the Loeb Classical Library, who have allowed me to quote from Sir Arthur Hort's translation of the *Enquiry into Plants* of Theophrastus.

Part of the work on the history of botany incorporated in the present edition has been carried out during the tenure of a Leverhulme Research Fellowship; I wish to acknowledge my indebtedness to the Trustees for the opportunities thus afforded me. I should also like to thank those reviewers and correspondents from whom, at the time of the first publication of this book, I received corrections and constructive suggestions, of which, after this long interval of time, I have been able to make use.

In connection with the new figures added to the present edition, I must express my gratitude to Dr F. W. T. Hunger, for allowing me to reproduce pictures from his facsimile version of *The Herbal of Pseudo-Apuleius*; to Prof. Gola, for giving me information about the portrait of Prospero Alpino at Padua, and for having it photographed for reproduction here; to Prof. R. E. Fries, for lending me an engraved portrait of Brunfels from the collection in the Hortus Bergianus at Stockholm; to Dr Wegener, for giving me a photograph of

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#### Preface to the Second Edition

the painting of the dragon-tree in the Clusius Collection in the Preussische Staatsbibliothek at Berlin; to the Director of the Kaiser-Friedrich-Museum, Berlin, who has allowed me to reproduce Adrian van Ostade's *Physician in his study*, as a frontispiece to the present book; and to Les Archives Photographiques d'Art et d'Histoire, Paris, for sanctioning the use of François Clouet's portrait of Pierre Quthe, from the Musée du Louvre. For permission to copy illustrations from books in collections under their charge, I am indebted to the Cambridge University Librarian; to the Keeper of the Department of Printed Books, British Museum; and to the Director of the British Museum (Nat. Hist.).

I must, moreover, express my gratitude to Sir Henry Maxwell-Lyte, K.C.B., for his kindness in giving me information about his ancestor, Henry Lyte, and showing me family records relating to him.

I wish, also, to thank the members of the staff of the Cambridge University Press for the trouble which they have taken over the production of this edition; authors who benefit by their critical judgment and expert skill, owe more to them than it is easy to express.

Finally I should like to say that I am acutely conscious that the treatment of many topics in this book is of the slightest and sketchiest character. The attempt to deal with so large a subject as the botanical history of two centuries, within so small a compass as that of the present volume, resolves itself into an essay in the art of rejection. I can but echo the words with which William Turner sent forth his herbal, nearly four hundred years ago: "To them that compleyne of the shortnes of the boke, I answer, if they be...learned men, let them write longer bokes and amend my shortnes with their long and great bookes."

**AGNES ARBER** 

Cambridge January, 1938.



### FROM THE PREFACE TO THE FIRST EDITION, 1912

The main object of the present book is to trace in outline the evolution of the *printed herbal* in Europe between the years 1470 and 1670, primarily from a botanical, and secondarily from an artistic standpoint. The medical aspect, which could only be dealt with satisfactorily by a specialist in that science, I have practically left untouched, as also the gardening literature of the period. Bibliographical information is not given in detail, except in so far as it subserves the main objects of the book. The titles of the principal botanical works, which were published between 1470 and 1670, will be found in Appendix I.

The book is founded mainly upon a study of the herbals themselves. My attention was first directed to these works by reading a copy of Lyte's translation of Dodoens' herbal, which happened to come into my hands in 1894, and at once aroused my interest in the subject. I have also drawn freely upon the historical and critical literature dealing with the period under consideration, to which full references will be found in Appendix II. The materials for this work have chiefly been obtained in the Printed Books Department of the British Museum, but I have also made use of a number of other libraries. I owe many thanks to Prof. Seward, F.R.S., who suggested that I should undertake this book, and gave me special facilities for the study of the fine collection of old botanical works in the Botany School, Cambridge. In addition I must record my gratitude to the University Librarian, Mr F. J. H. Jenkinson, M.A., and Mr C. E. Sayle, M.A., of the Cambridge University Library, and also to Dr Stapf, Keeper of the Kew Herbarium and Library. By the

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#### From the Preface to the First Edition

kindness of Dr Norman Moore, Harveian Librarian to the Royal College of Physicians, I have had access to that splendid library, and my best thanks are due to him, and to the Assistant-Librarian, Mr Barlow. To the latter I am especially indebted for information on bibliographical points. I have also to thank Mr Knapman of the Pharmaceutical Society, Dr Molhuizen, Keeper of the Manuscripts, University Library, Leyden, and the Librarian of the Teyler Institute, Haarlem, for giving me opportunities for examining the books under their charge.

The great majority of the illustrations are reproduced from photographs taken directly from the originals by Mr W. Tams of Cambridge, to whom I am greatly indebted for the skill and care with which he has overcome the difficulties incidental to photographing from old books, the pages of which are so often wrinkled, discoloured or worm-eaten. For the use of pl. xx1, which appeared in Leonardo da Vinci's Note-Books, I am under obligations to the author, Mr Edward McCurdy, M.A., and to Messrs Duckworth & Co. Text-figs. 7, 18, 89, 90 and 130 are reproduced by the courtesy of the Council of the Bibliographical Society, from papers by the late Dr Payne, to which the references will be found in Appendix II, while, for the use of text-fig. 126, I am indebted to the Royal Numismatic Society. For permission to utilise the modern facsimile of the famous Dioscorides manuscript of Anicia Juliana, from which pls. i, ii, xviii, and xxiii are derived, I have to thank Prof. Dr Josef Ritter von Karabacek, of the k. k. Hofbibliothek at Vienna. In connection with the portraits of herbalists here reproduced, I wish to acknowledge the generous assistance which I have received from Sir Sidney Colvin, formerly Keeper of Prints and Drawings, British Museum.

I would also record my thanks to Mr A. W. Pollard,

<sup>&</sup>lt;sup>1</sup> The numbering of the plates and text-figures mentioned in this preface has been altered to that in the present edition.



#### From the Preface to the First Edition

Secretary of the Bibliographical Society, Prof. Killermann of Regensburg, Signorina Adelaide Marchi of Florence, Mr C. D. Sherborn of the British Museum (Natural History) and Dr B. Daydon Jackson, General Secretary of the Linnean Society, all of whom have kindly given me information of great value. For help in the translation of certain German and Latin texts, I am indebted to Mr E. G. Tucker, B.A., Mr A. F. Scholfield, M.A., and to my brother, Mr D. S. Robertson, M.A., Fellow of Trinity College, Cambridge.

I wish, further, to express my gratitude to my father for advice and suggestions. Without his help, I should scarcely have felt myself competent to discuss the subject from the artistic standpoint. To my husband, also, I owe many thanks for assistance in various directions, more particularly in criticising the manuscript, and in seeing the volume through the press.

AGNES ARBER

Balfour Laboratory, Cambridge, 26 July 1912



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