

INTRODUCTION.

There is no large work on the Tunicata as a class, nothing of the nature of a revision of the group, to which one may refer for the results of the numerous memoirs and widely scattered papers which have been written on particular forms and special points in anatomy. It seems therefore almost necessary to give, as an introduction to the description of so many new genera and species of Ascidians, an outline of the history of the group, a full bibliography, and a short account of the anatomy and histology of the principal forms.

HISTORY.¹

The history of the literature of this, as of almost every other group of animals, extends back to about 330 B.C., when Aristotle in his History of Animals gave, under the name of *Tethyum*, a short account of a Simple Ascidian. He described briefly the external appearance and the nature of the test, referred to the apertures and their inhalent and exhalent functions, mentioned the mantle as a sinewy membrane lining the shell-like substance, and evidently recognised the branchial and atrial chambers and the alimentary canal—all the more important points in the macroscopic anatomy of the animal.

The only other writers of classical times who mention Ascidians are Pliny and Ælian, and they seem to have made little or no advance upon the knowledge of Aristotle.

After this the record of Ascidiology takes a great leap over nearly fourteen centuries—the dark ages of literature and science—and brings us to the middle of the sixteenth century, when Bellonius and Rondeletius wrote treatises upon marine animals, some of which we can recognise either from the figures or descriptions as Ascidians.

During the next hundred years Aldrovandus, Avicenna, Gesner, Jonston, Redi, and Sloane, wrote on Marine Zoology, and contributed more or less to the knowledge of the Tunicata.

Schlosser first brought the Compound Ascidians into notice by his paper in the Philosophical Transactions for 1756, containing a description of *Botryllus*, with some observations by John Ellis. A few years later, A. Russel described and figured an undoubted *Boltenia* from the coast of North America. Baster, shortly afterwards, in his *Opuscula Subseciva*, described a species of Tunicate to which he gave the name *Ascidium*, and compared its organisation with that of the oyster. Pallas suggested the union

¹ As a rule, only works of considerable importance are referred to in this outline of the history. The complete titles and dates of these and other works on the Tunicata will be found under the authors' names in the Bibliography.