

**A GUIDE TO THE SHELL AND STARFISH  
GALLERIES: (MOLLUSCA, POLYZOA,  
BRACHIOPODA, TUNICATA, ECHINODERMA,  
AND WORMS), DEPARTMENT OF ZOOLOGY,  
BRITISH MUSEUM (NATURAL HISTORY),  
CROMWELL ROAD, LONDON, S.W.**

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DEPARTMENT OF ZOOLOGY,

BRITISH MUSEUM (NATURAL HISTORY), *Dept.*

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### PREFACE TO THE THIRD EDITION.

ONE of the large north galleries approached from the Bird Gallery is devoted to the exhibition of the extensive Class of Mollusca. Specimens of the types of all the principal divisions of this Class are exhibited, either entire and preserved in spirit, or as models. However, as not the animals, but their shells have always been a favourite object of study, and a popular source of pleasure to collectors, the exhibition of the species of shells has been made as complete as the space of this Gallery admitted. It has thus proved adequate for the requirements of the majority of visitors and students who consult this Collection. A separate series of British Shells is exhibited in some small table-cases along the west wall.

This Gallery also contains the exhibited series of Polyzoa, Brachiopoda, and Tunicata.

The Starfish Gallery, so called from one of the best-known types of the Echinoderma, contains an exhibition of the animals of this Class, as well as of the somewhat heterogeneous assemblage of creatures which are comprised under the popular name of Worms (*Vermes*). These animals possess greater attraction to students of Natural History than to the general public, and many, from their small size or the soft nature of their body, are not suitable for exhibition. Therefore no attempt has been made to show more than

a carefully selected number of the types of the larger groups. But the exhibition of very complete series, supplemented by models or figures, to illustrate the remarkable life-history of some of these animals, also of specimens of the Worms which possess a special interest from their relation to man, render this Gallery particularly instructive to the student.

This guide has been prepared by Mr. E. A. Smith, Mr. F. J. Bell, and Mr. R. Kirkpatrick, who have special charge of the collections described.

Thanks are due to Messrs. A. & C. Black, Messrs. F. Warne & Co., Messrs. Macmillan & Co., Crosby Lockwood & Son, and the Linnean Society for kindly allowing the use of *clichés* from illustrations in various works published by them.

April, 1901.

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THE present issue is, to a great extent, a reprint of the fourth edition.

Some important corrections, however, have been made, and further information given where necessary, especially in the part of the Guide which has reference to the Echinodermata.

BRITISH MUSEUM (NATURAL HISTORY),  
LONDON, S.W.

August, 1908.



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# THE SHELL GALLERY.

## GENERAL NOTES ON MOLLUSCA.

THE MOLLUSCA constitute one of the principal divisions of the Animal Kingdom, and include such animals as the Octopus, Cuttlefish, Snail, Slug, Whelk, Cockle, and Oyster.

They may be characterized as soft, cold-blooded animals, without distinctly marked external division into segments (as in Worms); their cerebral ganglia (the centre of the nervous system) lie above the commencement of the gullet, and are connected with the inferior ganglia by nerve-chords. Their heart consists of two or more chambers, and is situated on the dorsal side of the animal; it drives the blood into spaces between the various organs of the body. Only the Cephalopods possess internal cartilages, but all are without a bony internal skeleton; in the majority this is compensated for by an external hardened shell which is formed (secreted) by the outer covering of the animal termed the *mantle*. The shell may consist of two parts (valves), as in the Oyster, or may be single, as in the Whelk and Limpet, or composed of a series of plates, as in the "Coat-of-mail" shells or Chitons; when well developed it is hardened by a rich deposit of carbonate of lime; but it may be gelatinous, as in *Cymbulia*, or altogether absent, as in *Polypus*; it may cover and protect the body, as in the Oyster, lie within the folds of the mantle, as in the Sea-hares (*Aplysidae*) and the Slugs, or it may be quite internal, as in the horny "pen" of the Squid. It may be elongated, as in the Elephant Tooth-shell (*Dentalium*), cup-shaped, as in the Limpet, or spirally coiled, as in the Snail.

The mantle may form a free fold on either side of the body, as in the Bivalves, or it may become largely attached to the body-wall, as in the Snail or the Slug, and so give rise to an air-chamber,

Definition.

The shell.

Description of the animal.