

THE
VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on the POLYPLACOPHORA collected by H.M.S. CHALLENGER during the years 1873-76. By ALFRED C. HADDON, M.A., M.R.I.A., Professor of Zoology, Royal College of Science, Dublin.

INTRODUCTION.

THE number of specimens of the Polyplacophora, or Chitons, collected by the Challenger Expedition was very small, considering the frequency and wide distribution of the group. This is to be accounted for by the fact that the majority of Chitons are strictly littoral in their habit, and the Expedition occupied itself mainly with deep-sea dredging. About eighty specimens were collected, which are referable to fifteen genera and thirty species, of which seven were previously undescribed, and others, though described, had not been figured.

The really deep-sea Chitons all belong to the genus *Leptochiton*, and, judging from their sculpture, they are closely related forms. *Leptochiton alveolus*, Sars, which may be taken as the type of this series, occurs off the west coast of Norway at from 150 to 420 fathoms, and has also been dredged from 220 fathoms in the Gulf of St Lawrence, from 150 fathoms in the Gulf of Maine, and northwards along the east coast of North America beyond New England waters, from 99 to 640 fathoms, a region which is swept by Arctic currents. *Leptochiton belknapi*, Dall, has been dredged from 1006 fathoms (bottom temperature 35°·5 F.) in the North Pacific, near the Aleutian Islands, and by the Challenger Expedition off Cape Bolinas, Luzon, Philippine Islands from 1050 fathoms (bottom temperature 37°). Another allied species, *Leptochiton benthus*, n. sp., also from the North Pacific, 15° north of Hawaii, Sandwich Islands, from 2300 fathoms (red clay, bottom temperature 35°·1), attains the greatest depth which has hitherto been recorded for any