VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on the Pelagic Hemiptera procured during the Voyage of H.M.S. Challenger, in the years 1873-1876. By F. Buchanan White, M.D., F.L.S.

I. HISTORY AND BIBLIOGRAPHY.

The only Pelagic Hemiptera, and indeed the only truly pelagic insects, belong to the genus *Halobates* and one or two allied genera. *Halobates* was founded in 1822 by Professor J. Friedrich Eschscholtz, of the University of Dorpat, for the reception of three species taken during von Kotzebue's voyage round the world in the ship "Rurick." Since that time a few other species have been described, but specimens are still rare in collections, and consequently little has been added to our knowledge of the genus.

A special interest is attached to these animals, as being the only pelagic representatives of their class. It is true that a few other insects are marine, but they are all found in close proximity to the shore, whereas the species of *Halobates* usually, and in some cases only, occur at a considerable distance from any land. Moreover, their structure would seem to indicate that they are archaic forms of very great antiquity, and hence all that can be learned with regard to them is of very great importance.

Abundantly as they seem to be distributed in the tropical seas, specimens are very rare in collections, and, when named at all, are in most cases wrongly determined.

For these reasons it has been deemed advisable to attempt a monograph of the genus, though it is probable that many species yet remain to be discovered by those who have the opportunity and the will to turn their attention in this direction.

The literature of the genus is not extensive, but, as it is much scattered, it has been

Amongst these may be noticed species of Aspus, Hesperophilus, Micralymna, &c., belonging to the Coleoptera; Aspophilus amongst the Hemiptera; two Caddis-flies (Philanisus plebejus and Molanna, sp.) amongst the Neuroptera; and a few Diptera (such as Chironomus oceanicus); which either in the perfect or in the larval condition habitually live below high-water mark. In addition to these some other species are to be found occasionally in salt or brackish water.