

demand too much from the imagination if we suppose that the genus originated there, and has spread thence to other parts of the world.

So far as some of the species are concerned, this seems almost certain. The two species *proavus* and *hayanus* are, while distinct enough, extremely closely allied and very similar in general appearance. The first occurs near Gilolo, the second in the Red Sea. Now Professor Semper¹ has pointed out the close alliance between the mollusca, crustacea, fishes, &c., of the Red Sea and Indian Ocean and those of the Philippines and Western Pacific, and has suggested that this alliance is due to the currents. He also states that a strong superficial current enters the Red Sea, and, while taking many species in, prevents the return of those which dwell on or near the surface. From this it seems not improbable that *hayanus* has been developed from emigrant individuals of *proavus*.

So far as general appearance and coloration go, two other species—*flaviventris* and *frauenfeldanus*—also resemble *proavus*, but structurally they present far greater differences, and indeed if *frauenfeldanus*, which I have not seen, be correctly described,² it would seem almost to deserve generic separation. *Frauenfeldanus* occurs at the Nicobar Islands, *flaviventris* near Ceylon, Madagascar, and St. Helena, and it does not seem impossible that they have in *proavus* their common ancestor, or at least have had with that species and *hayanus* a progenitor less remote than the common ancestor of the genus.

Wüllerstorffi, *micans*, and *princeps* are three other species somewhat closely allied. The headquarters of *wüllerstorffi* certainly appear to be the Atlantic, but notwithstanding this it probably came originally from the Western Pacific, for by the arrangement of ocean currents it seems scarcely possible that it should have spread in the opposite direction.

In like manner *sericeus*, if it occurs elsewhere than the Pacific, has probably been carried thence by the currents.

Of the distribution of the remaining species we know too little to make it worth discussion. To conclude, it seems probable that the genus originated in the region of the West Pacific, and that the species, or their ancestral forms, have been distributed by the ocean currents.

HALOBATODES.

Halobatodes lituratus is reported as occurring in the Chinese Sea, between Manilla and Hong Kong. The locality of the closely allied *histrion* is "Japan," but whether it is marine or fresh-water is not stated. *Compar* is an Indian species, and *stali* comes from Ceylon.

This distribution is interesting, when it is remembered that the metropolis of the species of *Halobates* is the region between the Indian Ocean and Western Pacific, and that *Halobatodes* has probably been derived from *Halobates*.

¹ The Natural Conditions of Existence, p. 279, 1881.

² See however the description, *antea*, p. 57.