

Fam. CYCLOSTOMIDÆ.

The Cyclostomidæ are characterized by a generally oblong finely sculptured shell of reddish-grey colour, often with brown interrupted bandlets or rows of spots; and, chiefly, by the operculum being of a rather ovate subangular form and composed of few spiral whorls. They are generally smaller in size than the Cyclophoridæ. As regards the radula they are also Tænioglossata, but the outer plates are often provided with many deep notches, so that they may be looked upon as forming a sort of transition to the Rhipidoglossata (Helicinidæ).

Their geographical distribution is very peculiar, extending (1) over the whole of Africa, with Madagascar and Arabia, Southern and Western Europe, and (2) Central America; they are very plentiful in the larger islands of the West Indies, especially in Cuba (136 species) and Jamaica (66 species), and are also represented in nearly all the small islands, from the Bahamas to Trinidad (about 56 species). The species found on the continent of America are comparatively few in number, and they do not extend to any notable distance from the Caribbean Sea: five are found on the shores of Venezuela, two (so far as we know) in British Guiana, but one in Ecuador (*Chondropoma aspratile*, Morel.), and one is said to come from Bolivia (*Cistula thoreyana*, Phil.); this last statement, however, requires confirmation, as it dates from 1851 and has not since been verified. Not one is known from Cayenne or Brazil. It appears, therefore, that the Cyclostomidæ follow chiefly the chain of the Andes.

In the United States, one species is found in Florida, which, as is well known, pertains more to the Caribbean than to the Nearctic fauna. Within the limits of Mexico and Central America we know at most seventeen, or, including all doubtful ones, twenty-one species:—one or two only from north of the Isthmus of Tehuantepec, most of them (not only as regards species, but in the number of individuals) in Yucatan, Guatemala, and Honduras, that is to say, in the large tropical wooded countries which drain into the Caribbean Sea and are moistened by winds from that quarter. In Mexico (Yucatan excepted) the only precisely known localities are Cordova and Atoyac in the province of Vera Cruz, both on the eastern slope. It is very remarkable that hitherto no special locality situated on the western slope is known as a "habitat" of a species of Cyclostomidæ; only the vague statement "Isthmus of Tehuantepec" and the quite general ones "Mexico," "Chiapas," "Guatemala" suggest the possibility that some species may perhaps also be found on the western slope.

The most elevated locality known to me is Coban in northern Guatemala, *Chondropoma rubicundum* being found there as well as at a lower elevation.

The genera are not at all distinct from those prevailing in the islands of the Caribbean Sea; but not all Caribbean genera are represented on the continent of America—for example, *Cyclostoma* proper (*Tudora*?), *Licina*, *Ctenopoma*, *Jamaicia*. The geogra-