

numerous Costa-Rican forms I am indebted to H. Pittier and P. Biolley. But I dare not draw general conclusions, which might be disproved by the next observing traveller. The central Tableland of Mexico, without manifest drainage either to the Atlantic or to the Pacific, is treated in the enumeration of localities in the body of the work, and in the preceding Tables, as a distinct division. This region appears to be essentially poorer in Molluscs than the adjacent Eastern slope, the State of Vera Cruz, especially in Cyclophoridæ and Cyclostomidæ, as well as in *Omphalina*, among the land-shells; *Aplecta*, *Stenophysa*, *Ampullaria*, *Neritina*, *Glabaris*, and *Polymesoda*, among the freshwater shells, are wanting in Central Mexico, while they are present on the Western and Eastern slopes: the number of freshwater shells is also remarkably smaller, especially in the genera *Unio* and *Anodonta*; *Planorbis*, on the contrary, and the subgenus *Alampetis* of *Physa* are, however, well represented: among the land-shells, *Helicina*, *Glandina*, *Polygyra*, *Otostomus*, *Eucalodium*, *Holospira*, and *Succinea* are comparatively numerous. In Guatemala, Nicaragua, and Costa Rica I have also distinguished for the land-shells a central region, as distinct from the Pacific and Atlantic slopes: in Guatemala it comprises the metamorphic formations of the upper districts drained by the River Usumacinta and the upper half of that of the Rio Grande or Motagua River; in Nicaragua it corresponds to the basin of the Lake of that name, draining to the Atlantic, although nearer geographically to the Pacific; and in Costa Rica it comprises the elevated regions in the vicinity of the capital, San José, 1200 metres and more above the sea. The relationship of the fauna of these central parts to that of the neighbouring Pacific and Atlantic provinces will be seen particularized in the Tables: generally, it may be mentioned that *Helicina*, *Glandina*, *Streptostyla*, *Otostomus*, and *Succinea* are more or less well represented on the central plateaux, as in Central Mexico, and the Cyclophoridæ and Cyclostomatidæ very scarce. The species hitherto known to occur in the highest regions (2400–3500 metres, or about 8000–11,600 feet) on the central Tableland of Mexico and Guatemala belong to the genera *Helicina* (see *infra*, pp. 33, 37, 603), *Glandina* (pp. 54, 73), and *Otostomus* (pp. 208, 210)*.

* Fischer and Crosse (Miss. Sci. Mex., Moll. ii. p. 677) mention correctly in this respect *Helicina* and *Glandina*; but they go too far in stating that in South America, as a difference from the fauna of Mexico and Guatemala, the land-shells of the most elevated regions are *Bulimulus*; for *Otostomus sulcosus* (*Bulimulus*, in the sense of Fischer and Crosse) reaches in Mexico the height of 3200 metres (see *infra*, p. 208), and *O. ghiesbreghti*, in Guatemala, reaches 2600–2900 metres, which is a much greater elevation than that known for *Glandina* (2250–2400 metres), but less than that reached by *Helicina* (3500–3900 metres).