

## 14. CHILOPODA and DIPLOPODA: by R. I. Pocock.

The dates of publication of this Volume are, Chilopoda 1895–1896, Diplopoda 1903–1910. For the two groups 255 species are enumerated, of which 106 are described as new, the Chilopoda numbering 53 (19 new) and the Diplopoda 202 (87 new) respectively. The author, for want of sufficient data, does not give any particulars as to general distribution, beyond that mentioned under each genus or species in the text. The three plates belonging to the Chilopoda are partly coloured, the twelve others referring to the Diplopoda are uncoloured.

[The PROTOTRACHEATA (*Peripatus*, &c.) have not been studied.

One species at least has been recorded from Nicaragua.]

## 15. COLEOPTERA. Vol. I. part 1: by H. W. Bates: Cicindelidæ and Carabidæ.

The author, who had previously studied the insect fauna of the Amazons during his long residence in that region, remarks, in his 'Introduction' (published in 1884), on the Central-American fauna of these two families as follows:—"The number of species (1086), belonging to 154 genera, is greater than the apparent poverty of tropical regions in Carabidæ would have led us to expect. The tolerably well-worked valley of the Amazons, although rich in species of genera belonging to alluvial plains, and in arboreal forms, contains only 576 species belonging to 124 genera; and the fauna of such tropical regions as the Malay archipelago is still poorer. The reason for the comparative paucity of Carabidæ has been supposed, apparently on good grounds, to be that their place, as predaceous terrestrial insects, is to a great extent occupied by the ubiquitous ants. The undoubted fact that purely epigæous Carabidæ, except marsh species, are scarce in the Tropics, especially near the Equator and in the lowlands, and that arboreal or climbing forms alone are numerous and varied, affords support to this hypothesis. The essentially Neotropical character of the Central-American fauna is generally admitted, and is strikingly confirmed by the Cicindelidæ and Carabidæ. But with regard to the northern limits of the fauna, and especially the extent to which Nearctic and North-temperate forms have penetrated the region from north to south, these are points not yet settled. Wallace included, or seemed inclined to include, the whole of the central highlands of Mexico and Guatemala in the Nearctic province, which must mean that the North-temperate American forms are there in the majority. The two families of Coleoptera we are dealing with do not support this conclusion. The Nearctic forms are comparatively few, and in the 'tierra templada' are far outnumbered by tropical genera. The northern limit of the Central American fauna appears to be—on the highlands, if not also on the maritime lowlands east and west—a little south of the political frontier of Mexico. Does the Central American fauna constitute one homogeneous province, or is it divisible into two subprovinces, as Salvin ('Ibis,' 1866, p. 202) has shown to be probably the case with