in the inferior subdivisions of Worms), and the resemblance in the form of some species to Daphniæ and other Entomostracans, sustain the view that they are Crustacean.

The Cirripeds appear to be only attached, amplificate Ostra-

coids. (See pages 324, 325.)

The subdivisions of the orders of Insecteans and Crustaceans are then the following:

	Insects.	Spiders.	Myriapods.	Decapods.	Tetradecap's.	Entomostr.
α.						
β.	Ctenopters.			Brachyurans.	Isopods.	Carcinoids.
γ	Metasthenics or Elytropters.	Scorpionoids.	Diplopods.	Macrurans.	Amphipods.	Ostracoids.
a. D.	Apters.	Acaroids.			Trilobites.?	Limuloids.
b. D.				l ——	l ——— I	Rotifers.

7. Subdivisions of the orders of the class of Worms.—On the true method of grouping the typical (Branchiate and Abranchiate) Annelids, I here make no suggestions. The tribes of the other orders are probably those indicated on page 343, and which need not be here repeated. The Cystics are there included with the Cestoids. If any of the simple Cystics are really adults, they may possibly make a second subdivision of the Cestideans.

8. Subdivisions of the classes of Mollusks.—The Ordinary Mollusks include three orders, as usually given: (1) Cephalopods, (2) Cephalates and (3) Acephals; of which, the first two correspond to different grades of typical Mollusks, and the last is degradational in its relations to the type, the species being im-

perfect in the senses and means of locomotion.

The Ascidioid Mollusks comprise (1) Brachiopods and (2) Ascidians, with perhaps the Bryozoans as the third order. If the last, however, be made a third class, as suggested (though with hesitation) on page 340, there is no third order, unless the inferior of the compound Ascidians, having water-apertures to a group of individuals instead of to each one, and the mouth-opening of each usually radiated (the number of rays six), be regarded as the third. This would make the orders, (1) Brachiopods; (2) Ascidians; (3) Incrustates; the first two typical, the last degradational and strikingly hemiphytoid.

## 4. Conclusions.

The preceding review of zoological classification appears to sustain the following general conclusions.

1. Number and typical relations of the subdivisions of groups.

I. The number of subkingdoms, classes, orders, and tribes in the system of animal life is either four or three, that is, the division in each case is either quaternate or ternate.

Am. Jour. Sci.—Second Series, Vol. XXXVI, No. 108.—Nov., 1863.