Forbes. These affinities I have recognized in uniting the Hydroids and Gymnophthalmata with the Siphonophoræ in one order, to which I have lately added the Tabulata and Rugosa of Milne-Edwards. This step seems to me to have at last circumscribed the class within its natural limits, and fixed its boundaries on the side of the Polyps, where the dividing line had remained more vague than in any other direction.

I have already presented my objections to some points of the classification of Vogt relating to the Acalephs in general. I have only to give here an outline of the minor divisions which he admits among these animals. But while I cannot agree with his classification, it is but justice to him to say that his paper upon the Siphonophoræ of Nizza is one of the most valuable contributions of modern times to the natural history of these animals, forming, in connection with similar papers by Leuckart, Kölliker, Gegenbaur, and Huxley, a very full description of all the representatives of this type.

CLASSIFICATION OF VOGT, 1851.

Referring the Ctenophoræ to the Mollusks, Vogt, in his "Zoologische Briefe," published in 1851, has adopted the following classification for the Acalephs, after dividing the Radiata into four classes: *Polyps*, including Lucernaria but not the other Hydroids, *Hydromedusæ*, *Siphonophoræ*, and *Echinoderms*.

The class of HYDROMEDUSÆ (Quallenpolypen) is divided into two orders:—

1st Order. *Hydroids*, with three families: Hydrida, Tubularida, Campanularida.

2d Order. *Medusæ*, with six families: Medusida, Oceanida, Æquorida, Bereuicida, Rhizostomida, Geryonida.

The class of SIPHONOPHORÆ (Röhrenquallen) is divided into three families: Physalida, Velellida, and Diphyida, to which Stephanomia is appended.

The class of CTENOPHORÆ (Rippenquallen) is divided into two families: Beroida and Callianirida.

In his paper upon the Siphonophoræ of Nizza, published in 1854, Vogt has appended the following classification of the order of his Hydromedusæ, which embraces them:—

Order I. POLYPI NECHALEI.

1st Division. With active natatory organs. Polyps provided with fishing threads. Swimming belly hollow.

1st Family. *Agalmides:* Apolemia, Agalma, Physophora.—The genera Rhizophysa, Brachysoma, Stephanomia, Epibulia, Sarcoconus, and Discolabe, are considered as founded upon mutilated animals.

2d Family. *Hippopodides:* Hippopodius, Vogtia.—Elephantopes and Racemis are questionable.

3d Family. *Diphyides:* Praya, Galeolaria, Diphyes. All the other genera referred to this family are rejected.

4th Family. *Athorybides:* Athorybia.—The genus Anthophysa is questioned.

2d Division. With passive natatory organs.

1st Family. *Physalides:* Physalia.—The sub-genera Salacias, Cystisoma, and Alophotes, are considered as useless; and Angela as probably near Physalia.

2d Family. *Velellides:* Velella and Porpita.—Rataria is young Velella.