The history of the Acalephs has received very important accessions from the investigations of Mertens, who was naturalist in the Russian exploring expedition of the Seniavin. Unfortunately he died before having published his labors; and the only paper he left so far finished as to have appeared under his name is his "Beobachtungen und Untersuchungen über die Beroeartigen Akalephen," in 2d vol. 6° ser., Mem. Acad. Scien. Pétersbourg. Brandt, who had superintended the publication of this paper, afterwards worked up the materials left by Mertens relating to the other families of the Acalephs, and gave a full account of them in the "Ausführliche Beschreibung der von C. II. Mertens, auf seiner Weltumsegelung beobachteten Schirmquallen," 4° vol. Mém. Acad. Sc. Pétersbourg. The value of Mertens's contributions to the natural history of these animals may be inferred from the simple fact, that Brandt, without having seen the Acalephs he describes, could make elaborate descriptions of them merely from the drawings and scanty notes found among Mertens's papers. The fact is, the drawings of Mertens, and those of his travelling companion, Professor Postels, are among the most accurate and beautiful representations of Acalephs thus far published, and constitute by themselves an ample atlas of the whole order of Discophoræ.

CLASSIFICATION OF BRANDT, 1833.

Brandt, in his "Prodromus Descriptionis animalium ab II. Mertensio observatorum," published in the Memoirs of the Imperial Academy of Sciences of St. Petersburg, in 1833, has the following classification of the Acadephs, exclusive of the Beroids:—

DISCOPHORE. MEDESIDE.

Monostomæ.

Oceanidm: Circe, Conis.

Æquoridæ: Æquorea, Stomobrachiota, Mesonema, Zygodactyla, Æginopsis, Polyxenia.

Medusidae: Phacellophora; Cyanca and Cyancopsis; Aurelia: Monocraspedon, Diplocraspedon;

Pelagia, Chrysaora.

Polystomæ.

Geryonida: Geryonia, Proboscidactyla, Hippocrene.

Rhizostomida: Cassiopea.

Incertæ sedis.

Berenicidæ: Staurophora.

SIPHONOPHOR.E.

Diphyidæ: Diphyes.

Physophoridæ: Physophora.

Rhizophysidæ: Epibulia: Macrosoma, Brachysoma.

Agalmidæ: Agalma.

Anthophysida: Athorybia, Anthophysa, Apolemiopsis.

Physalida: Physalia: Salacia, Alophota.

Velellida: Velellina: Velella, Aristerodexia; Porpitina: Porpita.