

CLASSIFICATION OF GEGENBAUR, 1856-1859.

Gegenbaur is the last author to whose systematic views I have to allude, as far as they relate to the Acalephs in general: later authors have only considered parts of the subject. He, like most recent German writers, adopts the primary division of the Radiata into Cœlenterata and Echinodermata, proposed by Leuckart, and in his Textbook of Comparative Anatomy subdivides the Cœlenterata into three classes: POLYPI, HYDROMEDUSIDA, and CTENOPHORA. Here the Hydroids are all referred to the class of the Hydromedusida, with the sole exception of Lucernaria, which is left among the Polyps. The Hydromedusida themselves are divided in the following manner:—

- 1st Order. HYDROIDEA: Coryne, Syncoryne, Hydraetinia, Sertularia, Pennaria;—Campanularia, Eudendrium, Tubularia.
- 2d Order. MEDUSIDA: 1° *Craspedota*: Oceania, Sarsia, Lizzia;—Geryonia;—Æquorea;—Ægineta, Cunina. 2° *Acraspeda*: Pelagia, Aurelia, Chrysaora;—Rhizostoma, Cassiopeia.
- 3d Order. SIPHONOPHORA: Velella, Porpita;—Diphyes, Abyla;—Agalma, Physophora, Physalia.

To the class Ctenophora the genera Cestum, Cydippe;—Mnemia, LeSueuria;—Eucharis;—and Beroe, are referred. But Gegenbaur had already published a more special account of his view of the Ctenophora in 1856, in the "Archiv für Naturgeschichte," p. 163, in which he adopts the following families:—

- Callianiridæ: Callianira.
- Calymnidæ: Calymna, Mnemia, Axiotima, Bolina, Eucharis, Leucothoe, Alcinoe, Chiaja, LeSueuria, and Euramphæa.
- Cestidæ: Cestum.
- Cydippidæ: Neis, Ocyroe, Mertensia *Less.*, Anais, Eschscholtzia, Mertensia *Gegenb.*, Janira, Cydippe, Pleurobrachia, Beroe *Mert.*, Owenia.
- Beroidæ: Beroe (*Idya*, *Cydalisa*, *Medea*).—Sicyosoma.

In 1857, Gegenbaur published a special paper upon the Discophoræ in the Zeitschrift für wissenschaftliche Zoologie, in which he admits two great divisions, corresponding to the *Phanero carpæ* and *Cryptocarpæ* of Eschscholtz, and to the *Steganophthalmata* and *Gymnophthalmata* of Forbes, as follows:—

ACRASPEDA, with four families:—

- Rhizostomidæ: Rhizostoma, Cephea, and Cassiopeia.
- Medusidæ: Aurelia, Sthenonia, and Cyanea.
- Pelagidæ: Chrysaora, Pelagia, and Nausithoe (*Oetogonia*).
- Charybdeidæ: Charybdea.

CRASPEDOTA, with seven families:—

- Oceanidæ: Oceania, Saphenia, Turris, Sarsia, Modeeria, Bougainvillea, Lizzia, Cytavis, Zanclea, Steenstrupia, Euphysa, Cladonema, Willsia, Chrysonitra; with five sub-families, *Oceanidæ* proper, *Sarsiadæ*, *Bougainvillidæ*, *Willsiadæ*, and *Cladonemidæ*.
- Thaumantidæ: Thaumantias, Staurophora, Tiaropsis, and Tima.
- Æquoridæ: Æquorea, Mesonema, Stomobrachium.
- Eucopidæ: Eucope, Sminthea, Eurybiopsis, Aglaura.
- Trachynemidæ: Trachynema, Rhopalonema.
- Geryonidæ: Geryonia, Liriopæ.
- Æginidæ: Cunina, Ægineta, Ægina, Æginopsis, Polyxenia.