

Goldfuss was one of the most eminent zoölogists of the German school of Physio-philosophers. Adopting the general view of Oken, that the animal kingdom is an organic whole, representing as it were the individualized parts of the highest living beings, he considers the classes and their subdivisions as determined by the nature of the organs through which animal life is maintained. In the special parts of his Text-book he displays an extensive acquaintance with the whole animal kingdom, and suggests many important improvements over the classifications of his predecessors. His arrangement of the Acalephs especially, discloses a better appreciation of their affinities than any previous system.

CLASSIFICATION OF GOLDFUSS, 1820.

In his "Handbuch der Zoologie," published in 1820, Goldfuss unites into one class, under the name of Protozoa, the following groups of animals, which he considers as orders of that class: 1° Infusoria, 2° Phytozoa, 3° Lithozoa, 4° Medusinae. This fourth order embraces the Acalephs proper, which are divided into the following families:—

- 1st Family. *Æquorea*: Eudora, Ephyra, *Æquorea*, Orythia, Oceania, Cephea, Pelagia, Cassiopea, Callirhoe.
- 2d Family. *Beroes*: Idia, Beroe, Cestum, Callianira.
- 3d Family. *Physophoræ*: Rhizophysa, Physophora, Stephanomia, Arethusa.
- 4th Family. *Porpitæ*: Porpita, Velella.

The Hydroids are divided among the orders Infusoria and Phytozoa, and the Corallinae and Crinoids among the Lithozoa. The separation of the Beroes and Porpitæ from the Medusæ proper is a marked improvement over the classification of Cuvier.

As naturalist of the expedition of the Rurick around the world, Chamisso had excellent opportunities for studying the Acalephs, and his special investigations of many new forms are truly valuable. His paper upon Salpa, also the result of this voyage, is the most important contribution of the poet-naturalist to the advancement of science. In working up his materials relating to the Acalephs, he was assisted by his friend Eysenhardt, himself the author of an excellent paper upon the anatomy of Rhizostoma.

CLASSIFICATION OF CHAMISSO AND EYSENHARDT, 1821.

- MEDUSÆ*. *Vesiculares*: Physalia, Physophora, Rhizophysa.
- Medusæ proper*: Rhizostoma, Cephea, Pelagia, Cyanea, Aurelia, *Æquorea*.
- Vibrantes*: Beroe, Callianira, Cestum, Appendicularia.
- Chondrophoræ*: Velella, Porpita.
- Anomalæ*: Diphyes, Stephanomia.

This classification is a mere reproduction of that of Goldfuss, with a change of names and an injudicious separation of Stephanomia and Diphyes from the other Siphonophoræ.