## CLASSIFICATION OF VAN BENEDEN.

Van Beneden has also proposed a classification based upon Embryology, which was first sketched in his paper upon the Embryology of Bryozoa: Recherches sur l'anatomie, la physiologie et l'embryogénie des Bryozoaires, Bruxelles, 1845, 4to., and afterwards extended in his Comparative Anatomy: Anatomie comparée, Bruxelles, (without date, but probably from the year 1855,) 1 vol. 12mo.

I. HYPOCOTYLEDONES or HYPOVITELLIANS. (Vertebrata.) The vitellus enters the body from the ventral side.
- CL. 1. Mammalia. (Primates, Cheiroptera, Insectivora, Rodentia, Carnivora, Edentata, Proboscidea, Ungulata, Sirenoidea, Cetacea.)
- CL. 2. Birds. (Psittaceæ, Rapaces, Passeres, Columbæ, Gallinæ, Struthiones, Grallæ, Palmipedes.)
- CL. 3. Reptiles. (Crocodili, Chelonii, Ophidii, Saurii, Pterodactyli, Simosauri, Plesiosauri, Ichthyosauri.)
- CL. 4. Batrachians. (Labyrinthodontes, Peromelia, Anura, Urodela, Lepidosirenia.)
- CL. 5. Fishes. (Plagiostomi, Ganoidei, Teleostei, Cyclostomi, Leptocardii.)

II. EPICOTYLEDONES or EPIVITELLIANS. (Articulata.) The vitellus enters the body from the dorsal side.
- CL. 6. Insects. (Coleoptera, Nevroptera, Strepsiptera, Hymenoptera, Lepidoptera, Diptera, Orthoptera, Hemiptera, Thysanura, Parasita.)
- CL. 7. Myriapodes. (Diplopoda, Chilopoda.)
- CL. 8. Arachnides. (Scorpiones, Araneæ, Acari, Tardigrada.)
- CL. 9. Crustacea. (Decapoda, Stomapoda, Amphipoda, Isopoda, Læmodipoda, Phyllopoda, Lophyropoda, Xiphosura, Siphonostoma, Myzostoma, and Cirripedia.)

III. ALLOCOTYLEDONES or ALLOVITELLIANS. (Mollusco-Radiaria.) The vitellus enters the body neither from the ventral nor from the dorsal side.
- CL. 10. Mollusca. Including Cephalopoda, Gasteropoda, Pœcilopoda, and Brachiopoda. (Acephala, Tunicata, and Bryozoa.)
- CL. 11. Worms. (Malacopoda, Annelides, Siponculides, Nemertini, Nematodes, Acanthocephali, Scoleides, Hirudinei.)
- CL. 12. Echinoderms. (Holothuriæ, Echinides, Stellerides, Crinoides, Trematodes, Cestodes, Rotiferi, Planariæ.)
- CL. 13. Polyps. Including Tunicata, Bryozoa, Anthozoa, Alcyonaria, and Medusæ, as orders. (Ctenophoræ, Siphonophoræ, Discophoræ, Hydroids, Anthophoridæ.)
- CL. 14. Rhizopods. Only the genera mentioned.
- CL. 15. Infusoria. Only genera and families mentioned.

Van Beneden thinks the classification of Linnæus truer to nature than either that of Cuvier or of de Blainville, as the class of Worms of the Swedish naturalist corresponds to his Allocotyledones, that of Insects to his Hypocotyledones, and the four classes of Pisces, Amphibia, Aves, and Mammalia to his Hypocotyledones. He compares his primary divisions to the Dicotyledones, Monocotyledones, and Acotyledones of the vegetable kingdom. But he overlooks that the Cephalopods