1828. MILNE-EDWARDS, HENRI, born October 23, 1800, died July 29, 1885 (Friedländer, Naturæ Novitates).

Mémoire sur quelques Crustacés nouveaux. Annales des sciences naturelles. Tom. 13, pp. 287 to 301. Pl. 13, 14, 15. 1828.

The first of these new Crustaceans is considered by Milne-Edwards to be evidently an Amphipod. He says it resembles the Gammarids by its general form, the disposition of the antennæ, and the appendages under the five first segments of the abdomen; it is separated from them by the structure of the two first pairs of feet, by the form of the terminal segment of the abdomen, and by the long filaments which this latter supports; these characters, he says, bring it near to Eupheus, with which it cannot be confounded. Eupheus had been withdrawn from the Isopods and placed among the Amphipods by Latreille in his last work, and Milne-Edwards believes that his new genus will here fill up a gap between "les Amphipodes uroptères et les hétérops," though the characters of the Uroptera will require some slight modification. He thus defines the genus Rhæa:-"Quatre antennes dont les supérieures sont grosses, bifides, et plus longues que les inférieures, quatorze pattes dont les deux premières terminées par une pince et les autres par un ongle crochu; le dernier article de l'abdomen allongé et supportant deux appendices terminés par de longs filamens." The type species Rhæa latreillii has now been transferred to the earlier genus Apseudes, Leach, of which Risso's Eupheus is considered a synonym. Whether this and the other Tanaidæ should be reckoned as Amphipods is a matter still sub judice.

## 1828. STRAUS-DURCKHEIM, HERCULE EUGÈNE, born 1790 (Hagen).

Considérations générales sur l'Anatomie comparée des Animaux articulés, aux quelles on a joint l'anatomie descriptive du melolontha vulgaris (hanneton), donnée comme exemple de l'organisation des coléoptères. Paris, Strasbourg, Bruxelles, 1828.

In the introduction the author observes that animals had generally been classified in a simple series, but that the natural method is ramified, as Lamarck had first pointed out in his "Hist. nat. des animaux sans vertèbres, 1815; tome 1°r, p. 457."

In the "Tableau synoptique des animaux articulés, avec l'indication des genres par lesquels les classes et les ordres s'avoisinent dans l'état actuel de la scionce," he passes from the first class, Annelids, to the Myriapods as the second class, and from these in a straight line to the third class, the Insects, but through a branching off at the genus Glomeris to the fourth class Crustacea, in which the 1<sup>or</sup> Ordre, Isopodes" descends through the "P. or G. or Armadillo" to Sphæroma and Proto. At Proto branches off the "2.° Ordre, Parasites," including the genera Nymphon and Lernæa, while at Sphæroma another branch carries down the lines as follows:—3.° Ordre Amphipodes. P. or Gro Hiella. D. or G. or Phronima.

4° Ordre Stomapodes. P. or G. or Squilla. D. or G. or Erichthus. 5° Ordre Decapodes. 1 or Fam. Macroures. P. or G. or Mysis." &c.

He discusses, pages 33 to 38, the chemical composition of the integument of insects and Crustacea, and mentions that what Odier calls chitine, Lassaigne proposed to call Entomeiline, from ἔντομον, an insect, and εἴλυμα, a covering.

In regard to his order of "Parasites," he says in the introduction, page 17, that in it he places successively "les Nymphon, les Phoxichilus, les Pycnogonum, les Cyamus, les Cecrops, les Calygus, les Dichelestion, les Chondracante, et les Lernœa," thus mixing up Cyamus with animals very differently constructed. For Limulus he proposes a separate order with the name Gnathopodes.