

class of Crustacea, agrees strikingly with their early appearance in geological times, while the form of the adult Cirripeds¹ and that of the Lernæans would hardly lead one to suspect their near relationship, which has, indeed, been quite overlooked until Embryology showed that their true position is among Crustacea. In the development of the higher Crustacea,² their superior rank is plainly exhibited, and few types show more directly a resemblance, in their early stages of development, to the lower members of their class, than the Brachyura.

In the class of Insects, I include Myriapods, Arachnoids, and the true Insects, as, according to the views expressed hereafter, these natural groups constitute only different degrees of complication of the same combination of organic systems, and must, therefore, be considered as natural orders of one and the same class. This class, though very extensively studied in a zoölogical and anatomical point of view, and as far as the habits of its representatives are concerned, still requires, however, much patient work, as the early embryonic development of these animals has been much less studied than their later transformations.³ The type of the Arachnoids

pus stagnalis, Zeitsch. f. wiss. Zool. 1851, vol. 3, p. 280.—VANBENEDEN, (P. J.) Recherches sur quelques Crustacés inférieurs Ann. Sc. Nat. 3e sér. 1851, vol. 16, p. 71.—Mémoire sur le développement et l'organisation des Nicothoës, Ann. Sc. Nat. 3e sér. 1850, vol. 13, p. 354.—BARRANDE, (J.) Syst. sil. q. a.; contains the first observations upon the transformations of Trilobites.

¹ THOMPSON, (W. V.) Zoölogical Researches and Illustrations, or Natural History of nondescript or imperfectly known Animals, Cork, 1828-34, 8vo., fig.—BURMEISTER, (H.) Beiträge zur Naturgeschichte der Rankenfüsser, (Cirripedia,) Berlin, 1834, 1 vol. 4to. fig.—GOODSM, (H. D. S.) On the Sexes, Organs of Reproduction, and Development of Cirripeds, Ed. N. Phil. J. 1843, No. 35, p. 88, fig.—MARTIN ST. ANGE, (G. J.) Mémoire sur l'organisation des Cirripèdes et sur leurs rapports naturels avec les animaux articulés, Ann. Sc. Nat. 1831, p. 366, fig.—DARWIN, (CH.) A Monograph of the sub-class Cirripedia, with Figures of all the Species, London, 1851, 2 vols. 8vo. (Ray Society.)—BATE, (SPENCE,) On the Development of the Cirripedia, Ann. and Mag. Nat. Hist. 2d ser. vol. 8, p. 324.

² RATHKE, (H.) Untersuchungen über die Bildung und Entwicklung des Flusskrebses, Leipzig,

1829, 1 vol. fol. fig.—Beiträge zur Fauna Norvegia, Act. Nov. Ac. Leop. Cæs. vol. 20.—Beiträge zur vergleichenden Anatomie und Physiologie, Reisebemerkungen aus Skandinavien, Dantzig, 1842, 4to.—Zur Morphologie, Reisebemerkungen aus Taurien, Riga und Leipzig, 1837, 4to. fig.—Ueber die Entwicklung der Decapoden, Müller's Archiv, 1836, p. 187, Wiegman's Archiv, 1840, I, p. 241.—Beobachtungen und Betrachtungen über die Entwicklung der Mysis vulgaris, Wiegman's Archiv, 1839, p. 195, fig.—ERDL, (M. P.) Entwicklung des Hummeries, München, 1843, 4to. fig.—EDWARDS, (H. MILNE,) sur la génération des Crustacés, Ann. Sc. Nat. 1829.—Observations sur les changements de forme que divers Crustacés éprouvent dans le jeune âge, Ann. Sc. Nat. 2de sér. vol. 3, p. 321.—AGASSIZ, (L.) Zoölogical Notes, etc., Am. Jour. Sc. and A., 1852, p. 426.—Recent Researches, etc., Am. Jour. Sc. and A., 1852, vol. 16, p. 136.

³ HEROLD, (M.) Entwicklungsgeschichte der Schmetterlinge, etc., Kassel und Marburg, 1815, 4to. fig.—Disquisitiones de animalium vertebris carentium in ovo formatione, Frankfurt a. M., 1835, fol. fig.—RATHKE, (H.) Entwicklungsgeschichte der Blatta germanica, Meckel's Archiv, 1832.—Zur Entwicklungsgeschichte der Maulwurfsgrille (Gryl-