

tinct branches, while others unite them into one. I confess I cannot see the ground for a distinction. The worm-like nature of the larvæ of the majority of Arthropods and the perfect homology of these larvæ with the true Worms, seem to me to show beyond the possibility of a doubt, that all these animals are built upon one and the same plan, and belong, therefore, to one branch, which contains only three classes, if the principles laid down in my second chapter are at all correct, namely, the Worms, Crustacea, and Insects. As to the Protozoa, I have little confidence in the views generally entertained respecting their nature. Having satisfied myself that Colpoda and Paramecium are the brood of Planariæ, and Opalina that of Distoma, I see no reason, why the other Infusoria, included in Ehrenberg's division *Enterodela*,<sup>1</sup> should not also be the brood of the many lower Worms, the development of which has thus far escaped our attention. Again, a comparison of the early stages of development of the Entomostraca with Rotifera might be sufficient to show, what Burmeister, Dana, and Leydig have proved in another way, that Rotifera are genuine Crustacea, and not Worms. The vegetable character of most of the Anentera has been satisfactorily illustrated. I have not yet been able to arrive at a definite result respecting the Rhizopods, though they may represent, in the type of Mollusks, the stage of yolk segmentation of Gasteropoda. From these remarks it should be inferred, that I do not consider the Protozoa as a distinct branch of the animal kingdom, nor the Infusoria as a natural class.<sup>2</sup>

Taking the class of Worms, in the widest sense, it would thus embrace the

<sup>1</sup> That Vorticellidæ are Bryozoa, has already been stated above.

<sup>2</sup> SCHULTZE, (M.) Beiträge zur Naturgeschichte den Turbellarien, Greifswald, 1851, 4to., fig.—Zoologische Skizzen, Zeitsch. f. wiss. Zool. 1852, vol. 4, p. 178.—MÜLLER, (J.) Ueber eine eigenthümliche Wurmlarve, etc., Archiv, 1850, p. 485.—DESOR, (E.) On the Embryology of Nemertes, with an Appendix on the Embryonic Development of Polynoe, Boston Journ. Nat. Hist. 1850, vol. 6, p. 1; Müller's Archiv, 1848, p. 511.—AGASSIZ, (L.) Colpoda and Paramecium are larvæ of Planariæ, Proc. Am. Ass. Adv. Sc., Cambridge, 1849, p. 439.—GIRARD, (Ch.) Embryonic Development of Planocera elliptica, Jour. Ac. Nat. Sc. Phil., 2d ser. 1854, vol. 2, p. 307.—EHRENBERG, (C. G.) Die Infusionsthierchen, etc., q. n.—KÜTZING, (F. T.) Ueber die Verwandlung der Infusorien in niedere Algenformen, Nordhausen, 1844, 4to. fig.—SIEBOLD, (C. Th. E. v.) Ueber

einzellige Pflanzen und Thiere, Zeitsch. f. wiss. Zool. 1849, vol. 1, p. 270.—NAEGELI, (C.) Gattungen einzelliger Algen, Zurich, 1849, 4to. fig.—BRAUN, (A.) Algarum unicellularium genera nova et minus cognita, Leipzig, 1855, 4to. fig.—COHN, (F.) Beiträge zur Entwicklungsgeschichte der Infusorien Zeitsch. f. wiss. Zool. 1851, vol. 3, p. 257.—Beiträge zur Kenntniss der Infusorien, Zeitsch. f. wiss. Zool. 1854, vol. 5, p. 420.—Ueber Encystirung von *Amphileptus fasciola*, *ibid.* p. 434.—SCHULTZE, (M.) Ueber den Organismus der Polythalamien, Leipzig, 1854, 1 vol. fol. fig.—Beobachtungen über die Fortpflanzung der Polythalamien, Müller's Archiv, 1856, p. 165.—AUERBACH, (L.) Ueber die Einzelligkeit der Amœben Zeitsch. f. wiss. Zool. 1855, vol. 7, p. 365.—Ueber Encystirung von *Oxytricha Pellionella*, Zeitsch. f. wiss. Zool. 1854, vol. 5, p. 430.—CIENKOWSKY, Ueber Cystenbildung bei Infusorien, Zeitsch. f. wiss. Zool. 1855, vol. 6, p. 301.