

The animal of the Brachiopod had attracted the attention of Pallas in 1766, Pennant in 1773, Grundler in 1774, Müller in 1776, Poli in 1791, Lamanon and Cuvier in 1797; but no regular anatomical dissections had been executed, and these observations seemed, in a great measure, to be limited to the labial appendages, mantle, and some other minor details. This most important inquiry was, however, subsequently admirably followed out by such excellent zoologists and anatomists as Cuvier,<sup>1</sup> R. Owen,<sup>2</sup> Huxley,<sup>3</sup> Vogt,<sup>4</sup> Macdonald,<sup>5</sup> Hancock,<sup>6</sup> Gratiolet,<sup>7</sup> De Lacaze-Duthiers,<sup>8</sup> King,<sup>9</sup> E. Deslongchamps,<sup>10</sup> and others,<sup>11</sup> to whose works the reader is referred, as it would not be possible in the limited space devoted to the description of the species dredged by the Challenger Expedition to write a treatise on the history of the class, or to refer to the fossil genera and species, which vastly outnumber those inhabiting the existing seas.

Restricting ourselves, therefore, to the recent species, we may observe that the correct knowledge we now possess with respect to their geographical and bathymetrical distribution is mainly due to the numerous governmental and private dredging expeditions carried out during the last forty years. Before that period very few reliable data were in

<sup>1</sup> Cuvier.—Sur l'animal de la *Lingule anatine*, Memoires du Muséum, vol. i., 1802.

<sup>2</sup> R. Owen.—On the Anatomy of the Brachiopoda, Trans. Zool. Soc., vol. i., communicated in 1833. Sur l'appareil de la circulation chez les Mollusques de la classe des Brachiopodes, Annales des Sciences Nat., 3d ser.; Zoologie, vol. iii., Acad. des Sciences, 1845, and in Davidson's British Fossil Brachiopoda, Introduction.

<sup>3</sup> T. Huxley.—Contributions to the Anatomy of the Brachiopoda, Annals and Mag. of Nat. Hist., vol. xiv., 2d ser., Oct. 1854.

<sup>4</sup> Vogt.—Anatomie der *Lingula anatina*, 1845.

<sup>5</sup> Macdonald.—On the Physiology of the Pallial Sinuses of the Brachiopoda, Trans. Linn. Soc., vol. xxiii., 1862.

<sup>6</sup> A. Hancock.—On the Organisation of the Brachiopoda, Phil. Trans., vol. cxlviii., 1858.

<sup>7</sup> P. Gratiolet.—Recherches pour servir à l'Histoire des Brachiopodes, Journal de Conchyliologie, Oct. 1857–1860.

<sup>8</sup> De Lacaze-Duthiers.—Histoire naturelle des Brachiopodes vivants de la Méditerranée, Annales des Sciences Naturelles, Zoologie, vol. xv., 1861.

<sup>9</sup> W. King.—On Some Characters of the Living *Lingula anatina*, Annals and Mag. of Nat. Hist., July 1873.

<sup>10</sup> E. Deslongchamps.—Recherches sur l'organisation du manteau chez les Brachiopodes articulés, Caen, 1864.

<sup>11</sup> Semper.—Vascular System of *Lingula*, &c., Zeitschrift für wissenschaftliche Zool., vol. ii., 1859, and vol. xiv., 1864. S. P. Woodward.—A Manual of the Mollusca, 1856. E. Morse.—The Brachiopoda: a Division of Annelida, Am. Journ. of Science and Art, vol. for 1870. On the Oviducts and Embryology of *Terebratulina*, vol. iv., 1872. On the Systematic Position of the Brachiopoda, Proc. of Boston Soc. of Nat. Hist., vol. xv., 1873. Embryology of *Terebratulina*, Mem. Boston Soc. of Nat. Hist., vol. ii., 1869. On the Early Stages of *T. septentrionalis*, Mem. Boston Soc. Nat. Hist., vol. ii., 1869. F. Müller.—Early Stages of Certain Brachiopoda, Reichert und du Bois-Reymond's Archiv, 1860, and in Wiegmann's Archiv, 1861; see also Annals and Mag. of Nat. Hist., 3d ser., vol. viii. p. 505. Steenstrup.—Proc. Royal Danish Academy, 1847. Kowalevsky.—On the Embryology of *Argiope*, *Thecidium*, and *Terebratulina* (written in the Russian language), 1873; also A. Agassiz.—Silliman's American Journal of Science and Art, 3d ser., 1874. Hérouard.—Sur les courants de nutrition des Brachiopodes, Ann. des Sciences Phys. et Chim., 3d ser., t. xiv., and Journal de Conchyliologie, 1877. Davidson.—British Fossil Brachiopoda, Introduction, 1863. What is a Brachiopod? Geol. Mag., 1877, &c., &c. Dall.—Report on the Brachiopoda, obtained by the U. S. Survey Ex., Bull. Mus. Comp. Zool., 1877, and other papers. W. B. Carpenter.—On the Microscopic Structure of Shells, Brit. Assoc. Rep., 1843; On a Peculiar Arrangement of the Sanguiferous System in *Terebratula*, &c., Proc. of Royal Soc., vol. vii., 1854; and in Davidson's Brit. Foss. Brach., Pal. Soc., 1853. W. King.—On the Histology of the Test of the Class *Palliobranchiata*, Trans. Royal Irish Academy, vol. xxiv., 1867. J. Gwyn Jeffreys.—British Conchology. Oscar Schmidt.—Die neuesten Untersuchungen über die Brachiopoden. Halle, Zeitschr. Gesammt. Naturw., Bd. iii., 1854, pp. 325–333. E. Suess.—Über die Wohnsitze der Brachiopoden,—Wien, Sitz. Ber., Bd. xxxvii., 1859, pp. 185–248.