Tiedmann, Anat. des Fischherzens. Landshut, 1809.

Hyrtl, in Medizin. Jahrb. d. österr Staats, Band 15, 1837, upon Vascular System.

Fohmann, Saugadersystem der Wirbelthiere, Heft 1. Heidelb. 1827.

Hyrtl, in Müller's Archiv f. 1843, upon Vascular Sinuses.

Müller, in Berliner Monatsberichten f. 1841, and J. Goodsir, Trans. of Royal Soc. of Edinb., vol. 15, on Amphioxus.

Duvernoy, in Ann. des Sci. Nat., 1837, tom. 8, on Accessory Heart.

Marshall Hall on Caudal Heart, in his Essay on the Circulation.

Eschricht, über Wundernetze beim Thunfisch in Abh. der Berlin. Akad. f. 1841.

Organs of Respiration.

Rathke, op. cit. p. 181, and Müller on Myxinoidæ.

Alessandrini, de Piscium Apparatu Respirationis. Bonon. 1838.

Swimming-Bladder.

De la Roche, in Ann. du Mus. d'Hist. Nat. vol. 16.

Müller's Archiv f. 1842; Rathke, Cuvier and Valenciennes, op. cit. and Jacobi, de Vesica Aërea Piscium. Berol. 1840.

Urinary Organs.

Steenstra-Toussaint, Comment. de systemate uropoetico Piscium. Lugd. Bat. 1835.

Retzius, Obs. in Anat. Chondropterygiorum. Lundæ, 1819.

Stannius, in Müller's Archiv f. 1839.

Sexual Organs.

Rathke, op. cit. Müller's Archiv f. 1836. R. Wagner's Prodromus Hist. Generationis.

Joh. Müller, Abhand. über glatten Hai des Aristoteles. Berlin, 1842.

Hallmann, Bau des Hodens und Samenthierchen der Rochen. Müller's Archiv f. 1840.

Lallemand, Ann. des Sci. Nat., tom. 15. 1841.

Mayer, in Froriep's Notizen f. 1834, on *claspers* of Shark.

R. Wagner, in Münnchner Denkschriften, Band 2, 1837.

APPENDIX.

A LIST is subjoined of the most useful works that treat upon the Development of the Vertebrata, this being a subject of the highest interest and importance when a general comparison is instituted between the several classes.

Baer, Rathke, and others, in Burdach's Physiol. 2d ed. 1837, have given a most complete and general survey of the development of the Vertebrata. Upon that of the *Mammalia*, consult Von Baer's Entwickelungsgeschichte der Thiere, Köningsb. 1837. Bischoff, Entwickelungsgeschichte des Kaninchenes, Braunschweig, 1842, and Rudolph Wagner's Elements of Physiology by Dr. Willis, part 1, on Generation, where copious bibliographical references are also given. *Birds*, Von Baer, über Entwickelungsgeschichte der Thiere, 1 ter Theil, 1828. Pander, Beiträge zur Entwickelungsg. des Hünchens im Ei., Wurzburg, 1817. Reichert Entwickelungsleben im Wirbelthierreich, Berlin, 1840. *Reptiles*, Baer, op. cit. Band 2, on Batrachia. Rathke, Entwickelung der Natter, Köningsb. 1839. Reichert, op. cit. Vogt. Untersuch. über Entwickelungsg. der Geburtshelferkröte, Solothurn, 1842. *Fishes*, Baer, Untersuch, über Entwickelungsg. der Fische, Köningsb. 1835, and Vogt. Entwickelungsg. der Forelle in Agassiz Hist. Nat. des Poissons d'eau douce de l'Europe, Neufchatel, 1841.

The following Addenda comprise some new and valuable contributions to the literature and anatomy of the Vertebrata:—

Otto Köstlin, der Bau des Knochernen Kopfes in den vier Klassen der Wirbelthiere, mit 4 Tafeln, Stuttg. 1844.

Reichert, Vergleichende Entwickelungsg. des Kopfes der nackten Amphibien, Köningsb. 1838.

Rapp, Anat. Untersuch. über die Edentaten, Tubingen, 1843.

Natalis Guillot., l'Organiz. du Centre Nerveux d'Anim. Vertébrés in Mém. de l'Acad. de Bruxelles, tom. 13. 1843.

NOTE to pages 49 and 61.

The *thymus gland*, according to Owen, trans. Zool. Soc., vol. 1, is absent even in the fœtus of the Marsupialia, but not in the Ornithorynchus. The *Cloaca* appears only to occur in the female Marsupials.

NOTE to page 100.

Dr. Rudolph Wagner found that the bulk of the creamy fluid contained in, and even the recticular membrane lining, the *Inglwvial gland* of an old pigeon that had died two days after hatching her young, consisted of soft whitish granules, about $\frac{1}{50}$th to $\frac{1}{150}$th of a line in size, presenting in their interior small highly refractive nuclei; they consisted of protein combined with fat, but contained neither milk-sugar nor fluid casein, although the secretion of this gland has been constantly compared to the milk of a Mammiferous animal.

NOTE to page 106.

Stannius, see Müller's Archiv f. 1843, has found true *Lymphatic hearts* in the Stork among the Grallatores, in the Ostrich and Cassowary among Brevipennes, and, in the Natatores, in the Goose, Swan, Diver, and Auk. He has as yet failed to detect them in the Fowl and Turkey. Panizza was previously acquainted with their existence in the Goose; these hearts lie near the sacral bone, are connected with lymphatic vessels, and a vein issues from them. As yet they have not been observed to pulsate, though they exhibit distinct fasciculi of transversely-striated muscular fibre.

NOTE to page 117.

Tschudi, in Müller's Archiv f. 1843, describes a remarkable structure of the *Trachea* and *Inferior larynx* in Cephalopterus ornatus, which seems to agree closely with that in the Duck; it consists of an expansion of the trachea below the superior larynx into a large elongated drum-like cavity; the inferior larynx is also similarly dilated; this structure is the more remarkable from its occurring in one of the order Passerinæ and family of Coracinidæ. The bird utters a loud and unpleasant howling cry, and occurs in the same latitudes, namely, S. America, as the Howling Apes.

NOTE to page 176.

Bachthold, über die Giftwerkzeuge der Schlangen, Tubingen, 1843, gives beautiful figures of the *Poison glands* of Hydrophis pelamys and Naija rhombeata. The length of the poison gland of the latter amounted, in a specimen eighteen inches long brought from the Cape, to three inches, or a sixth part of the length of the body; it is placed parallel to the vertebral column like a broad band, and surrounded by a strongly-attached muscle, which draws the gland forward or toward the head; the gland consists of six perfectly parallel tubes, or long cæca, two of which unite to form a common excretory duct. The poison tooth is not, however, of large size.

Fischer's Amphibiorum, nudorum neurologiæ specimen primum, Berol, 1843, contains beautiful illustrations of the cerebral nerves of Bufo, Hyla, Bombinator, Pelobates, Pipa, Salamandra, Triton, Proteus, and Cæcilia.

THE END.