



In this table the branch proceeding from Mytilacea to Ostracea corresponds to the Dysodonta of Neumayr; the branch from Submytilacea to Tellinidæ and Lucinidæ represents Neumayr's Heterodonta, and the Myacea with the two branches which rise from them are his Desmodonta.

It will be noticed that the above table differs in several points from that of Professor Neumayr (*loc cit.*, p. 413). In fact, I regard his Palæoconcha as arising from the Taxodonta (Arcacea), rather than as giving origin to them. It is possible that these Palæoconcha represent the origin of the Solenomyidæ.

And again, I regard the Trigoniidæ as the direct derivatives of the Arcacea. The nature of their mantle, of their foot, and of their gills, which consists each of two plates of filaments,<sup>1</sup> afford strong evidence in favour of this interpretation.

As to the Monomyaria (Ostracea and Pectinacea) and the Heteromyaria (Mytilacea), I am in entire agreement with the opinion of Neumayr, which is shared, I believe, by all malacologists, that the first are derived from the second, of which they merely constitute a "sedentary" specialisation. The Heteromyaria find their origin in the Arcacea, through forms belonging to the Aviculidæ, and more especially to the Pterineinæ (such as *Macrodon* and *Pterinea*).

As regards the Desmodonta and Heterodonta, it will be seen that I do not regard

<sup>1</sup> Huxley, Description of the animal of *Trigonia*, *Proc. Zool. Soc. Lond.*, 1859, p. 31.