

marginal teeth, and, according to Sars,¹ its formula is 2-1-2; whilst in *Nautilus*, according to Keferstein,² there are two marginal teeth on each side, so that the radular formula is 2-2-1-2-2.

In the Pteropoda, on the other hand, the radula varies within wide limits (the extreme formulæ being 1-1-1 and 17-1-17), and besides is characterised by the uniformity of all the lateral teeth, which differ only in their respective dimensions, their form not distinguishing, among them, so-called marginal teeth.

- c. *Mandibles*.—In all the Cephalopoda these are dorsal and ventral; in the Pteropoda, on the other hand, they are lateral, sometimes situated ventrally side by side (Gymnosomata).
- d. *Salivary Glands*.—In the Cephalopoda there are generally two pairs of these, which consist of two distinct portions, viz., the distended glandular mass and the narrow excretory duct. In the Pteropoda there is never more than one pair of salivary glands, which vary in length and do not exhibit any distinction between duct and gland.
- e. *Œsophagus*.—A crop is present in the Cephalopoda but not in the Pteropoda.
- f. *Stomach*.—This organ in the Cephalopoda never possesses any masticatory plates, even in the embryonic condition; on the contrary, the Thecosomatous Pteropoda have them always, and according to Krohn³ the Gymnosomata have them during their larval development. The Cephalopoda have a gastric cæcum into which the ducts of the liver open; upon these latter is situated the gland commonly known as a "pancreas." The Pteropoda have neither such a cæcum nor "pancreas."
- g. *Intestine*.—In the Cephalopoda this organ terminates in the middle line, whilst in the coiled Thecosomata (Limacinidæ) and in the Gymnosomata it ends on the right side (in the Gymnosomata it appears to be ventral in consequence of the reduction of the pedal face; in reality it would be quite lateral if this last were of larger size); in the straight Thecosomata (Cavoliniidæ and Cymbuliidæ) it terminates on the left side, in consequence of the rotation which was explained at the end of the first part of this anatomical Report.

B. If we consider the *organs of circulation, respiration, and excretion*, we see that in the Pteropoda the heart is asymmetrical, as is also the gill when it exists, whilst in the Cephalopoda these organs (heart and gills) are quite symmetrical. In the same manner

¹ Mollusca regionis arcticæ Norvegiæ, pl. xvii. fig. 2; see also Steenstrup, *Oversigt k. Dansk. Vid. Selsk. Forhandl.*, 1880, p. 10.

² Die Klassen und Ordnungen des Thierreichs, Bd. iii. pl. cxv. figs. 2, 3.

³ Beiträge zur Entwicklungsgeschichte der Pteropoden und Heteropoden, pp. 6, 14.