barely be seen in the sea with the naked eye. The two last-mentioned forms are found in warm currents on the coast of Norway, and their presence is feared by the fishermen, because they very often spoil the herring which feed on them; the shells are very slowly digested and the

stomach-contents putrify when the herrings are salted, and then the whole herring decomposes. Among the many warmwater species Limacina bulimoides is characteristic. The Cavolinidæ include numerous forms with cornet-shaped shells. Clio pyramidata (Fig. 430) and Diacria trispinosa are very important forms, occurring in vast numbers, and their shells are very numerous in the deposits. Creseis



FIG. 429.

Limacina retroversa, Fleming.

(From Sars.)



FIG. 430. Clio pyramidata, L. (From Boas.)

acicula (Fig. 431) and Cavolinia gibbosa (Fig. 432) are characteristic forms.

The "whale's food," Clione limacina (Fig. 433), is specially abundant in northern waters, and is better known than most of the Gymnosomata. It is 3 or 4 cm. long, perfectly transparent, with red shadings and black stomach. In the Polar Sea it may be seen swimming among the ice-floes, but it occurs also in the Norwegian Sea, in the Norwegian fjords, and in the Atlantic south of Iceland.

The majority of the pteropoda (both species and individuals) are restricted to

FIG. 431. Creseis acicula, Rang. (From Meisenheimer.)

warm water: in the Atlantic the northern limit for the warm-water forms may be roughly drawn from the Bay of Biscay to New York, and the southern limit from Brazil to the Cape. This area is the real home of Clio pyramidata, C. cuspidata, Creseis acicula, the Cavolinidæ, the Cymbulidæ, Pneumoderma violaceum, Limacina inflata, L. lesueuri, L. bulimoides. As with the radiolaria and copepoda, many