Norway there are three common species: Laminaria hyperborea, L. digitata, and L. saccharina. The first of these occurs in great thickets in open bays or places where the play of the waves is felt, whereas the other two grow in more sheltered localities. The fauna varies accordingly. On the stalks of Laminaria hyperborea we get numbers of attached forms, chiefly hydroids, bryozoans, synascidians (see Fig. 327), and



FIG. 327.
Synascidian: Polycyclus fuscus,
Huitfeldt Kaas.

calcareous sponges. Halichondria panicea, one of the few siliceous sponges of the littoral zone, also

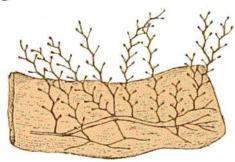


FIG. 328.

Obelia geniculata, L. (After Hincks.)

frequently forms a thick covering over long pieces of the stalks. On the blades of the laminaria two forms are very common, namely the bryozoan *Membranipora membranacea*, which makes a white covering over large portions, and the little hydroid *Obelia geniculata* (see Fig. 328). An unattached form, the gasteropod belonging to the Patellid family (*Nacella pellucida*),

is very conspicuous, owing to its handsome bluestriped shell, and lives exclusively on the laminaria.

Besides the attached forms,

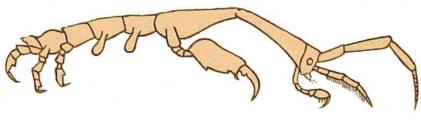


Fig. 329. Caprella linearis, L.

that often completely cover the lower parts of the laminaria, there are unattached species in great abundance existing upon or among them. The best way of observing them is to shake a thickly overgrown laminaria stalk, placed in a large glass of sea-water, when we may perceive swarms of amphipods, worms, tiny mussels and snails, little starfishes, and other creatures. The most noticeable of the amphipods are the elongated and strangely built caprellids, of which Caprella linearis (see Fig. 329)

¹ A species of Nicolea is common.