

and a few other species of *Tellina*, *Venus fluctuosa*, *Cardium ciliatum*, *C. grönlandicum*, *Thracia truncata* (rarely found in the boreal region), *Pandora glacialis*. Brachiopods: *Rhynchonella psittacea* (see Fig. 371), *Terebratulina spitsbergensis*. Echinoderms: *Asterias lincki*, *A. panopla*, *A. grönlandica*, *A. hyperborea*, *Stichaster albulus*, *Ctenodiscus crispatus*, *Ophiopleura borealis*, *Ophiura nodosa*, *Amphiura sundevalli*, *Ophiopus arcticus*, *Gorgonocephalus eucnemis* and *G. agassizi*, *Antedon eschrichti*, *A. proluxa*, *Cucumaria minuta*, *C. glacialis*, *Euphyrgus scaber*, *Trochostoma boreale*, *Ankyroderma jeffreysi*, *Chirodota lævis*, *Myriotrochus rinki*. Decapod crustaceans: *Sclerocrangon ferox*, *S. boreas*, *Sabinea septemcarinata*, *Hippolyte turgida* and *H. spinus*, *Bythocaris payeri*, *Idotea entomon*. Two species of pycnogonids, *Nymphon robustum* and *N. hirtipes*, are very abundant in the arctic region; the former is largely a deep-sea form, which descends far down into the cold area of the Norwegian Sea deep basin, whereas *N. hirtipes* belongs more to the banks and plateaus. Both species were trawled by the "Michael Sars" on the Jan Mayen plateau, showing that they may be abundant in shallow waters also. The largest pycnogonid of the Norwegian Sea is *Colossendeis proboscidea*, found both on the slopes of the deep basin and on the banks. There are also several other species of *Nymphon*, such as *N. elegans*,

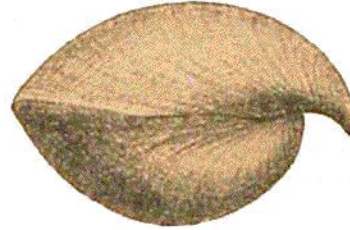


FIG. 371.

Rhynchonella psittacea, Chemn.
(After G. O. Sars.)

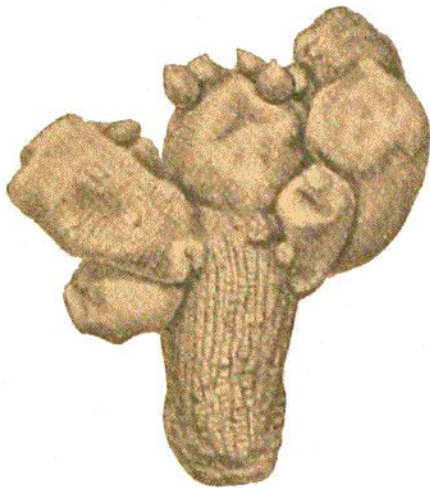


FIG. 372.

Dendrodoa aggregata, Rathke.
Nat. size.

N. macronyx, and *N. gracilipes*, which are common arctic forms. The hydroids have comparatively few purely arctic species, though the magnificent large *Tubularia regalis* is one that deserves special notice; in congenial localities like the Bear Island shoal and the banks of Jan Mayen it forms regular thickets on the bottom. Among ascidians *Dendrodoa (Styela) aggregata* (see Fig. 372) is a very characteristic arctic form, and is often found in little colonies composed of a number of cohering individuals. Another characteristic though rarer species is *Chelyosoma macleyanum*, easily recognisable owing to its extremely flattened shape and the squares into which its surface is divided. *Ciona intestinalis*, one of our commonest boreal forms, occurs in the arctic tracts as a distinct variety (*longissima*). The compound ascidians are represented by several species, amongst which the tuberous *Synoicum incrustatum*, whose surface is encrusted all over with grains of sand, may be easily recognised. Other forms are *Molgula retortiformis*, *Amaroucium mutabile* (tuberous and of a reddish-violet colour), and *Sarcobotrylloides aureum*.

The second category of forms in the arctic region is made up of those which are at the same time extensively distributed

Arctic-boreal forms.