generally find the most abundant animal life among the algæ in localities where wave-action is most effective. Most of the non-attached forms are in no way directly dependent upon the algæ-vegetation.

It will be evident that attachment to fucus and laminaria is not biologically essential, if we bear in mind that the same animal forms which attach themselves to these plants occur also on rocks and stones. The vegetation merely increases the area available for the attached forms. Nor is any particular plant essential for any particular species of animal. No doubt on the Norwegian west coast *Laomedea flexuosa* and *Clava squamata* nearly always attach themselves to *Ascophyllum*, while *Obelia geniculata* and some others prefer laminaria, but this is chiefly owing to the tides. On the Skagerrack coasts, where tides are inconsiderable and irregular, we find even in the fucus belt forms like *Coryne* (see Fig. 333), *Tubularia*, and *Obelia geniculata*, though on the west coast of Norway they grow only among the laminaria and at a lower depth. These forms cannot stand exposure for any length of time, and they are therefore not to be found in places where the ebb regularly goes back a long way. The forms met with in the tidal area cannot, however, be in any way dependent upon the ebb-tide for their existence, seeing that they occur numerously also on the coasts of the Skagerrack, where tides are scarcely felt. Instances of this are furnished by *Clava*, *Campanularia flexuosa*, and *Dynamena pumila*, but the fact that these forms are able to withstand exposure for considerable periods of time makes it possible for them to occupy a far more extensive area than would otherwise be the case.

FIG. 333.
Coryne pusilla, Gaertn. (After Hincks.)

So far as the structure of their organs is concerned, the unattached forms in the algæ-fauna are particularly well equipped for gripping, climbing, or creeping about among the hydroids and the red bushy algæ that usually grow in quantities upon the laminaria. The crustaceans (caprellids and amphipods)