

notwithstanding the apparently suitable bottom of stones and shells, is very remarkable, a few specimens of *Lepidopleurus* (*Chiton*) *cinereus* at one station (57 metres, temperature 7.9° C.) being all that we met with.

The bottom of the North Sea abounds, as already stated, in empty shells, particularly of mussels. The commonest forms are *Cardium echinatum*, *Cyprina islandica*, *Venus gallina*, *Dosinia lincta*, *Mactra*, *Psammobia ferröensis*, *Solen*, etc., all of which were likewise taken alive. *Lucina borealis*, on the other hand, though shells were met with here and there at a depth of 38 to 98 metres, sometimes even in fairly large quantities, was not captured alive out in the North Sea by us, and the "Pomerania" Expedition obtained only empty shells on the Dogger Bank; it is not included by Heincke amongst the molluscs of Heligoland, but we do find it along the coasts of Britain and in the Skagerrack. Empty shells of *Mya truncata* forma *typica* were also found in two localities, one at a depth of 14 metres off the north-west coast of Jutland, and the other midway between Jutland and Scotland at a depth of 68 metres.

The higher crustacean fauna is comparatively poor in species, most of them being restricted in distribution and few in numbers. The hermit crabs *Pagurus bernhardus* and *P. pubescens* are exceptions, as they are pretty generally distributed over the whole area, though only the first named is met with in shallow water, at or below 40 metres; at greater depths both species occur, as in some other areas of the North Sea. Of crabs *Hyas coarctatus* is common in both deep and shallow water, whereas *Portunus depurator* (or *holsatus*?) and *P. pusillus* are more limited in their distribution, and occur mainly in the lesser depths. Other forms are more local, though frequently met with in considerable numbers, like the little *Porcellana longicornis*; as a contribution to its biology I may mention that we found large numbers at two stations (depth 32 metres and 42 metres, temperature 10.9° C. and 8.7° C.), where in one case it had crept into the holes made by the borer-mussel (*Pholas crispata*) in sunken pieces of timber and in the other it occupied cavities in the large clotted lumps of sand constituting the colonies of the tube-worm *Sabellaria alveolata*. At greater depths it was absent, *Porcellana* being to a great extent a littoral form.¹

¹ We also found two other crabs in shallow water west of Jutland (32 metres): the ordinary edible crab (*Cancer pagurus*) and *Hyas araneus*. Single specimens of two species of *Ebalca*