In its normal condition *Saccammina sphærica* is readily distinguished from most of the other monothalamous species which resemble it in general contour—from the corresponding varieties of *Pilulina*, *Technitella*, and *Pelosina* by its hard rough firmly cemented test, and from *Reophax difflugiformis* by its relatively large size and thicker walls. From *Psammosphæra fusca*, the distinction, which depends primarily on the presence of a distinct aperture, is not so satisfactory, for specimens belonging unquestionably to the genus *Saccammina* are occasionally met with in which the orifice is exceedingly obscure, if not entirely wanting.

In localities where the species is very abundant, the test often assumes anomalous forms. Sometimes individuals, crowded together at the sea-bottom, adhere to each other, in which case they either have separate orifices and remain in fact independent organisms, or, as is more common, they open into each other and constitute a sort of polythalamous test. Occasionally a larger fragment of rock is built into the wall, and the test has the characters of an adherent organism (Pl. XVIII. fig. 14). In polythalamous specimens the additional chambers are smaller than the primordial one, and to some extent, therefore, supplementary; in such cases the sandy investment of the terminal sphere is often incomplete, and shows numerous large openings amongst the sand-grains. An example with some of these peculiarities is represented in Pl. XVIII. fig. 16. The large chamber adhering to two stones is the original test, and the remainder is supplementary, the smaller extremity being a mere mass of sand-grains with large interstitial openings. The chambers are sometimes connected in a straight line, as in the specimen under notice, but more commonly are combined in a less regular manner. The fusiform test, fig. 17, has two orifices, and closely resembles a single chamber of the fossil *Saccammina carteri*. Such variations from the typical form as those which have been described are more or less the result of accidental circumstances, and have little zoological significance.

Saccammina sphærica has been dredged on the coast of Norway—in Hardanger Fiord, Christiania Fiord, off Bergen, off Dröbak, and elsewhere, by M. Sars, G. O. Sars, Norman, and others. Dr. Carpenter's collection contains specimens from ten or more "Porcupine" Stations in the North Atlantic, situated west and south-west of Ireland, at depths of from 173 to 1443 fathoms; and from one point in the Faröe Channel, 542 fathoms. It occurs in eight out of ten soundings made on the Austro-Hungarian Expedition, off the shores of Franz-Josef Land, in latitude 79° to 80° N., depth, 89 to 145 fathoms; and in some of them it was the most abundant Foraminifer. It is reported also from deep water in the Bay of Biscay. It has only been found at two Challenger Stations, No. 246, near the very deep area of the North Pacific, 2050 fathoms, in which locality the specimens were built almost entirely of dead *Globigerina* shells; and Station 155, depth 1300 fathoms, near the Antarctic Ice-barrier, where a considerable number of individuals, indistinguishable from the North Atlantic type, were met with.