

chamber may be formed whenever sufficient has collected at one spot to segregate itself into a mass of the requisite size.

Setting aside a number of doubtful specimens, *Sorosphæra confusa* has been found at the following points. In the North Atlantic, south of the Rockall Bank, 630 fathoms; Farøe Channel, 542 fathoms; off Drobak, Norway (Carpenter); off the Azores, 900 fathoms; and at one Station in the North Pacific, 2900 fathoms.

*Saccammina*, M. Sars.

*Saccammina*, M. Sars [1868], Carpenter, Brady, G. O. Sars, Etheridge, Zittel, Young, Rupert Jones, Norman, Bütschli, &c.

Test free or rarely adherent; consisting of one or several rounded or fusiform chambers with distinct apertures. Polythalamous forms with or without stoloniferous connections between the chambers.

The typical condition of *Saccammina* is represented by a single, free, spherical or pyriform chamber, with compact arenaceous investment and a simple aperture situated in a somewhat produced neck. Recent specimens, as a rule, agree pretty well in all these particulars. The association of a number of such chambers in a sort of colony, so long as they are only adherent by their exterior surfaces and the individual apertures remain distinct, is a comparatively unimportant deviation from the normal state, but more noteworthy exceptions are found in the adherent and polythalamous specimens occasionally met with in localities where the typical form is abundant, and these will be alluded to in a later paragraph.

In the fossil condition *Saccammina* is normally, if not invariably, polythalamous; the chambers instead of being globular or pyriform, are, as a rule, more or less fusiform, and joined end to end by short stoloniferous tubes; though the size of the segments and the structure of the walls correspond precisely with those of the recent type.

Prof. Zittel has figured,<sup>1</sup> under the name *Saccammina schwageri*, a little fossil resembling a single segment of the common Carboniferous species, but with reticulated exterior. Surface-ornament of any sort is exceedingly rare amongst the arenaceous Foraminifera, and unless the figured reticulation is caused by an unusually regular arrangement of agglutinated sand-grains, it is difficult to see how the organism can belong to the present genus. Under the designation "*Saccammina?* (*Calcisphæra*) *eriana*,"<sup>2</sup> Principal Dawson has described certain minute calcareous spheres, plentiful in one of the Devonian limestones of Ohio. Although I have not myself been able to recognise Foraminiferal characters in specimens of the organism kindly transmitted to me by two or three American correspondents, at any rate not with any degree of certainty, I am not

<sup>1</sup> Handbuch der Palæontologie, vol. i. p. 76, fig. 5.

<sup>2</sup> *Canadian Naturalist*, 1880, vol. x. No. 1, p. 5.