Lituolidæ. Under ordinary circumstances, there is no difficulty in distinguishing the *Hormosinæ* from their larger Lituoline isomorphs, by their thin walls and smooth, almost homogeneous, tests, and amongst the smaller species by their regularity and symmetry of form.

In point of distribution *Hormosina* is essentially a deep-water type. Except possibly in the Jurassic formation of Switzerland (Haeusler), no representative of the genus has been found in the fossil state.

Hormosina globulifera, H. B. Brady (Pl. XXXIX. figs. 1–6).

Hormosina globulifera, Brady, 1879, Quart. Journ. Micr. Sci., vol. xix., N. S., p. 60, pl. iv. figs. 4, 5.
„ „ Carpenter, 1881, The Microscope, 6th ed., p. 561, fig. *c*.

Test composed of a single spherical chamber with a tubulated orifice, or of several (2 to 6) such chambers, each larger than its predecessor, and more or less embracing it. Segments arranged in straight or curved linear series, and terminating in a narrow tubular neck, which serves as the general aperture. Walls thin, texture very finely arenaceous, surface smooth. Length of polythalamous specimens, $\frac{1}{8}$th inch (3 mm.) or less.

Adult specimens of *Hormosina globulifera* have chambers varying in number from one to five or six, and the species affords frequent examples of the tendency, not uncommon amongst the Foraminifera, to cease growing after the production of a segment of relatively large size. As a rule, the specimens which have the greatest number of segments are those with the smallest initial chambers; and, on the other hand, if a very large primordial chamber is formed, the test usually remains monothalamous, and no further growth takes place. This is well illustrated by a comparison of the Lageniform specimen (Pl. XXXIX. fig. 1), with the earlier segments of figs. 3 and 4; and it will be further observed how nearly the dimensions of the arrested monothalamous test approach those of the final segments of figs. 2, 3, and 4 respectively. In the somewhat anomalous specimen (fig. 5) a second large chamber has been formed before growth has ceased.

The same rule which applies to the first chamber in the present species holds good also, more or less, during the later stages of growth amongst Foraminifera generally; and it may often be noticed, in calcareous as well as arenaceous species, that with the formation of a chamber of abnormal size, the growth, that is to say, the continued production of sarcode-segments, comes to an abrupt termination. But whatever may be the significance of monothalamous as distinct from polythalamous tests amongst the Rhizopoda of other groups, the character in the present case is not even of varietal importance.

The only species with which *Hormosina globulifera* is likely to be confounded is *Reophax pilulifera*, and from this it may generally be distinguished by its thinner walls and finer texture, and by its smooth and neatly finished exterior.