## Uvigerina, d'Orbigny.

Polymorpha, pars, Soldani [1791].

Uvigerina, d'Orbigny [1826], Reuss, Czjzek, Costa, Egger, Parker and Jones, Williamson, Carpenter, Karrer, Brady, Alcock, M. Sars, Schwager, &c.

The ordinary external aspect of the test in the genus Uvigerina is that of a more or less elongated spire, having three segments to each convolution and terminating in a tubulated aperture with an everted lip. The normal triserial arrangement is by no means constant, and some varieties are met with in which each whorl is composed of more than three segments, whilst on the other hand there are certain forms that exhibit a biserial or Textularian mode of growth. Dimorphous modifications of the typical structure, consisting of a small spiral shell surmounted by a uniserial line of segments, constitute the subordinate generic group, Sagrina.

In contour, the test of *Uvigerina* is typically ovate or slightly tapering; occasionally it is trifacial, with three more or less angular longitudinal edges; and in rare instances it is bifacial and compressed. The walls are calcareous, perforate, and hyaline, never sandy. They are seldom smooth externally, but usually bedecked with surface-ornament which takes the form of raised longitudinal costæ, fine striæ, spines, or minute prickles. Occasionally an intermediate condition is exhibited, in which the costæ are interrupted and part of them broken up into rows of tubercles or spines, as shown in Pl. LXXIV. figs. 24-26.

The genus Uvigerina is nearly related to Polymorphina, but apart from other distinctive characters the difference in their respective apertures is generally sufficient for their identification. The orifice of Polymorphina is surrounded by radiating lines, whilst that of Uvigerina, whether sessile or tubulated, is furnished with a thickened rim or a phialine lip.

The geographical distribution of *Uvigerina* extends from the most northerly points of the Arctic Ocean to the equator, and from the equator to the Antarctic Ice-barrier, and its presence has been noted at every depth down to 2600 fathoms or more. Its geological history, so far as is known, commences with the Eocene formations of the Bavarian Alps and of the vicinity of Paris, and reaches forward to the latest Glacial and Post-tertiary deposits of northern Europe.

Uvigerina canariensis, d'Orbigny (Pl. LXXIV. figs. 1-3).

<sup>&</sup>quot;Testæ pineiformes minusculæ," Soldani, 1798, Testaceographia, vol. 1i. p. 18, pl. iv. figs. E, F, G, H.

Uvigerina nodosa, var. β, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 269, No. 3. ,, canariensis, Id. 1839, Foram. Canaries, p. 138, pl. i figs. 25-27.