

seven visible segments which are individually much inflated, and the sutures correspondingly depressed externally; whilst the latter, *Polymorphina communis*, has only four or five visible segments, of which the sutures are excavated in a less degree. These characters, however, are soon found to be the result of mere individual peculiarity, and beyond that to have little or no distinctive value.

In the "Vienna Basin" memoir both forms are included, and the terms in which they are described are so nearly alike as to be practically useless for the identification of specimens. It may be inferred, however, that the shell of *Polymorphina communis* is of smaller size, that the superior end is acuminate (the oral extremity of *Polymorphina problema* being obtuse), and that the sutures are complanate—none of which are very noteworthy distinctions.

Reuss, in his notes on Herr von Schlicht's Septaria-clay Foraminifera, one of the lamented author's latest contributions to the literature of the Rhizopoda, treated *Polymorphina communis* as a variety of *Polymorphina problema*.

Practically it is quite impossible, with a number of specimens under examination, to say by any rule how they should be apportioned between the two "species," and under these circumstances the recognition of both appears needless complication of the nomenclature. *Polymorphina problema*, which obviously represents the more fully developed form, might with advantage be adopted as the type of the group, and the term "*communis*" allowed to lapse.

In like manner the two forms are closely associated in their distribution, which either from a geographical, bathymetrical, or a geological point of view, affords no basis for separate treatment. They are found in the littoral, laminarian, coralline, and coral zones of almost every latitude, reaching as far north as lat. 79° 26' N., and southwards at any rate to Tristan da Cunha and the Cape of Good Hope. The greatest depth at which they have been observed is 155 fathoms.

The same varieties are recorded from the Lower Lias (Blake); they are also well represented in the Chalk, and in marine formations of almost every later geological age.

*Polymorphina oblonga*, d'Orbigny (Pl. LXXIII. figs. 2-4).

*Polymorphina oblonga*, d'Orbigny, 1846, For. Foss. Vien., p. 232, pl. xii. figs. 29-31.

„ *uviformis*, Reuss, 1855, Zeitschr. d. deutsch. geol. Gesellsch., vol. vii. p. 289, fig. 5.

„ *guttata*, Id. 1870, Sitzungsber. d. k. Akad. Wiss. Wien, vol. lxii. p. 487.—Schlicht, 1870, Foram. Pietzpuhl, pl. xxx. figs. 25-32.

This is an elongate variety, with characters intermediate between those of *Polymorphina problema* and *Polymorphina compressa*. The test is more or less compressed, and has six to eight visible segments, which are somewhat oblong and inflated in contour, and