

cent pores coalescing into a roughly hexagonal net-work, so that the pore appears to lie at the bottom of an hexagonal pit. At each angle of this hexagon the crest gives off a delicate flexible calcareous spine, which is sometimes four or five times the diameter of the shell in length. The spines radiate symmetrically from the direction of the centre of each chamber of the shell, and the sheaves of long transparent needles, crossing one another in different directions, have a very beautiful effect. The smaller inner chambers of the shell are entirely filled with an orange-yellow granular sarcode; and the large terminal chamber usually contains only a small irregular mass, or two or three small masses run together, of the same yellow sarcode stuck against one side, the remainder of the chamber being empty. No definite arrangement, and no approach to structure, was observed in the sarcode; and no differentiation, with the exception of bright-yellow oil-globules, very much like those found in some of the Radiolarians, which are scattered apparently irregularly in the sarcode; and usually one very definite patch of a clearer appearance than the general mass, colored vividly with a carmine solution; and the presence of scattered particles of bioplasm was indicated by minute spots here and there throughout the whole substance, which received the dye.

When the living *Globigerina* is examined under very favorable circumstances—that is to say, when it can be at once placed under a tolerably high power of the microscope in fresh still sea-water—the sarcodic contents of the chambers may be seen to exude gradually through the pores of the shell, and spread out until they form a kind of flocculent fringe round the shell, filling up the spaces among the roots of the spines, and rising up a little way along their length. This external coating of sarcode is rendered very visible by the oil-globules, which are oval and filled with intensely colored secondary globules, and are drawn along by the sarcode, and may be seen with a little