spermospores and not sperm-balls, as I did in the description of *Carteriospongia radiata*, for they are quite different in appearance and structure. In *Carteriospongia radiata*, and in other instances, these formations present an aggregation of cells, if not ripe spermatozoa, these cells being each equivalent to the other, and the whole lying in a capsule formed by numerous pavement cells; in *Verongia* the analogous capsule is formed by a *single* cell, the endothelium is not to be found at all. In one word, the male generative products are quite equivalent to those of Calcarea as I have described them in *Sycon raphanus*.[1] I must confess I can find no explanation of this; the matter appeared to me strange even before, when I thought the Calcarea were opposed in this respect to the *whole* group of Silicea. I was thoroughly startled when, hand in hand with indubitable sperm-balls in *Carteriospongia* as well as in some other Keratosa of the collection, I discerned in my preparations of both species of *Verongia* the most typical spermospores. I was not able to follow out their development, but when ripe they recall so vividly the corresponding formations in *Sycon raphanus* (with the sole distinction that while in this latter instance the nucleus of the covering cell in quite ripe spermospores is in most cases indistinct, in *Verongia* I find quite empty capsules, nevertheless, provided with it) that I *must* identify both these formations; on the other hand, I have now no doubt that at the development of the *sperm-balls* no covering cell is formed, that its description by F. E. Schulze[2] agrees closely with the reality. I have repeatedly examined *Oscarella* (*Halisarca*) and *Aplysilla*, and was able to follow out the development of their sperm-balls from the first beginning, and I can only affirm the former statements of F. E. Schulze, that we have in these instances to do with real division of the sperm cells, and that there is no covering cell to be discerned. On the whole the enigmatic question requires a special and extensive investigation, the more so that it is not only of spongiological but also of general interest.

Colour.—External surface black, that of the central cavity and parenchyma grey, skeletal fibres brownish yellow.

Habitat.—Off Barra Grande, September 10, 1874; depth, 400 fathoms.

A perusal of the preceding pages shows that of thirty-four determinable forms brought home by the Challenger Expedition, almost two-thirds (21) have been found to be new, and that only three species (*Psammopemma densum*, *Luffaria variabilis*, and *Cacospongia collectrix*) were obtained from more than one locality. Under such conditions any discussion of the geographical distribution of the Keratosa would be possible only if extended over all the Keratosa hitherto described. It must be said, however, that on

[1] *Sitzungsb. Akad. d. Wiss. Wien*, Bd. lxxxvi., 1882.

[2] *Zeitschr. f. wiss. Zool.*, Bd. xxviii. p. 24, pl. iii. fig. 19.