II.—DESCRIPTION OF SPECIES.

CLASS CALCAREA, Bowerbank.

Porifera whose skeleton is composed of calcareous spicules.

ORDER HOMOCŒLA, Poléjaeff.

Calcarea without separate flagellated chambers, the whole of whose inner surface is covered with flagellated cells.

Family Asconidæ (Ascones), Hæckel.

Of the characters of the Order.

Leucosolenia, Bowerbank.

Of the characters of the Family.

Leucosolenia poterium (?) Hæckel, sp. (Pl. III. figs. 1, 2).

Ascetta primordialis, var. poterium, Hæckel, Kalkschwämme, Bd. ii. p. 16. Clathrina poterium, Ridley, Proc. Zool. Soc. Lond., 1881, p. 133.

One of the four varieties established by Prof. Hæckel for his Ascetta primordialis, the variety poterium has recently been elevated by Mr. Ridley to the rank of an independent species. In this course Mr. Ridley was supported by the fact that the sponge, having been previously found only in Australia, was also dredged in the year 1878 in Tom Bay, south-west Chili, and proved, furthermore, to be constant in its main characters, notwithstanding the distance between these two localities. As properties distinguishing the

Note.—The technical terms :—gastric, subgastric, tubar, subdermal, and dermal, are used here with the meanings applied to them by Hæckel in his Kalkschwämme. All the measurements were made with instruments by R. Winkel, of Göttingen. The specimens were examined by means of sections stained with picro-carmine and mounted in Canada balsam. The indication of the colour refers to the specimens preserved in spirit.