

times in the fourth joint there are four rows). Mouth constricted, half as broad as the fourth joint. (In Ehrenberg's figure all five joints are delineated, but the greater part of the hemispherical cephalis is broken off.)

Dimensions.—Length of the shell (with five joints) 0·1, of each joint 0·02; breadth of the fourth joint 0·05.

Habitat.—South Atlantic, Station 332, depth 2200 fathoms.

4. *Lithocampe radricula*, Ehrenberg.

Lithocampe radricula, Ehrenberg, 1838, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 130, Taf. iv. fig. 11.; Mikrogeol., 1854, Taf. xxii. fig. 23a.

Shell smooth, spindle-shaped, with five sharp strictures. Six joints equal in length, each with four transverse rows of regular, circular, double-edged pores. The third and fourth joints are the broadest, and equal. The constricted mouth is not broader than the hemispherical cephalis, scarcely one-fourth as broad as the third and the fourth joints. This remarkable species is the oldest known skeleton of a Radiolarian, a figure of it being given in 1838, *loc. cit.* (compare my Monograph, 1862, p. 3, 4, 331). But this figure of Ehrenberg is not quite accurate, and differs from other figures of the same species, which he afterwards (1854) published in his Mikrogeologie (*loc. cit.*). The best of these is fig. 23a in pl. xxii., and is identical with the typical form (common in Barbados), and according to this I have here framed my description. The sixth joint possesses a distinct (though small) terminal mouth; when this becomes closed, the species passes over into *Stichocapsa radricula*.

Dimensions.—Length of the shell (with six joints) 0·18, length of each joint (on an average) 0·03; breadth of the third and fourth joints 0·08, of the second and fifth 0·06 of the terminal mouth and the cephalis 0·03.

Habitat.—Fossil in Tertiary rocks of Barbados.

5. *Lithocampe ventricosa*, Haeckel.

Dictyomitra ventricosa, Stöhr, 1880, Palæontogr., vol. xxvi. p. 102, Taf. iii. fig. 25.

Shell ovate, with six slight strictures. Seven joints nearly equal in length, each with four (or sometimes three or five) transverse rows of small, regular, circular pores, in the last joint the pores are larger. The fourth and fifth joints are the broadest, and are twice as broad as the constricted mouth.

Dimensions.—Length of the shell (with seven joints) 0·13 to 0·14; length of each joint 0·017 to 0·02, greatest breadth 0·083, mouth 0·04.

Habitat.—Fossil in Tertiary rocks of Sicily; Grotte, Caltanissetta.

6. *Lithocampe fusiformis*, n. sp.

Shell smooth, spindle-shaped, decreasing uniformly towards the two blunt poles, with eight or nine sharp strictures, and nine or ten joints of equal lengths, each with four transverse rows of regular,