Genus 4. Fieldingia, Sav. Kent (Pl. XCVII.).

1870. Saville Kent, Ann. and Mag. Nat. Hist., ser. 4, vol. vi. p. 219.

· 1876. Marshall, Zeitschr. f. wiss. Zool., Bd. xxvii. p. 124.

History.—On a specimen of Lophohelia prolifera, var. anthophyllites, which was dredged ten miles off the shore of Cezimbra, Portugal, from a depth of 500 fathoms, Saville Kent found in 1870 a Hexactinellid, distinguished by a pustulate rind of fine recticulated laminæ and numerous spherical internal bodies, varying in diameter from $\frac{1}{30}$ to $\frac{1}{15}$ of an inch. He named it *Fieldingia* in honour of Mr. Edward Fielding, adding the specific name of lagettoides, in reference to the delicate reticulate laminæ associated with the cortex, which are so strongly suggestive of the internal lace-like layers in the bark of the lace-bark tree. His brief diagnosis of the new form was :-"Sponge adherent, consisting of a cortex of irregular reticulated spicula, having on its interior surface numerous reticulated laminæ of extremely delicate consistence. Common cavity of the sponge containing numerous spherical aggregations of spicular reticulations; these invested and brought into relation with the cortex by loose reticulated fibres of coarser structure, having a general hexradiate arrangement; these fibres cylindrical, and to a considerable extent minutely and erectly spined; frequently attached to them very diminutive spicula of the 'rectangulated hexradiate' type, these also minutely and erectly spined. Nutritive and exhalent functions most probably performed through the general reticulations of the cortex."

Marshall, who in 1876 ranked Fieldingia along with Aphrocallistes as "aberrant forms" among his Pleionacidæ, suggested that the form was probably a young Aphrocallistes.

Fieldingia lagettoides, Sav. Kent (Pl. XCVII.).

The drawing on Pl. XCVII. fig. 1 represents in its natural size one of the two dried specimens which were trawled by the Challenger off Little Ki Island (Station 192, lat. 5° 49′ 15″ S., long 132° 14′ 15″ E.), in 140 fathoms, on blue mud ground. The surface of the knob-like specimens, which are as large as a walnut, consists in the perfectly intact regions of a strong external rind, associated with adherent granules of sand and other foreign bodies. The rind appears here and there somewhat blistered and almost spongy, and consists of several lamellæ of a very narrow meshed and irregular network. An irregular framework of strong siliceous beams with partly square meshes (from 1 to 3 mm. in width) extends from the rind across the lumen. This framework of beams exhibits numerous thick spherical knots about 1 mm. in diameter, and with tolerably

¹ Ann. and Mag. Nat. Hist., ser. 4, vol. vi. p. 219.

² Zeitschr. f. wiss. Zool., Bd. xxvii. p. 124.