base, which may either have grown upon a solid body, or may have formed a flat expansion on somewhat loose clayey ground.

The largest of the specimens, bought by Dr. Döderlein in Enoshima in a dried condition, attains a height of 10 cm. On the outer extremity of the tubes a simple smooth-margined oscular opening occurs. Through the dermal and gastral sieve-like skin the canals, which are from 1 to 2 mm. in width, may be recognised.

In the dictyonal framework, which has been isolated by maceration, the gastral margins of the longitudinally disposed dictyonal plates project freely on the inner surface, while an irregular network of beams with round openings from 1 to 2 mm. in diameter extends over the exterior.

The dermal skeleton is formed of strong pentacts, with numerous inequalities over the entire surface. A round knob or peg represents the atrophied distal (sixth) ray. The long proximal ray and the four tangentials generally terminate in sharp points. Scopulæ also occur, each provided with a moderately long, terminally rough and pointed stalk, and bearing on the outer simple conical expanded extremity of the latter four rough, slightly capitate or entirely unknobbed, parallel or slightly diverging, terminal rays (Pl. XCIII. fig. 4). In some specimens numerous fine spicules, which run out to a point at both ends, occur in groups close to the proximal ray of the pentacts, and project somewhat above the skin.

In the gastral skeleton, curiously enough, I have found no pentacts or hexacts, although numerous scopulæ similar to the dermal forms were present in the familiar radial position (Pl. XCIII. figs. 2, 5).

The loose parenchymalia consist of very thin and short uncinates (Pl. XCIII. fig. 3) of simple, slender, or somewhat rough hexacts (Pl. XCIII.) and oxyhexasters, each of which bears two diverging, short, and strong straight terminal rays on each of the moderately long basal principals.

## 2. Hexactinella lata, n. sp. (Pls. XCIV., XCV.).

Dichotomously branched tubes, which tend to anastomose, varying from 1 to 4 cm. in diameter, expanding superiorly in funnel-like form. They are also frequently crowded together laterally, and appear to be pitted or swollen out here and there in an irregular manner. The wall of the tube has a thickness of 2 to 2.5 mm. Through it one can clearly recognise the radial and also the generally longitudinal, frequently undulating or meandering plates, with the intervening spaces, while on the inner surface only irregular round spaces are to be observed through the gastral skin (Pl. XCIV. fig. 1). In completely macerated specimens it may be seen that, in the parallel longitudinal radial plates of the dictyonal framework, the longitudinal fibrous bands exhibit an external