at the base, but gradually decrease in diameter towards the pointed extremity, and are laterally compressed like the blade of a knife, with the edge turned inwards and the back towards the exterior (Pl. LXXVIII. figs. 3, 5).

The pentacts of the gastral skeleton generally resemble those of the dermal skeleton, but more frequently exhibit a gently arched or even markedly protruding knob-like elevation in place of the undeveloped sixth ray. The scopulæ are tolerably abundant; and resemble the dermal forms of the first type. The expanded end of the posteriorly pointed stalk bears a knot-like swelling with four to five slightly diverging prongs. The slender stalk of the prongs exhibits a club-shaped extremity beset with small barbs (Pl. LXXVIII. fig. 4).

The structure of the soft parts does not differ in any essential feature from that described in *Eurete semperi*.

3. Eurete farreopsis, Carter (Pl. LXXIX. figs. 5-8).

The species of Eurete figured in Pl. LXXIX. fig. 5 is a tubular feltwork, which in several places is firmly attached to the solid substratum. The tubes have a comparatively small diameter (of 5 to 8 mm.) and only a moderate peripheral thickness. The form was obtained near the Little Ki Island (Station 192, lat. 5° 49′ 15" S., long. 132° 14′ 15" E.) from a depth of 129 fathoms and a blue mud ground. It was thus found in the same locality as Eurete semperi. In the structure of its skeletal elements it resembles very closely the Eurete farreopsis described by Carter in 1877, and represented in a very effective figure (pl. ix. figs. 1-7). The identity of the two forms is unquestionable. The dictyonal framework, in which the square form of meshes predominates, consists of smooth or only slightly tubercled beams, and of more or less markedly thickened and Simple, rough, minute oxyhexacts occur in the roughened nodes of intersection. parenchyma, especially in the older and lower portions, and are in part fused by one ray to the general framework. Besides these, the parenchyma includes small discohexasters with terminal knobs on the four divergent, moderately long, often perianth-like, curved terminal rays, and in sparse occurrence the familiar uncinates beset round about with appressed barbs.

The dermal skeleton agrees perfectly with the gastral. The pentacts are provided on both sides with slightly curved tangential rays, somewhat rough at the rounded off extremities, and a somewhat longer straight radial, in which the narrowed, roughened, terminal portion is moderately pointed or rounded off.

Just as the dermal and gastral pentacts resemble one another, so do the peculiarly shaped scopulæ which occur beside them; but the latter are characterised by the sharp break-like bend of the terminal rays. Each of these thin bent stalks, which diverge