

meyeri. This was further proved by the examination of a large specimen of the same form, preserved in the Zoological Museum at Dresden, which I was allowed to study through the kindness of Hofrath A. B. Meyer.

I also found a dried specimen of *Crateromorpha meyeri* among the sponges which Dr. Döderlein collected at Enosima in Japan.

2. *Crateromorpha thierfelderi*, n. sp. (Pl. LXII. figs. 1-4).

The stalked cup-shaped form, represented in its natural size in Pl. LXII. fig. 1, was trawled near the Little Ki Island (Station 192), from a depth of 129 to 140 fathoms, and a blue mud bottom. It measures 10 cm. in total length, and 4.5 cm. in maximum breadth. The bulb-like or thick spindle-shaped body is 5 cm. long, and exhibits a simple bulging gastral cavity, about 2.5 cm. in width, opening superiorly by a circular osculum 15 mm. broad, and continued inferiorly into the lumen of the stalk. The stalk is from 6 to 8 mm. in breadth. The lower end of the latter and a large piece of the upper wall of the body have unfortunately been torn away. In its bulging portion the wall is about 8 mm. in thickness, but it decreases rapidly towards the upper end, ending finally in a short, thin, smooth, projecting fringe. Inferiorly, on the other hand, the thickness of the body-wall decreases to about 3 mm. as it joins the stalk.

While the external surface of the sponge appears smooth, the internal surface exhibits numerous round apertures, belonging to the efferent canals. These pores vary in width up to 5 mm.

The parenchyma contains besides strongly developed slightly curved diacts (Pl. LXII. fig. 4) and medium-sized hexacts, also numerous oxyhexasters, with terminal rays bent gently outwards (Pl. LXII. fig. 2). Besides these, there are small comparatively regular discohexasters 0.05 mm. in diameter, with five to eight equal-sized terminals on each principal ray (Pl. LXII. fig. 3).

The dermal membrane contains rough tetracts, and less frequently similar pentacts, with a more or less strongly developed internal ray. In the gastral membrane only roughened pentacts occur.

I have named this form in honour of my friend Professor Albert Thierfelder of Rostock. While it presents a certain resemblance to *Crateromorpha meyeri*, it is also very closely allied to *Crateromorpha murrayi* about to be described, and occupies in fact an intermediate position between these two species.

3. *Crateromorpha murrayi*, n. sp. (Pl. LXIII.).

In the vicinity of the Little Ki Island (Station 192), from a depth of 129 to 140 fathoms and a blue mud ground, the trawl brought up, along with numerous other