

Islands, those from the two last-named localities being nearly all young forms. The majority of the examples from Kerguelen are considerably larger than the type form described by Mr. Smith, which was also collected at Kerguelen, during the sojourn of the Transit of Venus Expedition in 1875. The largest specimen dredged by the Challenger measures  $R = 68-70$  mm.;  $r = 27$  mm.; another example,  $R = 60$  mm.;  $r = 23$  mm. I have figured one of these examples.

I have failed to detect any pedicellariæ in this species, although it is distinctly stated in Mr. Smith's diagnosis that numerous large ones occur in the interspaces between the paxillæ on the abactinal area. Numerous large and conspicuous papulæ are present in all these interspaces, and I venture to suggest with little hesitation that these are the organs referred to, the word "pedicellariis" having probably slipped in inadvertently.

*Young Phase.*—The small examples taken off Marion and Heard Islands exhibit so unmistakably the characters of the adult, that I feel little or no hesitation in assigning them to this species, notwithstanding their being found in association with *Gnathaster elongatus*. It is to be confessed, however, that I should have shrunk from expressing an opinion so definitely if the young of *Gnathaster elongatus* had been unknown, but fortunately small examples of that species were found at Marion Island and Kerguelen, which on their part resemble so characteristically the adult form of their species, and are so readily distinguishable from the young examples of the same size of *Gnathaster meridionalis*, as to place the question almost beyond doubt. I have given figures of the young of both species, see Pl. XIX. and Pl. XLVIII. The adult forms are drawn on Pl. XLVII. and Pl. XLVIII.

2. *Gnathaster elongatus*, n. sp. (Pl. XLVIII. figs. 1-4; Pl. XLIX. figs. 5-10; Pl. XIX. figs. 5 and 6).

Rays five.  $R = 56$  mm.;  $r = 16.5$  mm. (Another example,  $R = 62$  mm.;  $r = 17$  mm.)  $R = 3.5 r$  approximately. Breadth of a ray between the second and third supermarginal plates, 14.5 mm.

Rays long, narrow throughout and tapering for the genus. General form subdepressed. Abactinal area capable of slight inflation, often producing the effect of carination along the ray. Actinal area subconvex, especially apparent along the ray. Margin thin but rounded outwardly. Interbrachial arcs wide and open, but often with a slight tendency to become angular at the summit of the arc.

The whole abactinal paxillar area is covered with low and rather distinctly spaced pseudo-paxillæ, leaving small spaces for the protrusion of the papulæ. The crown or tabulum of the paxilla is subcircular and bears nine to twelve or more very short papilli-form granules, of which one to three are central; these are coarse, subprismatic, roundly truncate, all perfectly uniform in height, size, and character, and are not specially crowded