

irregularity. On a moderate-sized plate there are about five granules in a line. Several of the adambulacral plates on each side of the furrow have a small pedicellaria with three or four valves, which are squamiform and very little longer than the height of the granules. The pedicellaria is usually situated in the first line of granules behind the furrow series of spinelets, and lies between the adoral margin of the plate and the middle of the line.

The actinal intermediate plates are square or subrhomboid, and are covered with rather large, uniform, semiglobular granules, definitely spaced; a few of the plates in each area bear a small valvate pedicellaria, the jaws of which are but slightly higher than the granules, but are twice as broad. They are placed over a puncture in the plate, and are surrounded by a small circular scrobicule, devoid of granules.

The armature of the mouth-plates is granuliform on the outer part of the mouth, and here scarcely distinguishable from those on the actinal intermediate plates, but the granules increase in size as they approach the inner end of the plates, and as they assume the true spinelet form they also become subprismatic in shape.

Locality.—Station 125. Off the western coast of Brazil, near the mouth of the Rio San Francisco. September 12, 1873. Lat. $10^{\circ} 46' 0''$ S., long. $36^{\circ} 2' 0''$ W. Depth 1200 fathoms. Red mud. Surface temperature $77^{\circ} 0$ Fahr.

Remarks.—Although I have felt some doubt as to the propriety of regarding this form as a distinct species, I do not see my way to rank it merely as a variety of *Nymphaster protentus*. The much shorter ray, the smaller number of granules on the abactinal plates, the absence of any external spinelets in the armature of the adambulacral plates, and the substitution in their place of numerous granules, all seem contradictory to such a view. Indeed the characters enumerated are quite at variance with what one would expect to find in a merely larger development of the form described as *Nymphaster protentus*, especially when regard is had to the relative characters of that species and *Nymphaster albidus* described in the preceding pages.

Careful study of the three forms, *Nymphaster protentus* from Station 3, *Nymphaster albidus* from the Cape Verde Islands, and *Nymphaster basilicus* from Station 125, lead to the almost inevitable conclusion that if the small *Nymphaster albidus* should ultimately prove to be the young of *Nymphaster protentus*, the specimen under notice (*Nymphaster basilicus*) cannot be a merely larger-grown example of that form, as the characters it presents do not accord with the scheme of growth stages indicated by the other two forms; and *vice versa*, if this large individual (*Nymphaster basilicus*) be considered as the adult form of the type *Nymphaster protentus*, the small specimen *Nymphaster albidus*, from the Cape Verde Islands, must be considered as an independent species.

Under these circumstances the course that has seemed to me to be the least open to objection has been that of ranking the three forms, provisionally at least, as separate species.