antarctica. Although the two species are scarcely distinguishable when viewed on the actinal surface, the difference between them in their abactinal aspect is most striking.

I felt at first sight disposed to rank this form as only a variety of *Porania antarctica*, but from the fact that the examples of *Porania glaber* are of large size and all identical in character, also that a large series of specimens of *Porania antarctica* were collected ranging from those very young up to those equal in size to the examples of *Porania glaber*, and that all these maintain their characters without exception, I am inclined to consider the differences above noted as worthy of specific recognition.

4. Porania spiculata, n. sp. (Pl. LIX. fig. 4).

This form is very nearly allied to *Porania glaber*, with which it agrees in all the general points of structure. The chief difference is that in the present species the whole of the abactinal membrane is furnished with small, widely spaced, spicule-like spinelets, which are buried in the membrane, and are only to be seen with the aid of a magnifying-glass.

None of the examples attain the size of the adult *Porania glaber*. It is also to be noticed that the disk is large, and that the rays appear to proceed more abruptly from it; the abactinal surface is less convex, and incapable of the great inflation seen in *Porania glaber*; the marginal spines are relatively smaller, and have a tendency to be directed downward rather than horizontally; the outer series of spines on the adambulacral plates are robust and chisel-shaped, and do not appear to be normally more than one-third longer than the inner series, often not so much. On the median and outer part of the furrow supplemental outer spines are very frequently present, and being situated obliquely in relation to the normal outer spine, which they resemble in all respects, the appearance is produced of an oblique series of three spinelets on a plate. On the outer part of the ray this occurs on nearly every plate, and is probably normal.

Although these differences are not very striking superficially, I have been led to consider them worthy of specific recognition, after a careful study of the series of specimens belonging to this form together with those of *Porania glaber* and *Porania antarctica*. If the correctness of this view be not admitted, *Porania glaber* and *Porania spiculata* would have to be ranked as varieties of *Porania antarctica*, a course which in my opinion would demand an amount of elasticity within the scope of a species scarcely justifiable in our present knowledge of this genus.

I can detect no differences worthy of note between the example from the Arrou Islands and those from off Heard Island. One would almost feel disposed to entertain some doubt as to the accuracy of the label of the specimen from the Arrou Islands, but I have no reason to give for this suspicion excepting the presence of the species under notice in such a locality.

The colour in alcohol is a brownish grey, with traces of a dark purple tint on the largest examples, which was probably the normal colour during life.