The reader sees that there are many points in which I disagree with Dr. Marshall. Most of the contradictions are, however, insignificant, and the remaining ones, I feel certain, are to be explained by the fact that Dr. Marshall's specimens were either in a dried state or very badly preserved. At any rate, I see no reason against adopting both the genus and the species.

Colour.—Sandstone-yellowish.

Habitat.—Station 49, May 20, 1873, lat. 43° 3′ N., long. 63° 39′ W.; depth 85 fathoms; gravel and stones. Off Port Jackson, 7 fathoms.

Psammopemma porosum, n. sp.

In his paper on systematic rules Strickland suggests that generic and specific designations should be given which allude to the main generic or specific character of the given form;—very good counsel indeed, yet it occurs but too often that whilst following it the classifier creates very unfortunate systematic designations, and so far as the species I am going to describe is concerned, I feel by no means certain that—just as we find *Ancorinæ* without any anchor-like spicules—specimens of *Psammopemma porosum* will be found of no less density than that of the Challenger specimen of *Psammopemma densum* from Port Jackson. Still I do not take refuge in naming the species in question according to its second and undoubtedly more important character, for this latter character may prove to be of a subgeneric consequence. The species is represented in the collection by numerous small fragments, which, formless as they are, show distinctly that the external shape of the specimen—or, perhaps, specimens—dredged by the Challenger must have been of a rather stout, massive appearance. Apart from this character as well as from the porosity, which latter peculiarity may stand in connection with the massive shape of the animal, the fragments in question recall vividly as regards their form the Challenger specimens of *Psammopemma densum*, and especially that from Nova Scotia. Their colour is a dirty sandstone greyish, and the presence in the parenchyma of foreign enclosures (chiefly sand-grains, and, only in the upper skin, fragments of spicules) is well marked in the roughness of the surfaces.

As I remarked before, one of the characters of the species may be its porosity. I have but to add that this peculiarity must be really regarded as characteristic at least of the specimen, for there is no reason to suggest that the parenchymal cavities in question are due to worms as in the specimens of *Psammopemma densum* examined by Dr. Marshall. Except a Hydroid (*Aglæophenia*, sp. ?) rooting in one of the fragments and the doubtful round bodies to which I shall refer later, I miss any parasitic inhabitants entirely.

The second peculiarity characterising this form is the minuteness of its flagellated cells, which are smaller than in any horny sponge hitherto described. It is only in some Corticatæ (*Stelletta grubei*, *Geodia gigas*, *Ancorina aaptos*, *Tethya lyncurium*) that I