

that their presence is in relation to the encircling wreath of forcipiform pedicellariæ at the base of the spines.

The adambulacral plates are very small, and their armature consists of a single short, delicate, tapering spinelet about 1.5 mm. long, or a trifle more, the series of which forms a regular longitudinal line on each side of the furrow. At the base of these spines and quite within the furrow is an irregular and often interrupted series of small forcipiform pedicellariæ, generally more or less pedunculated.

The ambulacral furrows are wide, and the tube-feet, which have a very small, button-like terminal disk, are biserial in arrangement at the base and on the outer part of the ray, but are crowded and assume an alternating quadriserial arrangement about the middle of the ray.

The actinostome is very wide, measuring about 11 mm. in diameter, and there is a broad exposed buccal membrane.

The madreporiform body, which is rather small and inconspicuous, is situated nearer the margin than midway between the centre and the margin, and its surface is marked with fine convoluted striations.

The anal aperture is large and excentric in position.

Colour in alcohol, a bleached ashy white.

*Locality*.—Near Zebu, Philippine Islands. January 19, 1875. Depth 95 fathoms.

*Remarks*.—The resemblance of this form to *Brisinga* at first glance is very striking. The small, well-defined, button-like disk, the long narrow and easily detachable rays, the simplicity of the skeletal framework, and the widely expanded actinostome at once recall that group of starfishes. On the other hand, the structural affinities of *Asterias* (*Stolasterias*) *volsellata* clearly point in the direction of *Asterias* (*Stolasterias*) *tenuispina*, *Asterias* (*Stolasterias*) *calamaria*, and their allies, and although there is much temptation to recognise the striking features of the external form above referred to by placing the species in a distinct genus, I do not after careful study feel justified in taking this step on the strength of the single example at my disposal.

Although I am quite disposed to think that the group of species of which *Asterias tenuispina* is the type will ultimately be separated as an independent genus, which may well be called *Stolasterias*, I prefer at present to treat them as I have done other groups considered in this Report, and to rank them provisionally only as a subgenus, until more is known of the anatomy of the various constituents of the present genus *Asterias*, and the partition can be undertaken on a sounder and more definite basis than is yet possible.

Apart altogether from these considerations, *Asterias* (*Stolasterias*) *volsellata* furnishes a highly interesting link between the Asteriidæ and Brisingsidæ, and shows that the two families are not so widely separated as they were at one time considered to be. I am inclined to think that the Brisingsidæ are the degenerate descendants of a not very remote ancestor, modified through the action of complete isolation.