Locality.—Station 186. In Torres Strait, off Cape York. September 8, 1874. Lat. 10° 30′ 0″ S., long. 142° 18′ 0″ E. Depth 8 fathoms. Coral mud. Surface temperature 77°·2 Fahr.

Remarks.—*Astropecten zebra* is distinguished from *Astropecten velitaris* by the three or four comparatively large flattened spines on the supero-marginal plates on each side of the median interradial line, and by the presence of the well-developed pedicellariæ; and it is distinguished from *Astropecten fragilis* by the single lateral spine, and by the spinelets in the aboral series on the infero-marginal plates increasing in length as they approach the margin. The armature of the adambulacral plates is also different.

11*a*. *Astropecten zebra*, var. *rosea*, Sladen.

Astropecten zebra, var. *rosea*, Sladen, 1883, Journ. Linn. Soc. Lond. (Zool.), vol. xvii. p. 263.

The examples of *Astropecten zebra* from Station 186 are very constant in their characters. The specimens from Station 187 (three in number) present some variation. In colour they are a rosy brown, approaching madder-brown, and the markings are dark brown. The actinal surface is a delicate rosy pink, and the tube-feet are a rich scarlet. The rays are slightly broader, and taper rather more rapidly at the tip. Only the innermost two or three supero-marginal plates bear spines, which are smaller and almost invisible excepting the innermost. The small spinelets on the aboral margin of the infero-marginal plates do not form the continuous line noted in the specimens from Station 186, but are wanting in the median portion, thus leaving the spinelet near the adambulacral plates isolated, and the spinelet near the lateral spines is relatively larger and might almost be counted along with the laterals.

Locality.—Station 187. In Torres Strait. September 9, 1874. Lat. 10° 36′ 0″ S., long. 141° 55′ 0″ E. Depth 6 fathoms. Coral mud. Surface temperature 77°·7 Fahr.

12. *Astropecten velitaris*, von Martens.

Astropecten velitaris, von Martens, 1865, Archiv f. Naturgesch., Jahrg. xxxi., Bd. i., p. 360.

Localities.—Amboina. Depth 100 fathoms, 15 to 25 fathoms.

Admiralty Islands. Depth 16 to 25 fathoms.

Remarks.—Dr von Martens when describing this species suggested, with his customary care and foresight, that owing to the small size of his type (R = 16 mm.) it might possibly be thought that *Astropecten velitaris* would ultimately prove to be the young phase of some other species, such for instance as *Astropecten armatus*, Müller and Troschel (*i.e.*, *Astropecten polyacanthus*). In support of the view that it is a distinct species, or at any rate not the young of *Astropecten polyacanthus*, I may here mention that small examples of *Astropecten polyacanthus* from Port Jackson, the smallest measuring about R = 8 to 9