1. Pavonia divaricata, Lamarck.

Pavonia divaricata, Lamarck, Hist. Anim. sans Vert., ii. p. 240, 1816.
,, Dana, Zoophytes, p. 327, pl. xxii. fig. 6.

Three fragments of this species were obtained. Pavonia scriata and Pavonia minor, Brüggemann, are so close both to one another and to this species that it seems likely they will have to be united with it.

Locality.—Tongatabu.

2. Pavonia crassa, Dana.

Pavonia crassa, Dana, Zoophytes, p. 331, pl. xxiii. fig. 2.

Two small fragments of this species were obtained, which are about 1 cm. thick at a distance of 2.5 cm. from the margin. The septa are scarcely crowded and the surface consequently has a rather open appearance. The special septa, which are continuous from centre to centre in a transverse direction, are thickened and very conspicuous.

Locality.—Tongatabu.

3. Pavonia decussata, Dana.

Pavonia decussata, Dana, Zoophytes, p. 329, pl. xxii. fig. 4.

A single specimen referable to this species was obtained. The greater portion of it consists of a dead corallum, which has been overgrown and almost entirely covered by fresh growth, so that the specimen becomes very like a small one of *Pavonia crassa*. The larger lobes, which have been formed chiefly by this incrustation over previously formed plates, are on this account much thicker than those in the specimens described by Dana. Numerous small plates spring out irregularly over the surface.

It is very close to Pavonia (Madrepora) cristata, Ellis and Solander. Locality.—Api, New Hebrides.

4. Pavonia formosa, Dana.

Pavonia formosa, Dana, Zoophytes, p. 525, pl. xxiv. fig. 2.

Two specimens of this species were obtained. One is a large, broad, and variously lobed frond, which originally was part of a very finely grown specimen, typical of the species; the other consists in great part of a dead corallum, the summits of which have been covered by fresh growth, which takes the form of very divided, rather thin lobes and crispate fronds. The species is very close to *Pavonia prætorta*, and the latter specimen seems to point to their identity.

Locality. - Tahiti.