however, their number is very limited. As is pointed out in the diagnosis, the larger pedicels form a distinct simple row along each side of the body. These larger pedicels have a length of 7 mm. or more, and a breadth of 1·5 mm. or less. The pedicels of the odd ambulacrum are so small that they are scarcely visible to the naked eye. The few and very scattered dorsal ambulacral appendages present, perhaps, a conical form, which, however, is by no means well marked; they do not attain the size of the large lateral pedicels above mentioned. The middle of the odd interambulacrum seems to be almost naked. The tentacles are drawn within the body, but seem to have the structure common to the Aspidochirotæ.

The calcareous ring (Pl. X. fig. 16) is devoid of any posterior prolongations. A single short ventral Polian vesicle is present. The single dorsal madreporic canal is attached to the dorsal mesentery. A bundle of short, slightly branched, slender genital tubes is situated on the left side of the dorsal mesentery. The two respiratory-trees are well developed, but are not in any intimate connection with the pseudhæmal vessels. The longitudinal muscles are simple, and there are no retractors.

The tables vary greatly in size and shape, some having a nearly regular hexagonal disk with six large peripheral holes and a central smaller hole, others having the disk smaller, irregular, with the central hole larger than the surrounding ones (Pl. X. fig. 17). The diameter of the largest disks measures about 0·12 mm., while that of the smaller is only 0·07 mm. The height of the spire (Pl. X. fig. 18) varies from 0·12 mm. to 0·18 mm. But tables are often met with which have the disks perforated with more than six peripheral holes. The pedicels and dorsal appendages (pedicels?) are strengthened by terminal plates and more or less deformed tables, but they seem in general to be devoid of transverse rods. The terminal disks of the dorsal appendages are more rudimentary. The above diagnosis and description refer to the large, well-developed individual. The smaller specimen, 57 mm. long, obtained at the same Station is much contracted and wrinkled, but here it becomes more evident that the dorsal appendages at the anterior extremity of the body are of a conical form.

The two specimens brought home from Station 298 resemble the small one obtained at Station 300; one of them, however, is devoid of deposits in the integument, probably a result of the influence of some acid in the alcohol. In the other specimen, on the contrary, the greater part of the deposits is left uninjured; they closely resemble those above described, excepting that the three teeth of the spire are less spinose. The individual deprived of deposits seems to have the dorsal ambulacral appendages more numerous and like pedicels.

Holothuria murrayi, var. *parva*, nov. (Pl. IX. fig. 2; Pl. XVI. figs. 4, 5).

Habitat.—Station 219, March 10, 1875; lat. 1° 54′ S., long. 146° 39′ 40″ E.; depth, 150 fathoms; coral mud; one individual.