Pecten kermadecensis, n. sp. (Pl. XXI. figs. 7-7a).

Testa fragilis, tenuissima, pellucida, valde compressa, valvis diverse sculptis. Valva dextra liris gracillimis confertis concentricis instructa, sinistra liris concentricis magis distantibus radiatimque pulcherrime squamulatis ornata. Auriculæ inæquales, anticis majoribus, in valva dextra antica inferne sinuata, porca angusta marginata, superne cristulata. Umbones mediocriter acuti, lateribus divergentibus rectis.

Only two valves described above were obtained, and it is even possible that they do not both belong to one and the same species. They are about as long as high, very thin and fragile, transparent whitish, very much flattened, and ornamented with different sculpture. The right has fine close-set concentric lire, which become a trifle more pronounced as the shell increases. The left also bears numerous rather more remote and more elevated concentric lire, supporting many radiating series of small scales, of which one or two indications are visible in the right valve. The ears are unequal, the anterior being conspicuously larger than the posterior. The front one in the right valve is sinuated beneath, and is margined along the oblique dorsal slope by a smoothish ridge, which is concave on the reverse side. The lines of growth are conspicuous on the ears, and in the right valve are produced upward, forming a crested edge to the hinge-line. The beaks are moderately acute, having an apical angle of about 108°, the converging lines being rectilinear.

Length 7½ mm., height 7½, diameter 2½.

Habitat.—Station 171, north of Kermadec Islands, at a depth of 600 fathoms.

This is a fragile species, and probably, living at such a depth, never becomes much thickened.

Pecten pudicus, n. sp. (Pl. XXI. figs. 8-8b).

Testa tenuissima, planulata, paulo inæquivalvis, albida, haud nitida, concentrice valde plicata, plicis utrinque attenuatis, undique confertim et tenuiter lirata. Auriculæ inæquales, anticis majoribus, antica valvæ dextræ liris gracilibus paucis squamulatis ornata, inferne profunde sinuata.

Length 18½ mm., height 20, diameter 5.

Habitat.—Station 146, east of Marion Island, in 1375 fathoms; Globigerina voze.

This beautiful species is very like *Pecten fragilis* of Jeffreys, but appears to differ somewhat in form and in having both valves similarly plicate and lirate. The auricles also are not "equal in size," the anterior being decidedly larger than the posterior.

The right valve is rather flatter than the left, and its anterior auricle is deeply incised underneath, the upper half of it being ornamented with four or five finely squamate slender line.