others; and forms another generic character. But the most interesting part of the capsule is the beautiful appendage, styled the peristome. It is a fringe of scarlet, pale yellow, purple, or intermediate shade. according to the genus to which the plant belongs. The peristome is divided into 8, 16, 32, or 64 segments or teeth. These numbers never deviate, a certain number of teeth are invariably found in a certain genus, they are always regular in number, and thus we have again strong characters for distinguishing genera.

In many of the Mosses the peristome is double, the inner one being much paler in colour than the outer, and in some few genera cilia may be found interposited with the teeth of the inner peristome. These are all abiding characters, and with the forms and arrangement of the leaves and habits of the plants, arranged, illustrated, and generically described as they are in the key before us, will be found sufficient in most cases to identify the genus to which the plant belongs.

May we be allowed to enter a plea for the Mosses of Tasmania which we so ruthlessly uproot from our garden walks and trample down by the road side; their forms are exquisite, their habits are in the charming corners and glades, as well as on the face of the mountain crag, their study is pure and refining, and there remains an insight to the student of contrivance, system, wisdom, Infinite Wisdom, and a source of infinite admiration.

NEW SPECIES OF TASMANIAN MARINE SHELLS,

By W. F. PETTERD.

[Read May 12, 1885.]

1. Pecten aktinos, n. sp.

Shell of moderate thickness, irregularly, elongately, and somewhat obliquely orbicular, depressed, marked with irregular prominent lines of growth, ornamented with numerous—fourteen to eighteen—radiating perceptibly imbricated riblets, which are alternately large and small, and again covered with smaller liræ; cellular structure, distinctly visible under the lens, towards the base; ears unequal, moderately prominent; colour, pink to bright rose, with irregular light or dark bands, and again peculiarly marked with numerous small sharply angular patches of white to pink, shaded with deep brownish-red; interior, shining

pinkish-white, with exterior colouration faintly showing through.

Long.—42 mill. Lat.—36 ,, Alt.—15 ,,

Habitat.—North-West Coast.

Though very distinct from the other Tasmanian forms, this species shows an approach to the common *P. asperrimus Lam*, but may be at once recognised by its form, smaller size, and very different colouration. It appears to be of rare occurrence, for, although I have seen numerous valves, but two perfect examples have come under my notice. It is probably a deep water form.

2. Diaphanna nivea, n. sp.

Shell, globose, very thin, semi-transparent, milky-white, shining; whorls, 4; spire, small, scarcely projecting, longitudinally streaked with fine lines of growth; aperture, narrowly ovate, inflated.

Long.—14 mill. Lat.—7 ,,

Habitat.—Near River Leven (Miss Lodder). An unique example of a new genus to our Marine Molluscan fauna.

3. Cassis tumida, n. sp.

Shell, thick, white, dull, globose, marked with a few prominent lines of growth; whorls, 5; rounded, minutely, regularly, transversely lirate; spire, small, short, rather acute, apical whorls, smooth, suture emarginate; callus deposit, thin, striate, and shining; aperture ovate, inflated; outer lip, sub-reflexed, and slightly prominently thickened cutside.

Long.—30 mill. Lat.—18

Habitat.-Near River Leven (Miss Lodder). A single specimen collected of this small but distinct specie.