ADDITIONS TO THE TASMANIA MOLLUSCAN FAUNA. (PL. VI.).

By W. L. MAY.

(Read 14th September, 1908.)

Since the publication of Tate and May's Revised Census, in 1901, a considerable number of species new to the Tasmanian molluscan fauna have become known to me, and I think it is well to place the names on record. I also offer observations on several species, and take the opportunity to describe and figure what appear to be three species new to science. This paper does not in any way refer to the large mass of new material lately dredged off Cape Pillar by C. Hedley and myself.

List of new records, with habitat and remarks:—

- FASCINUS TYPICUS (Hedley).—One juvenile example taken on the beach at Pirate Bay, and identified by the author, Coll. W. L. M.
- MARGINELLA ANGASI (Brazier).—This has long been known to local collectors, but has been confused with M. simsoni (Tate and May). If I have rightly identified the species, then M. halli (Prit. and Gat.) is a synonym.
- TEREBRA INCONSPICUA (Prit. and Gatliff).—One specimen. Storm Bay, 23 fathoms.
- CLATHURELLA BICOLOR (Angas).—Not uncommon in Frederick Henry Bay.
- TARANIS EDWINI (Brazier), Clathurella.—One specimen. Very similar to T. minuta (T. W.) in general appearance, but distinguished by its punctate pullus, which in minuta is spirally lirate. Daphnella mimica (Sowb.) is a synonym of the latter.

- DAPHNELLA CASSANDRA (Hedley).—Derwent Estuary. Many specimens.
- MITROMORPHA PALLIDULA (Hedley), Storm Bay.—Fred. Henry Bay. Rare.
- NATICA SHOREHAMI (Prit. and Gatliff), Storm Bay, 24 fathoms.—One example.
- SCALA VALIDA (Verco).—One living example, off Pilot Station, Derwent. Several fragmentary, from Fred. Henry Bay, in shell sand.
- CINGULINA DIAPHANA (Verco).—Three examples. Various southern localities, in dredgings.
- LITORINA PRAETERMISSA (May).—N. S.
- RISELLOPSIS MUTABILIS (May).—N. S.
- CYCLOSTREMA BASDOWI (Gatliff).—One example, Fred. Henry Bay, which seems a slight variety of this species.
- SCISSURELLA ROSEA (Hedley).—Fred. Henry Bay. Several examples.
- SCISSURELLA ORNATA (May)—N. S.
- GADINEA ANGASI (Dall).—East and North Coasts. Rare.
- GARI KENYONIANA (Prit. and Gatliff), Tellina.— Two valves, on beach at Adventure Bay. Coll. W. L. M.
- CIRCE ANGASI (Smith).—Several valves. Storm Bay, 24 fathoms.
- CUNA CONCENTRICA (Hedley).—Storm Bay, 24 fathoms. One valve.
- CONDYLOCARDIA PROJECTA (Hedley).—Fred. Henry Bay. One valve.
- CONDYLOCARDIA CRASSICOSTA (Bernard), Fig. 6.—This species was described from New Zealand, and is an interesting addition to our list. Under the belief that it was new, a figure was prepared by Miss West, which is here inserted for the benefit of Australian students. A few specimens taken in Frederick Henry Bay.

PHILIPPIELLA RUBRA (Hedley).—Many localities in the south.

MYTILUS CANALICULUS (Martyn), Universal Conchologist, 1784, Pl. 78. Latus (Chem), non Lamarck. Tasmanicus, Tenison-Woods. This novel synonymy is the result of a careful examination of our larger Mytilus, showing that the very large form named Tasmanicus, by Woods. is not conspecific with M. planulatus (Lamarck). but is identical with the New Zealand species M. canaliculus, which is distinguished—besides some difference in outline—by strong teeth in the hinge at the apex of the shell, and which are quite wanting in M. planulatus. The habitat is peculiar, it being nearly always found in deep water, and is occasionally obtained by scallop dredgers in the Derwent. I once saw two specimens attached to a tidal rock, Fred. Henry Bay, and also possess a fine example taken on the beach at Marion Bay. East Coast.

AURICULA DYERIANA (Tenison-Woods).-- I now possess one of the type lot of the above species. In Tate and May it is made a synonym of Cassidula zonata (H. and A. Adams), but from a study of C. Hedlev's figure of that species, in P. L. Soc., New South Wales, 1905, p. 537, Pl. XXXIII., Fig. 30, and also from Port Jackson specimens I now have, I find they are quite distinct. I also find that A. dveriana is an absolute synonym of Cassidula nucleus (Mart). As this is a tropical species, it is very unlikely to occur here, and Mr. Dver told me that after taking the type lot he could never find it again, although he searched very carefully. I therefore consider it to have been an accidental introduction, and that the name should be expunged from our list.—Sandford, July, 1908.

In the Records of Australian Museum, Vol. IV., No. 7, 25th August, 1902, H. L. Kesteven erected a new genus, Risellopsis, for Hutton's Fossarina varia. I now describe a second species, which is quite distinct from Hutton's, whilst still fulfilling the conditions necessary to place it in the genus.

RISELLOPSIS MUTABILIS (May), Figs. 1 and 2.— Shell depressed of three whorls, rapidly increasing, umbilicate; aperture large, descending in front, angular above; suture somewhat canaliculate. Two prominent keels divide the shell into a superior, a peripheral, and basal area. The lower keel is considerably the stronger. There is a low ridge on the base of the shell, and beyond it a small, sharp keel, exactly defining the umbilical area, which latter is whitish, whilst the rest of the shell is a dull purplish black. Lip sharp and simple, somewhat angled by the persistence of the peripheral keels. which, however, have become nearly obsolete. Columella arched, and slightly expanded over the umbilicus, which is ample and perspective. Shell almost smooth (often corroded), but very finely striated by lines of growth. Height, 21/2; greatest diameter, 31/2 mill. Habitat.—Most of my specimens, including the type, are from Fred. Henry Bay, Tasmania. It occurs in Victoria also (C. Gabriel, F. H. Baker).

Individuals may vary, by the keels—especially the upper one-becoming almost obsolete, giving the whorls a more rounded appearance. One example is highly turretted, giving it a trochiform appearance. Another has the last whorl partly detached. The colour may also become reddish, mottled with white, or there may be vellowish patches on a black ground. From the New Zealand species (R. varia), it differs in being less round and without the keels on the base and upper part of the whorl, and in wanting the coarse striation. Type to be placed in the Tasmanian Museum, Figs. 1 and 2.

The following note on the Genus Litorina was communicated by my friend, Charles Hedley, of the Australian Museum, Sydney, whom I also have to thank for kind assistance in the preparation of this paper.

"LITORINA (Menke), 1828, non Littorina Ferussac" 1822), nomen nudum. Ferussac (Tabl. Syst. des Anim. Moll., 1822, p. xxxiv.), casually wrote Litto-

NOTE.—This species was wrongly figured in Tate and May's Census, Pl. xxiii., fig. 9, as Fossarina Funiculata Tenison-Woods.

rina among a long list of genera without giving a type definition or other means of identification; his name must therefore be discarded as a nomen nudum. Then Menke (Syn. Meth. Moll., 1828) introduced Litorina with a classified list of species, their synonyms, and references to literature. It is on Menke's work that the genus is based. I have not access to his first edition, but in the second edition (1830) the genus is given on p. 44."

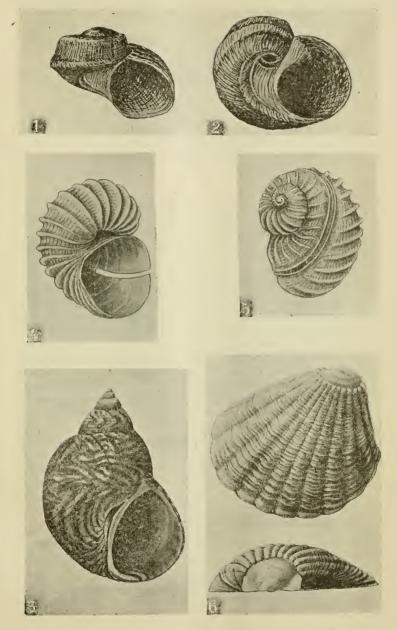
LITORINA PRAETERMISSA (May), N. S., Fig. 3. —Shell globosely turbinate, umbilicate; whorls, six rounded, rapidly increasing, the last very large; mouth pyriform, columella arched, flattened, and expanded over a narrow but deep umbilicus, which is frequently covered, and so not a constant feature. The interior varies from light to dark purplishbrown; umbilical area white. Operculum sub-spiral. Within the anterior end of the columella is a pale band, margined by narrow dark lines. The whole shell is girt with fine spiral impressed lines—about 12 on the penultimate—and strongly and frequently very coarsely ridged by lines of growth. Ground colour greenish white; the purplish-brown colour pattern varies considerably in different examples. but usually consists of undulating and zigzag bands more or less broken up. The apical whorls are brown—lighter towards the top. Very variable in size. Dimensions of the type:-Length, 15; breadth, 11 mill. Figure 3. It differs from L. Mauritiana (Lamarck) chiefly in the globose form and colour markings, which seem very constant. but is connected by the impressed spirals and light band in the mouth. It was listed by Tenison-Woods in his census as L. undulata (Grav), and perhaps comes nearest to L. cincta (Quoy and Gaim.), from New Zealand. Habitat.-Widely distributed, and in the same positions as L. mauritiana, but not so universally present as that species. Type to be placed in the Tasmanian Museum.

SCISSURELLA ORNATA (May), N. S., Figs. 4 and 5.
—Shell minute, obliquely discoidal, strongly ribbed and spiralled; whorls rounded, but somewhat angled by the canal; mouth large, roundish, oval, and a small

but deep umbilicus. The canal forms a deep furrow. bordered by sharp, raised edges, the whole raised on a distinct ridge, which surrounds the shell about midway between the suture and the periphery; on the lower side there is a smooth, depressed area. The strong sharp ribs begin below this area, and continue round the whorl to enter the umbilicus. Above the furrow raised curved ribs roughly correspond to those below; they continue uninterrupted from the central ridge to the suture. The spaces between these ribs are cancellated by six to eight spiral keels, much smaller than the ribs, and not passing over them. These spirals continue between the lower ribs, passing over the upper part of them, there giving them a crested appearance. All these spirals are irregularly spaced. The apex of 11/2 turns is squared by a beaded ridge, and is sunken below the level of the adult whorls. The mouth is well defined by a continuous narrow margin; the slit is open, deep, and of moderate width. Whorls two, exclusive of the apex. Colour, vellowish white. Greatest diameter, 11/2; least, 11/4; height, 1 mill. Habitat:—Frederick Henry Bay; a few specimens in kelp roots. It has a superficial resemblance to Schismope beddomei (Petterd), but the ribs are more numerous and continuous, and with strong spirals, and it is a larger shell, and a true Scissurella. Scissurella coronata (Watson), Challenger report, page 114, seems a near ally. Figs. 4 and 5. Type in Tasmanian Museum.

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PL. VI.



1, 2. RISELLOPSIS MUTABILIS, May. 4, 5. SCISSURELLA ORNATA, May.

3. LITORINA PRÆTERMISSA, May. 6. CONDYLOCARDIA CRASSICOSTA, Bernard