LIST OF LITERATURE REFERRED TO.

BARTRUM. J. A., 1920. The Conglomerate at Albany, Lucas Creek, Waitemata Harbour, Trans. N.Z. Inst., vol. 52, pp. 422-30.

—— 1921. A Conglomerate at Onerahi, near Whangarei, Auckland, New Zealand, Trans. N.Z. Inst., vol. 53, pp. 128-30.

COTTON, C. A., 1916. The Structure and Later Geological History of New Zealand, Geol. Mag. (n.s.), dec. 6, vol. 3, pp. 243-49 and 314-20.

COX, S. H., 1881. Geology of the Rodney and Marsden Counties, Rep. Geol. Explor. during 1879-80, pp. 13-39.

FERRAR, H. T., 1922. On the Geological Survey of the Whangarei and Bay of Islands Subdivision, N.Z. Jour. Soi. and Tech., vol. 4, pp. 311-14.

FERRAR, H. T., and Cropp, W. H., 1921. Whangarei and Bay of Islands Subdivision, Fifteenth Ann. Rep. N.Z. Geol. Surv., pp. 6-8.

HECTOR, J., 1881. Progress Report, Rep. Geol. Explor. during 1879-30, pp. xi-xv. McKay, A., 1884. On the Occurrence of Serpentinous Rocks as Dykes in the Cretaceo-Tortiary Strata near the Wado, Auckland, Rep. Geol. Explor. during 1883-84, pp. 99-101.

pp. 99–101. 1884A. On th On the Relations of the Tertiary and Cretaceo-Tertiary Strata on the

Coast-line between Auckland and Mahurangi, ibid., pp. 101-6.

1888. On the Geology of the Northern District of Auckland, Rep. Geol. Explor. during 1887-88, pp. 37-57.

MARSHALL, P., 1916. The Younger Limestones of New Zealand, Trans. N.Z. Inst., vol. 48, pp. 87-99.

Descriptions of Two New Species of Gasteropod Shells.

By Albert E. Brookes.

Read before the Auckland Institute, 14th December, 1922; received by Editor, 28th December, 1922; issued separately, 26th May, 1924.]

Plate 7.

TATEA, Ten.-Woods, 1879, Proc. Roy. Soc. Tasm., p. 72.

Tatea hedleyi n. sp. (Plate 7, figs. 1-3.)

Shell small, elongate, conical, with rounded nucleus, and without any perceptible sculpture except a few faint growth-lines. Colour pale buff, with narrow ochraceous bands below suture. Whorls 51, convex, with rather deeply impressed sutures. Body-whorl more than half the height of all preceding ones taken together. Protoconch depressed, consisting of one turn. Spire about 1½ the height of aperture. Aperture ovate, angled above, base rounded, descending. Peristome discontinuous, with margins united by a thin parietal callus. Basal lip thickened, outer lip thin. Columella short and rounded. Umbilicus consisting of a narrow chink. Operculum thin, horny, transparent, paucispiral, with nucleus subcentral, slightly raised and nearer base, upon which are several broad shallow grooves.

Diameter, 1.7 mm.; height, 2.5 mm.

Animal unknown.

Holotype and paratypes in my collection, and paratypes also in the collection of the Australian Museum, Sydney.

Habitat.—Rangitoto Island, Hauraki Gulf, Auckland.

Situation.—Under decaying Zostera, near high-water mark.

Numerous specimens were obtained. It adds a genus and a species to our fauna.

Distribution.—Tasmania (genotype); Australia; Macquaric Island.

Remarks.—Tatea huonensis Ten.-Woods was stated by its author to have an operculum "calcareous, with a vertical submarginal claw" (1). This very serious and misleading error was perpetuated by Tryon (2), but was somewhat rectified by Mr. E. A. Smith, who states, "As far as I can discover, judging from an external view, it appears to be thin, horny, paucispiral, with the nucleus subcentral, but rather towards the base "(3). After having examined the operculum of a number of specimens of *T. hedleyi* I can fully confirm the views of Mr. Smith. This interesting species is named in honour of my esteemed friend Mr. C. Hedley, of the Australian Museum, Sydney, who discovered it while on a visit to New Zealand in 1917-18, and to whom I am greatly indebted for kindly assistance rendered at various times.

This species is not so elongate as is usual with other members of the

genus.

MARGINELLA, Lamarck, 1799, Mem. Soc. N. H. Paris, p. 70.

Marginella cairoma n. sp. (Plate 7, figs. 4-5.)

Shell small, elongate, transparent and shining. Spire bluntly rounded. Sculpture consisting of fine growth-lines crossed by very fine spiral threads, giving the surface, under the miscroscope, a very fine decussated appearance. Without the aid of a good lens the shell appears quite smooth and polished. Colour pale cream-buff (Ridgway's colour standards) with a whitish narrow band above suture. On upper whorls there are ochraceous-orange bands, and two on body-whorl extending over outer lip into aperture. Outer lip and base whitish. Spire conical, not much produced, with bluntlyrounded apex, about half the height of aperture. Protoconch of about 1½ turns, nucleus flattened. Whorls 4, very slightly convex. Last whorl long and narrow, widest at top and gradually narrowing towards base. Suture superficial and distinct. Aperture slightly oblique, narrow, channelled above, rounded below. Outer lip nearly straight, rounded, and thickened, with an indistinct varix, retrocurrent towards suture, smooth inside. Columella slightly oblique, with four subequidistant plaits, the two lower ones oblique and thicker than the upper ones. Top plait short and nearly transverse, the lower extending to basal margin. Inner lip thin and transparent.

Diameter, 1.8 mm.; height, 4.2 mm.

Animal unknown.

Holotype and paratypes in my collection, and paratypes also in the collection of the Australian Museum, Sydney.

Habitat.—Russell, Bay of Islands (A. E. B.); near Taipa, Doubtless

Bay (type, A. E. B.).

Situation.—Under loose boulders embedded in sand, near low-water mark.

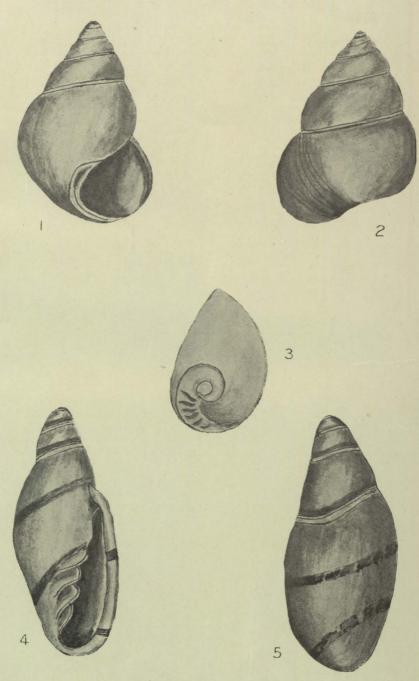
Remarks.—Three specimens were collected at Russell, and about twenty

at Doubtless Bay, and all were alive.

This species is allied to M. allporti Ten.-Woods, but the absence of tubercules in the outer lip, and its constant narrow form, separate it from that species.

REFERENCES.

Tenison-Woods, J. E., 1875. Bythinia huonensis, Proc. Roy. Soc. Tasm., p. 71.
 Tryon, G. W., 1887. Tatea, Man. Conch., vol. 9, p. 323.
 Smith, E. A., 1881. On the Fresh-water Shells of Australia, Jour. Linn. Soc. Lond., vol. 16, No. 92, Zoology, p. 268-69.



Figs. 1, 2.—Tatea hedleyi n. sp. Fig. 3.—Tatea hedleyi n. sp.: operculum. Figs. 4, 5.—Marginella cairoma n. sp.