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[WITH TWENTY-SEVEN PLATES].

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columella margin thickened and extending across the body whorl into a thin callus plate joining the upper part of the peristome.

Length $10\frac{1}{2}$, breadth $8\frac{1}{2}$ lines.

Hab., Diamantina River, Queensland.

I have named the species after its discoverer, Mr. William Alison, jun., of Wingadee, who presented two specimens (adult and young) to the Macleay Museum, Elizabeth Bay.

On some Terriary Fossus from Muddy Creek, Western Victoria. By the Rev. J. E. Tenison-Woods, F.G.S., F.L.S., Hon. Corr. Mem. Lin. Soc., N.S.W.

Plates 20 and 21.

The following fossils were obtained from the tertiary beds on the banks of the Muddy Creek, a tributary of the Wannon River, about five miles from Hamilton in Western Victoria The most of them were gathered for me by Mr. Samuel Pratt Winter, whose beautiful station of Murndal, on the Wannon, is not far from the locality in question. Some have been in my possession for more than sixteen years, and I would have published a notice of them long ago, but that I understood that all the miocene fossils would have been fully described ten years since by the Victorian Geological Survey. This expectation has been frustrated by the reduction of the geological staff of the colony, and now the only person engaged on Victorian paleontology is Prof. M'Coy, who, in the "Decades," is most ably and satisfactorily dealing with some of the more remarkable species. As a very long time must elapse before all the larger fossils are dealt with, I have thought it better to publish my own limited investigations on the very small ones. I do this, because I am convinced that the material at my disposal gives me peculiar advantages, especially as I have for the last four years been engaged in describing the small existing species of the south coast, and I fear risking the loss of the material altogether if I delay its publication any longer. If what I offer is incomplete, I trust geologists will excuse this incompleteness, in view of the great necessity of doing something where so much has to be done, and where there are so lew inquirers.

The fossils now described are all new and peculiarly interesting. They are not generally like the present Australian fauna, and they are not identical with any fossils of other countries. The resemblance of some of them to the common forms of the Italian and Vienna miocene is very striking. This resemblance has already been referred to by Prof. M'Coy, and he has perpetuated it by giving specific names which will serve to recall the European types. So far as I have examined, the fossils would incline one to imagine the sea to have been a warmer one than at present; but it would not be, as yet, a very certain inference to draw from the evidence, which is so incomplete. For the rest, I have noted in the diagnosis of each species such resemblances or peculiarities as are the most apparent, and I will only add that the structure, sculpture, and elegance of form of the fossil fauna of the Australian miocene far exceed anything on our coasts at the present day. I do not enter into the question of the age of the beds. The evidence, so far, is entirely in favour of a miocene horizon. But the miocene of Australia is represented by wide deposits of such thickness that the per centage of existing species in the uppermost and lowest beds must be widely different. The true value of the term miocene, as applied to South Australian formations, can only be appreciated when the relative position of the beds in different localities is established. Prof. Tate is of opinion that the Muddy Creek beds are the equivalents of the uppermost of the River Murray series. I regard them as below the Mount Gambier limestones, which is the opinion of the geologists of the Victorian survey. So far, however, no accurate survey has been made to determine the question, which the following paleontological remarks may help to solve. All dimensions in French millimetres.

TRITON PRATTIL. Pl. 21, fig. 15.

T.t. parva, tumide-fusiformi, turrita, solida, nitente: anfr. 7 (embryonal. 2, inclusis), rotundatis, liris spiralibus inequalibus cinctis, costis obsoletis rugulosis, et undique crebre striatis, striis

crebre, sed regulariter et æquidistanter striatis, superne concinne marginetis; costis brevilus, latis, rotundatis, in medio elevatis, ultimo anfr. evanidis; apertura angusta, elongata, peristomate valle incrassato; sinu profundo, obliquo, margine tumido, labro solido, canali brevi, labio encausto, exacte definito. Striæ incrementi valde flexuosæ. Alt. 11, lat. 4, long. spiræ 7.

This interesting little species which does not appear to be very common at Muddy Creek, bears considerable resemblance to our existing D. Beraudii, which is common on the S. E. coast of Tasmania. It is a fusiform shell with the spire much longer than the aperture, the whorls are studded with many short blunt tumid ribs, and regularly spirally grooved; they are very distinctly margined above with a rather broad flat space which is thickly covered with curved striæ. The ribs disappear on the last whorl, but there are very distinct undulose lines of growth instead. The aperture is long and narrow with a thickened raised margin almost all round it. The sinus is deep and oblique with a swollen edge. The outer lip is thickened and the inner one is enamelled and exactly defined. The canal is short, straight, and truncate. The nucleus is smooth and shining, of two whorls.

I have dedicated this fossil to Mr. Trevor Winter, who obtained the greater part of this collection for me when temporary illness prevented me from visiting the beds in person. I am not aware of any fossil species nearly resembling it.

CONUS RALPHII. Pl. 21, fig. 14.

C. parva, anguste ovata, spira elata, solidiuscula, nitente; anfr. nucleo (2) incluso, superne concinne striatis, ad angulum anguste marginatis et coronatis, granulis quadratis; ultimo lineis incrementi insignito, basim versus spiraliter declivi striato, apertura angusta, nucleo lævi, tumido. Alt. 10, lat. 5.

Shell small, rather narrowly ovate, with a somewhat produced spire rising in stages, which are very distinctly granular, the granules being square and large. The upper part of the whorls is grooved with a few lines, and this grooving extends over the angle of the last whorl, causing a kind of granular margin.

There is no other ornamentation on the body-whorl, except about ten spiral strice near the base, but the lines of growth are very apparent. The species is like the Vienna miocene C. extensus Partsch in its young stage, but in that shell the spire is more acute and longer. In our fossil, the upper part of the whorl near the suture is faintly channelled. The granules are also different, and the anterior strice are more numerous and finer. Cours dujardinii is like it in form, and C. antediluvianus has the corona more marked with a deep sinus near the suture. Both the latter belong to the Vienna miocene. There is nothing at all like it in the Paris basin; and we have nothing very similar existing in Australia but Conus carmeli, mihi, which has the two last whorls only coronate, but is distinctly grooved all over, and is broader in proportion to length. I have dedicated this interesting specimen to Prof. Ralph Tate.

NATICA WINTLEI, mihi, var. HAMILTONENSIS. Plate 21, fig. 8.

Testa parca, late ovata, solida, polita, anguste umbilicata; anfr, 3; rotundatis, rapide accrescentibus, striis incrementi subregulariter tenuiter corrugatis; apertura semilunari, labro acuto, columella postice plus minusve callosa; umbilico uno sulco lato, corrugato, insignito, apice vix prominulo. Diam. et alt. 8.

A common fossil at Muddy Creek, mainly distinguished by its small size. It is polished with very faint signs of the lines of growth. The callosity is not conspicuous and confined to the upper part of the columella. The umbilicus is narrow, with a broad corrugated groove. The aperture is semilunar. The outline of the shell is diagonal. It cannot be said to have any peculiar or marked features, but it does not resemble any in the Vienna or Paris basins and must mainly be distinguished by its size, the moderate callus and the very slightly exerted spire. In deference to the opinion of Prof. Tate, I have referred this species to my Natica Wintlei described by me in the Proceedings of the Royal Society of Tasmania, for 1875, p. 23. It is generally smaller and more globose than the type referred to.

Ancielaria semilævis. Pl. 20, fig. 7.

A. parca, clongata, fusiformi, solida, nitente, spira apert. æquanti; anir. 5\; angustis, cavanstis, ita ut sutura et structura sint occultis;

CONTRIBUTIONS TO THE ZOOLOGY OF NEW GUINEA.

PARTS I AND II.

By E. P. Ramsay, F.L.S., Curator of the Australian Museum, Sydney.

Containing a list of the Mammals (part I) and Birds (part II) obtained during Mr. Goldie's second Expedition to New Guinea, collected by Mr. Goldie, the leader of the Expedition, and Mr. Alex. Morton, a collector from the Australian Museum, with descriptions of some new birds recently forwarded to the Museum by Mr. Kendal Broadbent, from the same localities.

In May, 1877, the Trustees of the Australian Museum despatched one of their collectors, Mr. Alexander Morton, to New Guinea; an opportunity having offered for him to accompany Mr. Andrew Goldie, who was starting to explore the South Eastern portion of that great island, on behalf of R. B. Williams, Esq., of Holloway Place, London.

The following notes, then, are on the collections made by Morton, and most of the remarks on the localities and habits of the birds are from his note book.

Mr. Goldie has also very liberally placed at my disposal the very large collections of mammals, birds, and reptiles made by himself and his collectors, Messrs. Shaw and Blunden, which is without doubt the largest collection of Natural History and Ethnological specimens yet made in those parts.

Mr. Ingham and Mr. Kendal Broadbent have also been collecting on the South East Coast, and as a portion of their collections has been forwarded to me, I am enabled to enumerate a few additional species; a full account of this collection will be given in another paper.

Mr. Goldie's collection is by far the most important yet made on the South East Coast; and although not containing many new species, yet from the large number of specimens which it contains, derived from the lines of growth only. The shape of the shell is depressed and flat, and the teeth are numerous and very minutely angular. It differs from all our living species.

The above thirty species is rather less than half those collected by me. I propose returning to the description of the rest in the course of a month or so. The most of the figures are already drawn on stone, and the diagnosis will receive my earliest leisure. It will be observed that I do not touch on the Marginellida which at present occupy the attention of Prof. Tate, who has written a most interesting memoir upon them.

EXPLANATION OF PLATES 20 AND 21.

Plate 20.

Fig. 1 .- Fusus funiculatus.

2.—Mangelia bidens.

3.—Pleurotoma Samueli.

4.—Drillia Trevorii.

5 .- Pleurot ma Murndaliana.

6.—Pisania tenuicostata.

7. - Ancillaria semilævis.

8.—Turritella transenna.

9.—Tritoris Wilkinsonii.

Daphnella gracillima.

11.—Thalotia exigua. 12.—Triforis sulcata.

13.—Turritella platyspira.

14.—Cerithium cribarioides.

15.—Cerithium apheles.

Plate 21.

Fig. 1.—Trochita turbinata.

2.—Leda inconspicua.

3. - L. da Huttonii.

4. - Ternatina involuta.

5.-Liotia lamellosa.

6. - Adeorbis aster.

7.—Monilea strigata.

8. - Natica, Wintlei var. Hamiltonensis.

9.—Adeorbis acuticarinata.

Sclarium wannonensis.

11 -- Solarium acutum,

" 12.—Cancellaria varioifera.

" 13.—Nassa Tatei.

14.—Conus Ralphii. 15 .- Triton Prattic.

