

June 8, 1841.

William Yarrell, Esq., Vice-President, in the Chair.

The following paper, "On the Blood-corpuscles of Marsupial Animals," by George Gulliver, Esq., F.R.S., was read.

"As far as I have had an opportunity of observing, the blood-corpuscles of marsupial animals possess the common circular form, and, compared with the red particles of other Mammals, are of rather large size, being nearly allied in this respect to the corpuscles of Man and the *Quadrumanus*, and slightly thicker than the corpuscles of the *Quadrumanus* and those of the human subject.

"It is remarkable that the corpuscles of two carnivorous *Marsupiatæ* should differ as much in size as the corpuscles of any other two species of the order. This fact, however, would appear to be not altogether devoid of interest, for the corpuscles of different families of the placental *Carnivora* also exhibit great diversity of magnitude, as may be seen by reference to the 'Observations on the Blood-corpuscles of the Order *Feræ*,' in the Proceedings of the Zoological Society, May 25, 1841. Now the corpuscles of the Ursine *Dasyurus* are of large size, like those of the *Canis*, and the corpuscles of the Viverrine *Dasyurus* are considerably smaller, like those of the *Felis* and *Viverris*. Hence it would be interesting to inquire whether the blood-corpuscles of the different tribes of marsupial animals do not generally present the same characters as the corpuscles of the corresponding types of the placental series. But the few observations which I have been able to make on the blood of the former order are by no means sufficient to admit of generalization. It may be noticed, however, that the corpuscles of an insectivorous species, the *Perameles*, are nearly as small as those of the Viverrine *Dasyurus*, and that the corpuscles of the Wombat are of much larger size.

"The measurements which I have made, as opportunities occurred, of the blood-discs of the *Marsupiatæ* are here for the first time revised, arranged together, and extended by some new observations. The averages, which I had not previously estimated, are also now given; these are set down at the bottom, beneath the lines; the two measurements immediately above the latter indicate the sizes of the large and the small corpuscles, and all the other numbers were obtained from the common-sized discs. As usual, the measurements are all given in fractions of an English inch.

"*Measurements of the Blood-corpuscles of Marsupial Animals.*

"1. Virginian Opossum (*Didelphis Virginiana*, Temm.).

1.3600 }
1.3530 } common sizes.

1.4570 small size.

1.2900 large size.

Thickness of discs.

1.12,000

1.3557 Average.

Nos. CI. & CII.—PROCEEDINGS OF THE ZOOL. SOC.

“ 2. Viverrine Dasyure (*Dasyurus viverrinus*, Geoff.).

1·4000
1·4800
1·3555

Average. . 1·4056

“ 3. Ursine Dasyure (*Dasyurus ursinus*, Geoff.).

1·3600	
1·3428	Thickness.
1·4365	1·12,000
1·3000	1·10,000

Average. . 1·3534	1·10,910
-------------------	----------

“ 4. Rabbit Perameles (*Perameles Lagotis*, Reid).

1·4572
1·4000
1·3428
1·4800
1·3200

Average. . 1·3902

“ 5. Bennett's Kangaroo (*Macropus Bennettii*, Waterh.).

1·3600
1·3432
1·4000
1·3200

Average. . 1·3535

“ 6. A small Kangaroo (*Halmaturus Derbyanus* ? Gray).

1·3554	
1·3432	
1·3200	Thickness.
1·4000	1·12,000
1·3000	1·10,000

Average. . 1·3405	1·10,910
-------------------	----------

“ 7. Vulpine Phalanger
(*Phalangista vulpina*, Desm.).

1·3600
1·3530
1·5000
1·2900

Average . . 1·3617

“ 8. Minute Phalanger
(*Phalangista nana*, Geoff.).

1·4000
1·3760
1·3554
1·6000
1·3000

Average . . 1·3856

"9. Squirrel Flying Opossum
(*Petaurista sciureus*, Geoff.).

"10. Wombat
(*Phascolomys Wombat*, Per. et
Lesu.).

1·3600
1·4800
1·3000

Average .. 1·3661

1·3600
1·3500
1·3200
1·3048
1·5333
1·2900

Average .. 1·3456."

The next paper read was by G. B. Sowerby, Jun., Esq., and is entitled "Descriptions of eight new species of the genus *Ranella*," in the collection of Mr. Cuming.

1. *RANELLA VEXILLUM*, Conch. Illustr., f. 3. *R. testâ ovali, ventricosâ, subacuminatâ, pallidè brunneâ, transversè striatâ, fasciis rufescentibus elevatis noduliferis cinctâ; varicibus irregularibus, decumbentibus, latis; aperturâ magnâ albâ, intus griseo fasciatâ, posticè vix canaliferâ, anticè in canalem brevem rectum, latum terminante; labio interno sublavi decumbente, dentibus lavi paululùm incrassato; labio externo subexpanso, leviter undulato, dentibus ferè obsoletis intus incrassato.*

Long. 3·40; lat. 2 poll.

Hab. ad (Chiloe) Conception.

Mr. Cuming collected specimens at rocky places from three to six fathoms deep. The outer lip is more expanded, and the knotted brown bands are narrower and more numerous than in *R. argus*.

2. *RANELLA CRUENTATA*, Conch. Illustr., f. 5, 5*. *R. testâ subquadratâ, rugulosâ albâ vel pallidè fulvâ, rubro-maculatâ, inter varices ad angulum anfractuum tuberculis magnis tribus, in medio tribus minoribus; varicibus elevatis, utrinque foveolatis; aperturâ paululùm angustâ, extremitatibus validissimè canaliferis; labio interno decumbente, dentibus acutis instructo, maculis sanguineis 5 ad 6 in medio picto; labio externo complanato, subdigitato, intus dentibus validis instructo.*

Long. 1·50; lat. 1·20 poll.

Hab. ad insulam Ticao, Philippinarum. H. Cuming legit.

Found on coral reefs. This species is remarkable for the well-defined spots of blood-red colour by which that part of the inner lip which rests upon the body-whorl is ornamented. A darker variety occurs, in which the spots are of a strong brown colour.

3. *RANELLA NANA*, Conch. Illustr., f. 6. *R. testâ elongato-ovali, lavi, inter varices nebuloso-purpureâ, in medio anfractu fasciâ albâ cinctâ, ad angulum anfractuum tuberculis acutis quatuor, antiùs tuberculis parvis; varicibus prominentibus, anticè laqueatis, posticè canalem exhibentibus; aperturâ ovali, ad extremita-*

tes validissimè canaliferâ; labio interno granoso; labio externo valdè denticulato.

Long. 1·80; lat. 1·05 poll.

Hab. ad insulam Panama, Philippinarum. H. Cuming legit.

Found in coarse sand at seven fathoms.

4. *RANELLA ALBO-FASCIATA*, Conch. Illustr., f. 14. *R. testâ ovali, subcompressâ, granulosa, fusco-purpureâ, fasciâ albâ in medio anfractu cinctâ, lineis moniliformibus numerosis et ad angulum 6 ad 7 tuberculis cinctâ; varicibus granuloso-tuberculiferis; aperturâ ovali, ad extremitates validissimè canaliferâ; labio interno granoso; labio externo valdè denticulato.*

Long. 1·80; lat. 1·20 poll.

Hab. ad insulam Panama, Philippinarum.

Much broader and more completely granulated than the former, which is nearly all over smooth. In this respect our shell resembles *R. granulata*, Lam., but it is neither so oval nor so compressed, the varices are more strongly marked, and the posterior canal is more perfect.

Found in coarse sand at 10 fathoms.

5. *RANELLA RHODOSTOMA*, Conch. Illustr., f. 10. *R. testâ subquadrata, rugulosa, granulata, pallidè fulvâ, rufo-punctatâ et maculatâ, inter varices tuberculis prominentibus tribus ad angulum, tribus in medio anfractu; aperturâ roseo-purpureâ, paululûm angustatâ, ad extremitates valdè canaliferâ; labio interno granuloso propè canales transversè dentato, labio externo sub-expanso, undulato, intûs dentato; varicibus granoso-tuberculatis, validis, utrinque foveolatis.*

Long. 1·15; lat. ·85 poll.

Hab. ad insulam Masbate, Philippinarum.

Found on coral reefs by Mr. Cuming. It is a pretty little species with a delicately purple aperture.

6. *RANELLA SUBGRANOSA*, Conch. Illustr., f. 18. *R. testâ ovali, subangulatâ, purpureo-fusâ, brunneo-fasciatâ et maculatâ, transversè lineis elevatis, moniliformibus alternantibus striatâ; ad angulum anfractuum tuberculis acutis; varicibus elevatis, utrinque subfoveolatis, granoso-tuberculatis; aperturâ ovali, albâ, intûs pallidè purpureâ; canali postico lato, antico subrecurvo, lato; labio interno tenui, posticè dentato anticè extanti; labio externo crenulato validissimè dentato, ad canalem posticum aculeato, anticè sub-expanso.*

Long. 2·85; lat. 1·70 poll.

Hab. ad sinus Manillæ. H. Cuming legit.

This species very nearly resembles *R. elegans*, Beck, Chemn. 1270, Conch. Illustr., f. 17, of which it may perhaps be only a local variety. Our shell is of a more oval shape and is more evenly granulated in every part. Found in sandy mud at ten fathoms.

7. *RANELLA NEGLECTA*, Conch. Illustr., f. 22. *R. testâ subquadrata, brevî, lineis granulatis transversè striatâ, pallidè fulvâ,*

fusco-maculatâ; *inter varices ad angulum posticum tuberculis tribus magnis, in medio tribus ad quatuor parvis, prope caudam uno, et aliquando serie moniliformi tuberculorum parvorum*; *varicibus crassis liratum granulosis posticè foveolatis*; *aperturâ ovali albâ*; *canali postico brevi, recto*; *canali antico brevi, subrecto*; *labio interno decumbente, granulato, prope canalem posticum acutè denticulato*; *labio externo, minutè denticulato, propè canales solùm reflexo.*

Long. 1·60; lat. 1·15.

Hab. ad insulam Ceylon.

This shell, which is now common, differs from *R. crumena* in the following respects: it is shorter, the tubercles are more obtuse, the canals are shorter and straighter, the outer lip is scarcely reflected, and the inner lip is not raised at the caudal extremity.

8. *RANELLA RUGOSA*, Conch. Illustr., f. 7. *R. testâ ventricosâ, granulosâ, angulatâ, pallidè fulvâ, fusco-maculatâ*; *inter varices ad angulum posticum tuberculis tribus obtusis, granulosis, inter granula fusco interrupto-lineatis, in medio lined duplicatâ moniliformi*; *caudam versùs lineis quinque alternantibus moniliformibus*; *varicibus crassis, granoso-tuberculatis, utrinque validissimè foveolatis*; *canali antico tortuoso, magno*; *aperturâ rotundato-ovali albâ, canali postico sub-elongato*; *labio interno tortuoso, propè extremitates validè extanti*; *labio externo reflexo, extùs laqueato, intùs quinquefariam bi-denticulato, denticulis foveolato.*

Long. 2·30; lat. 1·50.

Hab.

This species has not the thickness, flatness, nor the elongated, curved, posterior canal of *R. bufonia*, nor are the tubercles so large.

A fine specimen of the *Trogon Temnura*, presented by C. Clarke, Esq., British Consul at Cuba, was exhibited.

Mr. Yarrell laid before the Meeting the numbers eleven to twenty-four of Mr. Audubon's new royal octavo edition of his birds of North America.

June 22, 1841.

Owing to the removal of the Society from Leicester Square to Pall Mall at this time, no Meeting took place.