

Fig. 15. Head of *Cydmæa viridula*, IX. p. 138.

Fig. 16. Head of *Erytenna consputa* (Trans. Ent. Soc. 1870, p. 196)*.

Fig. 17. Head of *Phæodica fulvicornis*, XIII. p. 386.

Fig. 18. Front and side views of the head of *Glaucopela unicolor*, XIII. p. 385.

Fig. 19. Fore leg of *Melanterius floridus*, XVI. p. 62.

Fig. 20. Fore leg of *M. fugitivus*, XVI. p. 62.

Fig. 21. Fore leg of *Diethusa fervida*, XI. p. 185.

V.—*Descriptions of some new Shells from Kerguelen's Island.*

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THE following species form part of the collections made at Kerguelen's Island by the Rev. A. E. Eaton, the naturalist sent by the Royal Society with the British expedition for observing the recent transit of Venus. Only those species are here mentioned which are apparently undescribed, as it is purposed to publish elsewhere complete and detailed accounts of all the specimens obtained at the island. Of Mollusca the number is small, comprising only about twenty species; but of these the proportion of new forms is large, and several of them very remarkable discoveries.

1. *Struthiolaria mirabilis*, sp. nov.

Testa ovata, tenuis, imperforata, leviter turrata, alba, epidermide tenuissima fugaci olivaceo-alba amicta; anfractus $6\frac{1}{2}$, convexiusculi, superne anguste planulati, lente accrescentes, longitudinaliter oblique arcuatimque crebre plicati (plicis inferne ad suturam vix attingentibus); liris spiralibus prominentibus supra plicas undulatis (in anfr. superioribus 7–8, in ultimo circiter 22, illis infra medium simplicibus) succincti; apertura longitudinis totius circiter $\frac{4}{7}$ æquans; columella arcuata.

Operculum corneum unguiculatum, inferne costis duabus a nucleo unguiformi divergentibus munitum, superne medio longitudinaliter unisulcatum, concentrice striatum.

Long. 42 mill., diam. 22.

Hab. Swain's Bay, Kerguelen's Island.

But a single specimen of this very remarkable shell was obtained by Mr. Eaton. This unfortunately has the labrum so much broken away, that it is impossible to describe the form of the aperture and the nature of the basal channel. However, the animal and operculum agree in all respects ex-

* Figured in forgetfulness of its not having appeared in the 'Annals.'

ternally with *Struthiolaria*; and although the shell has more the general aspect of *Buccinum*, there can be no doubt of its true location. The species which compose this genus are strong thick shells; this, on the contrary, is particularly fragile, and clothed with a very thin deciduous epidermis.

2. *Buccinopsis Eatoni*, sp. nov.

Testa elongato-ovata, turrita, tenuis, lævis, pallide livido-fuscescens, haud nitens; anfractus 6? (apice fracto), reliqui 4 perconvexi, lente accrescentes, læves, incrementi lineis flexuosis insculpti, sutura profunda fere canaliculata sejuncti; apertura ovata, longitudinis totius circiter $\frac{4}{5}$ æquans; columella lævis, polita, medio leviter arcuata, versus basim obliqua; canalis latissimus, perbrevis, vix recurvus; labrum simplex, tenue.

Operculum ovatum, concentrice plicato-striatum, nucleo laterali, vix terminali.

Long. 56 mill., diam. 27; apertura long. 27 mill., diam. 14.

Hab. Royal Sound and Swain's Bay, Kerguelen's Island.

This is a very remarkable species, and chiefly characterized by the smooth convex whorls, which are destitute of all sculpture and ornamentation with the exception of the lines of growth. The suture is particularly deep, and almost amounts to a canaliculation. Around the short cauda of the body-whorl, from a little below the middle of the columella, runs a carination (which frequently occurs in species of *Bullia*), and joins the basal channel near the lip.

The operculum is peculiar in that the nucleus is not terminal as in *Buccinopsis Dalei*, but situated on the inner side about one tenth of the entire length from the extremity, and just at this point the outline is interrupted by a slight sinus. It consists of one whorl, which gradually increases by concentric layers well defined by the lines of growth; the inferior surface is somewhat thickened along the outer edge—that is, that opposite the nucleus. Such slight differences are scarcely sufficient to warrant a generic separation.

3. *Trophon albolabrat*, sp. nov.

Testa ovato-fusiformis, turrita, alba; anfractus 6, primi duo (nucleus) læves, cæteri convexi, liris spiralibus (in anfr. superioribus 4-5, in ultimo circiter 13) æqualibus subæquidistantibus cincti, et lamellis foliaceis numerosis subconfertis et prominentibus instructi; apertura superne ovalis, infra in canalem prolongata, intus saturate fusca, longitudinis testæ circiter $\frac{3}{5}$ æquans; labrum intus sublato albo marginatum, leviter expansum; columella medio parum arcuata, basi obliqua, callo inferne crassiusculo, superne tenui labroque juncto induta, cæruleo-alba, margine interno fusca;

regio umbilici leviter rimata ; canalis angustus, obliquus, paululum recurvus, modice elongatus.

Operculum flavo-corneum.

Long. 40 mill., diam. 18 ; apertura long. 24 mill., diam. 11.

Hab. Swain's Bay and Royal Sound, Kerguelen's Island.

The nearest ally of this species appears to be *T. philippianus* of Dunker, which is found in the Straits of Magellan, at Cape Horn, and the Falkland Islands. From this species it differs in having the whorls rounded above, and not flattened or excavated, the penultimate is larger and more elevated, the body-whorl is more inflated below the middle and not produced into such an elongated cauda, and the canal is shorter and the aperture rather larger, the longitudinal lamellæ are more prominent and not nearly so numerous.

4. *Littorina setosa*, sp. nov.

Testa imperforata, ovato-turrita, tenuis, pallide rosea, circa medium anfractuum linea spirali rufa cincta, epidermide fugaci villosa vel setosa olivacea induta ; anfractus 6, convexi, superne aliquanto tabulati, sutura profundiuscula discreti, ubique spiraliter et oblique minute punctato-striati ; apertura subquadrato-circularis, longitudinis totius $\frac{1}{2}$ æquans ; columella perparum arcuata, ad basim leviter patula ; labrum simplex.

Operculum paucispirale, ovatum, superne acuminatum, tenuissimum, flavo-corneum.

Long. 14 mill., diam. $8\frac{1}{2}$; apertura long. 7 mill., diam. 5.

Hab. Swain's Bay, Kerguelen's Island.

The epidermis which clothes this species is of a very deciduous nature ; it is minutely hairy, the hairs being disposed in obliquely longitudinal series showing the layers of increase.

5. *Rissoa Kergueleni*, sp. nov.

Testa ovata, semipellucida, vitrea vel lactea, ad apicem pallide rubescens, tenuis, imperforata ; anfractus 5, convexi, politi, sutura angustissime marginata divisi ; apex obtusus ; apertura ovata, superne acuminata, longitudinis totius $\frac{5}{12}$ adæquans ; peristoma continuum, leviter incrassatum et expansum.

Operculum paucispirale, corneum, simplex.

Long. 3 mill., diam. $1\frac{1}{2}$.

Hab. On a sponge, Kerguelen's Island.

This pretty species is of a glassy texture, sometimes streaked longitudinally with opaque white. The whorls are divided by a narrowly margined suture, and below it there is a faint depression ; the first two whorls form an obtuse apex ; and the penultimate is large.

EATONIA, gen. nov.

Testa formæ rissoideæ; apertura subcircularis; peristoma simplex, continuum, margine labrali haud incrassatum.

Operculum ovatum, pauci- vel unispirale, nucleo subterminali a latere columellari paululum remoto, infra ossiculo prominenti a nucleo exsurgente et versus marginem columellarem extenso munita.

There are two genera which have affinity to the present one—*Jeffreysia* and *Rissoina*. With *Jeffreysia* it agrees in the form and character of the aperture, but differs in having the nucleus of the operculum not lateral, but situated within the margin and towards the lower end—in fact, agreeing in this respect with *Rissoina* (see Adams, 'Genera of Recent Mollusca,' vol. iii. pl. 35. f. 1, *a* & *b*), but distinguished from it by the absence of the basal faint channel of the aperture and the lack of any incrassation to the labrum.

The operculum of *Jeffreysia* is composed of concentric layers (as in *Purpura*), commencing from a nucleus situated on the margin of the inner or columellar side; and the ossicle or rib proceeds "from the nucleus in the direction of the *outer* margin" (Jeffreys, 'Brit. Conch.' iv. p. 58; in the figure, *l.c.* pl. 1. f. 3, it is apparently the reverse).

In *Eatonia* the operculum is spiral, consisting of one or more whorls, the nucleus is situated within the margin and about one fourth the entire length from the lower end, and the ossicle is directed towards the *inner* margin.

I feel much pleasure in associating with this group the name of the Rev. A. E. Eaton, who worked so indefatigably in collecting specimens during the expedition.

6. *Eatonia kerguelenensis*, sp. nov.

Testa ovato-conica, tenuis, olivaceo-nigrescens, versus labrum pallidior semipellucida, vix rimata; anfractus 6, convexi, læves parum nitidi, incrementi lineis striati, sutura simplici sejuncti; apertura fere circularis, longitudinis totius $\frac{5}{12}$ æquans; peristoma simplex, continuum, in regione umbilicali leviter incrassatum et vix reflexum.

Operculum ovatum, intus concavum, nucleo posteriore sed haud terminali, crassiusculum, margine externo lira incrassatum, unispirale, supra incrementi lineis valde striatum, infra ossiculo elongato a nucleo exsurgente munitum.

Long. 3 mill., diam. $1\frac{2}{3}$.

Hab. On a sponge, Kerguelen's Island.

This species was found in company with *Rissoa Kergueleni*. It is of a very different form, the spire being conical, the last

whorl shorter and a trifle broader; and it also differs in colour. In general aspect it resembles very much several species of *Hydrobia*; but the operculum will at once separate it.

7. *Eatonia caliginosa*, sp. nov.

Testa ovata, modice tenuis, nigra, vix rimata; anfractus $4\frac{1}{2}$, convexi, læves, vix nitidi, sutura simplici discreti, incrementi lineis obsolete striati; apertura fere circularis, superne paululum acuminata, longitudinis totius $\frac{1}{2}$ fere æquans; peristoma continuum, levissime incrassatum, in regione umbilicali albidum, aliquanto reflexum, et versus basim parum effusum.

Operculum ei *E. kerguelenensis* fere simile.

Long. 2 mill., diam. 1.

Hab. Swain's Bay, Kerguelen's Island.

This minute shell has a simple style of sculpture. It is of a very black olive-colour, with a nearly circular aperture, the peritreme of which is black outwardly and whitish in the columellar region.

8. *Eatonia subrufescens*, sp. nov.

Testa ovata, leviter conica, tenuis, semidiaphana, vix rimata, subrufescens, versus labrum albida; anfractus $4\frac{1}{2}$, lente accrescentes, convexi, sutura subprofunda divisi, læves nisi incrementi striis tenuiter sculpti; apertura subcircularis, longitudinis testæ $\frac{1}{3}$ paulo superans; peristoma continuum, ad marginem columellarem leviter incrassatum et reflexum, rimam umbilicalem indistinctam effingens.

Operculum ei *E. kerguelenensis* fere simile, sed ossiculo fortissimo munitum.

Long. $1\frac{1}{2}$ mill., diam. $\frac{2}{3}$.

Hab. On a sponge, Kerguelen's Island.

The reddish colour of the upper whorls is attributable to the dried remains of the inhabitant.

9. *Skenea subcanaliculata*, sp. nov.

Testa minuta, orbiculata, depressa, tenuis, subdiaphana, albida, late profundeque umbilicata; spira minime elevata; anfractus $3\frac{1}{2}$, sublente accrescentes, perconvexi, ad suturam valde incurvati, fere canaliculati, læves nisi incrementi striis levissime sculpti; apertura subcircularis, leviter obliqua; peristoma continuum, simplex.

Operculum subcircularare, paucispirale, nucleo fere centrali.

Diam. max. $1\frac{1}{3}$ mill., diam. min. 1, alt. $\frac{1}{2}$.

Hab. On a sponge, Kerguelen's Island.

Some specimens are of a faint reddish colour in the upper whorls; but this may be from the dried animal within. The whorls are very much incurved at the suture, so much so that almost a channel is produced.

10. *Scissurella supraplicata*, sp. nov.

Testa heliciformis, spira brevi, anguste perforata, tenuis, semipellucida, alba, epidermide caduca crassiuscula pallide olivacea amicta; anfractus 3, primus — ? (abruptus), secundus convexiusculus, superne aliquanto planulatus et radiatim arcuate plicatus, ultimus magnus, paululum supra medium carina duplici tenui (cum scissura continua) succinctus, supra carinam radiatim arcuate plicatus, infra eam incrementi lineis striatus; apertura maxima, irregulariter circularis, ad marginem basalem levissime expansa; peristoma continuum, scissura profunda angusta.

Operculum corneum, — ?

Diam. max. $1\frac{1}{3}$ mill., diam. min. 1, alt. 1.

Hab. Swain's Bay, Kerguelen's Island.

The deep narrow slit is situated between the two thread-like keels, as is the case in several other species. The operculum is too far within the aperture to allow of examination.

11. *Solenella gigantea*, sp. nov.

Testa elongato-ovalis, postice subrhomboidalis, parum inæquilateralis, postice longior, aliquanto ventricosa, versus marginem posticum compressiuscula, epidermide nitidissima (vel fusco- vel flavo-olivacea) induta, incrementi lineis concentricis (interdum prominentibus) ornata, et striis paucis tenuissimis et confertis ab umbonibus usque ad medium lateris antici radiata, intus alba, iridescens; margo dorsalis utrinque leviter declivis, ventralis vix arcuatus; extremitas lateris antica brevioris paululum supra medium leviter acuminato-rotundata; postica superne subrostrata, medio leviter sinuata; dentes cardinales postice circiter 32, antice 11; pallii impressio perprofunde sinuata.

Lat. 62 mill., long. 32, crass. 19.

Hab. Royal Sound, Kerguelen's Island.

This magnificent species is by far the largest yet described of this genus, and is at once known from the other three species by its difference of form. The posterior end pouts in the same manner as in the North-American *Yoldia thraciæformis*. The epidermis in young and half-grown specimens is of a bright yellowish olive colour; but in the adult shell it becomes of a dark olive-brown, and is much eroded in the umbonal region; it is slightly reflexed within the margin of the valves. The few radiating contiguous striations towards the anterior end furnish another very distinctive character.

12. *Yoldia subæquilateralis*, sp. nov.

Testa ovalis, postice acuminata, subæquilateralis, postice paululum brevior, convexiuscula, epidermide olivacea vel flavo-olivacea induta, concentrice rugose striata, utrinque umbonibus ad marginem subventralem striis paucis subgranosis radiantibus insculpta, utrinque leviter hians, intus cæruleo-alba; margo dorsalis utrinque multum declivis, antice levissime convexo-arcuatus, postice fere rectus; margo ventralis ubique arcuatus; latus anticum late rotundatum, posticum subacuminate productum; fovea ligamentalis parva triangularis; dentes cardinales utrinque 11; sinus pallii latissimus parum profundus.

Lat. 34 mill., long. 23, crass. 9.

Hab. Swain's Bay, Kerguelen's Island.

I know but one species which approaches the present one somewhat closely, namely *Y. Eightsii* of Couthouy. From this, however, it is well distinguished by its difference in form. By reference to Jay's figure upon which *Y. Eightsii* is founded (for no description is given; Cat. Shells, 1839, ed. 3, pl. i. f. 12 & 13), it will be perceived that a very inequilateral shell is there represented, with a much *excavated* posterior dorsal slope; on the contrary, *Y. subæquilateralis* is almost equilateral, with a *straight* posterior dorsal acclivity.

VI.—*Descriptions of new Species of Crustacea collected at Kerguelen's Island by the Rev. A. E. Eaton.* By EDWARD J. MIERS, Zoological Department, British Museum.

THE Crustacea collected at Kerguelen's Island (exclusive of the Entomostraca, which have not yet been examined) amount to ten species, seven of which are here described for the first time. One of these, *Serolis latifrons*, is mentioned (but not characterized) by A. White, in the 'List of Specimens of Crustacea in the British Museum;' and examples from the Auckland Islands have long existed in the Collection.

Dynamene Eatoni, n. sp.

Convex, smooth, naked, with the sides of the pereion nearly parallel. Cephalon transverse, deeply encased within the first segment of the pereion; its front with a thin raised marginal line. Eyes very small. Segments of the pereion narrow, of equal width above; the seventh segment produced backward on the sides over the front of the first (real) segment of the pleon. Segments of the pleon (the last excepted) coalescent,



Smith, E. A. 1875. "Descriptions of some new shells from Kergulen Island." *The Annals and magazine of natural history; zoology, botany, and geology* 16, 67–73.

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