

XXVIII.—*Descriptions of Thirteen new Species of Terrestrial and Freshwater Mollusca from South Africa.* By JAMES COSMO MELVILL, M.A., F.L.S., and JOHN HENRY PONSONBY, F.Z.S.

[Plate XIII.]

IN continuation of our last paper (*vide* Ann. & Mag. Nat. Hist. 1892, vol. ix. p. 94) we now have the pleasure to present a fifth contribution, which shows how energetically our various correspondents and friends are working in the cause. We may add that we have in preparation a special paper dealing with new forms of the genus *Ennea* and other Pupidæ.

1. *Helix* (*Ærope*) *Trimeni*, sp. n. (Pl. XIII. fig. 1.)

H. testa profunde umbilicata, brunnea, depresso-orbiculari, solidiuscula, supra sericea, confertim striato-costulata, ad basin nitida, sublævi, striis obscuris, spira modice exserta; anfractibus quatuor, ultimo rapide accrescente; apertura rotundo-lunari; peristomate simplici, ad basin et marginem columellarem paululum reflexo.

Long. 17, lat. 22 mill.

Hab. "S. Africa" (*R. Trimen*).

A large species of dull brown colour allied to *H. (Ærope) eumacta*, described in this paper, and forming a link between the *caffra* and *vernica* sections.

In general aspect this species is more akin to *caffra*, but the polished base recalls *vernica*, *bullacea*, &c.

We have no exact record of its locality. There are three specimens, of which one is immature.

2. *Helix* (*Ærope*) *eumacta*, sp. n. (Pl. XIII. fig. 4.)

H. testa umbilicata, compacta, solidiuscula, albida, semipellucida, undique epidermide corneo-olivacea, radiatim disposita, induta, globulosa; anfractibus quatuor, convexis, confertim longitudinaliter tenuistriatis, ad suturas depressis, ultimo ad basin viridi-suffuso; apertura lunari-ovata, intus lactea; peristomate tenui, simplici, apud umbilicum triangulatim reflexo.

Long. 24, lat. 30 mill.

Hab. Natal (*Crawford*).

A large conspicuous compact shell, of thicker substance than *H. (Ærope) caffra* (Reeve), with the whorls not so elegantly striated, nor so effuse as regards the aperture.

Two specimens.

3. *Helix* (*Macrocyclus*) *cænotera*, sp. n.
(Pl. XIII. fig. 2.)

H. testa profunde umbilicata, declivi, depressa, viridescenti-cornea, tenui, nitidiuscula; anfractibus quinque, supra striis irregularibus dense cingulatis, ad basin nitidioribus; apertura obliquo-lunari; peristomate simplici, tenui.

Long. 10, lat. 17 mill.

Hab. "S. Africa" (*R. Trimen*); Tharfield (*Dr. Schönland*).

From the sources above mentioned we have received six specimens of this species, which have been allocated to *Macrocyclus* because of its general resemblance to *H. vancouverensis*, Lea. This has been done on conchological grounds only, for we have no opportunity of examining the animal.

4. *Helix* (*Macrocyclus*) *liparoxantha*, sp. n.
(Pl. XIII. fig. 3.)

H. testa profunde umbilicata, tenui, nitida, oblique orbiculari-depressa, aureo-cornea; spira obtusa; anfractibus quinque, conspicue regulariter costo-striatis, ultimo aufractu ad basin impresso-excavato; apertura ovata; peristomate tenui, simplici.

Long. 12, lat. (sp. majoris) 18.50 mill.

Hab. Maritzburg (*Burnup*).

Four specimens. This very beautiful shell is allied to *H. cænotera*, just described, but is of a finer build altogether, not quite so obliquely depressed, of a brighter shiny golden colour; umbilicus as deep, but narrower, and the two shells cannot well be confounded when seen together.

5. *Helix* (*Pella*) *actinotricha*, sp. n.
(Pl. XIII. fig. 5.)

H. testa obtecte sed profunde umbilicata, superne planato-depressa, pellucida, cornea, tenui, apice turbinato; anfractibus quinque, ad suturas impressis, convexiusculis, undique epidermide cornea connectis, striato-liratis, ultimo setis quadricingulato (setis ad et infra peripheriam longis, ad basin brevioribus, circa umbilicum denique brevissimis); apertura semilunari; peristomate tenui, columellari ad basin angulato, apud umbilicum triangulatim reflexo.

Long. 5.50, lat. 9 mill.

Hab. Maritzburg (*Burnup*).

A most attractive little species, perhaps not quite adult; of a delicate horny substance and colour, very flattened at the

periphery and above, and with the apex of the last whorl somewhat turbinate; the whole shell covered with a pale horny epidermis, everywhere striato-lirate. Around the periphery most of these striæ bear long bristles or setæ, which extend round the shell; just below also a second series occurs, and further towards the base are two more series, one with very short setæ about midway and the other nearer the umbilicus; in this the bristles are shorter still. We know no species at all nearly resembling this.

Two specimens.

6. *Helix (Pella) Burnupi*, sp. n.
(Pl. XIII. fig. 6.)

H. testa profunde sed anguste umbilicata, depressa, fusco-cornea, sericea, tenui, semipellucida; anfractibus quatuor, convexis, undique confertim oblique longitudinaliter costoso-plicatis, ad suturas compressis, ultimo compresso, subtus semiconvexo; spira depressa, apice obtusato; apertura obliquo-lunari, tenui; peristomate simplici, apud umbilicum reflexo.

Long. 5, lat. 7 mill.

Hab. Cope's Folly, near Maritzburg (*Burnup*).

More depressed than *H. biscalpta* (Benson), but of allied character, the whorls being very finely obliquely costoplicate, compressed at the sutures, the somewhat oblique mouth thin, reflected at the columellar margin near the umbilicus, which is deep, but narrow.

Several specimens.

7. *Helix (Pella) conisalea*, sp. n. (Pl. XIII. fig. 7.)

H. testa semipellucida, tenui, anguste umbilicata, albida, orbiculato-depressa, spira convexa; anfractibus quinque, convexis, angustis, ultimo mox accrescente, longitudinaliter dense liris, et undique epidermide sericeo-setosa tenuissime contextis, setis brevibus regulariter apud liras locatis, et ita dispositis ut lineæ quasi transversæ videantur; apertura lunari-oblonga, patula; peristomate tenui, membranaceo, apud marginem columellarem reflexo.

Long. 5, lat. 6.50 mill.

Hab. Maritzburg (*Burnup*).

A little shell with the aspect of the British *H. hispida*, L., or *sericea*, Müll., but when examined with a lens the whole pellucid surface is seen to be covered with a delicate epidermis, and upon the longitudinal liræ are ranged with regular precision crowded short setæ, so straightly disposed as to give the effect of transverse lines. The whorls are convex, five in number; umbilicus small, lip thin, reflexed at the columellar

margin over the umbilicus. Superficially the shell has a dusty appearance, suggesting the trivial name (*κονισάλεος*).

Several specimens.

8. *Helix (Pella) minythodes*, sp. n.
(Pl. XIII. fig. 8.)

H. testa angustissime sed profunde umbilicata, globoso-depressa, lævi, parum nitente, cornea; anfractibus quatuor, obscure striatis, ultimo mox accrescente, subconvexis, ad suturas compressis; apertura lunari-ovata; peristomate tenui, apud marginem columellarem triangulatim reflexo.

Long. 8, lat. 11 mill.

Hab. Craigie Burn (*Lightfoot*).

A neat horn-coloured shell, with a very thin, almost smooth epidermis, without gloss; whorls depressed, very obscurely striated; peristome thin, triangularly reflexed over the umbilicus, which is very narrow but deep; mouth slightly squamose at the base.

Three specimens.

9. *Helix Farquhari*, sp. n. (Pl. XIII. fig. 9.)

H. testa minima, umbilicata, tenui, cinereo-cornea; anfractibus quatuor, undique longitudinaliter scrobiculato-rugosis, gradatulis, ventricosulis, apice papillari; apertura rotundata; peristomate tenui, simplici.

Long. 2, lat. 3 mill.

Hab. Port Elizabeth (*Farquhar*).

A very minute though interesting species, somewhat recalling the *H. rupestris* (Fér.) of Great Britain and Europe. The surface is ashy corneous, irregularly wrinkled with oblique lines longitudinally; whorls four, somewhat angled, and simple mouth.

10. *Vitrina fuscicolor*, sp. n. (Pl. XIII. fig. 10.)

V. testa ampla, orbiculari-depressa, fusco-brunnea, tenui, spira subconica, ad apicem albescente; anfractibus quatuor, lente accrescentibus, longitudinaliter oblique striatis, transversim irregulariter unduloso-rugosis; apertura lunari-ovata, ampla; peristomate tenuissimo, margine membranaceo.

Long. 15, lat. 23 mill.

Hab. Rensberg's Kop, an offshoot of the Drakensberg, at an elevation of 7000 feet (*Quekett*).

A remarkable shell, and one very dissimilar from any species of the genus known to us from S. Africa, being of a warm russet-brown colour, with superficial shagreened, almost

silky appearance, owing to the indistinct irregular cross-lineation all over the surface. The apex is white; the whorls are four in number, somewhat gradually increasing; mouth large, but not so effuse as in some species; margin of lip membranaceous. The epidermis is slightly iridescent.

Six specimens.

11. *Vitrina chrysoprasina*, sp. n. (Pl. XIII. fig. 11.)

V. testa conico-globosa, pellucida, viridi-cornea, tenuissima; anfractibus quatuor, ventricosulis, undique longitudinaliter obscure striatis, ultimo mox accrescente; apertura lunari-rotundata, apud marginem columellarem paulum reflexa.

Long. 10, lat. 11 mill.

Hab. Pretoria.

This very beautiful conical little species is of very delicate substance and rounder than *V. natalensis* (Krauss); there is also no sign of any peripheral red band. Since we first received a specimen from Pretoria, in the spring of this year, the species has been shown to us from no less than three separate quarters—Mr. Heathcote, of Preston, and Mr. Standon, of Manchester, both having specimens sent by their South-African correspondents, and Mr. Sowerby likewise supplying us with the same shell.

12. *Vitrina phædima*, sp. n. (Pl. XIII. fig. 12.)

V. testa depresso-orbiculari, apice modice exserto, nitidissima, læte cornea; anfractibus quatuor, convexulis, ultimo in medio anguste et inconspicue rubri-cingulato, ad suturas subimpressis, lævissime irregulariter plicato-striatis; apertura lunari-oblonga.

Long. 8, lat. 12 mill.

Hab. Maritzburg (*Burnup and Quekett*).

This species somewhat resembles *V. pellicula*, Fér., but is of more transparent substance and brighter golden-horny colour, with a thin red band encircling the last whorl, this being very inconspicuous in some specimens. It is one of the most beautiful of the South-African species.

Several specimens. One of them is remarkably planate and may prove to be a distinct species; we prefer, however, awaiting the arrival of further specimens before deciding.

13. *Planorbis (Segmentina) emicans*, sp. n.
(Pl. XIII. figs. 13, 13 a.)

P. testa depressa, nitida, læte fulvescente, lævissima, spira deplanata; anfractibus tribus, ultimo rapide accrescente, ad basin

expanso, subangulato; apertura obliquo-trigonalis; peristomate simplici.

Long. 2.50, lat. 1.75 mill.

Hab. Zwartkop (*Farquhar*).

This very pretty species is not unlike the British *P. nitidus* (Müll.).

EXPLANATION OF PLATE XIII

Fig. 1. Helix Trimeni.

Fig. 2. — cænoteræ.

Fig. 3. — liparoxantha.

Fig. 4. — eumactæ.

Fig. 5. — actinotricha.

Fig. 6. — Burnupi.

Fig. 7. — conisalea.

Fig. 8. Helix minythodes.

Fig. 9. — Farquhari.

Fig. 10. Vitrina fuscicolor.

Fig. 11. — chrysoprasina.

Fig. 12. — phædima.

Figs. 13, 13 a. Planorbis emicans.

XXIX.—On *British Mysidæ*, a Family of Crustacea Schizopoda. By the Rev. Canon A. M. NORMAN, M.A., D.C.L., F.R.S., &c.

[Continued from p. 166.]

Genus 7. LEPTOMYSIS, G. O. Sars, 1869.

Eyes subglobose, not compressed. *Antennal scale* subulate, ciliated all round, second joint very long and running out to a narrow extremity. *Legs* long and slender; tarsus 3-articulated; a very slender nail. *Telson* linguiform or lanceolate, of considerable size, margins spined, entire at the extremity, which is aculeated with spines of unequal length. *Uropods* long and narrow, ciliated on all sides; acoustic organ large. *Pleopods* in female one-jointed, small and narrow; in male well developed, biramose, multiarticulate, natatory; lateral basal lobe of inner branch small; outer branch of fourth pair having 1-3 terminal articulations furnished with ciliated spines (instead of setæ).

1. *Leptomysis gracilis*, G. O. Sars.

1864. *Mysis gracilis*, G. O. Sars, Beret. om en i Somm. 1863 foretagen Zool. Reise i Christiania Stift, p. 23.

1869. *Mysis hispida*, Norman, "Last Report Dredging Shetland Isles," Brit. Assoc. Rep. 1868, p. 267.

1869. *Leptomysis gracilis*, G. O. Sars, Undersøgelser over Christianiafjordens Dybvandsfauna, p. 29.

1879. *Leptomysis gracilis*, G. O. Sars, Carcinol. Bidrag til Norges Fauna, I. Monogr. Mysider, p. 31, pls. xix., xx.

1882. *Leptomysis gracilis*, Czerniavsky, Monogr. Mys. Imp. Ross. fasc. i. p. 90, iii. p. 20.



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