

XLIII MOLLUSCA, V

By H. B. PRESTON, F.Z.S.

The specimens upon which the present short paper is written form part of the collections made during the late punitive expedition to the Abor country, and by Mr. F. H. Gravely in Lower Burma; though, with the exception of the five new species, there is nothing to call for especial notice, the majority being merely included in order to record their presence in the districts through which the expedition passed. Of the new species, the two which are the most noticeable are *Paludomus rotungensis* and *Diplomatina perobesa*, the former as being by far the smallest true *Paludomus* to have yet been diagnosed, and the latter for its somewhat peculiar pagodiform appearance.

Class GASTROPODA.

Order PULMONATA.

Family ZONITIDAE.

Sarika consepta (Benson).

(*Helix*), *Ann. Mag. Nat. Hist.*, (3) VI, 1860, p. 190; XI, 1863, p. 320.

Kobo, at an altitude of 400 ft., in rotten wood (S. W. Kemp).

Holkeion anceps (Gld.).

(*Caracolla*), *Boston Journ. Nat. Hist.*, IV, 1844, p. 454, pl. xxiv, fig. 4.

Moulmein, Lower Burma (F. H. Gravely).

Family HELICIDAE.

Chloritis gabata (Gld.) var. **merguiensis** (Philippi).

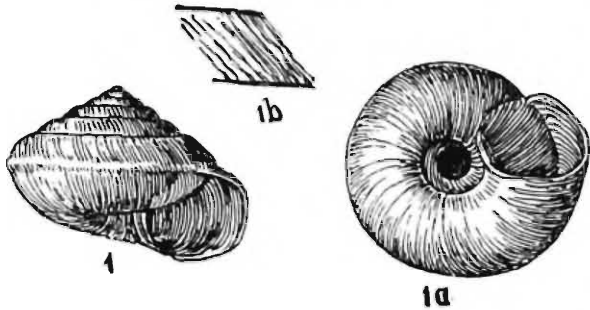
(*Helix merguiensis*), *Zeits. Malak.*, III, 1846, p. 192.

Myawadi, Burmo-Siamese Frontier, Amherst district, Lower Burma (F. H. Gravely).

Plectotropis austeni, sp. n.

Shell conically turbinata, light reddish-brown; whorls $6\frac{1}{2}$, regularly increasing, the last descending a little in front and broadly

and roundedly carinate at the periphery, the first two polished, shining, sculptured with fine, raised, spiral striae, the remainder of a roughish texture, marked with irregular, fine, oblique, trans-



FIGS. 1, 1a.—*Plectotropis austeni*, sp. n.,

× 2.

„ 1b.— do., sculpture, × 4.

verse striae; suture impressed; base of shell somewhat convex, sculptured as on the lower whorls; umbilicus deep, moderately wide, occupying rather more than one-fourth of the total diameter of the shell; columella margin reflexed, vertically descending in a curve; labrum simple; aperture ovate.

Alt. 8.5 (nearly), diam. maj. 12, diam. min 11 mm.

Aperture: alt. 5, diam. 5.25 mm.

Hab.—Upper Rotung.

Named in honour of my friend Lieut. Colonel H. H. Godwin-Austen who, by his untiring labours, has so greatly enriched our knowledge of the Indian Molluscan fauna.

Family CLAUSILIIDAE.

Clausilia (Phaedusa) insignis (Gld.).

Proc. Boston Soc. Nat. Hist., I, 1844, p. 140; *ibid.*, *Boston Journ. Nat. Hist.*, IV, 1844, p. 458, pl. xxiv, fig. 8.

Kobo at an altitude of 400 ft., in rotten wood (*S. W. Kemp*).

Clausilia (Phaedusa) annandalei, sp. n.

Shell cylindrically subulate, solid, yellowish-white; whorls 12, the first three submammillary, flat-tish, sculptured with closely set transverse costulae which become slightly oblique on the later whorls; suture rather lightly impressed; labrum continuous, white, outwardly reflexed; aperture obliquely ovate, bearing an erect, oblique entering lamella above and broad lamella entering in an upward direction on the columella margin.

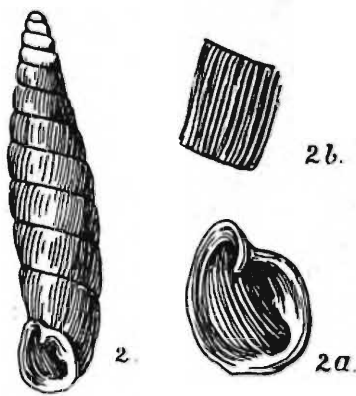


FIG. 2.—*Clausilia (Phaedusa) annandalei*, sp. n., × 2.

„ 2a.— do., aperture, × 4.

„ 2b.— do., sculpture, × 4.

Alt. 19, diam. maj. 3.75 mm.

Aperture: alt. 3.25, diam. 3 mm.

Hab.—Upper Rotung, at an altitude of 2000 ft., under stems of plantain trees (*S. W. Kemp*).

Clausilia (Oospira) philippiana (Pfr.).

Pfeiffer, *Zeits. Malak.*, IV, 1847, p. 69.

Kawkareik to 3rd Camp, Amherst district, Lower Burma
(F. H. Gravely).

Family FÉRUSSACIDAE.

Glessula botellus (Benson).

Ann. Mag. Nat. Hist., (3) V, 1860, p. 465.

Rotung.

Suborder *HYGROPHILA*.

Family LIMNAEIDAE.

Limnaea (Limnaea) acuminata (Lk.).

Anim. s. Vert., VI, pt. 2, p. 160.

Dibrugarh, N.-E. Assam, in small ponds; ditto, Brahma-
putra River (S. W. Kemp).

Planorbis exustus, Desh.

Bélang., *Voy. Ind. Orient., Zool.*, 1834, p. 417, pl. i, figs. 11-13.

Dibrugarh, N.-E. Assam, in small ponds; ditto, Brahma-
putra River (S. W. Kemp).

Planorbis (Gyraulus) himalayanus (Hutton).

Clessin, *Conch. Cab.*, 1884, p. 141, pl. xx, fig. 8.

Dibrugarh, N.-E. Assam, Brahmaputra River (S. W. Kemp).

Order *PECTINIBRANCHIA*.

Suborder *TAENIOGLOSSA*

Family TIARIDAE.

Tiara (Melanoides) variabilis (Benson).

J. As. Soc. Bengal, V, 1836, pp. 746-747.

Dibrugarh, N.-E. Assam, Brahmaputra River; young speci-
mens only (S. W. Kemp).

Tiara (Tarebia) lineata (Gray).

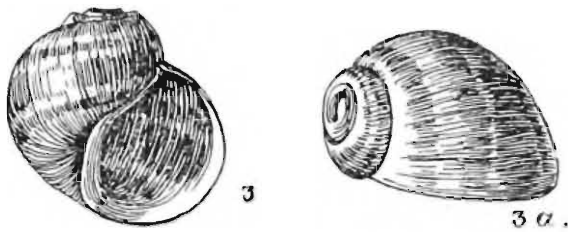
Wood, *Index Test. Supp.* (1828), *Helix*, fig. 68.

Dibrugarh, N.-E. Assam, Brahmaputra River (S. W. Kemp).

Paludomus rotungensis, sp. n.

Shell imperforate, ovate, olive-brown, painted with spiral,
blackish bands of varying breadth; remaining whorls 3, sculptured

with indistinct, fine, spiral striae; suture impressed, margined



FIGS. 3, 3a.—*Paludomus rotungensis*,
sp. n., $\times 3$.

below; columella margin livid, obliquely descending in a slight curve, diffused above into a thick, well defined, restricted, parietal callus which joins the upper margin of the labrum; labrum simple, somewhat dilated, especially below, where it is also rather thick-

ened; aperture large, ovate.

Alt. 4.25, diam. maj. 8.25, diam. min. 5.5 mm.

Aperture: alt. 4.75, diam. 4 mm.

Hab.—Upper Rotung (*Type*); Upper Rotung, at an altitude of 1300 ft., in a small stream; young specimens only (*S. W Kemp*).

Family PALUDESTRINIDAE.

Bithynia pulchella (Benson).

(*Paludina*), *J. As. Soc. Bengal*, V, 1836, p. 746.

Dibrugarh, N.-E. Assam, Brahmaputra River (*S. W Kemp*).

Bithynia dibrugarhensis, sp. n.

(Fig. 4, p. 541.)

Shell imperforate, ovate, pale straw colour; whorls 4, smooth, the first three regularly increasing, the last large, convex, rapidly descending; suture impressed; columella margin vertically descending in a slight curve; labrum continuous, very slightly reflexed, of a brownish colour; aperture ovate; operculum whitish, slightly concave, finely laminiferous, with central nucleus.

Alt. 5.25, diam. maj. 3.5, diam. min. 3 mm.

Aperture: alt. 3, diam. 2.25 mm.

Hab.—Dibrugarh, N.-E. Assam, Brahmaputra River (*S. W Kemp*).

Family VIVIPARIDAE.

Vivipara (Idiopoma) heliciformis (Frauenfeld).

(*Paludina*), *Verhandl. Zool-bot. Ges. Wien*, XV, 1865, p. 582, pl. xxii.

Thingannyinaung, E. base of Dawna Hills, at an altitude of 900 ft. (*F. H. Gravely*); Dibrugarh, N.-E. Assam, Brahmaputra River (*S. W Kemp*).

Family CYCLOPHORIDAE.

Diplommatina perobesa, sp. n.

Shell obliquely ovate with exserted spire, pale flesh colour, solid, opaque; whorls 7, the first two submammillary, the third

fourth and fifth regularly increasing, the sixth large, tumid, the last contracted and abandoning the direction of the axis of the shell, sculptured with coarse, obsolete, oblique, transverse costulae; suture well impressed; columella margin vertically descending, bearing a strong, downwardly bent, entering lamella above, sharply angled at the base, diffused above into a thick, outwardly expanded, well-defined, parietal callus which joins the upper margin of the labrum and gives to it a continuous appearance; labrum consisting of an outwardly expanded and slightly reflexed, shelf-like projection from which springs an erect, rather thick rim; aperture subcircular

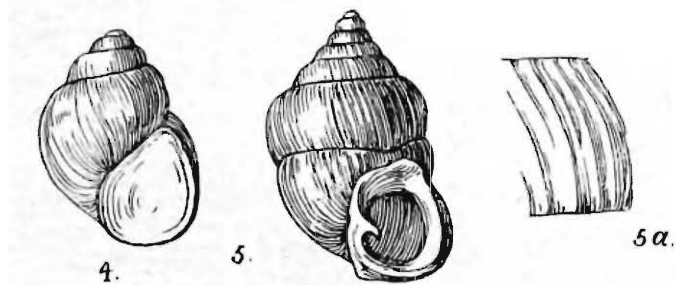


FIG. 4.—*Bithynia dibrugarhensis*, sp. n., $\times 4$.
 .. 5.—*Diplommatina perobesa*, sp. n., $\times 6$.
 .. 5a.— do., sculpture, $\times 12$.

Alt. 4.5, diam. maj. 2.5 mm.

Aperture: alt. 1.25, diam. 1.5 (nearly) mm.

Hab.—Upper Rotung, at an altitude of 2000 ft., under stems of plantain trees (*S. W. Kemp*).

***Raphaulus assamicus*, G. Austen.**

L. & F. W. Moll. India, I, p. 201, pl. xlvii, figs. 3-3a.

Rotung, at an altitude of 1300 ft., in rotten wood: Upper Rotung (*S. W. Kemp*).

Appears to vary somewhat in size among individual specimens.