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# THE ANNALS

AND

## MAGAZINE OF NATURAL HISTORY.

[SIXTH SERIES.]

No. 119. NOVEMBER 1897.

XLVIII.—*On a Collection of Land-Shells from New Guinea.*  
By EDGAR A. SMITH.

[Plate IX.]

THE specimens about to be enumerated and described were collected by Mr. W. Doherty chiefly at Kapaur, a mountainous region on the south-west coast of New Guinea, and at Takar, in the north-west of the island. The two forms of the new genus *Ditropopsis* and the new species of *Perrieria*, *Pupinella*, and *Adelomorpha* are especially interesting. All the specimens are in the National Collection.

*Rhytida kaparensis.* (Pl. IX. figs. 1-3.)

Testa depressa, orbicularis, aperte umbilicata, tenuis, translucens, cornea, epidermide nitida, flavo-olivacea induta; spira depressa; anfractus 4, celeriter accrescentes, sutura profunda sejuncti, convexiusculi, lineis incrementi obliquis, arcuatis, prope suturam validis, sculpti, ultimus supra depresso declivis, antice subdescendens; apertura obliqua, late lunata; peristoma tenue, marginibus callo tenuissimo junctis, columellari vix reflexo.

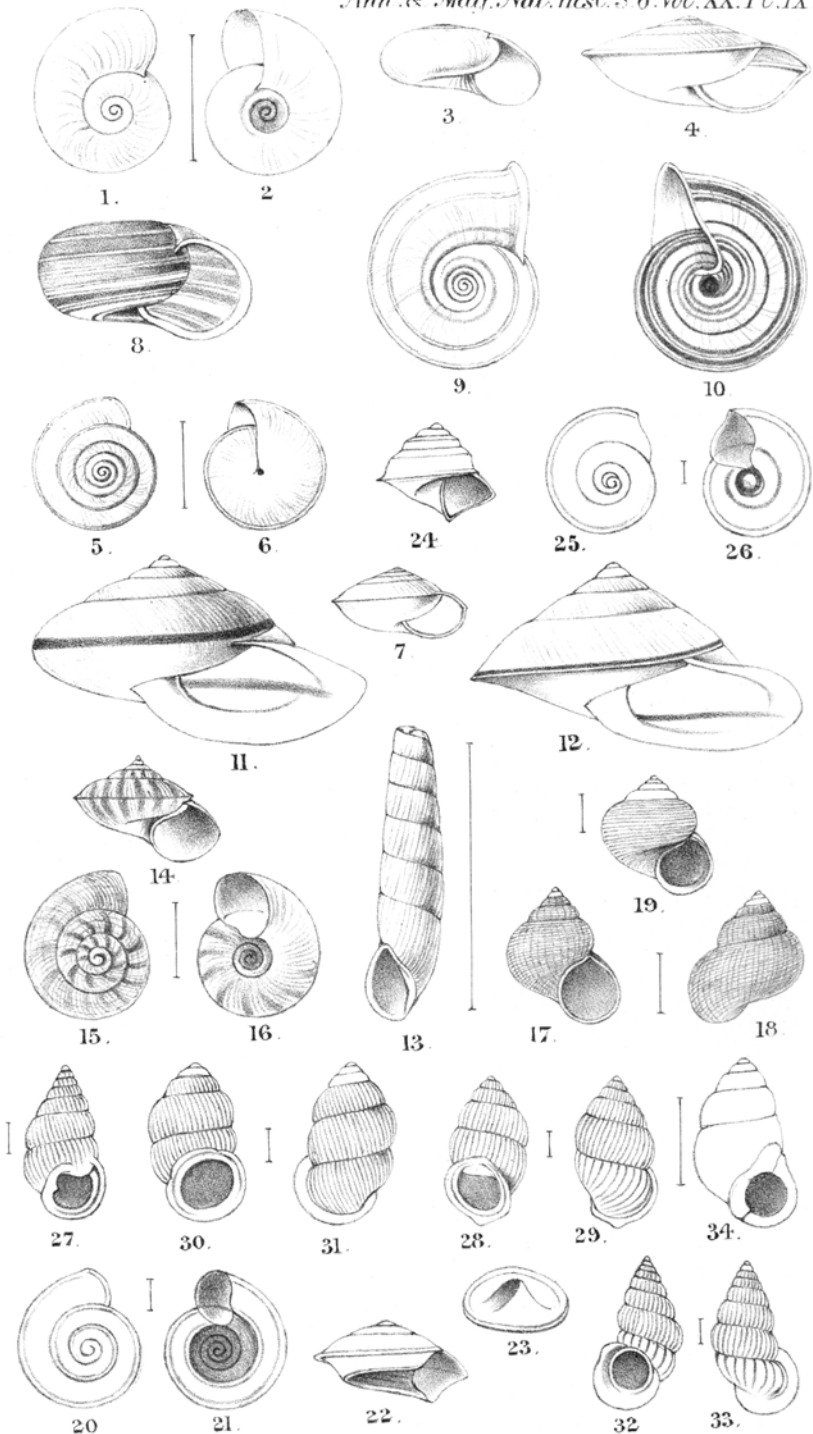
Diam. maj. 16 millim., min. 13; alt. 7.

*Hab.* Kapaur.

Very closely related to *R. trobriandensis*, Smith, but rather more openly umbilicated, more strongly striated, with a deeper suture and a more oblique and differently shaped aperture.

*Ann. & Mag. N. Hist.* Ser. 6. Vol. xx.

28



*Ariophanta (Rhysota) Foullioyi* (Le Guillou).

*Helix Foullioyi*, Le Guillou, Rev. Zool. 1845, p. 187; Pfeiffer, Mon. Hel. vol. i. p. 44; Canefri, Ann. Mus. Stor. Nat. Genova, p. 149, pl. ii. figs. 1-3, as *Nanina*.

*Hab.* Kapaur (*Doherty*); Triton Bay (*Le Guillou*); Secaar, S.W. of New Guinea (*Canefri*).

The granulation of the upper surface of this shell terminates abruptly at the periphery, the lower half of the whorl being covered with a very glossy periostracum, marked with fine lines of growth and very fine concentric striæ. The aperture is livid purple-brown within, excepting the whitish base. The pale central zone is not very conspicuous in the specimen from Kapaur, and is situated just above the periphery.

*Ariophanta (Hemiplecta) divergens* (Brancsik).

*Nanina (Hemiplecta) divergens*, Brancsik, Jahresheft natur. Verein. Trencsén. Comit. 1894-5, p. 222, pl. v. figs. 4 a-c (1895).

*Hemiplecta granigera*, Ancey, Proc. Linn. Soc. N. S. W. vol. x. p. 378 (June 1895).

*Hab.* German New Guinea (*Brit. Mus.*); Astrolable Bay (*Brancsik*).

The specimen examined is apparently of a lighter colour than those previously described, the upper part of the spire being light brownish and the rest of the surface paler and clothed with a yellowish-olive epidermis. I am not quite sure which of the above names has priority.

*Ariophanta (Hemiplecta) andaiensis*, Smith, var.

(Pl. IX. fig. 4.)

*Ariophanta (Hemiplecta) andaiensis*, Smith, Proc. Mal. Soc. vol. ii. no. 6.

*Hab.* Kapaur.

The specimens from this locality differ from the typical form from Andai in having the spire slightly less elevated and the keel more pronounced and compressed. *Nanina tritoniensis* of Le Guillou, as determined by Canefri, appears to be the same as this variety. The identification seems, however, somewhat doubtful, for the height (23 millim.) given by Le Guillou far exceeds that of the present form, taking into consideration the difference in diameter.

*Trochonanina albolabiata*. (Pl. IX. figs. 5-7.)

Testa conoideo-depressa, angustissime perforata, grisea, vel pallide cornea, subpellucida, acute carinata (carina compressa, prominente),

supra vix nitens, infra polita, lineis incrementi tenuibus obliquis striata; spira brevis, conoidea, ad apicem obtusa; anfractus  $5\frac{1}{2}$ , leviter convexiusculi, inferne ad carinam plane marginati, lente accrescentes, ultimus haud descendens, subtus convexus; apertura obliqua, lunata; peristoma intus incrassatum, album, margine superiore haud simplici, inferiore subexpanso, ad insertionem leviter reflexo.

Diam. maj. 11 millim., min.  $9\frac{1}{2}$ ; alt. 6.

*Hab.* Kapaur.

*T. Sturanyi* of Brancsik is larger than this species, somewhat different in general form, and appears to have slightly flatter whorls.

*Chloritis pervicina.* (Pl. IX. figs. 8-10.)

Testa orbicularis, umbilicata, flavescens, rufo polyzonata, epidermide breviter hirsuta induta; spira valde concave depressa; anfractus 5, convexi, apicalis lævigatus, sequentes fortiter punctati, ultimus maximus, convexus, fere inflatus, antice oblique descendens; apertura lunata, sordide lilacea, obscure zonata; peristoma pallide lilaceum, margine columellari fere albo, conspicue sinuato, leviter incrassato et reflexo, superiore æque expanso.

Diam. maj. 28 millim., min. 23; alt. 15.

*Hab.* Kapaur.

Like *C. circumdata*, Férussac, in colour, but not so flat, the body-whorl being higher and more inflated. The spire is more deeply sunken and the punctuation of the entire surface is quite different. In *C. circumdata* the apical whorls are coarsely punctate or granular, as in this species, but the rest of the shell exhibits only lines of growth and microscopic striæ across them. The red colour predominates above, the yellow on the under surface.

*Albersia zonulata* (Férussac).

*Albersia zonulata*, Férussac, Pilsbry, Man. Conch. ser. 2, vol. vii. p. 91, pl. xix. figs. 7, 8, var. fig. 6.

*Hab.* Kapaur.

The specimens from this locality belong to the variety *Recluziana*.

*Planispira (Cristigibba) moluccensis*, Pfr.

*Planispira (Cristigibba) semirasa*, Martens, Pilsbry, Man. Conch. ser. 2, vol. vi. p. 295, pl. xlvi. figs. 71-73.

*Hab.* Takar.

The banding of this species is subject to variation. The

typical form has two bands, one above and one below the middle. In a specimen in the Museum the lower band is wanting, and in the example from Takar there are three zones—a dark one around the periphery and two lighter brown ones above. In Herr Strubell's collection there is a form of this species from Batchian in the Moluccas. It consequently becomes a question whether the name *moluccensis* given by Pfeiffer should not be revived\*.

*Planispira (Cristigibba) corniculum* (Hom. & Jacq.).

*Planispira (Cristigibba) corniculum*, Hom. & Jacq., Pilsbry, Man. Conch. ser. 2, vol. vi. p. 291, pl. xlvi. figs. 65-67.

*Hab.* Kapaur.

The specimens examined belong to the var.  $\beta$  of Tapparone Canefri, characterized by the rose-coloured peristome and a single blackish band upon the upper surface.

*Papuina kapaurensis*. (Pl. IX. figs. 11, 12.)

Testa depresso turbinata, umbilicata, pallide fulva, supra peripheriam zona saturate castanea cincta, infra suturam albo lineata; spira breviter conica, ad apicem mammillata; anfractus  $5\frac{1}{2}$ , superiores  $2\frac{1}{2}$  convexi, cæteri planiusculi, oblique striati, ultimus ad peripheriam vel rotunde vel acute carinatus, vix descendens; apertura pallide purpureo-albida in medio unizonata; peristoma album, superne late expansum, marginibus columellari et inferiore latis-sime expansis et reflexis.

Diam. maj. 44 millim., min. 35; alt. 25.

*Hab.* Kapaur.

Perhaps only a variety of *P. lituus*, Lesson, or of *P. labium*, Férussac, differing in the sharper angulation and flatter whorls. *P. Bevani*, Hedley, belongs to the same group.

*Papuina Tayloriana* (Ad. & Reeve).

*Papuina Tayloriana*, Ad. & Reeve, Pilsbry, Man. Conch. ser. 2, vol. vii. p. 58, pl. xvii. figs. 40, 41, pl. ii. figs. 20, 21, 27.

*Hab.* Takar.

The beautiful specimens from this locality closely approach the type as regards form, but differ in colour. The zones (four or five both above and below) are much darker and more defined, and the upper whorls are blackish purple, but more or less pale beneath the suture.

\* *Vide* Smith, Proc. Malac. Soc. vol. ii. p. 120.

*Papuina aurora* (Pfeiffer).

*Papuina aurora*, Pfeiffer, Pilsbry, Man. Conch. ser. 2, vol. vii. p. 41.

*Hab.* Kapaur (*Doherty*); Islands of Sorong and Ramoi (*Canefri*); Waigiou (*Wallace*).

The specimen from Kapaur agrees precisely with the type of the species in size, colour, form, and sculpture.

*Papuina lacteolota*, Smith, var.

*Papuina lacteolota*, Smith, var., Pilsbry, *op. cit.* vol. vii. p. 25.

*Hab.* Kurudu, East of Jobi, New Guinea (*Doherty*).

This variety is smaller than the type, has a narrower body-whorl, fewer dark bands, and very little of the milky cloudiness upon them. There are five zones on the body-whorl, and of these two revolve up the spire.

*Papuina plurizonata* (Ad. & Reeve).

*Helix plurizonata*, Ad. & Rve., Voy. 'Samarang,' p. 62, pl. xvi. fig. 9.

*Hab.* Takar, north-west of New Guinea (*Doherty*).

The original locality assigned to this species—namely, Mindanao, Philippines—is evidently an error, and has never been confirmed. The specimen collected at Takar is almost identical in form and colour with the type in the Museum collection. The latter has a hole in the last whorl behind the lip, as if it had been threaded and attached to something. If it really was brought from Mindanao, it is quite certain that it must have been taken there by human agency.

*Papuina Hedleyi* (Smith).

*Helix (Geotrochus) Hedleyi*, Smith, Journ. of Conch. vol. vii. p. 72 (1892).

*Helix (Geotrochus) Canefriana* (Dohrn, MSS.), Kobelt, Conch.-Cab ed. 2, p. 708, pl. cci. figs. 1, 2 (1894).

*Hab.* Kapaur, S.W. New Guinea (*Doherty*).

This species appears to be rather variable in colour. The type has the base uniformly dark chestnut-brown, the rest of the shell being yellowish buff, excepting a fine opaque luteous line upon the keel which revolves up the spire and a narrow dark brown zone beneath the suture. The aperture is whitish within and the peristome tinged with dark brown at the edge.

A specimen collected by Mr. Doherty has a similar style of coloration, but the colours are all intensified, the base being darker, the keel orange, the peristome broadly margined with



black, and the spire of a darker tint, becoming purplish towards the apex, with a black infrasutural line and traces of a whitish periostracum forming oblique streaks in the direction of the lines of growth, more or less interrupted by fine spiral lines. This epidermal ornamentation is referred to by Kobelt.

Other specimens (var. *concolor*, nov.) are of a uniform whitish colour beneath the pale greenish-yellow or ochraceous periostracum, and the peristome is margined with pinkish purple-brown or purple-black. All specimens appear to have a white tooth-like prominence or thickening on the columella.

*Papuina Blanfordiana* (H. Adams).

*Papuina Blanfordiana*, H. Adams, Pilsbry, *op. cit.* vol. vii. p. 26, pl. xvii. fig. 33.

*Hab.* Kapaur.

*Calycia crystallina* (Reeve).

*Bulimus crystallinus*, Reeve, *Conch. Icon.* vol. v. pl. xxxii. fig. 194.

*Calycia crystallina*, Canefri, *Ann. Mus. Stor. Nat. Genova*, vol. xix. p. 100.

*Hab.* Kapaur.

*Opeas oparanus* (Pfeiffer).

*Bulimus oparanus*, Pfr., *Proc. Zool. Soc.* 1846, p. 34; *Monog. Hel.* vol. ii. p. 158; Reeve, *Conch. Icon.* vol. v. fig. 646.

*Hab.* Kapaur (*Doherty*); Island of Opara (*Pfeiffer*); Louisiade Archipelago and Madagascar (*Brit. Mus.*).

*Perrieria minor*. (Pl. IX. fig. 13.)

Testa sinistrorsa, elongata, cylindræa, epidermide tenui virescenti-flavescente induta; spira longissima, truncata; anfractus superstantes 7, lente accrescentes, leviter convexi, oblique striati, infra suturam subplicati, sutura valde declivi subcrenulata impressa sejuncti, ultimus antice subascendens; apertura subauriformis, intus pallide lilacea; peristoma pallidum, continuum, leviter incrassatum, antice paulo expansum; columella subcontorta, vix truncata.

Longit. 36 millim., diam. 8; apertura 9 longa, 5 lata.

*Hab.* Kapaur.

Much smaller than *P. clausiliceformis* of Canefri, of a thinner texture, having finer sculpture, a differently coloured periostracum, and a less truncate columella.

*Cyclotus (Pseudocyclophorus) canaliculatus*, Möllendorff.

*Cyclotus (Pseudocyclophorus) canaliculatus*, Möllendorff, Proc. Malac. Soc. vol. i. p. 238, pl. xv. figs. 8, 8 a.

*Hab.* Kapaur and Takar.

The type figured appears to have been either somewhat young or else a small example of the species, for those in the present collection are considerably larger, having a diameter of 22 millim. In some specimens an infra-peripheral colour-zone is more or less observable, and those from Takar have the spire rather more depressed than the typical form. The species (?) is probably a form of *C. distomellus*, Sow., in which the outer margin of the peristome is less developed than in normal examples.

*Leptopoma callichloros*, Canefri.

*Leptopoma callichloros*, Tapparone Canefri, Ann. Mus. Stor. Nat. Genova, vol. xxiv. p. 178, pl. ii. figs. 16, 17.

*Hab.* Kapaur.

The slightly more elevated and conical spire and the broadly and flatly expanded peristome are the features which separate this form from *L. vitreum*. Perhaps it is hardly sufficiently distinct to deserve specific rank. The type is described as "ochraceo-fulvida," but some specimens are ornamented with numerous fine spiral lines. One example is purplish red, spirally lineated, and has the peristome of an intensely black tint.

*Lagochilus papuanus*. (Pl. IX. figs. 14-16.)

Testa aperte umbilicata, depresso turbinata, lutescens, maculis rufis supra radiantibus infra subundulatis ornata, periostraco plus minus setoso induta; spira brevis, subconcave conica, ad apicem mammillata; anfractus 5, convexi, apicales duo nigro-purpurei, læves, cæteri lineis incrementi obliquis arcuatis aliisque spiralibus decussatis sculpti, ultimus ad peripheriam carinatus et breviter ciliatus, antice paulisper descendens; apertura fere circularis; peristoma pallidum vel lilaceum, vix expansum, intus incrassatum, sed ad marginem tenue, superne ad suturam distincte incisum.

Diam. maj.  $9\frac{1}{2}$  millim., min. 8; alt.  $6\frac{1}{2}$ .

*Hab.* Kapaur.

This and *L. Poirierii* of Canefri are the only species belonging to this genus as yet known from New Guinea. The spiral lines above the periphery are coarser than those beneath, and the lines of growth are well marked by epidermal threads.

*Adelomorpha Canefriana.* (Pl. IX. figs. 17, 18.)

Testa turbinata, anguste umbilicata, pallide rufescens, tenuissime spiraliter striata; anfractus 5, perconvexi, ultimus rotundatus, antice vix descendens; apertura subcircularis, intus dilute rufescens; peristoma simplex, tenue, haud expansum, pallidum, margine columellari obliquo, fere rectilineare, leviter incrassato, superiore prope suturam prominente. Operculum calcareum, extus valde concavum, album, anfractibus 5, utrinque carinatis, transversim fortiter striatis, sutura canaliculata sejunctis, infra luteum, lineis numerosis tenuibus, curvatis, radiantibus, griseis ornatum, margine externo trisulcato et carinato.

Diam. maj.  $7\frac{1}{2}$  millim., min. 6; alt. 8.

*Hab.* Kapaur.

Larger and more globose than *A. tunicata*, Canefri, and also readily distinguishable by its remarkable operculum.

*Adelomorpha globosa.* (Pl. IX. fig. 19.)

Testa turbinato-globosa, anguste umbilicata, sordide lutescens, spiraliter tenuissime striata; anfractus 5, perconvexi, sutura profunda sejuncti, ultimus globulosus, antice vix descendens; apertura subcircularis; peristoma tenue, simplex, acutum, pallidum, margine columellari subincrassato, vix reflexo. Operculum calcareum, album, extus concavum, anfractibus quinque lineis incrementi tenuissimis striatis.

Diam. maj. 5 millim., min.  $4\frac{1}{3}$ ; alt.  $4\frac{1}{2}$ .

*Hab.* Kapaur.

It differs from *A. Canefriana* in its smaller size, less elevated spire, deeper suture and operculum. *A. tunicata* appears to have a similar operculum, but the shell is very different in form.

*Ditropopsis papuana*, gen. et sp. n.  
(Pl. IX. figs. 20-23.)

Testa depressa, orbicularis, carinata, late et perspective umbilicata, olivaceo-cornea, nitens, semipellucida; spira convexa, depressa; anfractus normales  $3\frac{1}{2}$ , convexiusculi, ad suturam carino-marginati, ultimus haud descendens, ad medium et circum umbilicium carina acuta, definita, valde prominente, pallida instructus; umbilicus infundibuliformis, spiraliter liratus et carinatus, epidermide tenui, striata, indutus; apertura irregulariter pentagona, parva; peristoma leviter incrassatum et expansum, intus ad carinas canaliculatum, haud continuum, marginibus callo tenuissimo junctis. Operculum corneum, circulare, extus rufo-fuscum,

concavum, parte prominente conica, cava, in medio instructum, subtus convexum, flavescens, gyros 4-5 exhibens.  
Diam. maj.  $4\frac{1}{4}$  millim., min.  $3\frac{3}{8}$ ; alt.  $2\frac{3}{4}$ .

*Hab.* Kapaur.

The shells of this genus closely resemble certain forms of *Ditropis* (e. g. *D. planorbis*, Blanford), which comprises about twenty-two species from Africa, India, Borneo, Java, Sulu Islands, Amboina, Haruku, Fitzroy Island, N.E. Australia, and the Philippine Islands. Those from the last locality have been associated with it on conchological characters only, the opercula being either unknown or undescribed. The peculiarity in the operculum distinguishes the present genus from *Ditropis*. Perhaps *Ditropis spiralis* of Boettger, from Haruku Island, also belongs to *Ditropopsis*. Probably very few of the so-called species of *Ditropis* found outside India have the precisely typical operculum of that genus. It really becomes a question whether these differences of structure in the operculum are of more than specific importance.

The upper part of the spire of this interesting species has the appearance of being segmented within the whorls. What the cause of this remarkable partitioning may be could only be ascertained by more or less destroying one of the few specimens at present known.

*Ditropopsis* (?) *Fultoni*. (Pl. IX. figs. 24-26.)

Testa conica, perspective umbilicata, pellucida, albida, cornea, nitens; anfractus  $4\frac{1}{2}$ , apicales 1-2 (nucleus) vitrei, convexi, haud carinati, excentrici, soluti, apicem spiræ haud claudentes, cæteri convexi, in medio angulati et plus minus carinati, inferne ad suturam carino-marginati, striis incrementi tenuissimis sculpti, ultimus ad peripheriam carina acuta, lata, compressa, et altera circa umbilicum instructus, haud descendens; spira conica, tabulata, ad apicem perforata; apertura rotundata, ad carinas angulata; peristoma intus incrassatum, plus minus duplex, marginibus callo tenui junctis, supero et inferiore leviter expansis, ad carinas subcanaliculatis. Operculum ignotum.

Diam. maj. 3 millim., min.  $2\frac{1}{2}$ ; alt.  $2\frac{3}{4}$ .

*Hab.* Kapaur.

*Ditropis ingenua*, Boettger, from North Amboina, has the apex of the spire very similar to that of this species, but the operculum is not that of *Ditropopsis*. I have much pleasure in naming this species after Mr. Hugh Fulton, who has kindly submitted it to me for examination.

*Diplommatina symmetrica*, Hedley. (Pl. IX. fig. 27.)

*Diplommatina symmetrica*, Hedley, Proc. Linn. Soc. N. S. W. 1891, vol. vi. p. 107, pl. xii. fig. 39.

*Hab.* Kapaur (*Doherty*); Basilaki Island (*Hedley*).

The spiral striæ between the fine oblique lamellæ are excessively fine and only discernible under a compound microscope. The double lip is badly depicted in Mr. Hedley's figure. The inner margin is thickened and not continuous, and of a reddish colour, the outer being thin, expanded, paler, and united above by a thin callus. Outside this lip is a second strong lamella.

*Diplommatina papuana*. (Pl. IX. figs. 28, 29.)

Testa sinistrorsa, imperforata, ovato-acuminata, flavescens, ad apicem rufescens, vel purpureo-fusca; anfractus 6, perconvexi, apicales duo læves, cæteri costellis obliquis arcuatis tenuibus numerosis instructi, et microscopice spiraliter striati, penultimus inflatus, ultimum latitudine æquans, ultimus supra aperturam constrictus, antice ascendens; apertura obliqua, irregulariter ovata; peristoma aurantiacum, duplex, margine interno incrassato, haud continuo, dente columellari minuto instructo, externo tenui, expanso, callo tenuissimo continuo, pone lamella altera valida munito.

Longit. 3 millim., lat. 2; apertura cum perist.  $1\frac{1}{3}$  lata.

*Hab.* Kapaur.

Seen from behind the penultimate whorl is large and conspicuously tumid.

*Palaina Dohertyi*. (Pl. IX. figs. 30, 31.)

Testa sinistrorsa, imperforata, elongata, turrita, sordide albida, ad apicem fusco-cornea; spira elongata, ad apicem obtusa; anfractus 7, convexi, apicales duo læves, cæteri lamellis obliquis tenuibus instructi, penultimus ultimo conspicue latior, ultimus antice ascendens; apertura circularis, alba; peristoma pallidum, latissime plane expansum, margine interno continuo, externo interrupto.

Longit. 3 millim., diam.  $1\frac{1}{2}$ ; apertura cum perist.  $1\frac{1}{8}$  lata.

*Hab.* Kapaur.

Under a compound microscope spiral striæ between the lamellæ are discernible. The flat expanded peristome is finely concentrically striated.

*Palaina novoguineensis*. (Pl. IX. figs. 32, 33.)

Testa dextrorsa, ovata, imperforata, flavescens; anfractus 6, perconvexi, superiores 1-2 læves, cæteri costulis obliquis tenuissimis instructi, ultimus supra aperturam constrictus et gibbosus, penultimo minor, antice valde ascendens, penultimus inflatus, magnus; apertura circularis, flavescens; peristoma subduplex, intus incrassatum, margine inferiore continuo, externo expanso, tenui, supra aperturam interrupto.

Longit. 4 millim., diam.  $2\frac{1}{2}$ ; apertura cum perist. 2 lata.

*Hab.* Kapaur.

The fine riblets on the third and fourth whorls are rather further apart than those on the two last.

*Callianella Wallacei* (Pfeiffer).

*Callia Wallacei*, Pfr., Proc. Zool. Soc. 1862, p. 117, p. xii. fig. 1; Monog. Pneumon. vol. iii. p. 98; Sowerby, Thesaurus, vol. iii. pl. cclxv. figs. 7, 8.

*Pupina (Callia) Wallacei*, Martens, Preuss. Exped. Ost-Asien, p. 158, pl. iv. fig. 12.

*Hab.* Kapaur, New Guinea (*Doherty*); Ceram, Amboina, and Buru.

The two specimens from Kapaur agree in every particular with the types from Ceram, excepting that they look the least trifle shorter.

*Pupinella Hedleyi*. (Pl. IX. fig. 34.)

Testa subovata, superne acuminata, rufa; spira convexe conica; anfractus  $6\frac{1}{2}$ , convexiusculi, lineis incrementi obliquis tenuibus striati, penultimus ultimum latitudine æquans, ultimus oblique descendens, supra aperturam vix planatus; apertura circularis, intus rufa; peristoma pallide carneum, incrassatum, margine dextro valde reflexo, supra producto et sinuato, columellari infra oblique fissurato, supra calloso, callo labrum versus dente conspicuo terminato.

Longit. 11 millim., diam. 6; apertura intus  $2\frac{2}{3}$  lata.

*Hab.* Kapaur.

This species differs from *P. Strubelli*, Smith, and *P. Fultoni*, Smith, in form, colour, and in having a distinct upper labral sinus. In the last respect and general appearance it more resembles *P. mindorensis*, Adams and Reeve. Named after Mr. Charles Hedley, of the Australian Museum, Sydney.

*Helicina leucostoma*, Canefri.

*Helicina leucostoma*, Canefri, Ann. Mus. Stor. Nat. Genova, 1883, vol. xix. p. 277, fig. h.

*Hab.* Kapaur.

Two specimens, agreeing in all respects with the figure and description excepting the colour of the lip. In one reddish example it is pale yellow and in the other it is yellow like the rest of the shell. The species approximates very closely to *H. modesta*, Pfr., from the New Hebrides and Solomon Islands.

## EXPLANATION OF PLATE IX.

- Figs. 1-3. Rhytida kapauensis.*  
*Fig. 4. Ariophanta (Hemiplecta) andaiensis.*  
*Figs. 5-7. Trochonanina albolabiata.*  
*Figs. 8-10. Chloritis pervicina.*  
*Figs. 11, 12. Papuina kapauensis.*  
*Fig. 13. Perrieria minor.*  
*Figs. 14-16. Lagochilus papuanus.*  
*Figs. 17, 18. Adelomorpha Canefriana.*  
*Fig. 19. Adelomorpha globosa.*  
*Figs. 20-23. Ditropopsis papuana.*  
*Figs. 24-26. Ditropopsis (?) Fultoni.*  
*Fig. 27. Diplommatina symmetrica.*  
*Figs. 28, 29. Diplommatina papuana.*  
*Figs. 30, 31. Palaina Dohertyi.*  
*Figs. 32, 33. Palaina novoguineensis.*  
*Fig. 34. Pupinella Hedleyi.*

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XLIX.—*Descriptions of new Fishes from the Mekran Coast, Persia.* By G. A. BOULENGER, F.R.S.

THE new Fishes described in this note have been presented to the British Museum by Mr. F. W. Townsend, who obtained them on the Mekran coast of Persia during recent cable-repairing operations.

*Anthias Townsendi.*

Depth of body equal to length of head,  $3\frac{1}{2}$  times in total length. Snout convex, scaly,  $\frac{1}{2}$  diameter of eye, which is 3 times in length of head and slightly exceeds interorbital width; lower jaw projecting, naked; maxillary scaly, extending to below centre of eye, the width of its distal extremity  $\frac{1}{2}$  diameter of eye; serræ at angle of præopercle enlarged; two opercular spines. Gill-rakers long and closely set, about 30 on lower part of anterior arch. Dorsal X 16; originating