

ON A COLLECTION OF LAND SHELLS FROM NEW GUINEA AND ADJACENT ISLANDS.

(With 10 textfigures.)

By Dr. L. Soós.

The shells which form the subject of the present paper were collected by Mr. L. BIRÓ, and are now to be found in the collection of the Hungarian National Museum. Most of them belong to known species but I regard these also as being worthy to be recorded for the sake of the knowledge of their distribution.

1. *Helicina papuana* E. A. SMITH.

Helicina papuana E. A. SMITH, Ann. Mag. Nat. Hist. (6) XVI, p. 365, tab. 20, fig. 19; *Palaeohelicina (Ceratopoma) papuana* A. J. WAGNER, Denkschr. Akad. Wien, LXXVIII, p. 211, tab. 10, fig. 13a, b, c, 17 (1906).

German New Guinea: Friedrich-Wilhelmshafen, Stephansort, Jomba, Sattelberg, Hanseman Mts.

2. *Helicina sphæroconus* MÖLLENDORFF.

Helicina (Sulfurina) sphæroconus MÖLLENDORFF, Proc. Mal. Soc. London, I, p. 240, tab. 15, fig. 10, 10a (1895); *H. (Sphaeroconia) sphæroconus* A. J. WAGNER, Helicinacea in MARTINI-CHEMNITZ Conch. Cab., p. 195, tab. 39, fig. 15—18.

German New Guinea: Friedrich-Wilhelmshafen, Stephansort, Erima.

3. *Leptopoma vitreum* LESS.

Cyclostoma vitrea LESSON, Voy. Coquille II, p. 346, tab. 13, fig. 6, 6¹ (1830); *Leptopoma vitreum* TAPPARONE CANEFRI, Ann. Mus. Genova, XIX, p. 259 (1883); HEDLEY, Proc. Linn. Soc. N. S. Wales, (2) VI, p. 110; BRANCSIK, Trencsén. Természettud. Egyl. Évkönyve, XVII—XVIII, p. 225.

German New Guinea: Friedrich-Wilhelmshafen.

4. *Diaspira Birói* n. g. n. sp.

(Fig. 1.)

Shell dextral, tubiform, with free whorls, forming a regular conic spiral; thin, light yellowish white, spire depressed conic; whorls $3\frac{3}{4}$, free, except the embryonic nucleus, obliquely extremely fine striated, with 4 acute keels, the 1. along the line of the suture in normal shells, the 2. and 3. above and under the periphery respectively, the 4. on the under side (on one specimen a weaker keel between the 2. and 3. present), embryonic nucleus not keeled; aperture irregularly pentagonal, peristome somewhat expanded, double, inner margin stronger and more prominent than the outer one. Operculum: ?



Fig. 1.

Diaspira Birói.

Diam. 3·84—4 mm., alt. 2·89—3·1 mm., apert. 1·42 1·47 mm.

German New Guinea: Stephansort, in woods, under fallen leaves. 3 specimens.

I regard for the present this interesting species as representing a distinct genus, though I am not quite convinced, whether it does not belong to *Ditropopsis* E. A. SMITH. It differs from this latter chiefly by its free whorls and its aperture, but agrees with it in most of its other characters. I cannot decide in this question since I have not had the opportunity of comparing this form with a specimen of *Ditropopsis*, but I could use only the description and figure. It cannot be regarded as excluded that *Diaspira Birói* stands in the same relation to *Ditropopsis papuana* E. A. SMITH, as *Heteropoma aries* MLLDFF. to *Heteropoma meridionale* (cfr. MÖLLENDORFF, Berichte Naturf. Ges. Senckenb., 1890, p. 265). If it be the reality then *Diaspira* must be regarded naturally as a synonym for *Ditropopsis* E. A. SMITH.

5. *Cyclophorus Kubaryi* MLLDFF.

Cyclophorus Kubaryi MÖLLENDORFF, Proc. Mal. Soc. London, I, p. 238 (1895); *C. (Papucyclus) Kubaryi* KOBELT, Cyclophoridae (Tierreich), p. 152.

German New Guinea: Erima, Hanseman Mts. (Astrolabe bay).

6. *Cyclotus subflammulatus* L. PFR.

? *Cyclostoma guttatum* PFEIFFER, Proc. Zool. Soc. London, 1851, p. 251; *Cyclotus guttatus* TAPPARONE CANEFRI, l. c. p. 249; *Cyclotus subflammulatus* L.

PFEIFFER, Proc. Zool. Soc. London, 1861, p. 28; *Cyclotus (Pseudocyclophorus) subflammulatus* KOBELT, l. c. p. 194.

German New Guinea: Sattelberg.

7. *Adelomorpha læta* MLLDFF.

Adelomorpha læta MÖLLENDORFF, l. c. p. 239, tab. 15, fig. 9, 9a.

German New Guinea: Friedrich-Wilhelmshafen, Stephansort, Sattelberg.

8. *Pupina nasuta* E. A. SMITH.

Pupina nasuta E. A. SMITH, Ann. Mag. Nat. Hist. (6) XVI, p. 364, tab. 20, fig. 18 (1895); *P. (Tylotoechus) nasuta* KOBELT, l. c. p. 317.

German New Guinea: Sattelberg.

9. *Pupina aurea* HINDS.

Pupina aurea HINDS, Ann. Mag. Nat. Hist. X, p. 83, tab. 6, fig. 6 (1842); *P. (Tylotoechus) aurea* KOBELT, l. c. p. 307.

German New Guinea: Simbang; Bismarek Archipelago: Gerard de Nys I^d (Gerrit Denys).

10. *Pupina minuta* n. sp.

(Fig. 2.)

Shell ovate, glossy, yellow, apex rather acute; whorls 5, less convex, last about as long as the spire, or some longer, suture simple; aperture circular, vertical, anterior canal narrow at the margin, dilated inner, parietal lamella white, peristome slightly thickened, reflected.

Fig. 2.
Pupina minuta.

Diam. 1·8–2·1 mm., length 3·23–3·43 mm., apert. 1·1–1·3 mm.
German New Guinea: Sattelberg. 3 specimens.

11. *Moulinsia papuensis* n. sp.

(Fig. 3.)

Shell minute, ovate, glossy, yellowish white, apex rather acute; whorls 5, less convex, spire conic, suture scarcely impressed; aperture

vertical, semicircular, columella dilated, canal oblique with circular orifice, peristome slightly thickened and expanded.

Diam. 2·48 mm., length 3·94 mm., apert. 1·40 mm.

German New Guinea: Sattelberg, at an elevation of 800 m., on trees, under moss. 1 specimen.

The occurrence of a species of *Moulinisia* in New Guinea is by all means a very interesting fact, since this genus was not known till to-day to occur eastwards of the Moluccas.

Fig. 3. *Moulinisia papuensis*.

12. *Palaina Biró* n. sp.

(Fig. 4.)

Shell sinistral, ovate, fusiform, imperforate, yellowish; whorls 5, convex, the upper $1\frac{1}{2}$ smooth, the rest sculptured with oblique, fine lamellæ and with extremely fine, only under a compound microscope visible spiral striæ; aperture circular, white, peristome expanded, inner margin continuous.

Fig. 4.
Palaina Biró

Diam. 0·76—0·86 mm., length 1·47—1·50 mm., apert. with peristome 0·53 mm.

German New Guinea: Friedrich-Wilhelmshafen. 9 specimens.

13. *Palaina adelpha* n. sp.

(Fig. 5.)

Shell sinistral, ovato-cylindrical, rimate, thin, light fulvous; whorls 6, very convex, the first smooth, the rest sculptured with a spiral striation (under microscope!) and with very fine, thin, oblique, transparent lamellæ, the lamellæ on the ultimate are much denser, especially above the aperture, ultimate and penultimate — seen in front — are nearly equal, ultimate ascendent; suture deep; aperture circular, peristome expanded, inner margin continuous, rather strong.

Fig. 5.
Palaina adelpha. Diam. 1·2 mm., length 2·25 mm., apert. with peristome 0·73 mm.

German New Guinea: Stephansort. 1 specimen.

Closely allied to *P. Montrouzieri* Crossé, but differs therefrom by its more cylindrical form, by its sculpture, colour and aperture.

14. *Palaina papuanorum* n. sp.

(Fig. 6.)

Shell sinistral, ovate, fusiform, imperforate, thin, white or yellowish corneous; whorls 6, convex, the first smooth, the rest with rather strong, distant, oblique ribs and an extremely fine, only under a compound microscope visible spiral striation, the penultimate the largest, ultimate constricted, ascendent; aperture circular, peristome expanded, white, continuous.

Diam. 1.2 mm., length 2.30 mm., aperture with peristome 0.9 mm.

German New Guinea: Berlinhafen Seleo I^d, in woods, under fallen leaves. 25 specimens.

Fig. 6.

Palaina papuanorum.15. *Diplommatina symmetrica* HEDLEY.

Diplommatina symmetrica HEDLEY, Proc. Linn. Soc. N. S. Wales, (2) VI, p. 107, tab. 12, fig. 39; KOBELT, l. c. p. 447.

German New Guinea: Sattelberg, at an elevation of 800 m.

16. *Truncatella valida* PFR.

Truncatella valida PFEIFFER, Zeitschr. f. Malakozool., 1846, p. 182; TAPPARONE CANEFRI, l. c. p. 280; HEDLEY, l. c. p. 100.

German New Guinea: Simbang, Berlinhafen, Tamara I^d.

17. *Melania denisoniensis* BROU.

Melania Denisoniensis BROU, Melaniaceen in MARTINI-CHEMNITZ, Conch. Cab., p. 214, tab. 25, fig. 6, *6a, b* (1874); SMITH, Journ. Linn. Soc. XVI, p. 259 (1883); BRANCSIK, l. c. p. 218.

German New Guinea: Stephansort.

18. *Melania Demani* TAPP. CAN.

Melania Demani TAPPARONE CANEFRI, l. c. p. 39, tab. 1, fig. 17.

German New Guinea: Stephansort.

19. *Melania granifera* LAM. var. *papuana* n.

Differs from the typical form in the following respects: smaller, more slender, whorls not angulated above, granulations less developed, sometimes absent.

German New Guinea: Stephansort, Friedrich-Wilhelmshafen.

20. *Melania semiornata* BROT.

Melania semiornata BROT, Rev. Zool. 1860, tab. 16, fig. 5, l. c. p. 159, tab. 19, fig. 10.

German New Guinea: Stephansort.

21. *Melania pantherina* v. d. BUSCH.

Melania pantherina v. d. BUSCH, Malak. Blätter, 1858, p. 33, BROT, l. c. p. 172, tab. 20, fig. 8, 8a, b.

German New Guinea: Stephansort.

22. *Melania sobria* LEA.

Melania sobria LEA, Proc. Zool. Soc. London, 1850, p. 181; BROT, l. c. p. 178; TAPPARONE CANEFRI, l. c. p. 33.

German New Guinea: Stephansort.

23. *Melania punctata* LAM.

Melania punctata LAMARCK, An. s. vert. no. 4; BROT, l. c. p. 168, tab. 20, fig. 4, 4a.

German New Guinea: Stephansort.

24. *Melania scabra* MÜLL.

Buccinum scabrum MÜLLER, Verm. Hist., p. 136, No. 329; *Melania Doreyana* LESSON, l. c. p. 358; *Melania scabra* BROT, l. c. p. 266; TAPPARONE CANEFRI, l. c. p. 48.

German New Guinea: Stephansort.

BROT regards LESSON'S *M. Doreyana* as identical with MÜLLER'S *Buccinum scabrum*. My single specimen agrees with LESSON'S species.

25. *Melania acanthica* LEA.

Melania acanthica LEA, l. c. p. 194; BROT, l. c. p. 278, tab. 28, fig. 10, 10a—c; BRANCSIK, l. c. p. 218.

German New Guinea: Stephansort.

All my specimens (19) belong to BROT's var. β .

26. *Melania litigiosa* BROT.

Melania litigiosa BROT, Rev. Mag. Zool., 1860, tab. 16, fig. 4; Melaniaceen, p. 170, tab. 20, fig. 5, 5a, b.

German New Guinea (Stephansort? Berlinhafen?).

27. *Melania funiculus* QUOI et GAIMARD.

Melania funiculus QUOI et GAIMARD, Voy. Astrolabe, Zool., III, p. 158, tab. 56, fig. 43—44; BROT, Melaniaceen, p. 130, tab. 17, fig. 1, 1a, 1b; *Melania fumosa* HINDS, Ann. Mag. Nat. Hist (1) XIV, p. 8.

German New Guinea (Berlinhafen?).

28. *Melania Blossevilleana* LESS.

Melania Blossevilleana LESSON, Voy. Coquille, Zool., II., p. 358; BROT, l. c. p. 133; TAPPARONE CANEFRI, l. c. p. 27.

German New Guinea: Lemien (Berlinhafen).

29. *Melania (Thiara) Cybele* GOULD.

Melania Cybele GOULD, Proc. Bost. S. N. H., 1874; BROT, l. c. p. 294, tab. 30, fig. 1, 1a—c, 4.

German New Guinea: Lemien (Berlinhafen).

30. *Faunus ater* L.

Strombus ater LINNÉ, Syst. Nat., ed. XII, p. 1213, No. 516; *Faunus ater* BROT, l. c. p. 410, tab. 44, fig. 3, 3a—f.

German New Guinea: Lemien (Berlinhafen).

31. *Microcystis Brujnii* TAPP. CAN.

Nanna Brujnii TAPPARONE CANEFRI, l. c. p. 216, tab. 2, fig. 13—15.

German New Guinea: Erima, Simbang, Jomba, Sattelberg.

32. *Nanina citrina* L.

Helix citrina LINNÉ, Syst. Nat., ed. X, p. 771; *Nanina citrina* TAPPARONE CANEFRI, l. c. p. 196; HEDLEY, l. c. p. 71; BRANCSIK, l. c. p. 222.

German New Guinea: Simbang.

33. *Charopa novoguineensis* n. sp.

(Fig. 7.)

Shell small, widely umbilicated, with suboblique, dense strong ribs, and extremely fine, regular, dense, only under a compound microscope visible spiral striation belonging to the epidermis; brown; whorls $4\frac{1}{2}$, regularly enlarging, suture deep, last whorl not descending in front; aperture lunate, peristome acute.

Fig. 7. Diam. 2 mm., alt. 1 mm.

Charopa novoguineensis. German New Guinea: Sattelberg, at an elevation of 800 m., on trees under moss. 2 specimens.

34. *Sitala anthropophagorum* HEDLEY.

Sitala anthropophagorum HEDLEY, Proc. Linn. Soc. New South Wales, IX, p. 385, tab. 24—25, fig. 1, 3, 21, 24 (1894).

German New Guinea: Simbang, Sattelberg.

35. *Sitala subglobosa* n. sp.

(Fig. 8.)

Shell globose conoid, very thin, smooth, shining, translucent, perforate; drap; whorls $4\frac{3}{4}$, moderately convex, indistinctly angled at the suture, suture deep; sculptured with very faint, irregular, oblique growth lines, on the base and the first whorls with close, regular, concentric striæ; aperture a little oblique, lunate.



Fig. 8. Length 4 mm., diam. 4.5 mm.

Sitala subglobosa. German New Guinea: Jomba. 1 specimen.

36. *Sitala capillacea* n. sp.

(Fig. 9.)

Shell conoid, thin, capillaceo-costulate, perforate, brown or light corneous; whorls 6, rather convex, angled at the periphery, suture deep; sculptured above with dense, oblique, delicate ribs which reach till the angle of the periphery, on the base faint growth lines and concentric, wavy striæ are visible with a microscope; aperture a little oblique, semicircular.

Length 3.47—3.58 mm., diam. 3.42—3.52 mm.

German New Guinea: Sattelberg. 6 specimens.



Fig. 9.

Sitala capillacea.37. *Planispira simbangensis* Kob.

Planispira simbangensis KOBELT, Nachrichtsbl. Deutsch. Malak. Ges., 30, p. 92 (1898).

German New Guinea: Simbang (Huon Golf).

38. *Planispira purpurostoma* LE GUILL.

Helix purpurostoma LE GUILLOU, Rev. zool., 1842, p. 141; PFEIFFER Monogr., I., p. 377; *H. (Camaena) purpurostoma* TAPPARONE CANEFRI, I. c. p. 159; BRANCSIK, I. c. p. 224; *Planispira (Cristigibba) papuana* MÖLLENDORFF, Proc. Mal. Soc. London, I., p. 234, tab. 15, fig. 1, 1a (1895).

German New Guinea: Erima.

This species seems not to have been found again since described by LE GUILLOU. TAPPARONE CANEFRI and PILSBRY do not know it and in the latter's Manual (vol. VI, p. 177) only the original description is reproduced. The species is represented, however, in the collection of the Hungarian National Museum by some specimens, collected by the late SAMUEL FENICHEL, and identified by BRANCSIK (I. c.). These specimens originate from the Finisterre region in German New Guinea and agree with LE GUILLOU's description in every respect, therefore the identification is by all means correct. BRANCSIK I. c. described also a variety of this species under the name var. *albescens* differing from the typical form by having no dark band on its periphery. MÖLLENDORFF's *Planispira papuana* is identical with BRANCSIK's var. *albescens*. In BIRÓ's collection only one specimen is present.

39. *Chloritis lepidophora* Kob.

Helix (Sphaerospira) lepidophora KOBELT, Nachrichtsbl. Deutsch. Malak. Ges., XXIII, p. 24 (1891); Heliceen in MARTINI-CHEMNITZ Conch. Cab. IV, p. 645, ab. 185, fig. 5—8.

German New Guinea: Simbang, Sattelberg.

40. *Chloritis simbangensis* Kob.

Chloritis simbangensis KOBELT, Nachrichtsbl. Deutsch. Malak. Ges., XXX, p. 93 (1898).

German New Guinea: Simbang.

41. *Chloritis delphax* Kob.

Helix (Chloritis) delphax KOBELT, Nachrichtsbl. Deutsch. Mal. Ges., XXIII, p. 204 (1891); Heliceen in MARTINI-CHEMNITZ Conch. Cab., IV, p. 648, tab. 186, fig. 5—7; *Helix dinodeomorpha* TAPP. CAN., BRANCSIK, l. c. p. 224.

German New Guinea: Stephansort.

42. *Chloritis tenebrica* FULTON.

Chloritis tenebrica FULTON, Ann. Mag. Nat. Hist. (7) IX, p. 316 (1902); GUDE, Proc. Mal. Soc. London, VI, p. 45 (1907).

Bismarck Archipelago: New Mecklenburg (New Ireland).

43. *Papuina Chancei* Cox.

Helix Chancei COX, Proc. Zool. Soc. London, 1870, p. 171, tab. 16, fig. 5; *H. (Geotrochus) Chancei* KOBELT, Heliceen, IV, p. 696, tab. 199, fig. 3—6.

Bismarck Archipelago: New Mecklenburg.

44. *Papuina humilis* FULTON.

Papuina humilis FULTON, Ann. Mag. Nat. Hist. (7) IX, p. 317 (1902).

Bismarck Archipelago: New Hannover.

45. *Papuina multizona* LESS.

Helix multizona LESSON, Voy. Coquille, Zool., p. 308; TAPPARONE CANEFRI, l. c. p. 140; *H. (Papuina) multizona* KOBELT, Heliceen, IV, p. 651, tab. 187, fig. 5—8.

German New Guinea: Erima, Stephansort.

46. *Papuina Moseleyi* E. A. SMITH.

Helix (Geotrochus) Moseleyi E. A. SMITH, Proc. Zool. Soc., 1884, p. 263, tab. 23, fig. 2. 2a.

Bismarck Archipelago: New Mecklenburg.

47. *Papuina Tayloriana* AD. et RV.

Helix Tayloriana ADAMS et REEVE, Voy. Samarang, Zool., p. 59, tab. 15, fig. 2; PILSBRY, Manual, VII, p. 58, tab. 2, fig. 20, 21, 27, tab. 17, fig. 40, 41; SMITH, Ann. Mag. Nat. Hist. (5) XIX, p. 421, tab. 15, fig. 1; *Geotrochus Taylorianus* HEDLEY, l. c. p. 87; *H. (Geotrochus) Tayloriana* KOBELT, Heliceen, IV, p. 642, tab. 184, fig. 8—11.

a) typical form: *Tayloriana* AD. et RV.

German New Guinea: Berlinhafen, Stephansort, Erima, Seleo, Tamara I^d.

b) var. *yulensis* BRAZ.

Helix (Geotrochus) yulensis BRAZIER, Proc. Linn. Soc. N. S. Wales, I, p. 106, 126 (1876); *H. yulensis* TAPPARONE CANEFRI, l. c. p. 123, tab. 3, fig. 2; *Geotrochus Taylorianus* var. *yulensis* HEDLEY, l. c. p. 87; PILSBRY l. c. p. 59, tab. 2, fig. 28—31; *H. Tayloriana* and var. *Strabo* BRANCSIK, l. c. p. 223.

German New Guinea: Region of the Finisterre Mts. (FENICHEL), Friedrich-Wilhelmshafen, Erima, Jomba.

c) var. *katauensis* TAPP. CAN.

Helix katauensis TAPPARONE CANEFRI, l. c. p. 126, tab. 3, fig. 1, 3; *H. Strabo* var. *katauensis* PILSBRY, l. c. p. 60, tab. 1, fig. 14—15, tab. 2, fig. 24—26; *Geotrochus Taylorianus* var. *katauensis* HEDLEY, l. c. p. 87.

German New Guinea: Seleo (Berlinhafen), Tamara I^d.

48. *Partula similaris* HARTM.

Partula similaris HARTMANN, Proc. Acad. Philad., 1886, p. 30, tab. 2, fig. 1; HEDLEY, l. c. p. 97; PILSBRY, l. c. XX, p. 302, tab. 37, fig. 13—15.

German New Guinea: Seleo (Berlinhafen).

49. *Partula gerardensis* n. sp.

(Fig. 10.)

Shell elongate with conic spire, rimate: pale yellowish unicolor, thin; whorls 5, moderately convex, suture rather deep; the first embryonic whorl nearly smooth, the 2. and 3. puncture-striate longitudinally, the

two last with sculpture of fine and close spirals, the 3-5 whorls with extremely fine and irregular growth-wrinkles; aperture little oblique, ovate, whitish within, peristome expanded, thin, white margins connected by a very thin callus.

Diam. 10.5 mm., length 21.5 mm., apert. 10 mm.

Bismarck Archipelago: Gerard de Nys I^d (Gerrit Denys). 2 specimens.

Fig. 10.
Partula
gerardensis.

It is closely allied to *P. carterensis* QUOI et GAIMARD, but differs by its less slender form. If the specimens mentioned by PILSBRY (Manual of Conch. (2) XX, p. 299) which originate from the original habitat of, *P. carterensis* (Port Carteret, New Ireland), are actually identical with QUOI and GAIMARD's species, then *P. gerardensis* should be regarded with the greatest probability as identical with *P. carterensis*, since PILSBRY's specimens — as is to be seen from his description — differ from the mines only that the former are smaller (17.5 : 8.5) and that their sculpture is somewhat different.

50. *Opeas gracile* (HUTTON).

Bulimus gracilis HUTTON, Journ. Asiat. Soc. Bengal, III, 1834, p. 84, 93; *Stenogyra gracilis* TAPPARONE CANEFRI, l. c. p. 88; *Opeas gracile* PILSBRY, l. c. (2) XVIII, p. 125, tab. 18, fig. 3-6.

German New Guinea: Friedrich-Wilhelmshafen, Simbang, Erima, Jomba, Hanseman Mts., Belias I^d.

51. *Succinea simplex* PFR.

Succinea simplex PFEIFFER, Proc. Zool. Soc. London, 1854, p. 123; Mon. Hel. viv., IV, p. 813; HEDLEY, l. c. p. 100, tab. 12, fig. 32.

German New Guinea.