

Fissurella Noachina, Schum.—*Puncturella Noachina*, Lowe.—*Cemoria Flemingii*, Leach, MSS.—*Cemoria Noachina*, Lowe.—*Rimula Flemingii*, Macgill.—*Rimula Noachina*, Couthouy.—*Sipho Noachina*, Brown.

Hab. British Islands. Mus. Cuming.

2. **PUNCTURELLA CUCULLATA**, Gould.

Rimula cucullata, Gould, Expedition, Shells, p. 14.

Hab. Puget Sound.

3. **PUNCTURELLA GALEATA**, Gould.

Rimula galeata, Gould, Expedition, Shells, p. 14.

Hab. Puget Sound. Mus. Cuming.

4. **PUNCTURELLA COGNATA**, Gould.

Rimula cognata, Gould, Expedition, Shells, p. 14.

Hab. Orange Harbour.

5. **PUNCTURELLA CONICA**, D'Orb. Voy. Am. Mer.

6. **PUNCTURELLA FASTIGIATA**, A. Adams. *P. testá albidd ele-
rato-comicd, nitid, vertice acuminato involuto, costellis longitu-
dinalibus æqualibus æquidistantibus, interstitiis planis línēis
incrementi concentricis; fissurá lanceolatá; aperturá ovali,
margine crenulato, fornice costá, costá valde arcuatd, transver-
sali, simplici.*

Hab. Eastern Seas. Mus. Cuming.

7. **PUNCTURELLA PRINCEPS**, Mighels and Adams.

Cemoria princeps, Mighels and Adams, Bost. Journ. Nat. Hist. vol. iv. p. 43.

10. **ON SOME GENERA OF SHELLS, ESTABLISHED IN 1807 BY THE
LATE H. F. LINK. BY DR. HERRMANNSEN, OF KIEL.**

In several programs, hitherto not at all taken notice of by any Conchologist, the renowned Botanist Link of Berlin, then Professor of Natural History, Chemistry and Botany at Rostock, in the course of the years 1806 to 1808, has published an account of the Collections of the Rostock University. These little treatises seem to be very rare, nor do I remember ever to have found them mentioned, before my 'Index Generum Malacozoorum' recorded them. Yet they may claim priority in many instances, which I hope will be redeemed by simply noticing their contents. The German titles of these octavo pamphlets are as follows:—

Beschreibung der Naturalien-Sammlung der Universität zu Ros-
tock, von Dr. H. F. Link. Rostock. Gedruckt bei Adlers
Erben.

Erste Abtheilung; zum Weihnachtsfest, d. 25 Dec. 1806 (p. 1-48).
 Zweite Abth.; zum Osterfest, d. 29 Marz 1807 (p. 49-98).
 Dritte Abth.; zum Pfingstfest, d. 17 Mai 1807 (p. 99-165).
 Vierte Abth.; zum Weihnachtsfest, d. 25 Dec. 1807 (p. 1-30).
 Fünfte Abth.; zum Osterfest, d. 7 April 1808 (p. 1-38).
 Sechste Abth.; zum Pfingstfest, d. 5 Juni 1808 (p. 1-38).

Passing over those genera which are either superfluous because formerly rightly published under other names, or unhappily contrived, I will hint at those that may deserve to be attended to.

MOLLUSCA. GASTEROPODA. SIPHONOBANCHEA.

LAMBIDIUM, Link, 1807, *l. c.* iii. p. 112.

Spiral little prominent; aperture longitudinal, narrow; inner lip callous, with raised points; outer lip marginated; base truncated; shell destitute of varices or spines.

Lambidium oniscus (Strombus), Linn.

This genus having been indicated in 1798, by Dr. Bolten, as *Morum*, but without definition, the botanical signification of that name may have induced Link to select another, which, being correctly founded, must be preferred to *Oniscia* of Mr. Sowerby; or at least, if we should dissect the genus with Dr. Gray, into *Oniscia*, *Scosnia*, and *Morum*, to the last.

PHALIUM, Link, 1807, *l. c.* iii. p. 112.

Spiral shorter than the last whorl; aperture longitudinal, wide; inner lip callous and smooth, or extended into a folded or granulated lamina; outer lip marginated; shell often varicose; base strongly recurved, notched; inner columella not folded.

A. Lamina of the inner lip folded: *Phalium glaucum (Buccinum)*, Linn. &c.—B. Lamina of the inner lip granulated: *Phalium erinaceum (Buce.)*, Linn. &c.

This is *Bezoardica*, Schum., or *Cassidea*, Swains.

CASSIDEA, Link, 1807, *l. c.* iii. p. 111.

Spiral little prominent; aperture longitudinal, narrow; outer lip marginated, like the inner one, with many folds; shell spineless, often varicose; base strongly reflected, notched; inner columella folded.

Cassidea rufa, tuberosa, cornuta, testiculus, flammea, pennata.

This has been proposed by Mr. Stutchbury as *Cypræcassis*, but must at all events retain the name of *Cassis*, Browne, 1756.

GALEODEA, Link, 1807, *l. c.* iii. p. 113.

Spiral much shorter than the last tumid whorl; inner lip extended in shape of a smooth lamina; outer one slightly marginated; base rather elongated, reflected, not emarginate.

Galeodea echinophora (Buce.), Linn.

Synonyms are *Morio*, Montf., and *Cassidaria*, Lamek., both of a more recent date.

THAIS, Link, 1807, *l. c.* iii. p. 114.

[*Thais* of Bolten Mus. includes some *Ricinulae* and *Monoceros* of Lamarck, from which Link has depurated it.]

Spire shorter than the last, ventricose whorl; aperture semicircular; inner lip plane, obliquely cut off, callous, smooth; outer lip scarcely marginated; shell without varices; base short.

Thais Persica (Bucc.), Linn.—*patula*, Linn. sp.—*haemastoma* (Chemn. fig. 964, 965).—*fucus*, Gmel. sp.—*minuta*, Link.

This genus, which is synonymous with *Microtoma*, Swainson, I should think advisable to be retained at least as a section of the hitherto confused genus *Purpura*.

MANCINELLA, Link, 1807, *l. c.* iii. p. 115.

Spire much shorter than the last whorl; aperture longitudinal, rounded; inner lip smooth and callous, outer one little or not at all marginated; shell without varices, but provided with spines and imbricate scales; base short, or scarcely elongated, twisted outwards, slightly notched.

Mancinella aculeata (Chemn. 967, 968).—*hystrix*, Linn. sp.—*castanea*, Link (Chemn. 956–958).—*armigera*, Chemn. sp.—*mutabilis*, Chemn. 951–953.—*Bezoar*, Chemn. 754, 755.

This genus, combining some *Purpuræ* with some *Pyrulæ* of Lamarck, comes near to *Rapana a*, Schum., and perhaps may be adopted.

VOLEMA, Link, 1807, *l. c.* iii. p. 115. (*Volema*, Bolt. emend.)

Spire much shorter than the last whorl, often distorted; aperture oblong, rounded; inner lip smooth and callous, outer lip simple; shell without varices; if grown old, with spines or imbricated scales; base elongated, rather turned aside.

The species are to be found in my 'Ind. Gen. Malacoz.' vol. ii. p. 699.

This genus unites *Busycum*, Bolt. (= *Fulgur*, Montf.) with *Cassidulus*, Humphr., Gray.

XANCUS, Bolten, 1798, Mus. (edit. 1819, p. 94); Link, 1807, *l. c.* iii. p. 116.

Spire shorter than the last whorl; aperture above rounded, wide, below narrow; inner lip callous, with three folds; outer lip simple; shell heavy, without varices or spines; base elongated.

Xancus pyrum, Linn. sp., and *maculatus*, Link (Chemn. f. 917, 918).

This genus, by Humphrey called *Rapum*, by Fabricius *Pyrum*, by Dr. Gray *Turbinellus*, and by M. Deshayes *Scolymus*, is here characterized for the first time, and sufficiently.

CYMATIUM, Link, 1807, *l. c.* iii. p. 119.

Spire rather long; aperture above rounded; inner lip callous, with three folds; outer one marginated; a great number of crowded and ridged varices run down the shell, to which they are firmly grown; base little elongated.

Cymatium polygonum, &c.

This is quite identical with *Latisus*, Montf., or *Polygona*, Schum.

VASUM, Link, 1807, *l. c.* iii. p. 119. (*Vasum*, Bolt. emend.)

Spire rather long; aperture longitudinal; inner lip callous, with alternately larger folds; outer lip simple; shell without distinct varices; base elongated.

Vasum Ceramicum, Linn. sp., &c.

This is *Cynodonta*, Schum., *Scolymus*, Sw.

TUDICLA, Link, 1807, *l. c.* iii. p. 120. (*Tudicla*, Bolt. emend.)

Spire very short, depressed; aperture above semicircular; inner lip callous, with a single fold; outer one simple; no varices or spines; canal straight, thin.

Tudicla spirillus, Linn. sp.

Subsequently established as *Haustellum a*, Schum., *Pyrella*, Swains., *Spirillus*, Schlut., *Spirilla*, Sow. jun.

TRITONIUM, Link, 1807, *l. c.* iii. p. 121.

Spire rather long; aperture above rounded; inner lip callous, generally with small folds; outer lip marginated; shell with varices that are commonly discontinuous; base rather elongated.

With respect to this genus I may refer to my 'Ind. Gen. Malacoz.' vol. ii. p. 609.

DISTORTRIX, Link, 1807, *l. c.* iii. p. 122.

Spire rather long; whorls distorted; inner lip callous, folded; outer lip marginated; varices indistinct; base short-tailed.

Distortrix anus, Linn. sp., and *reticulata* (Chemn. f. 405, 406).

This name then is to be substituted in the place of *Persona*, Montf.

GYRINEUM, Link, 1807, *l. c.* iii. p. 123.

Spire nearly equal to the last whorl; aperture rounded; inner lip callous, often slightly folded or granulated; outer lip marginated; shell compressed, with two opposite varices; base short or a little elongated.

Gyrineum echinatum (Chemn. f. 1274, 1275), *rana* (f. 1269, 1270), *bufonium* (f. 1240, 1241), *natator* (f. 1229, 1230), *verrucosum* (f. 1233, 1234), *caudatum* (f. 1045–1047), *scrobiculator*, = *Ranella*, Lamck.

CANRENA, Link, 1807, *l. c.* iii. p. 126.

Spire short; aperture longitudinal; inner lip folded; outer lip inferiorly strongly dentated; shell crowded with spines, but without distinct varices; base short.

Canrena neritoidea (Mart. f. 972, 973, 976–979) = *Ricinula*, Lamck. &c.

ADELOBRANCHEA.

ASTRALIUM, Link, 1807, *l. c.* iii. p. 135.

Spire depressed; aperture broad, rounded, bending downwards.

Astralium deplanatum (Chemn. f. 1718–1720).—*Astralium calcar*, Gm., sp.

This genus will no doubt be acknowledged, being congruous with *Calear*, Montf., Phil. It had been indicated before by G. Humphrey,

under the name of *Sol*, and by Bolten as *Astraea*. But I think it should be extended farther, so as to receive *Imperator* and *Hercolea*, Montf., *Stellaria*, Schmidt, *Cyclocantha*, *Canthorbis*, subg., and *Tubicanthus*, Swains., *Bolma*, Risso, *Cookia*, Less., and *Astralium*, Phil.

UMBONIUM, Link, 1807, *l. c.* iii. p. 136.

Spire much depressed; aperture directed downwards, or to the side, simple; base showing a convex callus in the place of the umbilicus.

Umbonium vestiarium, Linn. sp., and *excisum* (Chemn. f. 1602).

That Link's name is to be adopted instead of *Globulus*, Schum., or *Rotella*, Lamck., can hardly be controverted; although his second species belongs to another tribe.

PYTHIA, Bolten, 1798, Mus. (ed. 1819, p. 74); Link, 1807, *l. c.* iii. p. 139.

Whorls, each of them composed of two pieces; aperture longitudinal, toothed on both sides.

Pythia scarabæa, Linn. sp.

This name is preferable to that of Fischer, *Polydonta*, which, although contemporary, is badly made, and wants correction.

ACEPHALA.

SUNETTA, Link, 1807, *l. c.* iii. p. 148.

Equivalve, in front rather obtuse, closed; hinge with two cardinal teeth, lateral ones indistinct; anterior slope shorter than the furrow-shaped posterior slope; ligament external.

Sunetta scripta (Chemn. f. 261-265) = *Cuneus*, Muohlf. 1811 = *Meroë*, Schum. 1817.

TIVELA, Link, 1807, *l. c.* iii. p. 152.

Equivalve, longitudinal, without epiderm, closed; hinge with two cardinal and one elongated lateral tooth; anterior and posterior slopes equally elongated; ligament external.

Tivela vulgaris (Chemn. f. 362).—*T. tripla* (*Venus*), Linn. = *Trigona*, Muohlf. 1811.

MUSCULIUM, Link, 1807, *l. c.* iii. p. 152.

Equivalve, closed; hinge with two small cardinal teeth, no lateral ones; anterior and posterior slope nearly equal.

Musculum lacustre (*Tellina*), Linn.

The genus established here, fourteen years afterwards was published as *Pisidium*.

TENTACULATA. See 'Ind. Gen. Malacoz.' ii. 541.

VERPA, Bolten, 1798, Mus. (ed. 1819, p. 49); Link, 1807, *l. c.* iii. p. 159.

Shell tubular, partly straight, partly winding, at one extremity open, at the other closed by a convex perforated blade.

Verpa penis (*Serpula*), Linn.

The oldest denomination of this genus that can be admitted ; *Penicillus* (Da Costa, p.p.), Brug., being a term since the times of Rondelet consecrated to the Annulate class : all the other names, *Aquaria*, *Arytæna*, *Clepsydra*, *Aspergillum*, are of younger date, and will give way to *Verpa*, Bolt., defined by Link.

The following descriptions of new *Naticæ* were communicated by Dr. Philippi :—

11. DESCRIPTIONES NATICARUM QUARUNDAM NOVARUM EX
COLLECTIONE CUMINGIANA, AUCTORE R. A. PHILIPPI.

1. NATICA CATENATA, Phil. *N. testd subglobosd, tenui, lividæ, zonis quatuor albis, maculas fuscas semilunatas exhibentibus pictd; anfractibus rotundatis; spird breviusculd, nigricante; sulcis radiantibus profundis superiorem anfractuum partem occupantibus; aperturæ semiorbiculari, intus purpureæ; umbilico amplio, margine acuto cincto; callo spirali satis valido medium umbilici occupante.*

Alt. $8\frac{1}{2}$, diam. $8\frac{2}{3}$ lin.

Hab. —?

Differt a *N. tæniatæ*, Menke, anfractibus superius non horizontalibus sed declivibus, zonis longitudinaliter maculatis, callo labiali et callo umbilicali longe latioribus, etc. ; a *N. depressæ* formâ globosâ, umbilico amplio, callo umbilicari mediano, etc. ; a *N. maroccana* formâ globosâ, umbilico longe ampliore, callo ejus mediano, etc.

2. NATICA INCEI, Phil. *N. testd depressæ, suborbiculari, solidæ, striatulæ, nitidæ, luteo-albidæ; anfractibus superius planatis; spird latè conicæ, acutæ; aperturæ semiorbiculari, valdè obliquæ; angulo basali columellæ incrassato; suturæ duplicatæ; callo maximo albo umbilicum magnum omninò implente.*

Alt. ab apice ad basin aperturæ $9\frac{1}{2}$, a dorso ad ventrem 6 lin. ; diam. 12 lin.

Hab. ad insulam Raines, in freto Torres, ubi legit *Capt. Ince, R.N.*

Cave ne hanc speciem cum *N. Josephiniæ*, Risso (*N. Olld*, M. de Serr.), confundas, cui simillima est, et a quâ unice differt : ambitu paullo magis orbiculari ; anfractibus minus rapide crescentibus ; angulo umbilicum eingente paullo magis distincto ; columellâ basi valde incrassatâ ; callo umbilicari albo ; colore fere albo in luteum vergente, præsertim versus basin, denique suturâ dupli. Linea superior suturæ a callo labiali, inferior a margine superiore anfractûs formatur, pariter ut in *Bulliis* d. Gray.—Operculum corneum.

3. NATICA INTEMERATA, Phil. *N. testd globoso-ovatd, solidæ, striatulæ, nitidæ, lactæ, ad suturam versus umbilicum et in parte ultimâ anfractus ultimi flavidæ; anfractibus superius planiusculis; spird conicæ, circa $\frac{1}{3}$ altitudinis æquante; aperturæ semiorbiculari; columelli rectd, incrassatd; umbilico magno, perrio, lacteo, sulco profundo lato exarato; funiculo semicylindrico ejus a callo labiali distincto.*