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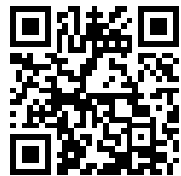
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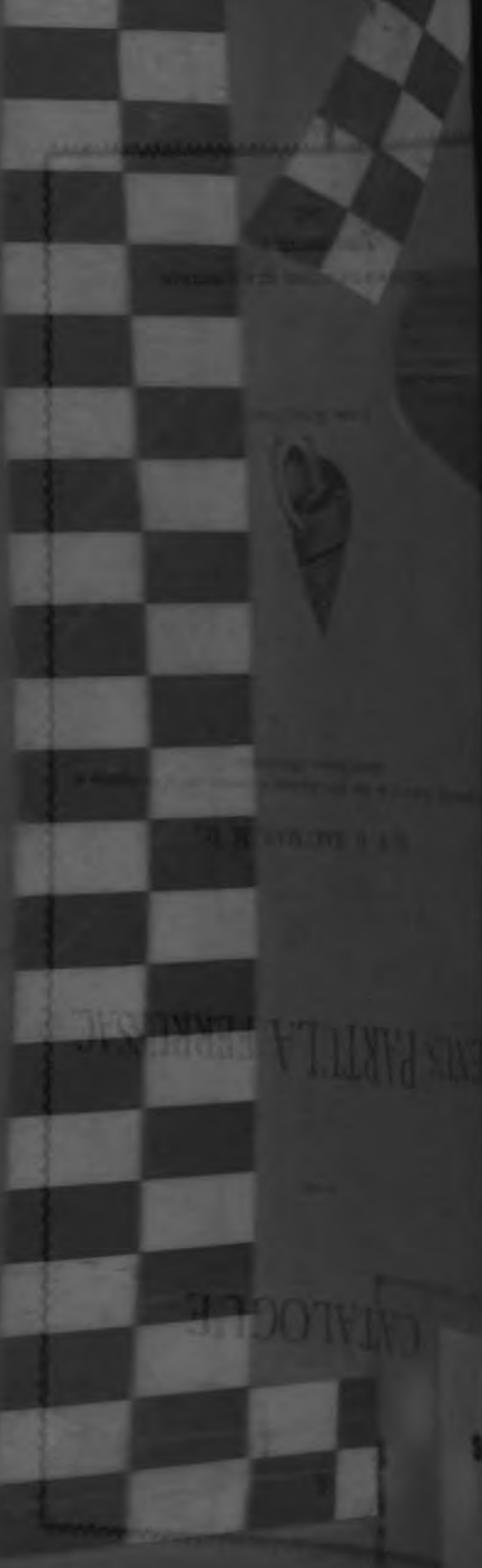
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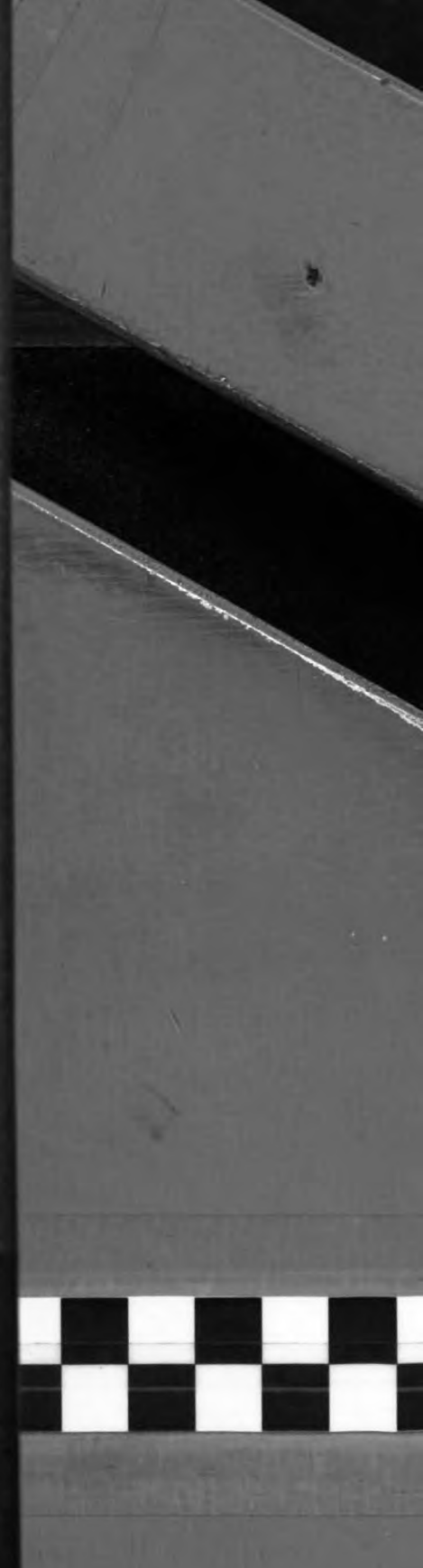
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CATALOGUE

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CATALOGUE

OF THE

GENUS PARTULA FERRUSSAC.

By W. D. HARTMAN, M. D.,

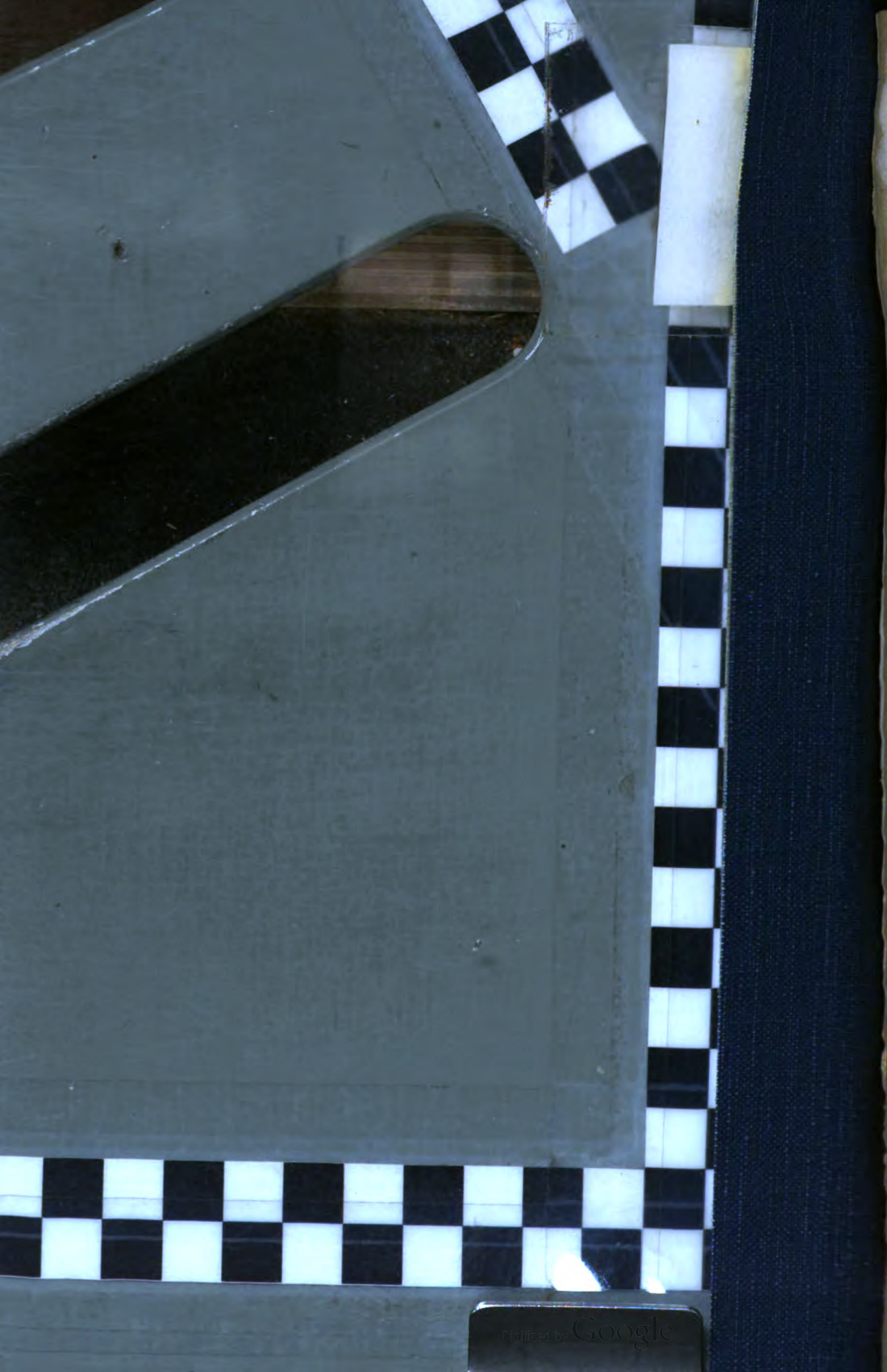
Corresponding Member of the New York Academy of Sciences, and of the Academy of Natural Sciences, Philadelphia.



P. FABA, Martyn (Type).

PRINTED FOR THE AUTHOR, BY F. S. HICKMAN,
WEST CHESTER, PA.

1881.



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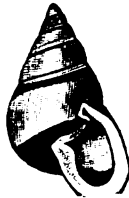
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A

CATALOGUE

OF THE

GENUS PARTULA FERRUSSAC.

UNIV. OF
CALIFORNIA

By W. D. HARTMAN, M. D.,

*Corresponding Member of the New York Academy of Sciences, and of the Academy of
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TO VIRU
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PREFACE.

For the past three years I have collected and examined the different species of the Genus *PARTULA* Ferrussac. In this period I have reviewed many thousand examples, from this country, Europe, and their native islands in Polynesia. Beside my own collection, which contains examples of almost all the known species, I may mention the very large collection of the late Wm. Harper Pease, containing types of all his species, both published and manuscript, now belonging to the Museum of Comparative Zoology, Cambridge, Massachusetts, for an examination of which, I am indebted to the courtesy of Prof. A. Agassiz. I have also examined the collections of *PARTULA* contained in the Smithsonian Institution and the New York State Museum of Natural History, kindly placed at my disposal by Professors Baird and Hall. The two latter collections contain some of Dr. Gould's types of *PARTULA*. All so called species of *PARTULA* of doubtful specific value, I have reviewed in my Bibliographic Catalogue of the Genus, to be published in the Bulletin of the Museum of Comparative Zoology. The Genus *PARTULA*, to which the shells of this group were at first accorded by Baron Ferrussac, with some degree of hesitation, has been for a long time acknowledged by systematic writers, as a well defined division of Land Shells peculiar to certain islands of the Pacific Ocean; and the more recent discoveries in the anatomical structure of the animal, by Wm. G. Binney, Esq., confirms the scientific acumen of the eminent Conchologist who founded the Genus. With the exception of Dr. Pfeiffer's Catalogue of the Genus *PARTULA*, in the last edition of his *Monographia Helieorum* Vi-

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ventium, there has been no attempt to arrange or classify the species. In this work he divides the species into *oblong*, *ovate*, and *ovate conic*, thereby including in his arrangement many species of apposite groups. In the present Catalogue, I have endeavoured to place each species in its natural group, and so far as it was possible, I have arranged in succession, affiliated species, commencing with the senior species of the Genus P. FABIA Martyn, as the representative of the Generic type. When we arrange allied species of the Genus side by side, it is obvious to a casual observer, that they form groups, which I have considered sufficiently distinct to erect into Sub-Genera, with a view of facilitating a reference to the species, as has been accorded to the Genera *Helix*, *Bulimus* and *Achatinella*. In the present Catalogue I have followed the example of Baron Ferrussac in proposing for the different Sub-Genera, the names of the Nymphs and Goddesses of Roman Mythology, one of which he so aptly applied in naming this beautiful Genus. A few species not represented in my collection, may in the future require other positions than those at present assigned them.

Genus **PARTULA** Ferr.

Animal viviparous, body covered by a mantel, as in *Helix*, blunt before, tail long and gradually acuminate, tentacles four, retractile, the superior oculiferous, collar and labial processes largely developed. No mucous pore, distinct locomotive disc, or parallel furrows alongside of the foot. Anal and respiratory orifices in the collar, opening on the exterior angle of the aperture of the shell. Organs of generation united, the orifice behind and below the right eye peduncle. Matrix ample and occupying much space in the pulmonary cavity, often containing several shells of two or three whorls beside eggs arranged in succession as developed. The embryo shells exhibit spiral rows of fovea, beginning at the apex, which, after extrusion, are continued as spiral striæ. The jaw is very thin, transparent, and of a light horn color, slightly arcuate and more or less attenuated at the ends. The whole anterior surface of the jaw is furnished with delicate, narrow, separated ribs, which break the continuity of either margin, and run obliquely to the median line, where they form a triangular space of ribs of unequal length, which do not reach the lower margin. The number of ribs on each side of the median line, vary in the same species, as well as in the different species, the whole number in each jaw varying from fifty-five to ninety-six. The lingual membrane is broad and the denticles vary in size in the different species, some being narrower than others.⁽¹⁾ Shell dextral, or sinistral, varying from oblong ovate to conic ovate, and from solid to translucent and hyaline. Labium often flat and widely reflected, occasionally revolute or concave, aperture auriform or ovate, more or less oblique, and occasionally contracted by the wide and often

1. See Wm. G. Binney, in P. A. N. S., April, 1875, and Obs. in my Bibliographical Catalogue.

dentate columella, and by a labial or pillar tooth, giving it an auriform appearance. Surface with minute spiral striæ, which are foveate at the apex.

Auriform Division.

Aperture contracted more or less by a pillar tooth and by the widely reflected labium and columella.

Section I.

Faba Group.

GENUS PARTULA, Ferr., 1819.

[Partula, a Sea Nymph, supposed to preside at the accouchment of the Romans.]



P. FABÆ, Martyn (Type).

Animal arboreal, shell pyramidally oblong, solid, perforate, pillar tooth sometimes absent, labium widely reflected, flat or concave, with an elevation on the inner margin, which, together with the wide columella, contracts the aperture. Aperture ovate or auriform.

- | | |
|-----------------------------------|--------------------------------------|
| ✓ P. FABÆ, Mart. ¹ | P. brunnea, Pse. MSS. |
| P. australis, Brug. | P. pallida, Pse. MSS. |
| ✓ P. citrina, Pse. | P. ventricosa, coll. Pse. (Anthony.) |
| ✓ P. subangulata, Pse. MSS. | ✓ P. FUSCA, Pse. |
| ✓ P. amanda, Garr. MSS. | ✓ P. protea, Pse. MSS. |
| ✓ P. bella, Pse. MSS. in coll. A. | ✓ P. ovalis, Pse. |
| N. S. | ✓ P. lugubris, Pse. |
| ✓ P. marginata, Garr. in litt. | |
| P. propinqua, Pse. MSS. | |

1. Proper names in small caps, synonyms immediately beneath in Roman.



Pillar tooth always present.

P. dubia, Garr. MSS.

ANIMAL TERRESTRIAL.

Pillar tooth usually present.

P. NAVIGATORIA, Pfr.

P. APPROXIMATA, Pse.

P. variabilis, Pse.

P. terrestris, Pse. MSS.

P. VITTATA, Pse.

P. castanea, Garr. MSS.

P. microstoma, Pse. MSS.

P. solidula, Pse. MSS. (non

P. PLANILABRUM, Pse.

Reeve.)

P. saturalis, Pse. (non Pfr.)

P. RADIATA, Pse. MSS.

Auriculata Group.

SUB GENUS NENIA.

[The Roman Goddess of funeral songs.]



N. AURICULATA, Brod. (Type.)

Animal arboreal, shell solid, ovate conic, perforate, lip flat, thick, and widely reflected, with a pillar tooth. Aperture key-hole shaped.

N. AURICULATA, Brod.

N. THALIA, Garr. MSS.

N. robusta, Pse. MSS.

N. abbreviata, Pse. MSS. (non

N. COMPACTA, Pse.

Mousson.)

Dentifera Group.

SUB GENUS ASTRÆA.

[The Roman Goddess of Justice.]



A. DENTIFERA, Pfr. (Type.)

Animal arboreal, shell solid, ovate conic, acute, umbilicus compressed or imperforate, aperture with a pillar tooth, and contracted at the superior part by a dentiform process on the inner margin of the labium, and a slight one on the columella, labium reflected thick and concave.

- | | |
|------------------------------------|---------------------------------------|
| A. DENTIFERA , Pfr. | A. IMPERFORATA , Pse. MSS. |
| A. <i>recta</i> , Pse. MSS. | A. VIRGINEA , Pse. MSS. |
| A. <i>decorticata</i> , Pse. MSS. | A. CALLIFERA , Pfr. |
| A. labiatea , Pse. MSS. | A. <i>megastoma</i> , Pse. MSS. |
| A. <i>Raiatensis</i> , Garr. MSS. | A. <i>calistoma</i> , Schmeltz. |
| A. FORMOSA , Pse. MSS. | |

Umbilicata Group.

SUB GENUS CLYTIA.

[A Roman Nymph, daughter to Oceanus.]



C. UMBILICATA, Pse. (Type.)

Animal arboreal, shell solid, globosely ovate or conic ovate, umbilicus open, pillar tooth elongate, columella slightly dentate, aperture roundly ovate, sometimes angular at base.

- | | |
|---------------------------------|--------------------------------|
| C. UMBILICATA , Pse. | C. BILINEATA , Pse. |
|---------------------------------|--------------------------------|

Lutea Group.

SUB GENUS ILIA.

[The mother of Romulus and Remus, of Roman Mythology.]



I. LUTEA, Lesson (Type).

Animal arboreal, shell solid, conic ovate, imperforate, aperture ovate, columella slightly dentate.

I. LUTEA, Less.

I. lilacina, Pfr.

I. solidula, Reeve (non Pse.)

Hebe Group.

SUB GENUS (ENONE).

[So named after a Nymph of Mount Ida.]



(E. HEBE, Pfr. (Type.)

Animal arboreal or terrestrial, shell short, turbinate, or globose ovate, umbilicate, pillar tooth elongate, aperture sub-orbicular, with an elevation on the columella.

ANIMAL ARBORREAL.

(E. HEBE, Pfr.

(E. bella, Pse. MSS. (Garr.)

(E. globosa, Pse. MSS.

(E. ventrosa, Garr. MSS.

ANIMAL TERRESTRIAL.

(E. CRASSILABRIS, Pse.

(E. rustica, Pse.

(E. pinguis, Garr. MSS.

Otaheitana Group.

SUB GENUS HELENA.

[In Roman Mythology, the beautiful daughter of Leda and Jupiter. In allusion to the beauty of the species comprising the group.]



H. OTAHEITANA, Brug. (Type.)

Animal arboreal, shell sinistral or dextral, oblong ovate, perforate, pillar tooth rounded, button-like, labium flat, moderately reflected, aperture ovate.

SHELL SINISTRAL.

- ~~H.~~ OTAHEITANA, Brug.
 H. maura, Grat.
~~H.~~ amabilis, Pfr.
~~H.~~ rubescens, Rve.
 H. perversa, Pse. MSS.
 H. crassa, Pse. MSS.
 H. Tahitana, Brug.
 H. tahulana, Anton.
 H. brevicula, Pse. MSS.
~~H.~~ turricula, Pse. MSS. (non
 turricula, Pse. in A. J. C.)
 H. sinistrosa, Pse. MSS.
 H. sinistralis, Pse. MSS.
 H. MOOREANA, Hartman.

SHELL DEXTRAL.

- H. Reeveana, Pfr.=Otaheitana.
 H. pacifica, Pfr. = "
 H. Isabellina, Pfr. = "
 H. diminuta, C. B. Adms. =
 Otaheitana.
 H. Vanicorensis, Quoy & Gaim.
 = Otaheitana.
 H. RUFa, Less.
 H. nitens, Pfr.
~~H.~~ lignaria, Pse.
~~H.~~ affinis, Pse.
~~H.~~ SUTURALIS, Pfr.
 H. strigosa, Pfr.
~~H.~~ alternata, Pse.
 H. STENOSTOMA, Pfr.
~~H.~~ vexillum, Pse. * *Sinistral*
 H. LINEATA, Less.
 H. torosus, Beck.
 H. NODOSA, Pfr.
~~H.~~ ^{cr.} bilineata, Pse.
~~H.~~ FILOSA, Pfr.
~~H.~~ lineolata, Pse.
~~H.~~ GARRETTII, Pse.

TERRESTRIAL SPECIES.

H. STOLIDA, Pse.

Pillar tooth absent.

~~H.~~ PRODUCTA, Pse. •

Spadicea Group.

SUB GENUS PASITHEA.

[In Mythology, one of the three graces. In allusion to the graceful form of the species of group.]



P. SPADICEA, Rve. (Type.)

Animal arboreal, shell ovate or elongate ovate, moderately solid, shining, often translucent, narrowly umbilicate, pillar tooth usually absent, aperture oblong, oval, columella with a slight dentiform process, spiral striæ, thickly crowded.

- | | |
|---------------------------------|--------------------------|
| P. SPADICEA, Rve. | ✓ P. HYALINA, Brod. |
| ✓ P. elongata, Pse. | P. ATTENUATA, Pse. |
| ✓ P. simulans, Pse. | P. gracilis, Pse. |
| P. Erhelii, Morelet. | P. gracillior, Pse. MSS. |
| ✓ P. striolata, Pse. | P. CLARA, Pse. |
| P. peraffinis, Pse. MSS. (Pfr.) | P. CONGINNA, Pse. |
| ✓ P. nucleola, Pse. | P. GRISEA, Less. |
| P. tæniata, Moersch. | P. COXI, Angas. |
| | P. MICANS, Pfr. |

Decussatula Group.

SUB GENUS ÆGA.

[Jupiter's Nurse. In allusion to the sub-globose or mammaform shape of the species.]



A. DECUSSATULA, Pfr. (Type.)

Animal arboreal, shell sub-translucent, roundly ovate, or sub-globose, perforate, pillar tooth absent, aperture roundly ovate.

- | | |
|------------------------|-----------------|
| ✓ A. DECUSSATULA, Pfr. | A. MINUTA, Pfr. |
|------------------------|-----------------|

Arguta Group.

SUB GENUS ECHO.

[A Roman Nymph who pined for the love of Narcissus, until nothing was left but her voice. In allusion to the thin and attenuated species of this group.]



E. ARGUTA, Pse. (Type.)

Animal arboreal, shell ovate, or elongate ovate, very thin

and pellucid, or hyaline, aperture ovate, labium slightly reflected.

✓ E. ARGUTA, Pse.

E. TURGIDA, Pse.

E. ANNECTEUS, Pse.

Section II.

Ganymedes Group.

SUB GENUS LATIA.

[The wife of Saturn. In allusion to the banded character of some of the species.]



L. GANYMEDES, Pfr. (Type.)

Animal arboreal, shell oblong conic, or ovate conic, moderately solid, compressly umbilicate, epidermis thin and generally absent. Aperture ovate, with the inner margin waived or roughened.

✓ L. GANYMEDES, Pfr.

L. REPANDA, Pfr.

L. gonochiela, Pfr.

L. recta, Pse.

L. fasciata, Pse.

L. ACTOR, Albers.

✓ L. INFLATA, Pse. ? *Keel P.*

L. Recluziana, Petit.

L. Thersites, Pfr.

L. Zebrina, Gld.

Balimoides Group.

SUB GENUS EVADNE.

[The daughter of Mars. In allusion to the large size of the species of the group.]



E. BULIMOIDES, Less. (Type.)

Animal arboreal, shell solid, ovate conic, or elongate conic, widely umbilicate, aperture large, ovate, lip usually callous, revolute or but slightly expanded.

- | | |
|------------------------|-------------------------|
| E. BULIMOIDES, Less. | E. ABBREVIATA, MOUSS. |
| E. canalis, MOUSS. | E. MACGILLIVARAYI, Pfr. |
| E. Upolensis, MOUSS. | E. Turneri, Pfr. |
| E. semilineata, MOUSS. | E. Brazieri, Pse. |
| E. conica, Gld. | E. Caledonica, Pfr. |
| ✓ E. GUAMENSIS, Pfr. | E. Pfeifferi, Cross. |
| E. brumalis, Rve. | E. RADIOLATA, Pfr. |
| E. OBESA, Pse. | E. COMPRESSA, Pfr. |
| E. CALYPSO, O. Semp. | |
| E. Thetis, O. “ | |
| E. Leucothoe, O. “ | |

Gibba Group.

SUB GENUS HARMONIA.

[The daughter of Venus and Mars, so named in allusion to the harmonious proportions of the species of the group.]



H. GIBBA, Ferr. (Type.)

Animal arboreal, shell solid, ovate acute, perforate, aperture quadrately ovate, very oblique, pillar tooth sometimes absent.

- | | |
|----------------------|------------------|
| ✓ H. GIBBA, Ferr. | H. PEASII, COX. |
| ✓ H. Mastersii, Pfr. | H. EXPANSA, Pse. |
| H. BICOLOUR, Pse. | H. extensa, Pse. |

Bulimoid Division.

In this division of the Genus the lip is concave and not reflected, and the aperture is not contracted by a pillar tooth, or by processes on the labium or columella, as in the Auriform Division.

Rosea Group.

SUB GENUS MATATA.

[The Goddess of the Morning, so named in allusion to the varied and bright colors of many of the species of the group.]



M. ROSEA, Brod. (Type.)

Animal arboreal, shell solid, elongate conic, perforate, aperture ovate, labium concave.

- | | |
|--------------------------|-------------------------------|
| ✓ M. ROSEA, Brod. | M. Cookiana, Mouss. |
| ✓ M. purpurascens, Pfr. | ✓ M. VARIA, Brod. |
| ✓ M. simplaria, Morelet. | M. strigata, Pse. |
| ✓ M. cognata, Pse. MSS. | M. mucida, Pfr. |
| M. ALABASTRINA, Pfr. | M. perplexa, Pse. MSS. |
| M. TURRICULA, Pse. | ✓ M. pulchra, Pse. MSS. |
| M. VIRGULATA, Pse. | ✓ M. Huahinensis, Garr. MSS. |
| M. GLUTINOSA, Pfr. | M. bicolour, Garr. MSS., (non |
| M. LÆVIGATA, Pfr. | Pse.) |
| M. ASSIMILIS, Pse. | M. SUB GONOCHEILA, MOUSS. |

Carterensis Group.

SUB GENUS STEROPE.

[One of the Pleiades.]



S. CARTERENSIS, Quoy et Galm. (Type.)

Animal arboreal, shell ovate, elongate, acute, perforate, thin and translucent, aperture ovate, pillar tooth usually absent.

S. CARTERENSIS, Quoy et Galm. S. CINEREA, Albers.

Pillar tooth present surface with elevated filiform lines.

✓ S. LIRATA, MOUSS.

FEB 14 1995

