

- Fig. 23.* *Docidium truncatum*; an individual about to divide, treated with solution of carbonate of ammonia.
- Fig. 24.* Recently-divided individual of the same species, laid in glycerine. The protruded new membrane of one half (the contents of which are drawn) has become doubled-in by the action of the fluid extracting water. The thin, gelatinous envelope which surrounded the old halves appears more clearly than in specimens lying in water.
- Fig. 25.* One-half of a similar object, treated with carbonate of ammonia. Only the outlines of the contracted cell-contents are given.
- Figs. 26, 27.* Globular cells surrounded by a double coat, occurring frequently among small Desmidieæ, after having been kept a long time in glycerine.
- Fig. 28.* One of the same with a simple coat; a fresh specimen.
- Fig. 29.* Two cells produced by the division of one of these cells, adhering together at the flattened surface of contact.
- Fig. 30.* Outline sketch of a *Cosmarium margaritiferum* beginning to divide.
- Fig. 30 b.* The isthmus of this cell more magnified.
- Fig. 31.* *Navicula viridis* at the commencement of division.
- Figs. 32, 33.* The same plant in more advanced stages of division. The striae of the primary sides, indications of which were already visible, in fig. 33, in the newly-formed adjacent sides of the daughter-cells, are omitted, in order to leave the drawing clearer.

## II.—Brief Diagnostic Characters of undescribed Madeiran Insects.

By T. VERNON WOLLASTON, M.A., F.L.S.

[With two Plates.]

### Ordo COLEOPTERA.

#### Fam. CARABIDÆ.

##### Genus CALATHUS, Bon.

###### *Calathus fimbriatus.*

*C. apterus, latiusculus, C. complanato plerumque paulo brevior, valde depresso, piceus, prothorace latiusculo, antennis pedibusque ferrugineis.*

*Mas nitidus; tibiis posterioribus intus (præsertim versus apicem) pilis longis densissime fimbriatis.*

*Fœm. opacus; tibiis fere simplicibus.*

*Calathus complanatus*, var.  $\gamma$ , Ins. Mad. 30 (1854).

*Inhabits* Porto Santo, abounding beneath stones (principally in the lower districts), and being apparently the Porto-Santan representative of the *C. complanatus* of Madeira proper and the Dezertas. Although attention was called, in the 'Insecta Madeirense,' to the present *Calathus*—as being considerably flatter, and rather broader and shorter than the ordinary *C. complanatus*

of Madeira proper and the Dezertas (as well as to the greater opacity of its male sex, and the more shining surface of the female),—it is not until now that I have ventured to regard it as specifically distinct; and it is through the detection by Mr. Janson of a good, *structural* character, which cannot possibly be the result of any combination of local influences to which it may have been long exposed in the more remote island of Porto Santo, that I would without hesitation, in the present paper, propose for it a new name. The peculiarity above alluded to (to which Mr. Janson has lately directed my attention) is a most remarkable one; nevertheless it had entirely escaped my own observation hitherto. It consists in the fact of the four hinder tibiæ of the males being densely fringed with long and very robust hairs along the apical two-thirds of their inner edge. It is a character which is most anomalous for the *Calathi*, and one which cannot fail therefore to strike every Coleopterist as abundantly sufficient, even of itself, to establish a specific claim; but when it is viewed in conjunction with the other differences, of outline and form, long ago alluded to, the *C. fimbriatus* may be at once looked upon as a most interesting addition to the *Geodephaga* of the Madeiran group. And I may add, moreover, that it is a most important consideration (and one which tends directly to substantiate the validity of other species, somewhat similarly circumstanced, and concerning which I have expressed occasional doubt,—such as, for instance, the *Hadrus illotus*), that so abundant and universal an insect as is the *C. complanatus* throughout Madeira proper and the Dezertas, *should have a strictly representative species*, and equally common, in the more distant island of Porto Santo.

### Genus TRECHUS, Clairv.

#### *Trechus Jansonianus.*

*T. subovato-oblongus*, angustatus, fusco-piceus, nitidus; prothorace parvo, subcordato, in disco parum convexo, basi utrinque leviter impresso, angulis posticis subrotundatis; elytris abbreviatis (pygidio multo brevioribus), laevibus (striarum fere parentibus), versus latera neconon ante apicem paulo dilutioribus; antennis testaceis, breviusculis, valde robustis; pedibus pallido-testaceis.—Long. corp.  $1\frac{1}{3}$  lin.

Several specimens of the present very interesting little *Trechus* were discovered by Mr. Janson (to whom I have dedicated the species) amongst the refuse which had accumulated around some blocks of a trunk of a Dragon-tree brought from Madeira proper by Mr. Mason. In general affinity (and probably also in habits) it is closely allied to the *T. fimbicola*; nevertheless it is altogether

narrower, and less ovate, than that insect; its prothorax is distinctly smaller, more convex on the disk, and more evidently impressed (transversely) behind; its elytra are very much shorter (a considerable portion of the pygidium being exposed to view), and still more free from indications of longitudinal striæ; its antennæ are even more robust than is there the case; and its entire colouring (as will be perceived from the above diagnosis) is different.

It may perhaps be desirable to state, that besides the two foregoing additions to the Madeiran Coleoptera since the publication of the late corrected Catalogue for the British Museum, I have detected amongst the insects of Mr. Bewicke the common *Alphitobius mauritanicus*,—which I had accidentally overlooked amongst some specimens of the *A. diaperinus* which he had formerly given me. Like that insect, it has been clearly introduced, with stores, into those islands; and it is therefore of no great importance. Still, in conjunction with the two above described, it raises the hitherto-detected species of Madeiran Coleoptera (from 580) to 583. Its synonymy appears to be as follows:—

*Alphitobius mauritanicus.*

- Tenebrio mauritanicus*, Fab. [nec. Linn. 1767] Ent. Syst. i. 113 (1792).  
*Tenebrio Fagi*, Pnz. Fna Ins. Germ. 61. 3 (1799).  
*Tenebrio mauritanicus*, Fab. Syst. Eleu. i. 149 (1801).  
*Tenebrio Fagi*, Sturm, Deutsch. Fna, ii. 233 (1807).  
*Tenebrio Fagi*, Dufts. Fna Austr. ii. 303 (1812).  
*Alphitobius picipes*, Steph. Ill. Brit. Ent. v. 11 (1833).  
*Heterophaga mauritanica*, Dej. Cat. edit. 3. 220 (1837).  
*Heterophaga mauritanica*, Lucas, Col. de l'Algérie, 341 (1849).  
*Heterophaga Fagi*, Redt. Fna Austr. 594 (1849).

The points in which it differs from the *A. diaperinus* may be at once gathered by a reference to page 499 of the 'Insecta Maderensia.'

Ordo ORTHOPTERA.

Fam. FORFICULIDÆ.

Genus FORFICULA, Linn.

*Forficula edentula.*

*F. aptera*, valde depressa, fusco-ferruginea vel fusco-picea, glabra, subopaca; capite postice paulo dilutiore; prothorace subquadrato, ad latera pallidiore, subdiaphano; elytris valde abbreviatis, apice conjunetim profunde emarginatis; abdomine confertim subrugoso-punctato, segmentis secundo et tertio plica laterali auctis, ultimo fere simplici, in fœm. apicem versus distincte sed parce pilosis; forcipis cruribus in utroque sexu edentulis, in ♂ longioribus,

curvatoribus; antennis (13-articulatis), palpis pedibusque diluto-testaceis, plus minus infuscatis.

Long. corp. ♂  $4\frac{1}{2}$ - $5\frac{1}{2}$  lin.; forc.  $2$ - $2\frac{1}{3}$  lin.

„ „ ♀  $4\frac{1}{2}$ -6 lin.; forc.  $1\frac{1}{2}$ -vix 2 lin.

*Inhabits* Madeira proper, occurring in the moist sylvan districts of intermediate altitudes; detected by myself at the base of the lofty perpendicular rocks near the upper extremity of the Ribeira de S<sup>a</sup> Luzia, during July 1855. It is a truly indigenous *Forficula*, and of a very remarkable type,—its apterous body, much abbreviated (apically-emarginate) elytra, and sub-opake, greatly flattened surface, in conjunction with the total freedom of even its male forceps from internal teeth, giving it a character which it is impossible to mistake.

### Fam. BLATTIDÆ.

#### Genus BLATTA, Linn.

##### *Blatta Ericetorum.*

*B. nitida*, nigra, limbo late elytrorumque sutura anguste pallidis, subdiaphanis; capite vel omnino vel solum hinc inde pallido; prothoracis dorso nunc vix nunc distinctius dilutiore, interdum etiam prothorace toto pallido; elytris modo abdominis longitudine, modo paulo longioribus; alis minutis, fere obsoletis; antennis palpisque ad basin pallidis, apicem versus obscurioribus; pedibus vel omnino pallidis, vel ad apicem ipsum tarsorum tibiarumque (valde spinosarum) nigrescentibus.—Long. corp.  $4\frac{1}{2}$ - $5\frac{1}{2}$  lin.

*Inhabits* Madeira proper, occurring principally beneath the loose outer fibre of the gigantic Heath-trees, on the upper limits of the sylvan districts,—from about 4500 to 5000 feet above the sea. It has been examined by Dr. Fischer of Friburg, who regards it as new, though allied to the *B. marginata* of Southern Europe.

### Ordo HYMENOPTERA.

#### (Sectio I. Terebrantia.)

### Fam. ICHNEUMONIDÆ.

#### Genus MISOLEPTUS, Grav.

##### *Misoleptus Maderensis.* Pl. IV. fig. 1.

*M. mas* testaceus; capite antennisque nigris, his corporis longitudine; thorace fascia fusca, lateribus antice albidis; abdomine piceo, fasciis pedibusque testaceis; alis subhyalinis.—Long. corp.  $1\frac{1}{2}$ , alar.  $2\frac{1}{2}$  lin.

*Inhabits* Madeira proper; having been discovered by myself

in the dense forest-region of the Lombo dos Pecegueiros, in the north of the island.

### Genus HEMITELES, Grav.

#### *Hemiteles postica.*

*H. fœm.* nigra, nitens; antennis corpore paulo brevioribus; abdomine rufo, basi nigro; oviductu abdominis dimidio paulo breviore; pedibus rufis, nigro-variis; alis subhyalinis.—Long. corp. 2, alar.  $3\frac{1}{2}$  lin.

*Inhabits* Madeira proper.

### Genus EXETASTES, Grav.

#### *Exetastes peregrinus.* Pl. IV. fig. 2.

*E. mas* niger; antennis corpore paulo brevioribus; abdomine valde compresso, thoracis duplicati longitudine, segmentis 3to 4toque flavis; pedibus flavis, femoribus tarsisque posticis nigris; alis subhyalinis.—Long. corp. 2–5, alar. 5–7 lin.

*Inhabits* Madeira proper, occurring principally at lofty elevations. In August 1850, I captured it on the extreme summit of the Pico Ruivo,—more than 6000 feet above the sea.

### Genus EPHIALTES, Grav.

#### *Ephialtes lateralis.* Pl. IV. fig. 3.

*E. fœm.* niger; antennis corporis dimidio paulo longioribus; thoracis vittis lateralibus coxisque anterioribus flavis; abdomine ferrugineo-rubo, thorace plus duplo longiore, basi suturisque nigris; oviductu corporis longitudine; pedibus rufis; alis hyalinis.—Long. corp. 6–8, alar. 9–19 lin.

*Inhabits* Madeira proper; occurring in the moist sylvan districts (Cruzinhos, Pecegueiros, &c.) of intermediate and lofty altitudes.

#### *Ephialtes lineatus.* Pl. IV. fig. 4.

*E. fœm.* rufus; capite flavo, nigro-vario; antennis nigris subtus ferrugineis, corporis dimidio longioribus; thorace nigro flavoque vittato; abdomine thorace plus duplo longiore, suturis nigris; oviductu abdominis dimidio paulo breviore; pedibus luteis, posticis nigro-variis; alis hyalinis.—Long. corp. 5, alar.  $7\frac{1}{2}$  lin.

*Inhabits* Madeira proper; being attached to similar spots (Cruzinhos, &c.) as the last species, within the sylvan regions.

#### *Ephialtes linearis.*

*E. mas et fœm.* rufus; capite antennisque nigris, his corpore bre-

rioribus; thorace nigro-vario; oviductu abdominis dimidio multo breviore; pedibus fulvis, tibiis posticis tarsisque apice nigris; alis hyalinis.—Long. corp. maris  $2-2\frac{1}{2}$ , fœm.  $4\frac{1}{2}$  lin.: alar. maris  $2\frac{1}{2}-3\frac{1}{2}$ , fœm. 6 lin.

Inhabits Madeira proper, in similar localities (Ribeiro Frio, &c.) as the last two species.

### Genus LISSONOTA, Grav.

*Lissonota dorsalis.* Pl. IV. fig. 5.

*L. mas* nigra; antennis corpore paulo brevioribus; mesothorace rufo, macula nigra ornata; abdominis suturis ferrugineis; pedibus rufis, tibiis posticis nigris; alis subcinereis, areola discali tetragona.—Long. corp.  $2\frac{1}{2}-3\frac{1}{2}$ , alar. 4–6 lin.

Inhabits Madeira proper, occurring in sylvan spots (Cruzinhos, Ribeiro Frio, St<sup>a</sup> Anna, &c.) of intermediate and lofty elevations.

### Genus BASSUS, Grav.

*Bassus albovarius.*

*B. niger*; antennis corpore multo brevioribus; scutello albo-maculato; pedibus rufis, tibiis posticis albo nigroque fasciatis, tarsis posticis nigris; alis hyalinis.—Long. corp. 2, alar.  $3\frac{1}{2}$  lin.

Inhabits Madeira proper.

### Fam. BRACONIDÆ.

#### Genus PERILITUS, Nees von Es.

*Perilitus debilis.* Pl. IV. fig. 6.

*P. fœm.* testaceus; antennis nigris; thorace piceo-trivittato; petiolo brevi; oviductu abdominis dimidio longiore; alis hyalinis.—Long. corp.  $1\frac{1}{2}$ , alar.  $2\frac{1}{2}$  lin.

Inhabits Madeira proper; detected by myself in the chestnut-woods of St<sup>a</sup> Anna, during the summer of 1850.

#### Genus EUPHORUS, Nees von Es.

*Euphorus petiolatus.*

*E. mas et fœm.* testaceus; antennis fuscis; mesothorace nigro; petiolo fusco, basi albido, abdominis longitudine; oviductu sub-exerto; alis hyalinis.—Long. corp.  $1\frac{1}{2}-1\frac{3}{4}$ , alar.  $2\frac{1}{2}-3$  lin.

Inhabits Madeira proper; captured in the same locality as the last species.

## Genus ASCOGASTER, Wesm.

*Ascogaster maculata.*

*A. mas nigra*; capite thoraceque ferrugineo-variis; antennis setaceis, basi ferrugineis, corpore vix brevioribus; abdomine striato, thorace paulo longiore et latiore; pedibus ferrugineis, tibiis et tarsis posterioribus fuscis, illis albido-cinctis; alis anticis subnebulosis, albido-unimaculatis.—Long. corp.  $1\frac{1}{2}$ , alar.  $2\frac{1}{2}$  lin.

*Inhabits* Madeira proper; having been captured by myself on the extreme summit of the Pico Ruivo (upwards of 6000 feet above the sea), early in August 1850.

## Genus ROGAS, Nees von Es.

*Rogas rufo-ater.*

*R. mas niger*, punctatus; antennis corpore paulo brevioribus; metathorace ruguloso, subquadrato, carinato; abdomine rufo, apice nigro, fasciis cinereis ornato; alis subfuscis.—Long. corp. 3, alar.  $4\frac{1}{2}$  lin.

*Inhabits* Madeira and Porto Santo; being tolerably common in the north of the former, especially in the chestnut-woods around Santa Anna.

## Fam. DIAPRIADÆ.

## Genus CLINOCENTRUS, Hal.

*Clinocentrus anticus.*

*C. fæm. niger*; antennis basi ferrugineis; scuto depresso substriato; mesothorace subcarinato; abdomine subsessili, subtus piceo, basi striato; oviductu brevi; pedibus ferrugineis; alis cinereis, maculis apud stigma albidis ornatis.—Long. corp.  $2\frac{1}{2}$ , alar. 5 lin.

*Inhabits* Madeira proper; having been captured by myself in the chestnut-woods of Santa Anna, during the summer of 1850.

*Clinocentrus divisus.*

*C. fæm. fuscus*; antennis basi testaceis, corpore paulo longioribus; thorace fusiformi, mesothorace ferrugineo punctato; abdomine longi-ovato, piceo-nigro, thorace paulo latiore vix longiore; oviductu abdominis longitudine; pedibus testaceis; alis hyalinis.—Long. corp.  $\frac{3}{4}$ , alar.  $1\frac{1}{2}$  lin.

*Inhabits* Madeira proper; taken by myself in Funchal.

## Genus SPATHIUS, Nees von Es.

*Spathius apterus.*

*S. fæm. fulvus, apterus, nitens, brevis*; antennis fuscis, basi fulvis,

corpore paulo brevioribus; abdomine piceo, fusiformi, thorace latiore et paulo longiore; oviductu abdomine vix breviore.—Long. corp.  $1\frac{1}{2}$  lin.

Inhabits Madeira proper; captured at São Vincente, in the north of the island.

### Genus GALESUS, Curt.

#### *Galesus fissus.*

*G. fœm.* niger; capite linearis, vix thoracis longitudine; antennis sub-clavatis, corporis dimidio haud longioribus; tibiis ferrugineis, tarsis testaceis; alis fuscis, apice fissis.—Long. corp. 2 lin.

Inhabits Madeira proper, occurring at intermediate (S. Antonio da Serra, Ribeira da Janella, Feijãa de Córte, &c.) and lofty elevations.

### Fam. SCELIONIDÆ.

#### Genus TELENOMUS, Hal.

##### *Telenomus basalis.*

*T. fœm.* ater; capite thorace latiore; antennarum articulo primo pedibusque fulvis; abdomine basi striato; alis limpidis, apice vix fuscescentibus.—Long. corp.  $\frac{1}{2}$ , alar.  $\frac{3}{4}$  lin.

Inhabits Madeira proper.

##### *Telenomus subfasciatus.*

*T. fœm.* ater, latus; capite thorace latiore; pedibus fulvis; abdomine punctato, basi striato; alis subhyalinis, sub stigmate indistincte fuscescentibus.—Long. corp.  $\frac{2}{5}$ , alar.  $\frac{2}{3}$  lin.

Inhabits Madeira proper.

##### *Telenomus divisus.*

*T. fœm.* ater, subgracilis; capite thorace vix latiore; antennis ad basin pedibusque fulvis; abdomine punctato, basi striato; alis subfuscouscentibus.—Long. corp.  $\frac{1}{4}$ , alar.  $\frac{2}{5}$  lin.

Inhabits Madeira proper.

##### *Telenomus Maderensis.*

*T. mas* et *fœm.* niger, laevis, latus, punctatus, obscurus; antennis fulvis, apice nigris; abdomine nitente, brevi, basi subsulcato; pedibus fulvis; alis hyalinis.—Long. corp.  $\frac{2}{3}$ , alar.  $1\frac{1}{4}$  lin.

Inhabits Madeira proper; taken in the chestnut-woods of Santa Anna, during the summer of 1850.

*Telenomus flavigornis.*

*T. niger*, latus, subnitens, scite punctatus; antennis flavis, basi nigris; abdomine piceo, basi sulcato; pedibus flavis; alis subfuscis.—Long. corp.  $\frac{1}{2}$ , alar. 1 lin.

Inhabits Madeira proper; captured in the same locality as the last species.

*Telenomus diversus.*

*T. fœm.* piceus; capite rufo; antennis luteis, capitatis, basi nigris, corporis dimidio brevioribus; pedibus fulvis; alis albidis.—Long. corp.  $\frac{1}{2}$ , alar.  $\frac{4}{5}$  lin.

Inhabits Madeira proper; taken in the same spot as the last two species.

Genus *SCELIO*, Latr.*Scelio minor.* Pl. IV. fig. 7.

*S. mas* et *fœm.* niger (*S. rugosulo* multo minor ac gracilior); antennis corporis dimidio maris multo longioribus, fœminæ multo brevioribus; abdomine maris basi pedibusque piceis; tibiis basi apiceque tarsisque testaceis; alis maris subhyalinis, fœminæ hyalinis.—Long. corp. 1, alar.  $1\frac{1}{2}$  lin.

Inhabits Madeira proper; detected in the chestnut-woods of Santa Anna, during the summer of 1850,—beneath stones, and crawling at the roots of grass on the dry ground.

Genus *CERAPHRON*, Latr.*Ceraphron parvulum.* Pl. IV. fig. 8.

*C. fœm.* nigrum, nitens, subgracile; antennis corpore paulo brevioribus; abdomine basi striato; pedibus fulvis; femoribus aliquo fuscis.—Long. corp.  $\frac{1}{2}$ , alar.  $\frac{3}{4}$  lin.

Inhabits Madeira proper.

Fam. *CHALCIDIDÆ.*Genus *PTEROMALUS*, Swed.*Pteromalus discalis.*

*P. fœm.* cupreo-viridis, robustus; antennis nigris, basi testaceis; abdomine æneo-viridi, subfusiformi, thorace longiore, in disco nigro-purpureo; pedibus flavis, tibiis tarsisque anticus fulvis, tibiis posterioribus apice fuscis; alis hyalinis, macula magna discali fusca ornata.—Long. corp.  $1\frac{2}{3}$ , alar. 3 lin.

Inhabits Madeira proper; occurring in the sylvan districts (Lombo dos Pecegueiros, &c.) of intermediate altitudes.

*Pteromalus biquadratus.*

*P. fœm.* nigro-cupreus, brevis, latus; antennis nigris; abdomine breviter ovato, thoracis longitudine; tibiis fuscis, tarsis fulvis; alis subhyalinis, maculis quatuor magnis fuscis ornatis.—Long. corp. 1, alar.  $1\frac{1}{2}$  lin.

Inhabits Madeira proper; captured at the Lombo dos Pecegueiros, with the last species.

Genus *COCOPHAGUS*, Westw.*Coccophagus nigrifrons.*

*C. fœm.* niger; antennis piceis, clavatis, corporis dimidio brevioribus; scutello flavo, apice nigro; abdomine nigro-æneo; femoribus nigris, tarsis anticus fulvis; alis hyalinis.—Long. corp.  $\frac{1}{3}$ , alar.  $\frac{3}{4}$  lin.

Inhabits Madeira proper; taken at São Vincente and Santa Anna, in the north of the island, and at Funchal, in the south.

Genus *EULOPHUS*, Geoffr.*Eulophus marginalis.*

*E. fœm.* cupreus; capite thoraceque antico viridibus; antennis nigris, clavatis, basi flavis, thorace brevioribus; abdomine elliptico, nigro-æneo, basi testaceo, apice æneo-viridi; pedibus testaceis; alis anticus subhyalinis, macula maxima subquadrata fusca ornatis.—Long. corp.  $1\frac{1}{4}$ - $1\frac{1}{3}$ , alar.  $2\frac{1}{4}$ - $2\frac{1}{2}$  lin.

Inhabits Madeira proper; occurring in the sylvan districts (Cruzinhos, Lombo de Vaca, &c.) of intermediate and lofty altitudes.

(Sectio II. Aculeata.)

Fam. *BETHYLIDÆ*.Genus *BETHYLUS*, Latr.*Bethylus linearis.*

*B. mas* niger; capite punctatissimo, thorace multo latiore; antennis pedibusque testaceis, illis capite haud duplo longioribus; thorace capite duplicato multo breviore; abdomine elliptico, thorace latiore et paulo longiore; alis subfuscis.—Long. corp.  $1\frac{1}{4}$ - $1\frac{1}{2}$ , alar.  $2-2\frac{1}{2}$  lin.

Inhabits Madeira proper, occurring at intermediate and lofty elevations;—Santa Anna, Lombo de Vaca, Fanal, &c.

*Bethylus latus.*

*B. mas* niger, præcedenti latior; capite punctatissimo, thorace multo

latiore; antennis pedibusque testaceis, illis apice fuscis, capite paulo longioribus; thorace capite paulo longiore; abdomine elliptico, thorace latiore et paulo longiore; alis subfuscis.—Long. corp.  $1\frac{2}{3}$ , alar.  $2\frac{1}{2}$  lin.

*Inhabits* Madeira proper, principally at intermediate altitudes;—Santa Anna, Ribeiro Frio, &c.

*Bethylus tenuis.*

*B. mas* niger; capite oblongo, parce punctato, thorace vix latiore sed multo breviore; antennis testaceis, apice fuscis, capite longioribus; abdomine longi-elliptico, thorace latiore et paulo longiore; pedibus testaceis, femoribus partim piceis; alis anticis subrufescensibus.—Long. corp.  $1\frac{1}{4}$ - $1\frac{1}{3}$ , alar.  $1\frac{1}{2}$ - $1\frac{3}{4}$  lin.

*Inhabits* the Northern Dezerta, or Ilheo Chão, on which I captured it abundantly early in June 1850, and at the end of May 1855.

[To be continued.]

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III.—*Notice of two new species of Brownia, a genus of Oceanic Mollusca.* By ARTHUR ADAMS, F.L.S.

Hong Kong, Oct. 1, 1857.

ON the 4th of July, steady breeze and fine weather, while crossing the China Sea, I was fortunate enough to take in the towing-net two new species of the genus *Brownia* of D'Orbigny. The typical species *B. Candei* is described as "lateraliter carinato-crenulata," and is probably the same as the *Echinospira diaphana* of Krohn, the *Calcarella spinosa* of Souleyet, and the *Jasonilla M'Leayiana* of Macdonald, all of which have the three salient angles of the whorls armed with short spines. In the species here described the whorls are unarmed, being carinated in one and angulated in the other. The forms described by Krohn, Souleyet, D'Orbigny, and Macdonald, may, however, be all distinct, forming a spinose section of the genus. Unfortunately the shells of my two species were found empty, with the exception of a transparent fragment in one individual of *B. carinata*, an examination of which, in conjunction with the form of the shell of these new species, has led me to infer, with M. D'Orbigny, that the animal is a Heteropod belonging to the family *Atlantidae*, and not to the *Macgillivrayidae*, where my brother and myself have placed the genus *Calcarella* of M. Souleyet. The shells are so perfectly diaphanous, that they are invisible in water, and were only detected by their adhering to the tongue of red bunting of the towing-net. D'Orbigny describes his *Brownia* as a section of the genus *Helicophlegma*, which is the same as the *Oxygyrus* of Benson and the *Ladas* of Cantraine.



Wollaston, Thomas Vernon. 1858. "Brief diagnostic characters of undescribed Madeiran insects." *The Annals and magazine of natural history; zoology, botany, and geology* 1, 18–28.

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