

I have taken as many as thirty-four perfect shells from one cup, showing that they are prolific.

They fix these cups in indentations and crevices and under overhanging parts of the rocks, and invariably on that side least exposed to the fury of the waves; and this circumstance shows that even in this animal the Great Author of all has implanted a sense of guarding its young from injury, proving his superintending care over all his creatures.

The accompanying drawings will illustrate the above statement:—

PLATE I. A.

Fig. 1. Nidi taken from under the whelk when in the act of forming it.

— 2. Nidi after the escape of the young.

— 3. Magnified view of the upper part or operculum when left by the whelk.

IX.—Descriptions of Chalcidites discovered near Conception, in South America, by C. Darwin, Esq. By FRANCIS WALKER, F.L.S.

Lampetatus Alexander, Mus. *Hæsa-viridis capreæ et cyaneæ varia, antennæ fulvi, pedes fulvi, alæ limpidae.*

Corpus breve, robustum, convexum, ante-viride, altens, scitissime squameum, paro hirtum: caput transversum, breve, viride, thorace paulo latius: vertex latus, frons impressa, abrupte declivis: oculi rufi, mediocres, non extantes: antennæ fulvi, subtiliformes, thorax non longior: articulus 1st nigro-viridia, longus, gracilis; 2nd longicrathiformis; 3rd et 4th brevissimis; 5th et sequentes usque ad 10th breves, approximatis, subaequalis; clava longicollis, compressa, acuminata, articulo 10th duplo longior: thorax evatus, capreæ-nervosus: prothorax brevisimus: metathorax scutum cyaneo-viride, longitudine latius: parapodium sutura bene determinata, postice approximate: scutellum subrotundum: parapoda et spinosa magna: metathorax mediocres, obconicus, declivis: petiolus sit longus: abdomen brevioratum, capreæ-varium, supra plenum, basi cyaneo-viride, thorace multo brevius: segmentum 1st magnum, 2nd et sequentes brevis: pedes fulvi, simplices, subaequalis; coxae virides; tarsi apice fuscæ: alæ angula, limpidae; squamula fuscæ: nervi fulvi; nervus humeralis ulnari fere duplo longior, radialis ulnari non brevis, cubitali multo longior; stigma minutum. (Corp. long. lin. 1; alæ, lin. 2.)

Gastracanthus Cephalon, Fern. *Caprea, antennæ nigrae, pedes late, femora basi nigra, alæ limpidae.*

Corpus capreæ, convexum, altens, scitissime squameum, paro hirtum: caput transversum, breve, thorace latius: vertex latus; frons impressa, abrupte declivis: oculi rufi, mediocres, non extantes: antennæ subclavatae, nigrae, sit graciles, subtiliformes, thorax non longior: articulus 1st longus, subtilaris; 2nd cyathiformis; 3rd et 4th minimi; 5th et sequentes usque ad 10th breves, approximatis, subaequalis; clava longicollis, acuminata, articulo 10th plus duplo longior: thorax evatus: prothorax transversus, mediocres, antice angustus: metathorax scutum longitudine latius: parapodium sutura bene determinata, postice approximate: scutellum subrotundum: metathorax brevis, postice angustus: petiolus brevissimus: abdomen ora-

tum, luteo, supra planum, subtus carinatum, apice acuminatum, thorace paullo brevius; pedes fulvi, simplices, subaequales; coxae virides; femora basi nigra; tarsi apice fusi; squamulae piceae; nervi fulvi; nervus humeralis ulnari multo longior, radialis ulnari paullo brevior, cubitali multo longior; stigma minutum. (Corp. long. lin. 4; alar. lin. 14.)

Pteromalas Calensis, Mus. *Abrco-viridia, abdominal cupreum, antennae nigrae, pedes fulvi, femora viridia, ale luteo-picea.*

Corpus levissimum, nitens-viride, nitens, subtilissime squameum, parochitum; caput transversum, breve, thorace latius; vertex latius; frons impressa, abrupte declivis; oculi rufi, mediocres, non extantes; antennae nigrae, subclavatae, thorace paullo longiores; articulus 1st longus, gracilis, 2nd longicostiformis; 3rd et 4th minimi; 5th et sequentes ad 10th subaequales; clava cincta, articulo 10th multo longior; thorax oratus; prothorax transversus, brevissimus; mesothoracis scutum longitudine latius; parapsidum naturae vix conspicere; scutellum obconicum; paraplecta magna; metathorax brevior, obsoletus, declivis; petiolus brevissimus; abdomen cupreum, sublineare, depresso, luteo, fere glabrum, thorace multo angustius et paullo brevius; pedes fulvi, simplices, subaequales; coxae virides; femora viridia, apice fulvi; tarsi apice fusi; mesotibiale fascie; metatibiale piceo-cincte; ale luteo-picea; squamulae piceae; nervi fusi; nervus humeralis ulnari duplo longior, radialis ulnari non brevior, cubitali paullo longior; stigma minutum. (Corp. long. lin. 1; alar. lin. 14.)

Dorostenus Albertas, Mus. *Viridia, antennae nigrae, pedes fulvi, ale fulvo-tincta.*

Corpus breve, convexum, viride, nitens, subtilissime squameum, parochitum; caput transversum, breve, thorace vix latius; vertex latius; frons impressa, abrupte declivis; oculi rufi, mediocres, non extantes; antennae graciles, submoniliformes, nigrae, apice acuminatae, thorace non longiores; articulus 1st longus, sublinearis; 2nd et sequentes usque ad clavam breves; thorax oratus, cupro-varius; prothorax brevissimus, supra non conspicuus; mesothoracis scutum longitudine latius; parapsidum naturae bene determinata, postice approximata; scutellum obconicum; metathorax magnus, declivis, obconicus; petiolus sat longus; abdomen brevioratum, luteo, fere planum, thorace multo brevius; pedes pallidi fulvi, graciles, subaequales; coxae virides; unguis et pulvilli fusi; ale fulvo-tincta, late; squamulae piceae; nervi fulvi; nervus ulnaris humerali multo longior, radialis vix ultus, cubitalis brevissimus. (Corp. long. lin. 4; alar. lin. 14.)

Chlosteroceps Cereus, Fem. *Viridia, abdominal discus purpureus, antennae nigrae, pedes nigri, tarsi fulvi, ale fulvo-nubilosa.*

Corpus sublineare, fere planum, luteo viride, nitens, subtilissime squameum, parochitum; caput transversum, brevissimum, impressum, thorace non latius; frons abrupte declivis; oculi rufi, mediocres, non extantes; antennae nigrae, graciles, submoniliformes, apice acuminatae, thorace paullo breviores; articulus 1st longus, sublinearis; 2nd et sequentes usque ad clavam breves, subaequales; thorax oratus; prothorax brevissimus, supra non conspicuus; mesothoracis scutum longitudine latius; parapsidum naturae non bene determinata; scutellum unco-viride, obconicum; metathorax brevis, postice angustus; petiolus brevissimus; abdomen ovatum, subtus carinatum, thorace brevius, non latius; discus purpureus; pedes nigri, simplices, subaequales; coxae virides; genita fulva; tibia apice flava; tarsi fulvi, apice fusi; ale sublimpida, ciliata, fascie obsolete nubilosae; squamulae piceae; nervi fulvi; nervus ulnaris humerali multo longior, radialis vix ultus, cubitalis brevissimus, in ale discum abrupte declivis; stigma minutum. (Corp. long. lin. 4; alar. lin. 14.)

Bellerus (N.G.) *Anastis* (Haliday MSS.), Mas. *Firidi*, *antennae nigrae,*
pedes virides, tarsi fusi, ale subfuscæ.

Corpus gracile, sublineare, convexum, viride, nitens, scissimè squameum, paros hirtum : caput transversum, brevissimum, thorace vix latus ; vertex non latus ; frons impressa, abrupte declivis : oculi rufi, mediores, non extantes : antennæ 12-articulatae¹, graciles, menilliformes, redorsum, verticillato-planae, corpore paucò breviora ; articulus 1st longus, sublinearis ; 2nd brevis ; 3rd et sequentes usque ad 9th verticillo setiferum ornati ; 3rd et sequentium quiske ad 9th gracillimi, linearis, apice ubi setæ incident in clavam globosum latecantes ; clava triradiata, fusiformis, acuminata : thorax longioris : prothorax transversus, setæ magnæ, antice angustus ; mesothoracis scutum longitudine latius ; parapodium sutura optime determinata, postice approximata : paraptera et spinula magna ; scutellum subovatum : metathorax medioris, obsoletus, declivis : petiolas brevissimas : abdomen sublineare, plenum, levæ, thorace angustius et multo brevius : pedes virides, simplices, subequalis ; trochanteres pisi ; genua fusa ; tarsi 4-articulati, fusi ; ungues et pulvilli nigrati ; pretarsus base levæ ; ale subfuscæ ; squamae planæ ; nervi fusi ; nervus ulnaris humerali multi longior, radialis humerali paucò brevior, cubitalis plus duplo longior ; stigma minutum. (Corp. long. lin. 4; alar. lin. 14.)

Tetrastichus *Nanulus*, Fem. *Aler, abdomen nigro-aneum, antennæ planæ,*
pedes fulvi, femora nigra, metastibilia fuscocincta, ale sublimpida.

Corpus validum, convexum, strum, nitens, levæ, paros hirtum : caput transversum, brevissimum, thoracis latitudine ; vertex non latus ; frons impressa, abrupte declivis : oculi rufi, mediores, non extantes : antennæ planæ, subclavatae, thorace non longiora ; thorax ovatus : prothorax brevissimus, supra vix conspicuus : mesothoracis scutum magnum, longitudine non latius ; parapodium sutura bene determinata, remota, postice approximata ; scutellum bisulcatum, semicirculum fugens : metathorax brevis, transversus, declivis : petiolas brevissimas : abdomen ovatum, nigro-aneum, supra planum, subitus carinatum, apice acuminatum, thorace paucò longius : pedes fulvi, simplices, subequalis ; coxa nigra ; femora nigra, apice fulva ; tarsi apice fusi ; metastibilia fuscocincta ; ale sublimpida, pubescens ; squamae planæ ; nervi fusi ; nervus ulnaris humerali fere duplo longior, radialis collitus, cubitalis non longus ; stigma minutum. (Corp. long. lin. 1; alar. lin. 14.)

Tetrastichus *Norax*, Fem. *Aler, antennæ planæ, pedes fusi, femora ali-*
gra, ale limpida.

Præcedens gracilior. Corpus sublineare, convexum, strum, nitens, levæ, paros hirtum : caput transversum, brevissimum, thoracis latitudine ; vertex non latus ; frons impressa, abrupte declivis : oculi rufi, mediores, non extantes : antennæ planæ, subclavatae, thorace non longiora ; articulus 1st niger ; thorax ovatus : prothorax brevissimus, supra vix conspicuus : mesothoracis scutum longitudine non latius ; parapodium sutura remota, bene determinata, postice approximata ; scutellum bisulcatum, semicirculum fugens : metathorax brevis, declivis : petiolas brevissimas : abdomen ovatum, supra planum, subitus carinatum, apice acuminatum, thorace non longius : pedes fulvi, simplices, subequalis ; coxa nigra ; femora nigra, apice fulva ; tarsi apice fusi ; ale limpida ; squamae planæ ; nervi fusi ; nervus ulnaris humerali duplo longior, radialis collitus, cubitalis non longus ; stigma minutum. (Corp. long. lin. 4; alar. lin. 14.)

of a Crinoid. It is further remarkable by deviating from the quinary type so prevalent in the *Echinodermata*: the lobes and ambulacra of this new genus are each four in number.

We have taken the number and arrangement of the plates surrounding the body as the leading characters on which to found our genera, as we have the variations in their form and other observable peculiarities, together with the number of rays or arms to distinguish the different species. Though the mouth of some of our species is central and but slightly protrusive, and in others it assumes the form of an elongated proboscis, yet we have not at present deemed this difference sufficient to found new genera on, when the plates surrounding the body agree in number, shape and general arrangement; nor have we separated those with the mouths placed laterally, if the other points coincide generally. Had these characters been acted on, we must have divided some long-established genera into no less than three, each differing in this particular. The question is however under consideration as to the propriety of continuing the present arrangement in the cases alluded to.

XIX.—*Descriptions of Chalcidites discovered by C. Darwin, Esq., near Valparaiso. By FRANCIS WALKER, F.L.S.*

Terymes Phormio, Fem. Viridi-niger, antennae nigrae, pedes rufi, femora viridia, ale sublimpida.

Corpus viridi-nigrum, convexum, nitens, scito squameum, parvo pubescens: caput transversum, levare, thorax vix latius; vertex sat latus; frons abrupte declivis, excavatis: oculi rufi, mediocres, non extantes: antennae nigrae, subclavatae, pubescentes, thorace paullo breviores; articuli approximati: thorax longi-ovatus: prothorax transversus, mediocris, antice non angustior: mesothoracis scutum latitudine paullo longius; parapodium subnatum bene determinata, postice approximata; scutellum subrotundum: metathorax mediocris, declivis, obconicus: pedibus brevissimum: abdomen longi-ovatum, subcompressum, subtegula carinatum, thorace paullo brevius: oviductus exsertus, rufus; vaginis nigrae, abdomine vix breviores: pedes pallide rufi; coxae virides; femora viridia; unguis et pulvilli fuscus; metafemora subnasus undulata, metathorax pallide fuscus, apice spina longa arcuata armata: ale sublimpida; squamulis paucis; nervi rufi; nervus humeralis tibiali fore duplo longior; radialis tibiali brevior, cubitalis brevissimum; stigma minutum. (Corp. long. lin. 14; ale. lin. 24.)

Callinotus Nonseris, Fem. Viridi-cyanum, antennae nigrae, pedes fusi, femora nigris, ale sublimpida.

Corpus viridi-cyanum griseo-viridum, convexum, scito squameum, parvo nitens, parvo pubescens: caput transversum, levare, thorax latitudine: vertex sat latus; frons abrupte declivis: oculi rufi, mediocres, non extantes: antennae nigrae, validae, clavatae, pubescentes, thorace non longiores: thorax longi-ovatus: prothorax sat magno longitudine paullo latius, antice angustior: mesothoracis scutum latitudine paullo longius; parapodium subnatum bene determinata, postice approximata; scutellum subrotundum: metathorax

mediocres, declivis, obconicus : petiolus brevissimus : abdomen ovatum, sub-compressum, nitens, subitus carinatum, thorace paullo brevius et angustius : oviductus rufus ; vagina nigra, abdominis longitudine : pedes fusi ; coxae virides ; femora viridia ; tarsi pallide fusi : ale sublimpidae ; squamulae virides ; nervi piezi ; nervus humeralis ulnari longior, radialis ulnari multo brevior, cubitalis brevissimus ; stigma minutum. (Corp. long. lin. 1 ; alar. lin. 14.)

Callimone Eumeia, Mas. *Piridi-eugenae*, antennae nigrae, pedes nigro-fusi, femora viridia, ale sublimpidae.

Corpus sublineare, convexum, viridi-cyanum, scutellum squatum, parum nitens, parco pubescens : caput transversum, breve, thorace paullo latius ; vertex sat latus ; frons abrupte declivis : oculi rufi, medieores, non extantes : antennae nigrae, crassae, thorace vix longiora : thorax longi-ovatus : prothorax transversus, brevis : mesothoracis scutum longitudinaliter vix latius ; parapodium sutura sat bene determinata ; scutellum subovatum : metathorax obconicus, medieores, declivis : petiolus brevissimus : abdomen sublineare, supra planum, thorace brevius : pedes simplices, subaequales, virides ; trochanterae piezi ; genua fusi ; tibiae nigrae ; tarsi fusi : ale sublimpidae ; squamulae piezi ; nervi fusi ; nervus humeralis ulnari multo longior, radialis ulnari brevior, cubitalis brevissimus ; stigma minutum. (Corp. long. lin. 2₁ ; alar. lin. 14.)

Amphe vulgaris Forn. *Micra*, abdomen atra, antennae nigrae, pedes fuscoc-flavi, femora nigro-cincta, ale limpidae.

Amphe vulgaris, Est. Mag.

Corpus convexus, antennae, nitens, fere levigata, parco pubescens : caput transversum, breve, thorace paullo latius ; vertex sat latus ; frons impressa, abrupte declivis : oculi piezi, medieores, non extantes : antennae nigrae : thorax longi-obconicus : prothorax transversus, medieores : mesothoracis scutum longitudinaliter latius ; parapodium sutura sat bene determinata, postice approximate fere condivites ; scutellum subconicum : metathorax obconicus, declivis, medieores : petiolus gracilis : abdomen longi-ovatum, atra, levigata, glabrum, subitus carinatum, spica acuminatam, thoracis longitudinaliter : pedes simplices, subaequales, flavi ; coxae aeneae, femora nigro-cincta ; tarsi apico fusi ; mesothibia et metathibia pallide fusi : ale limpidae ; squamulae piezi ; nervi fulvi ; nervus humeralis ulnari multo longior, radialis ulnari brevior, cubitali longior ; stigma minutum. (Corp. long. lin. 4 ; alar. lin. 14.)

Lanprostetus Cecina, Forn. *Cyaneus*, antennae nigrae, pedes fusi, femora fuscoc-cincta, ale limpidae.

Corpus convexum, cyanum, scutellum squatum, parum nitens, parco pubescens : caput transversum, breve, thoracis latitudine ; vertex sat latus ; frons impressa, abrupte declivis : oculi medieores, non extantes : antennae nigrae : thorax ovatus : prothorax brevis, antice angustior : mesothoracis scutum transversum : parapodium sutura sat bene determinata ; scutellum obconicum ? metathorax declivis, medieores, obconicum : petiolus sat longus : abdomen ovatum, nitens, levigata, fere glabrum, supra convexum, subitus carinatum, thorace brevius : pedes simplices, subaequales, flavi ; coxae virides ; femora fuscoc-cincta ; tarsi apico fusi : ale limpidae ; squamulae piezi ; nervi fusi ; nervus humeralis ulnari multo longior, radialis ulnari brevior, cubitali longior ; stigma parvum. (Corp. long. lin. 1 ; alar. lin. 14.)

Lyrus (n. p.) *Origa*, Forn. *Nigro-eugenae*, antennae nigrae, pedes fusi fuscoc-cincti, ale sublimpidae.

Corpus breve, crassum, convexum, nigro-cyanum, scutellum squatum, parum nitens, parco pubescens : caput transversum, breve, thoracis latitudine ; vertex latus ; frons abrupte declivis, vix impressa : oculi rufi, medio-

creas, non extantes: antennae subolivaceae, graciles, 2nd-articulatae nigrae, thictae, paucilo longiores; articulus 1st longus, geniculatus; 2nd longi-cylindricus; 3rd et sequentes breves; clava fusiformis: thorax brevi-ovatus: prothorax transversus, brevissimus: mesothoracis scutum longitudine latius; parapsidum suture non bene determinata, postice approximate; scutellum obconicum: metathorax longi-obconicus, declivis: petiolae brevissimae: abdogen ovatum, nitens, breva, supra planum, subtus carinatum, apice acuminatum: thorace paucilo angustius, vix longius: pedes graciles, simplices, subsequales, fusi; coxae nigrae; gemma fulva; tibiae apice basique fulvae; tarsi fulvi apice fusi, articulus 1st longus, 2nd multo brevior, 3rd adhuc brevior, 4th 3rd longior; unguis et paleilli minutus: ala sublimpida, mediocres; coxae pieae; nervi fulvi; nervus humeralis ulnari multo longior, radialis ulnari longior, cubitalis longissimus ulnari vix brevior. (Corp. long. lin. 4; alas. lin. 1*1*.)

Pteromalus Gryneus, Fem. *Cupressa*, *antennae pieae*, *pedes fusi*, *ala limpida*.

Corpus expreum, convexum, apiculatum squamatum, parum nitens: caput thorace vix latius, subtus exco-viride; vertex sat latius; frons abrupte declivis, excavata; scull pieci, mediores, non extantes: antennae pieae, subclavatae, thorace non longiores: thorax ovatus: prothorax brevissimus, super vix conspicuum: mesothoracis scutum transversum; parapsidum suture vix conspicuum; scutellum sat magnum, subestundrum: metathorax brevis, declivis, postice angustius: petiolae brevissimae: abdomen ovatum, nitens, lutea, fere glabrum, supra planum, subtus carinatum, apice acuminatum, thorace paucilo angustius, vix longius: pedes fusi; coxae virides; tarsi apice fusi: ala limpida; squamula fulva; nervi fulvi; nervus humeralis ulnari multo longior; radialis cubitali multo longior, ulnari non brevior; stigma minutum. (Corp. long. lin. 1; alas. lin. 1*1*.)

Entedon Bedius, Mas. *Aeneo-viride*, *abdomen basi viridi-cyanum*, *antennae nigrae*, *pedes fusi*, *ala flavescens*.

Corpus convexum, late viride, azoo-varium, nitens, apiculatum squamatum, parae pubescens: caput transversum, breve, thorace paucilo latius; vertex sat latius; frons impressa, abrupte declivis: oculi rufi, mediores, non extantes: antennae nigrae, lutea, setaceae, thorace non longiores; articulus 1st longus, gracilis; 2nd et sequentes breviores, lineares; thorax ovatus: prothorax brevissimus, supra vix conspicuum: mesothoracis scutum longitudine latius; parapsidum suture bene determinata, postice approximate; scutellum magnum, subovatum: metathorax magnus, obconicus, declivis: petiolae longae, cylindricus: abdomen brevi-ovatum lutea, glabrum, quasi contractum, basi viridi-cyanum, subtus convexum, thorace brevius; segmentum 1st maximum, 2nd et sequentes breviora: pedes graciles, simplices, subsequales, pallide fusi; coxae virides; tarsi apice fusi: ala flavo-tincta, sat late; squamula fusa; nervi fulvi; nervus ulnaris humerali fere duplo longior, radialis humerali brevior, cubitalis brevissimus; stigma minutum. (Corp. long. lin. 1; alas. lin. 2.)

Ectedon Flaccilla, Mas. *Viride*, *eyaceo esti cupreo varium*, *antennae nigrae*, *pedes fusi*, *ala flavo-limpida*.

Corpus convexum, late viride, nitens, apiculatum squamatum, parae pubescens: caput transversum, breve, viridi-eyaceum, thorace paucilo latius; vertex sat latius; frons abrupte declivis: oculi rufi, mediores, non extantes: antennae nigrae, graciles, subfiliformes, thorace paucilo breviores; articulus 1st gracilis, subclavata; 2nd et sequentes ad 3rd breviores, subsequales; clava fusiformis, acuminata, articulo 3rd multo longior: thorax ovatus: prothorax brevissimus, supra vix conspicuum: mesothoracis scutum longitudine latius; parapsidum suture bene determinata; scutellum viridi-eyaceum, subovatum:

metathorax magnum, declivis, obconicum : petiolum sat longus : abdomen brevi-ovatum, leve, fere glabrum, subtas convexus, basi viridi-cyanum, thorace brevius : pedes pallide flavi, graciles, simplices, subaequales ; coxae virides ; tarsi apice fusi : ale flavo-vix tinctae ; squamulae fuscæ ; nervi fulvi ; nervus ulnaris humerali multo longior, radialis brevis, cubitalis brevissimus ; stigma minutum. (Corp. long. lin. §; alar. lin. 1.)

Par. ♂.—Antennæ articulis 1st basi flavus : ale flavescentes.

Par. ♀.—Corpus cupro-varium.

Found also in Valdivia.

Eulophus Ichneus, Fem. *Nigro-crenæ, pedes fusi, ale sublimpida.*

Corpus sublineare, convexum, nigro-crenatum, nitens, sole squamatum, parœ pubescens : caput transversum, breve, thoracis latitudine ; vertex sat latus ; fronta impressa : oculi rufi, mediores, non extantes : antennæ ademptæ : thorax longi-ovatus : prothorax transversus, mesothorax angustior : metathorax scutum longitudine latius ; parapodium extensum sat bene determinatum : scutellum magnum, subquadrumatum, postice latius : metathorax declivis, obconicus, medioricta : petiolus brevissimus : abdomen longi-ovatum, leve, supra planum, subtas carinatum, apice acuminatum, thoracæ vix longius : pedes simplices, subaequales, fusi ; coxa nigra ; genæ fulva : ale sublimpida, squamulae piceæ ; nervi fulvi ; nervus ulnaris humerali longior, radialis humerali brevior, cubitali longior ; stigma parvum. (Corp. long. lin. 1; alar. lin. 15.)

Genus *Tetraspilus*, Holliday.

A genus formed of *Cirrospilus Lycides* (Mon. Chal. I. 295.) and other species.

Tetraspilus Polyphemus, Mas & Fem. *Ater, antenæ nigra, pedes nigro-fusi
fuso-cincti, ale limpida.*

Corpus sublineare, convexum, aitrum, nitens, leve, fere glabrum : caput transversum, brevissimum, thorace paulo latius ; vertex latus ; fronta impressa, abrupte declivis : oculi mediores, non extantes : antennæ filiformes, pilosa, nigra, graciles, thorace longiores : thorax ovatus : prothorax brevissimus, supra non conspicuus : mesothoraci scutum latum ; parapodium subtante remota, bene determinata, postice approximata ; scutellum obconicum, medioricta, bicarinatum : metathorax declivis, obconicus : petiolus brevissimus : abdomen sublineare, depresso, thorace angustius, non longius : pedes gracieles, subaequales, nigrae ; tibiae fusi ; tarsi flavi, apice fusi ; pretibiale flavum : ale limpida, leua, ciliata ; squamulae piceæ ; nervi fusi ; nervus humeralis ulni multo brevior, radialis nullus, cubitalis sat longus, stigma minimum.

Fem. Caput thoracis latitudine ; abdomen longi-ovatum, subtas carinatum, apice acuminatum, thorace longius. (Corp. long. lin. §—§; alar. lin. §—§.)

Tetraspilus Scutulus, Fem. *Piridis, antenæ piceæ, pedes flavi, femora viridia, ale limpida.*

Corpus crassum, convexum, obscurè viride, subtilissime squamatum, parœ nitens, parœ pubescens : caput transversum, breve, thoracis latitudine ; vertex sat latus ; fronta abrupte declivis : oculi rufi, mediores, non extantes : antennæ piceæ, clavatae, pubescentes, thorace paulo breviores ; clava triangularis, crista, acuminata, articulo precedente latior et plus duplo longior : thorax ovatus : prothorax transversus, medioricta : metathoraci scutum latum ; parapodium scutum bene determinatum : scutellum obconicum, bicarinatum : metathorax brevis, obconicus, declivis : petiolus brevissimus : abdomen longi-ovatum, nitens, supra convexum, subtas carinatum, apice acuminatum, thorace parallo longius et angustius ; segmenta transversa, subaequa-

lia : pedes flavi ; couae virides ; trochanteres picei ; femora viridia, apice ferræ ; tarsi apice fuscæ ; alas limpidæ ; squamulae piceæ ; nervi fulvi ; nervus ulnaris humerali multo longior, radialis nulla, cubitalis ut longus ; stigma minimum. (Corp. long. lin. 4 ; alar. lin. 14.)

XX.—*Short notice of a Botanical Trip to the Highlands of Scotland.* By Professor J. H. BALFOUR, M.D.

This trip was made in August last, along with my friend Mr. Babington and several of my pupils. We first visited the Clova district, and collected most of the rare alpine plants which are known to exist in that part of the Grampian range. *Souciæ alpinæ* was found in a new locality in Glen Dole. The cliff on which *Astragalus alpinus* used to be found abundantly was examined with care, but only two or three specimens of the plant were seen.

From Clova we proceeded by Glen Callaten to Brechin, and made several botanical excursions in the neighbourhood of Castleton.

In our ascent of Ben Aven, one of the lofty mountains in the Brechin district, we examined a hill called Little Craigindal, which deserves notice on account of the number of good alpine plants which it furnished. The hill has a rounded contour, is readily accessible, and is composed of loose dry granitic and micaceous rocks. We were delighted to find upon it *Astragalus alpinus* in great abundance, both in flower and fruit. In some places the turf was actually composed of this plant. *Carex rupestris* was also growing beside it in large quantity. The other plants seen on this hill were, *Thlaspium alpinum*, *Viola palustris*, *Silene acaulis*, *Dryas octopetala*, *Potentilla alpestris*, *Rubus chamaemorus*, *Alchemilla vulgaris*, *B. subsericea*, *Epilobium alpinum* and *alpinofolium*, *Sedum Rhodiola*, *Saxifraga oppositifolia*, *alcooides* and *stelleri*, *Cornus canadensis*, *Hieracium alpinum* and *marorum*, *B. pulmonaria*, *γ. Lawsonii*, *Saussurea alpina*, *Gnaphalium supinum*, *Vaccinium uliginosum*, *Arctocephalus Uva-ursi*, *Azalea procumbens*, *Pyrola media* and *secunda*, *Veronica Chamaedrys*, var. *hirsuta*, and *V. serpyllifolia*, *B. humifusa*, *Trientalis europaea*, *Armeria maritima*, *B. alpina*, *Oxyria reeiniformis*, *Salix herbacea* and *myrsinifolia*, *B. arbutifolia*, *Betula nana*, *Listera cordata*, *Tofieldia palustris*, *Juncus trifidus* and *triglauis*, *Larula spicata*, *Carex rigida*, *capillaris* and *pasciflora*, *Aira alpina*, *Lycopodium alpinum*. The hill at first sight appeared to be very unpromising in a botanical point of view, not presenting any of those wet, disintegrating, micaceous cliffs, on which the best alpine plants in Scotland are found; and I have therefore de-

tailed fully all the plants which were observed, with the view of calling the attention of botanists to many hills of a similar nature which occur in the Braemar district, and which I fear have been overlooked. Much still remains to be done in that part of Scotland, and I have no doubt that many of the plants hitherto considered as confined to the Clova range will, on careful examination, be detected on the Braemar hills. On reaching the summit of Ben Aven we gathered *Luzula arcuata* in considerable quantity.

In all the alpine districts which we visited, we met with numerous varieties of *Hieracium alpinum*, *Halleri* and *Lowsoni*. These require to be carefully studied, and I trust that ere long Mr. Babington will give us the result of his examination.

On leaving Braemar Mr. Babington and I proceeded to Dingwall, with the view of botanizing on some of the Ross-shire mountains. On Ben Wyvis we saw luxuriant specimens of *Arctostaphylos alpina*, growing in a damp situation more than 1000 feet below the summit. In the other districts of Scotland in which I have picked this plant, I have generally found it on the dry stony summits of the mountains. The other plants found on Ben Wyvis are not of such importance as to deserve notice. The mountain is not rich in alpine species, a character which it appears to possess in common with most of the other hills in Ross-shire.

We returned to Glasgow by the Caledonian Canal and Inverary, and picked *Potamogeton plantagineus* in several localities near Oban, and a variety of *Hieracium prenanthoides*, without a ray on the shores of Loch Long near Arrochar.

XXI.—*Excerpta Zoologica: On Metamorphoses among Intestinal Worms.* Communicated by W. FRANCIS, Ph. D., A.L.S.*

M. MIESCHER found *Filaria piscium* especially frequent in the following fish exposed for sale in the Paris market: in *Trigla Gurnardus*, *Lyra*, *Cynosus*, and *Sisentis*, in *Traquinius Draco* and *Gaster Merlangus*. The *Filariae* were partly free in the ventral cavity; some lie beneath the peritoneal coverings of the different intestines, between the layers of the mesentery beneath the peritoneum of the ventral walls,

* The present notice, which was alluded to in the last Number of this Journal, p. 48, is taken from Dr. Th. von Sibbold's valuable report on the investigations in Helminthology during 1840, and published in Wiegmann's 'Archiv,' parts 4 and 5 for 1841. It not only furnishes the results of Miescher's interesting discoveries, but also draws attention to similar investigations by Leblond and Dr. Richold. Miescher's paper is published in the Reports of the Proceedings of the Naturalists' Society in Bâle.

p. 221. This is a species observed by Steller and Gmelin, which I have not yet seen, and which, from Pallas's description, may probably be a species of *Cygnus*.

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3. *Anas falcaria*, Lath. Ind. Orn. p. 860; *Anas falcirostris*, Pall. Zoogr. vol. ii. p. 239. A very beautiful species, of which I have given a very detailed description in my work 'Descriptiones et Icones Animalium Rossicorum,' Arca, fasc. i. p. 21, pl. 3.

4. *Anas formosa*, Georgi, Reise, vol. i. p. 168; Lath. Ind. Orn. vol. ii. p. 876. = *Anas glaciata*, Pall. Zoogr. vol. ii. p. 261. I have also given a full description of this bird in the same work*.

5. *Anas peregrina*, Gmel. Reise, vol. ii. p. 183. pl. 16; *Anas gmelini*, Lath. Ind. Orn. vol. ii. p. 876, appears to me to = *Anas syriaca*, juv.

6. *Anas heineckii*, Gm. Reise, vol. iii. p. 249. pl. 26; Lath. Ind. Orn. vol. ii. p. 877. = *Anas strepera*, according to Pallas, Zoogr. vol. ii. p. 264, in which opinion I concur.

B. Thalassares.

1. *Procellaria aequinoctialis*, S. Kuril Petrel, Lath. Ind. Orn. p. 821; *Procellaria aequinoctialis*, Pall. Zoogr. vol. ii. p. 314. = *Puffinus curvirostris*, mihi in Museo Academicoo.

2. *Procellaria fuscata*, Lath. Ind. Orn. p. 825; *Procellaria orientalis*, Pall. Zoogr. vol. iii. p. 315. = *Thalassidroma fuscata*, mihi in Museo Academicoo. A well-marked species, of which I intend publishing a full description accompanied by a figure.

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1. *Pelecanus violaceus*, Gm. Syst. vol. i. p. 575; Lath. Ind. Orn. vol. ii. p. 888. = *Carbo violaceus*, mihi, Carbonum Monographia, MSS. A very distinct species, which will shortly be described and figured with accuracy by myself.

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XX.—Descriptions of Chalcidites found near Lins by C. Darwin, Esq. By FRANCIS WALKER, Esq., F.L.S.

Dicyclus Arbutina, Fem. *Ater, abdomen arseni, ostensus nigra, pedes flavo-fusca, ait limpida.*

Corpus breve, convexum, aitrum, aite squameum, parum nitens, parce hirtum: caput transversum, breve, thorax paulo latius; vertex latus; frons

* The above two beautiful species of Teal, *Querquedula falcaria* and *Querquedula formosa*, may now be seen in the Chinese Exhibition at Hyde Park Corner (Nos. 864 and 884 of the catalogue). M. Brandt appears to consider *Q. formosa* to be identical with *Anas glaciata*, Pall., the "Bimaculated Duck" of British authors. The latest authors, however, regard them

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XX.—Descriptions of Chalcidites found near Lima by C. Darwin, Esq. By FRANCIS WALKER, Esq., F.L.S.

Dicyclus Arcturus, Fem. *Ater, abdito anum, antennae nigrae, pedes flavo-fasciati, alis lippidae.*

Corpus breve, convexum, strum, scit squamatum, parum nitens, pars hirtum; caput transversum, breve, thorace paullo latius; vertex latus; frons

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impressa, abrupte declivis : oculi picci, mediores, non extantes : antennae nigrae, submoniliformes, extremitum crassiores, thorace non longiores ; articulus 1^o longus, gracilis ; 2^o cyathiformis ; 3^o et 4^o minimi ; 5^o et sequentes breves, usque ad 10^o paullo curvantes ; clava longicollis, acuminata, articulo 10^o plus duplo longior : thorax evatus : prothorax transversus, brevis : mesothorax scutum longitudine latius ; parapsidium scutum non bene determinatum ; scutellum brevi-conicum : metathorax sat magnum, obconicus, declivis : petiolas sat longas : abdomen angustum, subtriundatum, fere planum, nitens, leve, glabrum, thorace multo brevius ; segmentum 1^o magnum, 2^o et sequentia brevia : pedes nigri, simplices, subaequales ; trochanteres picci ; femora apice flavae ; tibiae fulva, apice basique flavae ; tarsi flavi, apice fuscii : alas limpidae ; squamulae picci ; nervi flavi ; nervus humeralis ulnari fere duplo longior, radialis ulnari via brevior, cubitali multo longior ; stigma minutum. (Corp. long. lin. 1 ; alas. lin. 14.)

Pachylarthrus Cleodora, Mac. *Viridis, abdomen caputum, antennae fulvae, pedes flavi, alas limpidae.*

Corpus concreatum, viride, nitens, scitissime squameum, parse hirtum ; caput concreatum, breve, thorace paullo latius ; vertex latius ; frons impressa, abrupte declivis : oculi rufi, mediores, non extantes : pulpi maxillares fulvi, elongati : antennae fulvae, extremitum crassiores, thorace paullo longiores ; articulus 1^o longus, gracilis ; 2^o fuscum, longicyathiformis ; 3^o et 4^o minimi ; 5^o et sequentes breves, usque ad 10^o paullo curvantes et latecantes ; clava finiformis, pallide flavae, articulo 10^o paullo latior et plus duplo longior : thorax evatus : prothorax transversus, medioris, antice angustus : mesothorax scutum longitudine latius ; parapsidium scutum non bene determinatum ; scutellum subconicum : metathorax medioris, declivis, obconicus : petiolas breviae : abdomen caputum, brevioratum, leve, depresso, fere glabrum, thorace breviorum : pedes flavi, simplices, subaequales ; coxae virides ; tarsi apice fuscii : alas limpidae ; squamulae picci ; nervi flavi ; nervus humeralis ulnari fere duplo longior, radialis ulnari via brevior, cubitali multo longior ; stigma minutum. (Corp. long. lin. 3 ; alas. lin. 14.)

Pteromalus Archia, Mac. *Niger, antennae nigrae, pedes rufi, femora nigrae, alas fuscæ.*

Corpus sublineare, concreatum, nigrum, obscurum, pubescens, scitissimum squameum : caput transversum, breve, thorace latitudine ; vertex sat latius ; frons impressa, abrupte declivis : oculi picci, mediores, non extantes : antennae nigrae, sublineares, pubescentes, thorace non longiores ; articulus 1^o longus, gracilis ; 2^o cyathiformis ; 3^o et 4^o minimi ; 5^o et sequentes usque ad 10^o breves, subaequales, approximatis ; clava subconica, articulo 10^o multo longior : thorax evatus : prothorax transversus, brevis, antice angustus : mesothorax scutum longitudine latius ; parapsidium scutum non bene determinatum ; scutellum subconicum : metathorax medioris, declivis, obconicus : petiolas brevissimæ : abdomen sublineare, depresso, nitens, leve, fere glabrum, thorace paullo brevior, non latius : pedes obscure rufi, simplices, subaequales ; coxa nigra ; trochanteres picci ; femora nigrae, apice rufa ; tarsi apice obscuriores : alas fuscæ ; squamulae picci ; nervi picci ; nervus humeralis ulnari duplo longior, radialis ulnari longior, cubitali multo longior ; stigma sat magnum. (Corp. long. lin. 1½ ; alas. lin. 2.)

as distinct (see Temm. Man. Orn. pt. 4. p. 526, and Yarell, Brit. Birds, vol. iii. p. 163), and it appears that European specimens never exhibit the peculiar plumage of *Acanthocephala*. The subject, however, requires further investigation.—(H. E. S.)

Enteden (*Hemisenus*, n.g. Holiday MSS.) Cledora, Fem. *Aeoo-ster*, *astenae nigra*, *pedes fulvi*, *sensora nigra*, *ala hispida*.

Corpus angustum, concresum, cuneo atrum, nitens, levigatum; caput transversum, brevissimum, thymus non latius; vertex sat latius; fronte impressa, absente declivis: oculi redi, sat magni, non extantes: antennae nigrae, submoniliformes, extremitate crassiores, thorace non longiores; clava fusiformis, acuminata, articulo precedente plus duplo longior; thorax longioratus: pectus transversus, brevis, antice angustus: metathoracis scutum transversum, latum; parapodium subarcuatum non bene determinatum; scutellum subtriangulariforme, medianum, postice latum; paraptera et epimera magna: metathorax sat magnus, declivis, obconicus, nigro-viridis: petiolae brevia, crassissimae: abdomen ovatum, concresum, subtruncatum, spicis acuminatum, thorace paulo brevius; segmentum 1st maximum; 2nd et sequentia brevissima: pedes fulvi: osse nigrae; sensora nigra, spicis fulva; tarsi 4-articulati; articulus 1st brevis; ungues et palvilli minuti: ala limpida, hirsuta; squamulae plieae; nervi fulvi; nervus alaris humerali duplo longior, radialis vix illius, cubitalis brevissimus; stigma minimum. (Corp. long. lin. 14; alar. lin. 2.)

[To be continued.]

XXI.—Descriptions of some new genera and species of Mammalia in the British Museum Collection. By J. E. GRAY, Esq., F.R.S., Keeper of the Zoological Collection in the British Museum.

Fam. VESPERTILIONIDÆ.

Moris (n. g.) *Vesperilionina*? Cutting teeth $\frac{1}{2}$, the upper oblique, far apart; wings thin; head small, hairy; forehead flattened, rather concave in front; lips rather thick, lower with a triangular wart in front; nose rounded; nostrils apical, roundish, not produced, and without any groove on its hinder edge; ears moderate, lateral; tragus elongate, well-developed; interfemoral membrane large, truncated; heel-bone rather long; tail slender, tip produced on the middle of the upper surface of the membrane; hind feet small; wings from the base of the toes.

This genus has all the external appearance of a *Vesperilio*, but it has the tail of an *Eptesicus*; it differs from that genus in the nose not being produced and truncated, and the nostrils not tubular. It appears to be the link between the *Vesperilioninae* and the *Nostidiinae*.

Moris nigrescens. Fur brown, rather paler below; wings blackish; tragus elongate, linear, blunt. Length of body, 1½ inch.

Hab. South America? Capt. Belcher, R.N.

This may be the *Vesperilio* *cousini* of Prince Neuwied, *Eptesicus* *cousini* of Temm.; but the tragus of that species is described as very short, broader above and with a constriction at the base, and the animal as considerably larger.

Kerivoulus Brasiliensis. Blackish; hairs with brownish tips, beneath rather paler; ears large, acute, best back.

Hab. Brazil.

FAM. FELIDÆ.

Mustela Harafeldii. Uniform dark blackish brown, very little paler beneath; middle of the front of the chin and the lower lips white; whiskers black; tail slender, blacker, half as long as the body and head.

Var., ? Throat with a large white spot, chin all white. Mus. East India Company.

Hab., Bhutan, India.

This species differs from *P. sublennachinus*, Hodgson, in the dorsal line not being darker; from *M. Caudia*, now *M. carriester*, of the same author, in the much darker colour; and from *M. sibirica*, in the face not being varied with black, and in the general colour being much darker.

Mustela santhegensis, Yellow-cheeked Weasel. Bright chestnut, beneath golden yellow; chin, small spot above the angle of the mouth, and feet white; spot under the ear yellowish white; spot behind the angle of the mouth towards the throat chestnut; end of tail black.

Hab., California, Capt. Belcher, R.N., C.B.

Rather larger than *M. erminea*; the upper lip and spot on side of the head chestnut, and spot under the ears whitish.

Mustela Hodgsoni, Hodgson's Wiesel. Fur yellowish brown, rather paler beneath; upper part and side of head much darker; face, lips, chin and throat varied with white; tail elongate, rather bushy, rather more than half as long as the body and head.

Var., Rather darker, white extended to between the eyes.

Hab., India, Himalaya.

This species does not agree with either of those described by Mr. Hodgson*.

Vulpes flavescens. Pale yellowish, back rather darker; face and outer side of fore legs and base of tail pale fulvous; spot on side of face just before the eyes, the chin, the front of fore legs, a round spot on the upper part of hind foot, and the tips of the hairs of the tail, blackish; the ears externally black; end of tail white.

Hab., Persia.

LUTRÆ.

The species of this genus are said to be extremely difficult to determine, but this appears to arise from sufficient attention not having been paid to organic characters which are of a permanent description. They may be thus divided into genera or subgenera:—

A. Hind and front feet similar in size; tail tapering, acute, elongate.

1. *Lutra*. Muffle hairy; soles of hind feet half naked; claws distinct. *L. caudensis*, *L. brasiliensis*.

2. *Lutre*. Muffle bald, oblong, transverse; claws distinct; soles half naked. *L. vulgaris*, *L. indica*, *L. chinensis*.

* Neither of these Indian species are amongst Mr. Hodgson's collection of Nepaul animals which he has just presented to the British Museum preparatory to their being published by Mr. F. Howard.

especially after Brongniart's statement in reference to the stigmatic tissue as the proper passage for the pollen tubes, to advance the opinion that they "penetrate the interspaces between the hairs;" and I would ask, is not the cuticle a barrier to any such penetration? If the fact be as he supposes, I consider it quite capable of being demonstrated by careful and minute dissection. The formation of pollen tubes is by no means conclusive; for Mr. Hassall has elsewhere said (p. 103) that this occurs "on parts of the flower distant from the stigma." In one case I observed a cluster of pollen granules upon the style, with pollen tubes so completely interlaced as to form an entangled mass of flocculent matter; but none of these tubes seemed to have any intimate connexion with the style. I dare not even assert that they were not produced under the influence of the stigmatic fluid; for, since the publication of my paper, I have seen that the stigmatic branches ultimately become revolute, and their papillose surfaces are thus brought into contact with the pollen adhering to the style; but this takes place long after the emission of the pollen, so that it is difficult to regard the evolution of the stigmatic branches as marking the precise time of fecundation.

Mr. Hassall's intended experiment on the flowers of *Campanula pyramidalis*, interesting as it will be, will not prove that fecundation is not effected by means of the collecting hairs. In opposition to Brongniart, I have shown that they are really the recipients of the pollen granules, and that traces of a foramen exist at the extremity of each hair which has performed its function. I cannot suppose that all this singular mechanism is intended merely to astonish the microscopic observer, and the conclusion is to my mind irresistible, that there must be an important relation between this function of the hairs and the fecundation of the plant; and this even if the pollen tubes cannot be traced from the base of the hair to the ovarium. Notwithstanding all that has yet been advanced on the subject, I confess myself to be somewhat sceptical as to the necessity for the introduction of pollen tubes into the ovarium of any plant.

I have only to add, that subsequent observations on the flowers of another species, *Campanula Rapunculoides*, confirm what I have already published in the 'Journal of Botany' on this subject.

W. WILSONS.

January 18, 1843.

XXX.—Descriptions of Chalcidites discovered in the Isle of Chonos by C. Darwin, Esq. By FRANCIS WALKER, Esq., F.L.S.

Larprotatus Numinus, Mas. Niger, abdomen caeruleum, antennae nigrae, pedes fulvi, femora nigra, alis sublimpidae.

Corpus breve, convexum, nigrum, parvo nitens, scutellum squamatum, parco hirtum : caput transversum, breve, thorace latitudine ; vertex latus ; frons impressa, abrupte declivis : oculi rufi, mediores, non extantes : antennae nigrae, graciles, filiformes, thorace non longiores; articulus 1^o longus, gracilis; 2^o longicyathiformis; 3^o et 4^o minimi; 5^o et sequentes breves, usque ad 10^o paulo curvantes; thorax longi-ovatus : prothorax transversus, brevis, artice angustus : mesothoracis scutum longitudine latius ; parapsidum scutum bene determinatae, postice approximatae ; paraptera et spinulae magna ; scutellum subconicum : metathorax brevis, declivis, postice angustus : petiolus brevis ; abdomen senectum, brevi-ovatum, nitens, leve, glabrum, thorace multo brevius ; segmentum 1^o magnum ; 2^o et sequentia brevissima : pedes fulvi, simplices, subsequales ; coxae nigrae ; femora nigra, apice fulvi ; tarsi apice fusi ; alis sublimpidae ; squamulae piceae ; nervi fusi ; nervus humeralis ulnari fore duplo longior, radialis ulnari non brevier, cubitali multo longior ; stigma parvum. (Corp. long. lin. 1 $\frac{1}{2}$; alar. lin. 2 $\frac{1}{4}$.)

Pteromalus? Oxyntes, Fem. Ater, antennae nigrae, pedes nigri, tarsi fusi, alis subfusca.

Corpus angustum, convexum, atrium, nitens, subtilissimum squamatum, parco hirtum : caput transversum, breve, thorace vix latius ; vertex latus ; frons impressa, abrupte declivis : oculi picei, mediores, non extantes : antennae nigrae, subclavatae, graciles, thorace non longiores; articulus 1^o longus, linearis; 2^o longicyathiformis; 3^o et 4^o minimi; 5^o et sequentes breves, usque ad 10^o curvantes ; clava longicollis, acuminata, articulo 10^o plus duplo longior : thorax ovatus : prothorax transversus, brevissimus : mesothoracis scutum longitudine latius ; parapsidum scutum non bene determinatae ; paraptera et spinulae magna ; scutellum subconicum : metathorax brevis, declivis, postice angustus : petiolus brevissimus : abdomen fusiforme, leve, supra planum, subitus carinatum, apice acuminatum, thorace multo longius : pedes nigri, simplices, subsequales ; trochantera picei ; genua piceae ; tarsi fusi, apice picei ; alis subfusca ; squamulae piceae ; nervi fusi ; nervus humeralis ulnari multo longior, radialis ulnari non brevier, cubitali multo longior ; stigma parvum. (Corp. long. lin. 1; alar. lin. 1 $\frac{1}{2}$.)

Entedon Ufens, Fem. Viride, abdomen nigro-parpareum, antennae nigrae, pedes fulvi fusa-dicta, femora viridia, alis sublimpidae.

Corpus sublineare, convexum, viride, nitens, scutellum squamatum, parco hirtum : caput transversum, breve, thoracie latitudine ; vertex latus ; frons impressa, abrupte declivis : oculi rufi, mediores, non extantes : antennae nigrae : thorax ovatus : prothorax transversus, brevis : mesothoracis scutum longitudine latius ; parapsidum scutum bene determinatae, postice approximatae ; scutellum subconicum : metathorax mediorum, obconicum, declivis : petiolus brevis : abdomen brevi-ovatum, leve, supra depresso, subitus carinatum, apice acuminatum, thorace multo brevius ; discus nigro-parpareus ; segmentum 1^o sat magnum ; 2^o et sequentia brevioris, subsequala : pedes fulvi, simplices, subsequales ; coxae virides ; femora viridia ; tarsi apice fusi ; mesopodium et metapodium tibiis apice fusi : alis sublimpidae ; squamulae piceae ; nervi fulvi ; nervus ulnaris humerali longior, radialis ulnari brevior, cubitalis brevissimus ; stigma minutum. (Corp. long. lin. 4; alar. lin. 1 $\frac{1}{2}$.)

Cladoceras Felor, Mus. *Firidis, abdomen purpureum, antennae nigrae, pedes fulvo-fusci, femora nigra, ala sublimpida.*

Corpus angustum, sublineare, convexum, viride, nitens, scutellissime squameum, parco hirtum : caput transversum, brevissimum, impressum, thorace paulo latius ; vertex latus ; frons abrupte declivis : oculi picci, mediocres, non extantes : antennae nigrae, subfiliformes, hirtie, graciles, thorace non longiores ; clava fusiformis, acuminata, articulo precedente plus duplo longior : thorax ovatus : prothorax brevissimus, supra vix conspicua : mesothorax scutum longitudine latius ; paraspidum sutura bene determinata, postice approximate ; scutellum subcoicum : metathorax mediecris, declivis, obconicus : petiolus brevissimus : abdomen sublineare, depresso, levigatus, purpureum, basi viride, thorace paulo brevius et angustius : pedes fulvi, graciles, subaequales ; coxae nigrae ; femora nigra, apice fulva ; tarsi fulvi, apice fusi ; ala sublimpida ; squamulae picee ; nervi fulvi ; nervus ulnaris humeralis duplo longior, radialis vix ultus, cubitalis brevissimus in ala dicum abrupte declivis ; stigma minutum. (Corp. long. lin. 4; alar. lin. 1.)

XX.XI.—*Descriptions of Chalcidites discovered in Coquimbo by C. Darwin, Esq. By FRANCIS WALKER, Esq., F.L.S.*

Lampetatus Tubero, Fem. *Ater, abdomen nigro-purpureum, antennae fuscæ, pedes fulvi, femora picea, ala limpida.*

Corpus breve, robustum, convexum, atrum, nitens, scutellissime squameum, parco hirtum : caput transversum, breve, thorace latius ; vertex latus ; frons impressa, abrupte declivis : oculi picci, mediocres, non extantes : antennae fuscæ, exterritorum crassiores, thorace non longiores ; articulus 1st niger, longus, gracilis ; 2nd piccus, longiclyathiformis ; 3rd et 4th minimi ; 5th et sequentes usque ad 10th breves, approximate ; clava conica, acuminata, articulo 10th duplo longior : thorax ovatus : prothorax transversus, mediecris, antice angustus : mesothorax scutum longitudine multo latius ; paraspidum sutura sat bene determinata ; scutellum subcoicum ; paraptera et spinula magna ; metathorax magnus, obconicus, declivis : petiolus sat longus : abdomen subrhombiflorum, levigatus, nigro-purpureum, supra platum, subitus carinatum, thoracis dimidio vix longius : pedes fulvi, simplices, subaequales ; coxae nigrae ; femora picea, apice basique fulva ; tarsi apice fusi ; ala limpida ; squamulae picee ; nervi fulvi ; nervus humeralis ulnari multo longior, radialis ulnari vix brevior, cubitali multo longior ; stigma minutum. (Corp. long. lin. 14; alar. lin. 24.)

Par. ♂. Antennæ articulis 1st viridis : abdomen aeneum : femora nigrae ; tibiae piceæ.

Lampetatus? Narvolus, Mus? *Firidis, antennæ piceæ, pedes picrovirides, tarsi flavi, ala limpida.*

Corpus angustum, convexum, viride, nitens, scutellissime squameum, parco hirtum : caput transversum, breve, thorace latius ; vertex latus ; frons impressa, abrupte declivis : antennæ subfiliformes, graciles, piceæ, thorace paulo longiores ; articulus 1st longus, linearis, nigro-viridis ; 2nd longiclyathiformis ; 3rd et 4th minimi ; 5th et sequentes usque ad 10th breves, approximate ; clava longicollis, acuminata, articulo 10th plus duplo longior : thorax ovatus : prothorax transversus, mediecris, antice angustus : mesothorax scutum longitudine latius ; paraspidum sutura bene determinata, postice approximate ; scutellum subcoicum : metathorax mediecris, obconicus, declivis : abdomen adensum : pedes virides, graciles, subaequales ; trochanteræ picci ; genua flava ; tibiae piceo-virides ; tarsi flavi, apice fusi ; ala limpida ; squamulae picee ; nervi fusi ; nervus humeralis ulnari multo

longior, radialis ulnari non brevis; cubitali multo longior; stigma minutum. (Corp. long. lin. 11; alar. lin. 14.)

Castranictus Pelle. Fem. *Piridia*, abdomen nigro-capitatum, pedes
picco-nigrides, tarsi fulvi, aliæ limpidae.

Corpus angustum, convexum, viride, nitens, luteo, parvo hirtum: caput transversum, breve, thorace paullo latius; vertex latus; frons impressa, abrupte declivis: oculi rufi, mediocres, non extantes: antennae nigrae, clavatae, submozziformes, thorace non longiores, articulus 1^o longus, gracilis; 2^o longicystithiformis; 3^o et 4^o minimi; 5^o et sequentes breves, approximati, usque ad 10^o latentes; thorax ovatus: prothorax transversus, brevissimus: mesothoracis scutum longitudine latius; parapsidum suturae bene determinans, postice approximata; scutellum subconicum: metathorax medioris, obscurus, declivis: petiolus brevissimus: abdomen fusiforme, nigro-cuprum, basi viride, supra depresso, subtus carinatum, apico acuminatum, thorace paullo longius et multo angustius: pedes virides, simplices, subequales; trochanteri picci; genua fulva; tibiae picce, apice fulva; tarsi fulvi, apice fuscii: aliæ limpidae; squamulae piccei; nervi fusi; nervus humeralis ulnari multo longior, radialis ulnari non brevis, cubitali multo longior; stigma ut magnum. (Corp. long. lin. 4; alar. lin. 14.)

Platyneta Nephela, Mas. *Piridia*, abdomen capreæ-nigrum, antennæ
flavæ, pedes flavi, aliæ limpidae.

Corpus sublineare, satis angustum, convexum, late viride, nitens, scutissimum squamatum, parvo hirtum: caput transversum, breve, thorace paullo latius; vertex latus; frons abrupte declivis: oculi rufi, mediocres, non extantes: antennae subclavatae, flavæ, thoraco paullo longiores; articulus 1^o longus, gracilis; 2^o longicystithiformis; 3^o et 4^o minimi; 5^o et sequentes breves, approximati, usque ad 10^o extantes; clava ovata, articulo 10^o multo latior et plus duplo longior: thorax ovatus: prothorax transversus, brevissimus: mesothoracis scutum longitudine paullo latius; parapsidum suturae vix conspicue; scutellum subconicum: metathorax brevis, declivis, postice angustus: petiolus brevissimus: abdomen depresso, luteo, sublineare, cuprum, thorace paullo brevius et angustius: pedes flavi, simplices, subequales; coxa virides; tarsi apice fuscii: aliæ limpidae; squamulae fulvae; nervi flavi; nervus humeralis ulnari multo longior, radialis ulnari vix brevis, cubitali multo longior; stigma minutum. (Corp. long. lin. 4-5; alar. lin. 14-15.)

Pteromalus Toxus, Fem. *Caprea*, antennæ nigrae, pedes fulvi, femora
nigra, aliæ limpidae.

Corpus robustum, convexum, cuprum, parvo rittera, scutissimum squamatum, parvo hirtum: caput transversum, breve, thoraci latitudine; vertex latus; frons impressa, abrupte declivis: oculi picci, mediocres, non extantes: antennae nigrae, subclavatae, thorace non longiores, articulus 1^o longus, sublinearis; 2^o longicystithiformis; 3^o et 4^o minimi; 5^o et sequentes usque ad 10^o breves, approximati; clava conica, acuminata, articulo 10^o plus duplo longior: thorax ovatus: prothorax brevissimus: mesothoracis scutum longitudine latius; parapsidum suturae vix conspicue; scutellum brevi-clavatum: metathorax brevis, declivis, postice angustus: abdomen ademptum: pedes fulvi; coxa nigra; femora nigra, apice fulva; tarsi apice fuscii: aliæ limpidae; squamulae piccei; nervi fulvi; nervus humeralis ulnari duplo longior, radialis ulnari non brevis, cubitali multo longior; stigma minutum. (Corp. long. lin. 14; alar. lin. 24.)

Pteromalus Sordida, Fem. *Niger*, abdomen cuprum, antennæ nigrae, pedes
fulvi, femora nigra, aliæ limpidae.

Corpus robustum, convexum, nigrum, parvo nitens, scutissimum squamatum,

parce hirtum : caput transversum, breve, thorace paulo latius; vertex latius; frons impressa, abrupte declivis; oculi mediocres, picci, non extantes; antennae nigrae, subclavatae, thorace non longiores; articulus 1^o longus, gracilis; 2^o longicostiformis; 3^o et 4^o minimi; 5^o et sequentes usque ad 10^o brevia, approximati; clava conica, acuminata, compressa, articulo 10^o latior et multi-longior; thorax ovatus; prothorax transversus, brevisinus; mesothoracis scutum longitudine latius; parapsidum sutura est bene determinata, postice approximata; scutellum subconicum: metathorax brevis, declivis, postice angustior; petiolus brevissimus: abdomen longi-ovatum, cuspitato, nitens, leve, supra depresso, subitus carinatum, apice acuminatum, thorace paulo longius et angustius; pedes fulvi, simplices, subsequales; coxa nigra; trochanteros picci; femora nigra, apice fulva; tarsi apice fusi: alae limpide; squamae picceae; nervus humeralis ulnari duplo longior, radialis ulnari non brevier, cubitali multo longior; stigma minutum. (Corp. long. lin. 14; alar. lin. 2.)

Pteromalus Rhabbus, Fem. *Niger*, abdomen nigro-anatum, antennae nigrae, pedes fulvi, femora nigra, alae limpide.

Corpus convexum, nigrum, scutum squameum, parum nitens, parce hirtum: caput transversum, breve, thorace paulo latius; vertex latius; frons impressa, abrupte declivis; oculi picci, mediocres, non extantes; antennae nigrae: thorax ovatus; prothorax transversus, brevissimus; mesothoracis scutum longitudine latius; parapsidum sutura vix conspicua; scutellum brevi-conicum; metathorax brevis, declivis, postice angustior; petiolus brevissimus: abdomen ovatum, nigro-anatum, nitens, leve, supra depresso, subitus carinatum, thorace paulo longius: pedes fulvi, simplices, subsequales; coxa nigra; femora nigra, apice fulva; tarsi apice fusi; alae limpide; squamae picceae; nervi fulvi. (Corp. long. lin. 1; alar. lin. 14.)

Pteromalus Vitula, Mus. *Cuprea*, abdomen viridi, discus purpureus, antennae picceae, pedes nigri, tarsi fulvi, alae limpide.

Corpus cupreum, convexum, parum nitens, scutum squameum, parce hirtum: caput transversum, breve, thorace latius; vertex latius; frons abrupte declivis; oculi picci, mediocres, non extantes; antennae picceae, subclavatae, thorace non longiores; articulus 1^o longus, gracilis; 2^o longicostiformis; 3^o et 4^o minimi; 5^o et sequentes brevia, approximati, usque ad 10^o curtae et latescentes; clava conica, acuminata, articulo 10^o latior et duplo longior; thorax ovatus; prothorax transversus, brevisinus; mesothoracis scutum longitudine latius; parapsidum sutura est bene determinata; scutellum subconicum: metathorax brevis, declivis, postice angustior; petiolus brevissimus: abdomen sublineare, depresso, nitens, leve, viridi, thorace angustius et paulo brevius; discus obscurè purpureus; pedes nigri; trochanteros picci; genua fusa; tibia apice fulva; tarsi fulvi, apice fusi; alae limpide; squamae picceae; nervi fulvi; nervus humeralis ulnari fere duplo longior, radialis ulnari non brevier, cubitali multo longior; stigma minutum. (Corp. long. lin. 4; alar. lin. 14.)

Pteromalus Cinoe, Fem. *Nigro-anatum*, abdomen anatum, antennae nigrae, pedes nigri, tarsi fulvi, alae limpide.

Corpus crassum, convexum, nigro-anatum, nitens, scutum squameum, parce hirtum: caput transversum, breve, nigrum, thorace paulo latius; vertex latius; frons impressa, abrupte declivis; oculi picci, mediocres, non extantes; antennae nigrae, clavatae, thorace non longiores; articulus 1^o longus, gracilis; 2^o longicostiformis; 3^o et 4^o minimi; 5^o et sequentes brevia, usque ad 10^o curtae et latescentes; clava ovata, articulo 10^o multo latior et plus duplo longior; thorax ovatus; prothorax brevissimus; mesothoracis scutum longitudine latius; parapsidum sutura vix conspicua;

scutellum obconicum : metathorax brevis, declivis, postice angustus : petiolus brevisimus : abdomen longi-ovatum, nigrum, leve, supra planum, subito profundè carinatum, apice acuminatum, thorace paulo longius et angustius ; segmentum 1st art. magnum ; 2nd et sequentia brevis ; pedes nigri, simplices, subsequales ; trochanteres picci ; genua fissa ; tibiae apice levatae ; tarsi flavi, apice fusi ; propedem tibiae picci, tarsi fulvi : ale limpidae, mediae ; squamulae picci ; nervi flavi ; nervus humeralis ulnari duplo longior, radialis ulnari brevior, cubitalis longior ; stigma minutum. (Corp. long. lin. 14 ; alar. lin. 2.)

Tetrastichus Narcissus, Fem. *Niger, antennæ nigrae, pedes flavi, femora picci, ale limpidae.*

Corpus sat latum, convercum, nigrum, nitens, leve, pars hirtum : caput transversum, brevisimum, thoracis vix latitudine ; vertex sat latuus ; fronte impressa, abrupte declivis ; ocelli rufi, mediterranei, non rotundati : antennae nigrae, subclavatae, thoraco non longiores : thorax ovatus : prothorax transversus, supra non conspicuus : mesothoracis scutum longitudine vix latius ; parapodium naturæ remoto, bene determinata, postice approximate ; scutellum obconicum, bivalvatum : metathorax transversus, brevis, postice angustus : petiolos brevisimus : abdomen longi-ovatum, supra planum, subito carinatum, apice acuminatum, thorace paulo angustius et multo longius : pedes flavi, simplices, subsequales ; coxe nigrae ; femora picci, apice fissa ; tarsi apice fusi : ale late, limpidae ; squamulae picci ; nervi fulvi ; nervus ulnaris humerali duplo longior, radialis vix ultra, cubitalis longus ; stigma minutum. (Corp. long. lin. 4 ; alar. lin. 14.)

Platygaster Sylea, Fem. *Aira, antennæ nigrae, pedes nigri, tarsi picci, ale subfuscæ.*

Corpus convercum, nitens, nitens, leve, pars hirtum : caput transversum, breve, thoracis latitudine ; vertex latuus ; fronte abrupte declivis, non impressa : ocelli picci, parvi, non extantes : antennæ nigrae, subfusiformes, graciles, ad os insertæ, thoraco multo longiores ; articulus 1st longus, subclavatus ; 2nd longitrochiformis ; 3rd et 4th longi, subsequales ; 5th et sequentes usque ad 10th breves, subrotundati : thorax longi-ovatus : prothorax brevisimus, supra vix conspicuus : mesothoracis scutum longitudine non latius ; parapodium naturæ vix conspicuus ; scutellum subrotundatum, non productum : metathorax mediterraneus, obconicus, declivis : petiolus brevisimus : abdomen subfusciforme, thorace longius et angustius ; segmentum 1st magnum ; 2nd et sequentia brevis : pedes nigri, simplices, subsequales, femoribus tibialibus elevatis, trochanteribus genitus tamquam picci : ale subfuscæ ; squamulae picci. (Corp. long. lin. 4 ; alar. lin. 14.)

Omaloderes intrepidas (Benthylæ affinis, n. g. Haliday MSS.). *Niger, antennæ fuscæ, pedes fusi, ale limpidae.*

Corpus angustum, sublineare, nigrum, plenum, levum, nitens, fere glabrum : caput oblongum, thorace paulo latius : ocelli picci, laterales, anteriores, sat magni : ocelli 3 picci, aperte postice inidentes, approximate, triangulum figurantes ; medius parparem anteropositus : antennæ fuscæ, 14-articulatae ?, graciles, moniliformes, thoraco non longiores ; articulus 1st validus, 2nd minor ; 3rd et sequentes usque ad 14th parvi, breves, subsequales : thorax longi-ovatus : prothorax sat magnus, conicum, postice incurvus : mesothoracis scutum brevisimum, longitudine plus duplo latius ; parapodium naturæ bene determinata, parallelae ; scutellum obconicum, parvum : metathorax magna, obconicus : petiolus brevis : abdomen longi-ovatum, thorace paulo brevis ; segmenta transversa, subequalia : pedes fusi, simplices, subsequales ; coxe nigrae ; tarsi articuli 1st ad 5th curvantes : ale angusta, limpidae ; squamulae picci ; nervi fulvi, preocella areolas cubitales 3 et subcubitales 2 digitatae. (Corp. long. lin. 14 ; alar. lin. 14.)

**XXXIX.—Descriptions of Chalcidites discovered in Valdivia
by C. Darwin, Esq. By FRANCIS WALKER, F.L.S.**

Pachylæthras Sariaster, Mas. *Viridia*, antennæ lutes, pedes fulvi, siccæ simpliciæ.—Fem. *Cuprea*, antennæ nigrae, pedes fulvi, femora viridia.

Mas. Corpus crassum, convexum, nitens, viride cupro-virium, scite squameum, parce pubescens : caput magnum, transversum, breva, virido, thorace latus ; vertex latus, cupro-virius ; frons impressa, abrupte declivis : oculi rufi, mediocres, non extantes : os flavum ; palpi maxillares clavati ; antennæ lutes, graciles, subfiliformes, 13-articulatae, thorace paulo longioræ ; articulus 1st longus, gracilis ; 2nd longicyathiformis ; 3rd et 4th minimi ; 5th et sequentes usque ad 10th mediocres, subsequales ; clava longiconica, acuminata, articulo 10th fere duplo longior : thorax ovatus, robustus : prothorax transversus, brevis, antice angustus : mesothoracis scutum longitudine latius ; parapsidum sutura bene determinata, postice approximate ; paraptera et epimera magna ; scutellum subconicum, sat magnum : metathorax mediocres, obconicus, declivis : petiolus sat longus : abdomen rhombiforme, contractum, levae, glabrum, latitudine non longius, thoracis dimidi longitudine ; segmentum 1st maximum, dorsum obtusum : pedes fulvi, simplices, subsequales ; coxae virides ; unguis et palvilli fusi : ale limpidae ; squamula lutes ; nervi fulvi ; nervus humeralis ulnari multo longior, radialis ulnari via brevir, cubitali duplo longior ; stigma minutum.

Fem. *Cuprea*, param nitens : caput thorace vix latius : palpi maxillares simplices ; antennæ nigrae, subfiliformes, thorace non longioræ ; articulus 2nd cyathiformis ; 3rd et sequentes usque ad 10th subsequales, approximatæ ; clava conica, articulo 10th longior : petiolus brevis ; abdomen ovatum, supra fere plenum, subitas carinatum, apice acuminatum et attenuatum, thorace vix longius ; segmentum 1st magnum, 2nd et sequentia brevia : pedes fulvi ; coxae virides ; femora viridia, apice fulva. (Corp. long. lin. 1—1½ ; alar. lin. 1½—2.)

Dicyclus Lynastes, Fem. *Viridi-anæus*, antennæ nigrae, pedes fulvi, femora aenea, ale limpidae.

Corpus breve, convexum, viridi-virens, nitens, scitellum squameum, parce hirtum : caput transversum, breva, thorace paulo latius ; vertex latus ; frons impressa, abrupte declivis : oculi rufi, mediocres, non extantes : antennæ nigrae, graciles, subclavatae, thorace vix longioræ ; articulus 1st longus ; 2nd cyathiformis ; 3rd et 4th minimi ; 5th et sequentes usque ad 10th subsequales, apiceminiæ ; clava conica, compressa, acuminata, articulo 10th multo longior : thorax ovatus : prothorax transversus, brevis, antice angustus : mesothoracis scutum longitudine latius, parapsidum sutura remota, sat bene determinata, postice approximate ; paraptera et epimera magna ; scutellum subconicum, mediocre : metathorax brevi-obconicus, declivis : petiolus brevis : abdomen subrotundum, supra fere plenum, subitas carinatum, apice acuminatum, thorace brevius ; segmentum 1st magnum : pedes fulvi, simplices, subsequales ; coxae aeneæ ; femora aenea, apice fulva ; tarsi apice fusi : ale limpidae ; squamula piecea ; nervi fulvi ; nervus humeralis ulnari multo longior, radialis ulnari via brevir, cubitali longior ; stigma minutum. (Corp. long. lin. 4 ; alar. lin. 1½.)

Lampetates Natta, Mas. *Viridi-cyanus*, antennæ nigrae, pedes fulvi, ale limpidae.

Corpus angustum, sublineare, convexum, viridi-cyanum, nitens, scitellum squameum, parce hirtum : caput transversum, breva, viride, thorace latus ; vertex latus, aeneo-virius ; frons impressa, abrupte declivis : oculi rufi,

mediocres, non extantes : antennae nigrae, graciles, subtiliformes, thorace vix breviores; articulus 1st longus, subtilis; 2nd longicyathiformis, 3rd et 4th minimi; 5th et sequentes usque ad 10th subsequales, approximati; clava longivirga, acuminata, articulo 10th multo longior; thorax longi-subrotundatus; prothorax transversus, mediorictis, antice paucis angustior; mesothoracis scutum longitudine latius; parapsidum sutura bene determinata, postice approximata; paraptera et spinulae magna; scutellum subconicum, mediocre; metathorax magna, declivis, obconicus; petiolus sat laetus; abdomen levigatum, luteo, glabrum, thorace multo brevius; pedes flavi, simplices, subsequales; coxae virides; tarsi apice fuscii; alae limpidae; squamulae fuscæ; nervi fulvi. (Corp. long. lin. 1; alas. lin. 1*b*.)

Lamprotatus Biseutes, Mas. *Nitens-viridia*, antennæ nigrae, pedes flavi, femora viridia, alæ limpidae.

Corpus convexum, azzeo-viride, nitens, scitissimum squameum, parvo hirtum; caput transversum, breve, thoracis latitudine; vertex latus; frons impressa, abrupte declivis; oculi rufi, mediocres, non extantes; antennæ nigrae; thorax, oratus: prothorax transversus, brevisimus; mesothoracis scutum longitudine latius; parapsidum sutura bene determinata, postice approximata; paraptera et spinulae magna; scutellum conicum, mediocre; metathorax brevi-obconicus, declivis; petiolus brevisimus; abdomen sublineare, luteo, glabrum, fere planum, thorace angustius et multo brevius; segmentum 1st maximum; pedes flavi, simplices, subsequales; coxae virides; femora viridia, apice flava; tarsi apice fuscii; alæ limpidae; squamulae piceæ; nervi fuscæ; nervus humeralis ulnari fere duplo longior, radialis paucis paucis brevior, cubitali paucis longior; stigma parvum. (Corp. long. lin. 1; alas. lin. 1*b*.)

Lamprotatus Orobia, Fem. *Viridia*, capro-varius, antennæ nigrae, pedes rufi, femora basi viridia, alæ limpidae.

Viridia, convexum, nitens, scitissimum squameum, parvo pubescens: caput transversum, mediocre, thoracis latitudine; vertex sat latus; frons abrupte declivis, ad antennarum receptionem excavata; oculi picosi, mediocres, non extantes; antennæ subtiliformes, nigrae, graciles, pubescentes, thoraco non longiora; articulus 1st longus, gracilis; 2nd longicyathiformis; 3rd et 4th vix conspicui; 5th longicyathiformis; 6th et sequentes breviores; thorax longioratus; prothorax mediocre, transversus, antice angulum stringuis fingeat non angustior; mesothoracis scutum longitudine vix latius; parapsidum sutura bene determinata, postice approximata; paraptera et spinulae magna; scutellum mediocre, conicum; metathorax mediocre, declivis, obconicus; petiolus brevis; abdomen ovalum, nitens, luteo, fere glabrum, apice acuminatum, thorace paucis brevius; segmenta antica magna, postica breviora; oviductus non exsertus; pedes graciles, recti, subsequales, pallido rati, pubescentes; coxae virides; trochanteri picosi; femora basi viridia; tarsi apice fuscii; alæ limpidae, mediocres; squamulae viridi-piceæ; nervi fuscæ; nervus humeralis ulnari fere duplo longior, cubitalis radialis brevior; stigma minutum. (Corp. long. lin. 1*c*; alas. lin. 2*c*.)

Var. ß.—Coptis vertex viridi-striatus: thoracis discus cupro-argenteus: abdomen cupro-varium.

Pteromalus Megareus, Fem. *Viridi-varius*, antennæ nigrae, pedes flavi, femora viridia, tibiae fulvo-cinctæ, alæ limpidae.

Corpus viridi-argenteum, convexum, parvo nitens, scitissimum squameum, parvo pubescens: caput transversum, breve, thoraco paucis latius; vertex sat latus; frons abrupte declivis, excavata; oculi picosi, mediocres, non extantes; antennæ nigrae, subtilitate, pubescentes, sat graciles, thoraco non longiora;

articulus 1st viridis : thorax brevioratus : prothorax brevissimus, supra vix conspicuum : mesothoracis scutum latum ; parapodium rotundum non bene determinatum ; scutellum subrotundum, mediocre : metathorax brevis, declivis, obconicus : petiolus brevissimus : abdomen longioratum, nitens, luteo, fere glabrum, supra plenum, subtus carinatum, apice acuminatum, thorace longior et angustius : pedes flavi ; coxa virides ; femora viridia, apice flavo ; tibiae fusco-cinctae ; tarsi apice fusi : ale limpidae ; squamulae piceae ; nervi fulvi ; nervus humeralis ulnari multo longior, cubitalis radialis multo brevior ; stigma minimum. (Corp. long. lin. 1 ; alar. lin. 1*b*.)

Chlorocerus Xenodice, Maa et Fem. *Viridis cyaneo-niger, abdomen cuprum, antennae nigrae, pedes flavi, femora viridia, apice flavo, tibiae fusco-cinctae, ale fusco-maculatae.*

Maa. Corpus sublineare, angustum; depresso, late viride, nitens, luteo, parvo hirtum : caput transversum, brevissimum, inter oculos impressum ; vertex sat latus ; frons abrupte declivis : oculi mediosores : antennae subtacere, nigrae, hirtae, thorace non longiorae : thorax ovatus : prothorax brevissimus : mesothoracis scutum longitudine vix latiss. ; parapodium rotundum vix conspicuum ; scutellum subrotundum : metathorax obconicus, declivis, mediocre : petiolus brevissimus : abdomen sublineare, cuprum, basi cyanee-viride, thorace angustius non longius : pedes flavi ; coxa virides ; femora viridia ; tibiae fusco-cinctae ; tarsi apice fusi : ale mediocres, ciliatae, fulvo-tinctae, in discum obsoleta fusco-maculatae ; squamulae piceae ; nervi fulvi ; nervus ulnaris humerali multo longior, radialis vix ulcus, cubitalis brevissimus in ale discum abrupte declivis ; stigma minimum.

Fem. *fl.* — Tibiae amninae fuscae : ale maculae vix conspicuae.

Fem. *g.* — Ale omnino limpida.

Fem. *Cyaneo-viridis* : antennae setosae, thorace breviorae : abdomen evan- tum, thorace paucis brevius vix angustius. (Corp. long. lin. 1—1*b* ; alar. lin. 1—1.)

Fem. *fl.* — Tibiae nigro-fuscae, apice flavo.

Platygastr Pachae, Maa et Fem. *Atra, antennae nigrae, pedes nigri, tarsi pilosi, ale sulphurea.*

Maa. Corpus convexum, atrum, nitens, luteo, fere glabrum : caput transversum, luteo, thorace vix latiss. ; vertex sat latus ; frons abrupte declivis : oculi picei, parvi, non extantes : antennae nigrae : thorax ovatus : prothorax brevissimus, supra vix conspicuum : mesothoracis scutum longitudine latius ; parapodium rotundum non bene determinatum ; scutellum subrotundum, non produstum : metathorax parvus, obconicus, declivis : petiolus brevis : abdomen longioratum, thorace paucis angustius non longius ; segmentum 1st magnum, 2nd et sequentia breviora : pedes nigri, subaequalis ; femora clavatae ; genua picea ; tibiae clavatae ; tarsi pilosi : ale subfuscus ; squamulae piceae. (Corp. long. lin. 1 ; alar. lin. 1*b*.)

Fem. Caput thoracis latitudine : antennae subclavatae : abdomen longioratum, apice acuminatum, thorace angustius et paucis longius.

Inostemma Quinda, Fem. *Atra, antennae flavae, apice fuscae, pedes flavi, ale limpidae.*

Corpus atrum, angustum, sublineare, convexum, luteo, nitens, pubescens : caput transversum, subrotundum, thorace vix latiss. ; vertex latus ; frons abrupte declivis : oculi parvi, non extantes : antennae subclavatae, flavae, apice fuscae : thorax ovatus : prothorax brevissimus, supra vix conspicuum : mesothoracis scutum transversum, solitus 2 indistinctis postice approximatis ; parapodium rotundum non bene determinatum ; scutellum obconicum, non produstum : metathorax brevi-obconicus, declivis : petiolus crassus, brevissimus : abdomen longioratum, glabrum, apice acuminatum, thorace paucis longius

non angustus; segmentum 1st maximum; pedes fulvi, simplices, subsequales; alicuius lispidae, mediserrae; squamulae piceae; nervi fulvi; nervus subcostalis alicuius basi emissus nervulum in discum relictum et spacio brevi ante costam medium in stigma subfasciatum decedens; nervus quoque spiritus alicuius basi emissus in discum excurrens et nervus subcostalis nervuloque triangulum fingens. (Corp. long. lin. 4; alar. lin. 1.)

Rosilius (n. g. *) *Zotale*, Fem. *Ater, antennae nigrae basi fulvi, pedes fulvi, alicuius lispidae.*

Corpus longum, angustum, sublineare, strum, vix convexum, obscurum, pilis canis pallescens, subtilissime et confertissime punctatum: caput transversum, breve, subrotundum, thorace vix latius; vertex latus; frons convexa, non impressa: oculi parvi, non exstantes: antennae nigrae, graciles, subclavatae, prope os inserentes, thorace non breviores; articulus 1st longus, subfusiformis, fulvis; 2nd longitubuliformis; 3rd et 4th longi, lineares; 5th et sequentes ad 10th breves, approximati, claram fingentes longitubuliformem: thorax longiorius: prothorax brevissimus, postice excavatus: metathorax scutum rugosum, tribulatum, longitudine vix latius; sulci laterales postice approximati: scutellum parvum, semicirculatum, fimbriatum: metathorax mediorientis, obconicus: petiolae brevissimae: abdomen longitubuliforme, subitus convexum, apice acuminatum, thorace multe longius; segmentum 1st brevis; 2nd et 3rd magna; 4th et 5th paulo breviora; 6th adhuc brevius: pedes fulvi, longi, graciles, simplices, subsequales; tarsis articulus 1st longus, 2nd multi brevior, 3rd aliud brevior, 4th 3rd brevior, 5th 4th paulo longior: alicuius mediorientis, lispidae, abdominis apicem dum quietum agunt non attingentes; squamulae fulvi; nervi fulvi; nervus subcostalis alicuius basi emissus ad costam medium non attingens et fore ad alicuius apicem percurrentes; nervus 2nd quoque alicuius basi emissus in discum excurrens ibique forcatus, force alicuius nervi subcostali triangulum fingens, force postica ad alicuius marginem posticum decedens; nervus cubitalis rectus, seti longus, nervo subcostali alicuius costam attingit emissus, stigmata terminatus minuto. (Corp. long. lin. 16; alar. lin. 24.)

[To be continued.]

XL.—*The Crustacea of Ireland*. Order Decapoda. By Wm. THOMPSON, Esq., Vice-Pres. Nat. Hist. Society of Belfast.

CRUSTACEA. Order DECAPODA.

DECAPODA BRACHYURAE.

Micropoda phalangium, Leach, Mal. pl. 23. f. 6; Desmar. p. 155. pl. 23. f. 3.

Stenorhynchus phalangium, Edw. Crust. tome I. p. 279.

Cancer phalangium, Penn. Brit. Zool. vol. iv. p. 11. pl. 9. f. 3, edition 1812.

This species has already been recorded by Templeton as "not uncommon on the Irish coast," and by Mr. J. V. Thompson as "very abundant in the deep water of the harbour of Cork." Ent. Mag. vol. iii. p. 371.

It has occurred very commonly to my scientific friends and myself when dredging in theoughs of Strangford and Belfast; and to Mr.

* *Serolis Davis* (Monogr. Chalcid., p. 61.) also belongs to this genus.