

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.

Torymus, Phormio, Fem. *Viridi-æneus, antennæ nigrae, pedes rufi, femora viridia, alæ sublimpidae.*

Corpus viridi-æneum, convexum, nitens, scite squameum, parce pubescens: caput transversum, breve, thorace vix latius; vertex sat latus; frons abrupte declivis, excavata: oculi rufi, mediocres, non extantes: antennæ nigrae, subclavatæ, pubescentes, thorace paullo breviores; articuli approximati: thorax longi-ovatus: prothorax transversus, mediocris, antice non angustior: mesothoracis scutum latitudine paullo longius; parapsidium suturæ bene determinatæ, postice approximata; scutellum subovatum: metathorax mediocris, declivis, obconicus: petiolus brevissimus: abdomen longi-ovatum, subcompressum, subtus carinatum, thorace paullo brevius: oviductus exertus, rufus; vaginæ nigrae, abdomine vix breviores: pedes pallide rufi; coxæ virides; femora viridia; ungues et pulvilli fusci; metafemora subtus unidentata, metatibiæ pallide fuscae, apice spina longa arcuata armata: alæ sublimpidae; squamulae piceae; nervi fusci; nervus humeralis ulnari fere duplo longior; radialis ulnari brevior, cubitalis brevissimus; stigma minutum. (Corp. long. lin. $1\frac{1}{2}$; alar. lin. $2\frac{3}{4}$.)

Callimome Nonacris, Fem. *Viridi-cyaneus, antennæ nigrae, pedes fusci, femora viridia, alæ sublimpidae.*

Corpus viridi-cyanum æneo-varium, convexum, scite squameum, parum nitens, parce pubescens: caput transversum, breve, thoracis latitudine; vertex sat latus; frons abrupte declivis: oculi rufi, mediocres, non extantes: antennæ nigrae, validæ, clavatae, pubescentes, thorace non longiores: thorax longi-ovatus: prothorax sat magnus longitudine paullo latius, antice angustior: mesothoracis scutum latitudine paullo longius; parapsidium suturæ bene determinatæ, postice approximata; scutellum subovatum: metathorax

mediocris, declivis, obconicus : petiolus brevissimus : abdomen ovatum, subcompressum, nitens, subtus carinatum, thorace paullo brevius et angustius : oviductus rufus ; vaginae nigrae, abdominis longitudine : pedes fuscii ; coxae virides ; femora viridia ; tarsi pallide fuscii : alae sublimpidae ; squamulae virides ; nervi picci ; nervus humeralis ulnari longior, radialis ulnari multo brevior, cubitalis brevissimus ; stigma minimum. (Corp. long. lin. 1 ; alar. lin. $1\frac{3}{4}$.)

Callimome Eumelis, Mas. *Viridi-cyaneus, antennae nigrae, pedes nigro-fuscii, femora viridia, alae sublimpidae.*

Corpus sublineare, convexum, viridi-cyaneum, scitissime squameum, parum nitens, parce pubescens : caput transversum, breve, thorace paullo latius ; vertex sat latus ; frons abrupte declivis : oculi rufi, mediocres, non extantes : antennae nigrae, crassae, thorace vix longiores : thorax longi-ovatus : prothorax transversus, brevis : mesothoracis scutum longitudine vix latius ; parapsidum suturae sat bene determinatae ; scutellum subovatum : metathorax obconicus, mediocris, declivis : petiolus brevissimus : abdomen sublineare, supra planum, thorace brevius : pedes simplices, subaequales, virides ; trochanteres picci ; genua fusca ; tibiae nigrae ; tarsi fuscii : alae sublimpidae ; squamulae piccae ; nervi fuscii ; nervus humeralis ulnari multo longior, radialis ulnari multo brevior, cubitalis brevissimus ; stigma minutum. (Corp. long. lin. $3\frac{1}{4}$; alar. lin. $1\frac{3}{4}$.)

Asaphes vulgaris ? Fem. *Aeneus, abdomen atrum, antennae nigrae, pedes fusco-flavi, femora nigro-cincta, alae limpidae.*

Asaphes vulgaris, Ent. Mag.

Corpus convexum, aeneum, nitens, fere laeve, parce pubescens : caput transversum, breve, thorace paullo latius ; vertex latus ; frons impressa, abrupte declivis : oculi picci, mediocres, non extantes : antennae nigrae : thorax longi-obconicus : prothorax transversus, mediocris : mesothoracis scutum longitudine latius ; parapsidum suturae bene determinatae, postice approximatae fere conniventes ; scutellum subconicum : metathorax obconicus, declivis, mediocris : petiolus gracilis : abdomen longi-ovatum, atrum, laeve, glabrum, subtus carinatum, apice acuminatum, thoracis longitudine : pedes simplices, subaequales, flavi ; coxae aeneae, femora nigro-cincta ; tarsi apice fuscii ; mesotibiis et metatibiis pallide fuscis : alae limpidae ; squamulae piccae ; nervi fulvi ; nervus humeralis ulnari multo longior, radialis ulnari brevior, cubitali longior ; stigma minutum. (Corp. long. lin. $\frac{3}{4}$; alar. lin. $1\frac{1}{4}$.)

Lamprotatus Caecina, Fem. *Cyaneus, antennae nigrae, pedes flavi, femora fusco-cincta, alae limpidae.*

Corpus convexum, cyaneum, scitissime squameum, parum nitens, parce pubescens : caput transversum, breve, thoracis latitudine ; vertex sat latus ; frons impressa, abrupte declivis : oculi mediocres, non extantes : antennae nigrae : thorax ovatus : prothorax brevis, antice angustior : mesothoracis scutum transversum ; parapsidum suturae sat bene determinatae ; scutellum obconicum : metathorax declivis, mediocris, obconicus : petiolus sat longus ; abdomen ovatum, nitens, laeve, fere glabrum, supra convexum, subtus carinatum, thorace brevius : pedes simplices, subaequales, flavi ; coxae virides ; femora fusco-cincta ; tarsi apice fuscii : alae limpidae ; squamulae piccae ; nervi fuscii ; nervus humeralis ulnari multo longior, radialis ulnari brevior, cubitali longior ; stigma parvum. (Corp. long. lin. 1 ; alar. lin. $1\frac{3}{4}$.)

Lyrucis (n. g.) Origo, Fem. *Nigro-cyaneus, antennae nigrae, pedes fuscii fulvo-cincti, alae sublimpidae.*

Corpus breve, crassum, convexum, nigro-cyaneum, scitissime squameum, parum nitens, parce pubescens : caput transversum, breve, thoracis latitudine ; vertex latus ; frons abrupte declivis, vix impressa : oculi rufi, medio-

cres, non extantes: antennæ subclavatæ, graciles, 9-articulatæ? nigræ, thorace paullo longiores; articulus 1^{us} longus, gracilis; 2^{us} longi-cyathiformis; 3^{us} et sequentes breves; clava fusiformis: thorax brevi-ovatus: prothorax transversus, brevissimus: mesothoracis scutum longitudine latius; parapsidium suturæ non bene determinatæ, postice approximata; scutellum obconicum: metathorax longi-obconicus, declivis: petiolus brevissimus: abdomen ovatum, nitens, breve, supra planum, subtus carinatum, apice acuminatum; thorace paullo angustius, vix longius: pedes graciles, simplices, subæquales, fuscii; coxæ nigræ; genua fulva; tibiæ apice basique fulvæ; tarsi fulvi apice fuscii, articulus 1^{us} longus, 2^{us} multo brevior, 3^{us} adhuc brevior, 4^{us} 3^o longior; ungues et pulvilli minuti: alæ sublimpidæ, mediocres; coxæ picæ; nervi fulvi; nervus humeralis ulnari multo longior, radialis ulnari longior, cubitalis longissimus ulnari vix brevior. (Corp. long. lin. $\frac{3}{4}$; alar. lin. 1 $\frac{1}{2}$.)

Pteromalus Gryneus, Fem. *Cupreus, antennæ picæ, pedes flavi, alæ limpideæ.*

Corpus cupreum, convexum, scitissime squameum, parum nitens: caput thorace vix latius, subtus æneo-viride; vertex sat latus; frons abrupte declivis, excavata: oculi picæ, mediocres, non extantes: antennæ picæ, subclavatæ, thorace non longiores: thorax ovatus: prothorax brevissimus, supra vix conspicuus: mesothoracis scutum transversum; parapsidium suturæ vix conspicuæ; scutellum sat magnum, subrotundum: metathorax brevis, declivis, postice angustus: petiolus brevissimus: abdomen ovatum, nitens, læve, fere glabrum, supra planum, subtus carinatum, apice acuminatum, thorace paullo angustius, vix longius: pedes flavi; coxæ virides; tarsi apice fuscii: alæ limpideæ; squamulæ fulvæ; nervi flavi; nervus humeralis ulnari multo longior; radialis cubitali multo longior, ulnari non brevior; stigma minutum. (Corp. long. lin. 1; alar. lin. 1 $\frac{1}{2}$.)

Entedon Bedius, Mas. *Æneo-viride, abdomen basi viridi-cyaneum, antennæ nigræ, pedes flavi, alæ flavescentes.*

Corpus convexum, læte viride, æneo-varium, nitens, scitissime squameum, parce pubescens: caput transversum, breve, thorace paullo latius; vertex sat latus; frons impressa, abrupte declivis: oculi rufi, mediocres, non extantes: antennæ nigræ, hirtæ, setacæ, thorace non longiores; articulus 1^{us} longus, gracilis; 2^{us} et sequentes breviores, lineares: thorax ovatus: prothorax brevissimus, supra vix conspicuus: mesothoracis scutum longitudine latius; parapsidium suturæ bene determinatæ, postice approximata; scutellum magnum, subovatum: metathorax magnus, obconicus, declivis: petiolus longus, cylindricus: abdomen brevi-ovatum læve, glabrum, quasi contractum, basi viridi-cyaneum, subtus convexum, thorace brevius; segmentum 1^{um} maximum, 2^{um} et sequentia brevia: pedes graciles, simplices, subæquales, pallide flavi; coxæ virides; tarsi apice fuscii: alæ flavo-tinctæ, sat latæ; squamulæ fusæ; nervi fulvi; nervus ulnaris humerali fere duplo longior, radialis humerali brevior, cubitalis brevissimus; stigma minutum. (Corp. long. lin. 1; alar. lin. 2.)

Entedon Flacilla, Mas. *Viride, cyaneo aut cupreo varium, antennæ nigræ, pedes flavi, alæ flavo-limpideæ.*

Corpus convexum, læte viride, nitens, scitissime squameum, parce pubescens: caput transversum, breve, viridi-æneum, thorax paullo latius; vertex sat latus; frons abrupte declivis: oculi rufi, mediocres, non extantes: antennæ nigræ, graciles, subfiliformes, thorace paullo breviores; articulus 1^{us} gracilis, sublinearis; 2^{us} et sequentes ad 5^{um} breviores, subæquales; clava fusiformis, acuminata, articulo 5^o multo longior: thorax ovatus: prothorax brevissimus, supra vix conspicuus: mesothoracis scutum longitudine latius; parapsidium suturæ bene determinatæ; scutellum viridi-æneum, subovatum:

metathorax magnus, declivis, obconicus: petiolus sat longus: abdomen brevi-ovatum, læve, fere glabrum, subtus convexum, basi viridi-cyaneum, thorace brevius: pedes pallide flavi, graciles, simplices, subæquales; coxæ virides; tarsi apice fuscii: alæ flavo vix tinctæ; squamulæ fuscæ; nervi fulvi; nervus ulnaris humerali multo longior, radialis brevis, cubitalis brevissimus; stigma minutum. (Corp. long. lin. $\frac{1}{2}$; alar. lin. 1.)

Var. β.—Antennis articulus 1^{us} basi flavus: alæ flavescentes.

Var. γ.—Corpus cupreo-varium.

Found also in Valdivia.

Eulophus Rhianus, Fem. *Nigro-æneus, pedes fuscii, alæ sublimpidæ.*

Corpus sublineare, convexum, nigro-æneum, nitens, scite squameum, parce pubescens: caput transversum, breve, thoracis latitudine; vertex sat latus; frons impressa: oculi rufi, mediocres, non extantes: antennæ ademptæ: thorax longi-ovatus: prothorax transversus, mesothorace angustior: mesothoracis scutum longitudine latius; parapsidum suturæ sat bene determinatæ; scutellum magnum, subquadratum, postice latius: metathorax declivis, obconicus, mediocris: petiolus brevissimus: abdomen longi-ovatum, læve, supra planum, subtus carinatum, apice acuminatum, thorace vix longius: pedes simplices, subæquales, fuscii; coxæ nigræ; genua fulva: alæ sublimpidæ, squamulæ picæ; nervi fulvi; nervus ulnaris humerali longior, radialis humerali brevior, cubitali longior; stigma parvum. (Corp. long. lin. 1; alar. lin. 1 $\frac{1}{3}$.)

Genus TETRASTICHUS, *Holiday.*

A genus formed of *Cirrospilus Lycidas* (Mon. Chal. i. 295.) and other species.

Tetrastichus Polybræa, Mas et Fem. *Ater, antennæ nigræ, pedes nigro-fuscii flavo-cincti, alæ limpida.*

Corpus sublineare, convexum, atrum, nitens, læve, fere glabrum: caput transversum, brevissimum, thorace paullo latius; vertex latus; frons impressa, abrupte declivis: oculi mediocres, non extantes: antennæ filiformes, pilosæ, nigræ, graciles, thorace longiores: thorax ovatus: prothorax brevissimus, supra non conspicuus: mesothoracis scutum latum; parapsidum suturæ remotæ, bene determinatæ, postice approximata; scutellum obconicum, mediocre, bisulcatum: metathorax declivis, obconicus: petiolus brevissimus: abdomen sublineare, depressum, thorace angustius, non longius: pedes graciles, subæquales, nigræ; tibiæ fuscæ; tarsi flavi, apice fuscii; protibiæ flavæ: alæ limpida, latæ, ciliatæ; squamulæ picæ; nervi fuscii; nervus humeralis ulnari multo brevior, radialis nullus, cubitalis sat longus, stigma minimum.

Fem. Caput thoracis latitudine; abdomen longi-ovatum, subtus carinatum, apice acuminatum, thorace longius. (Corp. long. lin. $\frac{1}{2}$ — $\frac{2}{3}$; alar. lin. $\frac{3}{4}$ —1.)

Tetrastichus Scadius, Fem. *Viridis, antennæ picæ, pedes flavi, femora viridia, alæ limpida.*

Corpus crassum, convexum, obscure viride, subtilissime squameum, parum nitens, parce pubescens: caput transversum, breve, thoracis latitudine; vertex sat latus; frons abrupte declivis: oculi rufi, mediocres, non extantes: antennæ picæ, clavata, pubescentes, thorace paullo breviores; clava triarticulata, ovata, acuminata, articulo præcedente latior et plus duplo longior: thorax ovatus: prothorax transversus, mediocris: mesothoracis scutum latum; parapsidum suturæ bene determinatæ; scutellum subconicum, bisulcatum: metathorax brevis, obconicus, declivis: petiolus brevissimus: abdomen longi-ovatum, nitens, supra convexum, subtus carinatum, apice acuminatum, thorace paullo longius et angustius; segmenta transversa, subæqua-

lia: pedes flavi; coxæ virides; trochanteres picei; femora viridia, apice flava; tarsi apice fusci: alæ limpidae; squamulae picæ; nervi fulvi; nervus ulnaris humerali multo longior, radialis nullus, cubitalis sat longus; stigma minimum. (Corp. long. lin. $\frac{3}{4}$; alar. lin. $1\frac{1}{2}$.)

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. *Sonchus alpinus* 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 Callatea to Braemar, and made several botanical excursions in the neighbourhood of Castleton.

In our ascent of Ben Aven, one of the lofty mountains in the Braemar district, we examined a hill called Little Craigin-dal, 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, *Thalictrum alpinum*, *Viola palustris*; *Silene acaulis*, *Dryas octopetala*, *Potentilla alpestris*, *Rubus chamæmorus*, *Alchemilla vulgaris*, β . *subsericea*, *Epilobium alpinum* and *alsinefolium*, *Sedum Rhodiola*, *Saxifraga oppositifolia*, *aizoides* and *stellaris*, *Cornus succica*, *Hieracium alpinum* and *murorum*, β . *pulmonarium*, γ . *Lawsoni*, *Saussurea alpina*, *Gnaphalium supinum*, *Vaccinium uliginosum*, *Arctostaphylos Uva-ursi*, *Azalea procumbens*, *Pyrola media* and *secunda*, *Veronica Chamædryas*, var. *hirsuta*, and *V. serpyllifolia*, β . *humifusa*, *Trientalis europæa*, *Armeria maritima*, β . *alpina*, *Oxyria reniformis*, *Salix herbacea* and *myrsinites*, β . *arbutifolia*, *Betula nana*, *Listera cordata*, *Tofieldia palustris*, *Juncus trifidus* and *triglumis*, *Luzula spicata*, *Carex rigida*, *capillaris* and *pauciflora*, *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-