## **ILLUSTRATIONS**

OF

# **BRITISH ENTOMOLOGY;**

OR, A

## Synopsis of Indigenous Insects:

CONTAINING

THEIR GENERIC AND SPECIFIC DISTINCTIONS;

WITH

AN ACCOUNT OF THEIR METAMORPHOSES, TIMES OF APPEARANCE, LOCALITIES, FOOD, AND ECONOMY, AS FAR AS PRÁCTICABLE.

BY JAMES FRANCIS STEPHENS, F.L.S.

MEMBER OF THE ZOOLOGICAL SOCIETY, ETC.

EMBELLISHED WITH COLOURED FIGURES OF THE RARER AND MORE INTERESTING SPECIES.

#### MANDIBULATA.

#### VOL. IV.

"In his tam parvis tamque ferè nullis quæ ratio! quanta vis! quam inextricabilis perfectio !"-Plin.

"Finis Creationis Telluris est gloria DE1, ex opera Naturæ, per Hominem solum."-Linné.

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## ILLUSTRATIONS

#### OF

## BRITISH ENTOMOLOGY.

#### SECTION IV.

Tarsi tetramerous, rarely heteromerous; the penultimate joint generally bilobed: head produced anteriorly into a rostrum, with the mouth at its apex, and the antennæ (varying in the number of articulations from nine to twelve) more or less clavate; or the head not rostrated, the antennæ 11- or 12-jointed, filiform or setaceous, occasionally serrated; labium more or less cordiform.

THE larvæ usually reside in the interior of vegetable productions, and are generally without legs, or have those organs extremely small; they are oblong and vermiform; some attack the outer bark of trees, others the solid wood, or the parenchyma of leaves, the interior of seeds, &c. In the image there is considerable diversity of appearance; it is therefore necessary to subdivide the group, and the portion in immediate affinity to the insects last treated of is

### Subsection 1.— RHINCHOPHORA, Latreille.

Head rostrated anteriorly, with the mouth at the apex: antennæ inserted on the rostrum, generally clavate; the basal joint frequently elongated: mandibles generally small, stout: palpi generally minute: body firm, hard: abdomen mostly robust; tarsi various.

This extensive and singular division of insects, equalled only in numbers by the Brahcelytra, is composed of strictly phytophagous species, all of them, both in their larvæ and final stages, subsisting upon plants in their various states; the larvæ are soft, whitish, and without feet, with the body composed of twelve distinct segments,

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MANDIBULATA. VOL. IV. 31st JAN. 1831.

the head broad, scaly, and armed with two strong jaws: they feed, as before mentioned, exclusively on vegetables, change to pupa in a silken cocoon, and in general appear towards the middle of the spring or beginning of the summer in their perfect states.

The indigenous genera may be divided into the subjoined families :

i	omnes articulis quatuor. Palpi	minuti, arto. ultimo conico:			42. CURCULIONIDÆ.
		obvii, filiformes:		•	•
	quatuor antici articulis 5; postici 4:		•	•	•

## FAMILY XLII.—CURCULIONIDÆ, Leach.

Tarsi quadriarticulate: palpi very minute, the apical joint conic: labrum wanting; rostrum thick, rounded; frequently very long: antennæ with from nine to twelve joints, clavate; the basal joint frequently very much elongated sometimes as long as the others united, which are mostly placed at a right angle thereto—and subclavate: wings frequently wanting.

This extraordinary and natural family of insects is no less distinguished by the singularity of the rostriform anterior portion of the head-the mouth being placed at the apex-than by the amazing number of species which it embraces: the latter present very remarkable forms and striking variety of colours; the last, in some instances, outvying the most splendid hues found in any other department of nature; this splendour is produced by small scales, which are scattered over the body, but which are very readily abraded: the indigenous species are generally small, but notwithstanding their minuteness several of them, as hereafter mentioned, are extremely destructive to grain and other articles of human consumption : they are timid, and when approached contract their antennæ and legs, and fall from their position, or, in cases where they are provided with saltatorial hinder femora, leap to a distance; they fly but seldom, and many of them have the elytra soldered together and are destitute of wings :- they all subsist upon vegetables, and there is consequently considerable diversity in their food: in form their larvæ are somewhat elongate, linear, with the extremities acute; with the head scaly, and the body furnished with tubercular projections in lieu of legs; their food varies considerably,

like that of the imago: from the multitude of species, and their great dissimilarity of habit, it becomes necessary to propose the following extensive and formidable list of genera; which have been mostly characterized in the elaborate " Curculionidum Dispositio methodica" by Schönherr.

#### A. Antennæ geniculatæ, articulus basilaris valdè elongatus.

Rostrum cylindricum vel filiforme, plus minusve elongatum, rard thorace brevius : antennæ haud juxta sinum oris insertæ.

Antennæ 9 articulatæ: funiculo 7-articulato.

Rostrum breve, latum : .	271. RHYNCOLUS.
elongatum, subgracile:	272. Cossonus.
9-art#; funiculo 6-articulato:	273. CALANDRA.
9-artæ ; funiculo 5-articulato :	281. SPHÆRULA.
Antennæ 10-articulatæ; funiculo 5-articulato.	
Tibix anteriores apice unco intus armat $x$ .	
Corpus elongatum; pygidium tectum:	275. MECINUS.
subovatum; pygidium haud tectum.	
Elytra subovata, convexa :	276. GYMNAËTRON.
planiuscula, subquadrata.	
Rostrum liberum, haud filiforme:	277. RHINUSA.
in canaliculâ pectorali immersum :	278. MIARUS.
Tibiæ anteriores apice truncatæ, muticæ.	
Antennarum arto 3-tio elongato, subclavato : .	279. CIONUS.
breve, obconico : .	280. CLEOPUS.
Bastuum in Assume in annalisulaus protonalous alles minusure	
Rostrum inflexum, in canaliculam pectoralem, plus minusve	
distinctè profundam, applicandum.	
Antennæ 11-articulatæ:	291. LYPRUS.
12-art*; Tarsi articulo ultimo unungulato :	286. Mononychus.
articulo ultimo biangulato.	
Tibiæ mediocres, rectæ, apice truncatæ, muticæ.	
Corpus politum, ovale, gibbum :	282. OROBITIS.
haud politum, squamulosum aut scabrosum plu	s minusverhombicum.
Rostrum elongatum : sulcus pectoralis elongatus :	283. CEUTORHYNCHU.
abbreviatus:	284. NEDYUS.
brevius, incrassatum :	285. RHINONCUS.
Tibiæ mediocres, rectæ, apice truncatæ, unco intus armatæ.	
Scutellum nullum.	
Femora simplicia : elytra connata :	287. ACALLES.
dentata : elytra libera :	288. RUTIDOSOMA-
Scutellum distinctum :	289. CRYPTORHYNCHUS.
Tibia longe, arcuate, apice intus unco acuto :	290. BAGOÜS.
Rostrum plus minusve inflexum, haud in canaliculum pectors	
applicandum : pedes antici basi sæpissime approxim	
Pedes antici basi approximati. Scutellum distinctum. A	lati.
Antennæ 11-articulatæ.	
Femora valida, postica haud incrassata :	-
Rostrum breviusculum, crassum :	292. PACHYRHINUS.
elongatum : corpus subnudum :	294. AMALUS.
dense pubescens :	296. SIBINIA.
Femora valida, postica valde incrassata:	297. ORCHESTES.
Antennæ 12-articulatæ.	
Femora valida, postica incrassata :	298. TACHYERGES.
postica haud incrassata.	
Tarsi articulo ultimo, ungulis omnino caret : .	293. ANOPLUS.
	в 2
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Tarsi articulo ultimo biungulato. Tibiis omnibus rectis.	
Pygidium plus minusve nudum : rostrum long	
simum	
tectum : femora dentata :	305. DORYTOMUS.
mutica:	306. PISSODES.
Tibiis omnibus curvatis.	
Antennæ arto 2-do crasso, obovato, 3-tio elongato	: 301. Hydronomus.
2-do et 3-tio longiusculis, obconic	is: 303. ERIRHINUS.
Tibiis anticis plus minusve ad apicem curvatis.	
Rostrum elongatum arcuatum.	
Corpus oblongo-ovatum, densè squamosum:	295. TYCHIUS.
oblongum, vix squamosum :	
Femora antica crassa, omnibus dentatis :	300. ANTHONOMUS.
haud dentata.	
Elytra oblongo-ovata, haud tuberculata:	304. NOTARIS.
subovata, tuberculata : • •	302. GRYPIDIUS.
Rostrum brevius, subrectum.	
Corpus elongatum, angustum : .	336. LIXUS.
ovatum, sublatum.	
Rostrum thorace longius :	337. LARINUS.
thorace brevius :	338. RHINOBATUS.
Scutellum nullum. Apteri :	307. ORTHOCHATES.
Pedes antici basi distantes :	274. BARIS.
	-
Rostrum plus minusve crassum et deforme, breviusculum,	parum arcuatum : antennæ
sæpe sinum oris insertæ.	
Canalicula antennalis infraocularis, curvata vel obliqua.	
Rostrum deflexum, longius, subcylindricum, subarcuati	ım.
Tibix omnes apice muticæ.	
Antennarum artº 2-tio 2-do breviore :	311. Ellescus.
arto 3-tio 2-do longiore.	
Corpus ovatum aut oblongum, densè squamosum	: 310. HYPERA.
oblongum, subnudum :	309. PROCAS.
Tibiæ omnes apice unco valido intús armatæ.	
Corpus apterum, durum : elytra connata.	
Scutellum nullum : corpus elongatum :	312. PLINTHUS.
minutum: corpus ovatum.	
Elytra vagè punctata, haud striata :	313. LIPARUS.
profunde punctato-striata :	314. LEIOSOMA.
Corpus alatum, durum : elytra libera.	
Antennarum arto 2-do longiusculo obconico:	315. Hylobius.
brevi, crassissimo :	316. TANYSPHYRUS.
•	
Rostrum deflexum, longiusculum, extrorsum sæpius subincra	satum.
Corpus sæpissime alatum.	200 Chevens
Elytra costata, posticè declivia, callosa:	308. GRONOPS.
haud costata, postice gradatim fornicata, subc	
Antennarum art <sup>o</sup> 3-tio 2-do breviore:	334. CLEONUS.
art <sup>o</sup> 3-tio 2-do longiore:	335. BOTHYNODERUS.
Corpus semper apterum.	
Elytra basi introrsum emarginata : scutellum minutum.	910 Manuary
Rostrum et thorax canaliculati: corpus oblongum:	319. MERIONUS.
carinati : corpus ovatum :	318. BARYNOTUS
Elytra anticè haud emarginata : scutellum distinctum.	000 T
Rostrum capite sublongius, subcrassum :	320. LIOPHLÆUS.
duplo longius, crassiusculum:	317. ALOPHUS.
Rostrum deflexum, breviusculum, crassissimum:	333. BROTHEUS.
subhorizontale, breve vel brevissimum.	
Corpus brevius, ovatum, plerumque pilosum, apterum	
Oculi prominuli.	
Autennarum arto 3 tio 2-do breviore:	323. PHILOPEDON.
artº 3-tio elongato 2-do longiore : :	324. STROPHOSOMUS.
Oculi mediocres vix prominuli.	
Femora dentata:	325. SCIAPHILUS.
haud dentata:	326. BRACHYSOMUS.
Corpus elongatum, angustum, muticum, apterum:	332. BRACHYDERES.
Corkins and Burning and Rotanis in anothing at the and	

Corpus elongatum vel oblongum, alatum. Antennarum art <sup>o</sup> 3-tio 2-do breviore, 4-8 nodosis: 4-8 subturbinati art <sup>is</sup> 2-dis et 3-tiis subæqualibus. Corpus densè squamosum: vix squamosum; sæpê pilosum:	•	331. 328.	Sitona. Tanymecus. Polydrusus. Nemoic.
Canalicula antennalis subrecta, versus medium oculi adsco Rostrum breve, subhorizontale : corpus alatum : longitudine capitis, subdeflexum : corpus ovi apterum, setosum : capite sæpè longius, subhorizontale : corpus	atum,	330. 322.	Phyllobius. Trachyphlæus.
ovatum, apterum, glabrum B. Antennæ non fractæ; articulus basilaris no			OTIORHYNCHUS.
Antennæ 12-articulatæ. Rostrum capite brevius, crassum. Caput oblongum, posteriùs valdè constrictum breve, in thoracem ad oculos retractum.			Apoderus.
Scutellum distinctum: vix conspicuum: Rostrum longitudine capitis, subrectum.	•	339.	CHLOROPHANUS. RHINOCYLLUS-
Antennarum artº 2-do suborbiculato; maxima:	•		PANUS.
obconico; clavo	ore-	0.40	<b>D</b>
vior :			RHINODES.
capito duplo longius, arcuatum : . Antennæ 11-articulatæ.	•	341.	MAGDALIS.
Rostrum porrectum: deflexum, aut inflexum. Femora postica haud incrassata.	•	344.	APION.
Rostrum filiforme, ad apicem haud dilatatum : ad apicem plus minusve dilatatum :		345.	OXYSTOMA.
capite longius:		348.	RHYNCHITES.
capite brevius:	-	349.	ATTELABUS.
Femora postica incrassata.	•	-	
Antennarum art° 2-do elongato, subclavato :		346.	RAMPHUS.
breve, globoso : .	•	347.	DEPORAÜS.

#### GENUS CCLXXI.-RHYNCOLUS, Germar.

Antennæ geniculated, nine-jointed, short, rather stout, inserted in the middle of the rostrum, the funiculus (comprising the space between the basal joint and the club) 7-jointed, with the basal joint large obconic, the rest short, subperfoliated, the club minute, obtuse, indistinctly articulated. Rostrum linear, sometimes very broad, and as long as the head, or cylindric and longer than the head: thorax oblong, convex: elytra elongate, subcylindric: body short,

A. With the rostrum very short, broad, and depressed.

+ Sp. 1. ater. Niger, glaber, antennis, pedibusque rufo-piceis, elytrorum interstitiis obsoletè seriato-punctulatis. (Long. corp. 3 lin.)

Ca. ater. Linné.-Rh. ater. Steph. Catal. 148. No. 1489, note.

Black, glabrous: head finely and thorax rather coarsely punctate; elytra punctate-striate; the interstices flat, each with a regular series of minute impressions: legs and antennæ rufo-piceous.

Said to have been taken in Britain; but I have not hitherto seen a specimen.

subcylindric: *tibiæ* slightly rounded, with a hook at the apex: *tarsi* slender, with the penultimate joint sometimes bilobed.

This genus differs chiefly, according to Schönherr, from Cossonus in the form of the rostrum, the more convex body, the greater length of the third joint of the antennæ—the basal one of the funiculus and the smaller club. The species reside in old trees, and the first, which has been supposed to inhabit Britain, closely resembles a species of Hylurgus.

- B. With the rostrum cylindric, longer than the head.
- Sp. 2. lignarius. Nigro-piceus, glaber, antennis pedibusque dilutioribus, thorace subtilit
  er punctulato. (Long. corp. 1<sup>1</sup>/<sub>4</sub>—1<sup>1</sup>/<sub>2</sub> lin.)
- Ca. lignarius. Marsham.--Ba. lignarius. Steph. Catal. 149. No. 1497.
- Dark, piceous; glabrous; head delicately punctured; thorax thickly and finely punctulated, with an obsolete dorsal carina: elytra punctate-striate, the interstices flat, smooth: body dull piceous beneath, punctured: legs and antennæ pale rufo-piceous, the club of the latter paler.

Not unfrequently taken from beneath the bark of elms, in the vicinity of the metropolis: I have captured it in such situations in Battersea-fields; at Hertford, near Darenth-wood, &c.: it also occurs near Bristol. "Taken in a house at Swansea, and by Mr. Jeffreys on the sand-hills."—L. W. Dillwyn, Esq. "Epping."—Mr. Doubleday.

- Sp. 3. piceus. Piceus totus, rostro crassiusculo, thoraceque punctatis, elytris subpilosis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)
- Ca. piceus? Wilkin MSS.-Ba. piceus. Steph. Catal. 149. No. 1498.
- Entirely piceous: thorax rather deeply punctate; elytra punctate-striate, the interstices punctulated, with a few scattered hairs.

Similar to the foregoing, but the rostrum shorter, more porrect and punctulated, the basal joint of the antennæ more slender; thorax more deeply punctate.

Probably the Cossonus culinaris of Reich.

Found, though rarely, near London, and also in other parts. "Taken beneath the Zostera marina on the banks of the river Orwell, near Ipswich, by Rev. R. Sheppard."—Marsham MSS. "Taken on the sand-hills (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 4. truncorum. Piceus, glaber, thorace subovali, profundiàs punctato, elytris profundà sulcato-punctatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)

Co. truncorum. Schüppel.-Ba. truncorum. Steph. Catal. 149. No. 1499.

Piceous, glabrous: rostrum finely punctured, pitchy-black: thorax oblong, with the sides rounded, rather narrowed in front, truncate at the base; convex, deeply punctate: elytra rather broader than the thorax, convex, deeply punctate-sulcate: the interstices slightly convex and very faintly and distantly punctured: body deeply punctured beneath: antennæ and legs pale ferruginous.

Found in profusion near Cork, but I believe not in England.

#### GENUS CCLXXII.-Cossonus, Clairville.

Antennæ geniculated, 9-jointed, short, rather stout, inserted towards the apex of the rostrum, or at its base, the funiculus 7-jointed, its two basal joints a little elongate, the remainder short, club large, ovate, subsolid. Rostrum elongate, rather slender, dilated at the apex, or filiform in some females: thorax subquadrangulate, rather depressed above: elytra linear-elongate; slightly convex: body elongate, sublinear, depressed: tibiæ compressed, with a large hook at the apex; tarsi rather slender, attached to the inner surface of the tibiæ, the penultimate joint bilobed.

Cossonus has the antennæ 9-jointed only from the club being apparently solid, and the funiculus '7-jointed, by which character it may be known from Calandra, exclusively of the elytra covering the apex of the abdomen; from Rhyncolus, to which it is more closely allied, the longer rostrum with its dilated apex (or filiform rostrum with basal antennæ in some females), and its more depressed form of body and subquadrangular thorax, &c. distinguish it.

- Sp. 1. Tardii. Piceo-niger, aut castaneus, nitidus, antennis pedibusque castaneis, elytris punctato-striatis, interstitiis rugosis. (Long. corp.  $3-5\frac{1}{2}$  lin.)
- Co. Tardii. Vigors MSS .- Curtis, ii. pl. 59.-Steph. Catal. 148. No. 1490.
- Pitchy-black, or castaneous, rugose, shining: head finely punctured: thorax thickly and deeply punctured, with a smooth dorsal line, the anterior edge with a transverse impression: elytra deeply punctate-striate, the interstices rugose: antennæ and legs rufo-piceous, or castaneous: rostrum very much dilated at the apex in the male, deeply punctured, and with a longitudinal suture between the antennæ; filiform, punctate, and without the suture in the female.

I believe this singular species, which offers so remarkable a sexual peculiarity in the structure of the rostrum and position of the antennæ, has not hitherto occurred in England: all the specimens which I have seen were but very local; in decayed hollies. "Taken near Powerscourt Waterfall in Ireland, in July."—N. A Vigors and J. Tardy, Esgs.

- Sp. 2. linearis. Niger, glaber, antennis pedibusque rufo-piceis, thorace postice in medio impresso.—(Long. corp. 2<sup>1</sup>/<sub>2</sub>—3<sup>1</sup>/<sub>4</sub> lin.)
- Co. linearis. Fabricius.-Steph. Catal. 148. No. 1491.
- Elongate, narrow, black, glabrous: head punctured, with the crown smooth: thorax somewhat coarctate in front, and transversely impressed, with an obsolete impression in the middle of the base, the disc somewhat thickly and moderately punctate, with a rudimentary dorsal carina: elytra linear, inclining to castaneous, deeply punctate-striated, the interstices elevated, smooth: antennæ and legs rufo-piceous.
- Var.  $\beta$ . Co. elongatus. Steph. Catal. 148. No. 1492. Of a more elongate form and paler hue: probably immature.

Also a local insect: it has been taken in boleti in Batterseafields, and in Somersetshire, out of an old tree. Var.  $\beta$ . I received from Mr. Sim's collection; it was found near Epping. "Fulham, in profusion, in July, 1826."—N. A. Vigors, Esq. "Taken several years ago near Swansea, and is far from common."—L. W. Dillwyn, Esq.

#### GENUS CCLXXIII.-CALANDRA, Clairville.

Antennæ geniculated, 9-jointed, inserted near the base of the rostrum, the funiculus composed of six short, subcoarctate, truncate joints, the club biarticulate, elongate-subovate, subacuminate. Rostrum elongate, rounded, slightly deflexed, and a little bent: thorax elongate, narrowed in front, depressed: the base and apex truncate: elytra shorter than the abdomen: body subdepressed: legs rather short; tibiæ armed with an acute spur: tarsi reflexed, the penultimate joint slightly bilobed.

Without noticing other characters, the distinctly abbreviated elytra, combined with the 9-jointed antennæ, will at once enable any one to distinguish the present genus from the others of this extensive family.

The Calandræ in their larva state are exceedingly destructive to the produce of the agriculturist; whole granaries being sometimes laid waste by them: the female imago lays a single egg in each grain, and the larva, when hatched, subsists entirely upon the interior or farinaceous portion of the grain, leaving the husk untouched, and undergoing its transformation to a pupa within, when the grain appears uninjured; but the defective corn may be discovered by throwing the suspected portion into water, when that which contains the Calandra floats. Ants are said to destroy them.

- Sp. 1. granaria. Elongata, rufo-picea, glabra, elytris profundè striatis, striis obsoletè punctatis, thorace profundè punctato. (Long. corp. 1<sup>1</sup>/<sub>3</sub>-2 lin.)
- Cu. granarius. *Linné*.—Ca. granaria. Steph. Catal. 148. No. 1493.—Insect Transformations, fig. in p. 320. Ca. frumentaria. Steph. Catal. 148. No. 1496, note.
- Elongate, rufo-piceous, or pale ferruginous: head obsoletely punctulate, thorax deeply punctate, the punctures oblong: elytra slightly convex, deeply striate, the striæ obsoletely punctate at the bottom: legs and antennæ rufo-ferruginous.
- The Ca. frumentaria of my Catalogue is a mere variety of the foregoing : it was found in some corn obtained from a public shop; I consequently doubted its indigneous origin.

Far too common in granaries throughout the metropolitan district, and known by the name of the corn weevil. "In granaries near Swansea; the Welsh call it Gwyfn-yr-yd."—L. W. Dillwyn, Esq. "Epping."—Mr. Doubleday.

- Sp. 2. unicolor. Ferrugineus, unicolor, thorace subpunctatus, elytris obsoletê striatis. (Long. corp. 1 lin.)
- Cu. unicolor. Marsham.-Ca. unicolor. Steph. Catal. 148. No. 1494.
- Entirely of a pale ferruginous: thorax minutely punctured; elytra obsoletely striated.
- Were it not for its minute size, I should conceive this insect to be a mere immature state of the foregoing, but it is also less punctate:—I possess an injured pair from the Marshamian cabinet; they appear more elongate in proportion

Sp. 3. Oryzæ. Niger, elytris maculis quatuor ferrugineis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.) Cu. Oryzæ. Linné.—Marsham (!)—Steph. Catal. 148. No. 1495, note.

- Black or pitchy-black, with deep oblong punctures: elytra striated, each with a ferruginous spot near the base and another towards the apex: antennæ and legs ferruginous.
- Taken occasionally alive in rice, and in that article alone; consequently not indigenous.

I possess a large, apparently new, species of Calandra, or rather of Rhynco-phorus (5 lines long), that was captured alive in the Isle of Dogs, but as it is probably West Indian, I refrain from further mention thereof. It is perhaps needless to add that the notice of species introduced in the foot-notes is solely for the purpose of putting the student on his guard as to their origin; which the experience of upwards of twenty years, in the ardent collection of our native insects, with a view to ascertain such as are truly indigenous, enables me to perform with some degree of accuracy.

than Ca. granaria, but whether they may have been taken with specimens of that insect does not appear.

Locality unknown :--- from the Marshamian collection.

GENUS CCLXXIV.-BABIS, Germar.

Antennæ geniculated, 12-jointed, rather short, and somewhat stout; funiculus 7-jointed, its basal joint more or less elongated, obconic; the second sometimes also obconic; the rest short; the club obtusely oval, four-jointed. *Rostrum* elongate, subcylindric, curved: thorax a little convex, the base somewhat bisinuated: body elliptic, depressed: elytra oblong, a little convex, the apex obtusely rounded; the pygidium sometimes a little exposed: legs short, stout; anterior distant at the base; tibiæ armed within with a stout hook.

From the foregoing genera of this family Baris differs by having the antennæ 12-jointed, seven of which are comprised in the funiculus, and from the rest of the family, in which the rostrum is elongate and deflexed, and not inserted in a pectoral groove, by the base of the anterior legs being distant:—the species frequent damp and marshy situations, and subsist upon aquatic or subaquatic plants: —the two first differ slightly in form, &c. from the three last, and would, with propriety, form a division in the genus.

Sp. 1. Atriplicis. Lineari-elongatus, niger nitidus, pectoris abdominisque lateribus subtùs albo-squamosis, rostro mediocri incurvo. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
Cu. Atriplicis. Paykul.—Ba. Atriplicis. Steph. Catal. 149. No. 1500.

Linear-elongate, shining black, glabrous; thorax thickly and rather deeply punctate, with a smooth narrow dorsal line; the lateral margins with a few scattered griseous hairs; elytra striated, the striæ subpunctate, and the interstices flat, each with minute punctures, disposed in a line, and a little setose : body beneath and sides of the abdomen densely clothed with snowy-white scales : rostrum moderately incurved.

Not uncommon in many places within the metropolitan district; in Battersea-fields I have frequently taken it, and also in the damp meadows near Hertford; it also occurs in Norfolk, and in Somersetshire. "On Erica tetralix on Crwmlyn-bog."—L. W. Dillwyn, Esq.

Sp. 2. pilistriatus. Elongatus, niger, pilosus; subtùs albus, elytris striatis, interstitiis seriato-pilosis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)

St. pilistriatus. Kirby MS .- Ba. pilistriatus. Steph. Catal. 149. No. 1501.

Elongate, black, pilose: beneath white: thorax rather deeply punctate, without a smooth dorsal line: elytra striated, the striæ obscurely punctate, the interstices each with a row of minute points, and a dusky pubescent line: body beneath ashy-white: rostrum slightly bent.

It is possible that this insect may be a more perfect state of the preceding, with the pubescence unworn; but its sculpture is less profound.

Taken near the metropolis; also near Bristol and in Suffolk.

Sp. 3. Artemisiæ. Niger, nitidus, glaber, thorace profnudè punctato, elytris striatis, interstitüs seriatim punctatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>—1<sup>3</sup>/<sub>4</sub> lin.)
 Rh. Artemisiæ. Fabricius.—Ba. Artemisiæ. Steph. Catal. 149. No. 1502.

Shining black, glabrous; rostrum considerably arcuated and thickly punctate: thorax bisinuated at the base, the disc thickly and very deeply punctured: elytra striated, the striæ subcrenate, the interstices broad, flat, each with a regular series of minute impressions: tarsi piceous: antennæ piceous at the base, with the apex and club black.

Found in damp hedges, and in sandy places at the roots of Artemesia vulgaris in May and June. "Southend."—Rev. F. W. Hope.

- Sp. 4. picicornis. Niger, suprà atro-cæruleus, antennis piceis, thorace punctato, elytris striatis. (Long. corp. 1<sup>2</sup>/<sub>3</sub>-2 lin.)
- Cu. picicornis. Marsham.-Ba. picicornis. Steph. Catal. 149. No. 1503.
- Black, shining, above deep blue; thorax deeply punctate, narrowed anteriorly: elytra striated, the interstices somewhat irregularly, but finely, punctured; legs black, with the tarsi slightly rufescent: antennæ rufo-piceous, with the club large.

Found in grassy and damp places, in the flowers of Reseda lutea, &c. in June; not uncommon near London; also in Norfolk. "Gravesend."—Mr. Bainbridge.

- Sp. 5. impunctatus. Niger, suprà cœruleus, thorace sublævi, elytris striatis, interstitiis impunctatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- St. impunctatus. Kirly MSS .- Ba. impunctatus. Steph. Catal. 149. No. 1504.
- Black, above bluish; thorax obscurely punctured: elytra striated, the striæ obsoletely punctate, with the interstices impunctate.

Taken near London, and in Suffolk.

#### GENUS CCLXXV.-MECINUS, Germar.

Antennæ geniculated, 10-jointed, short, moderately stout; funiculus 5-jointed, its two basal joints obconic; the second longest; the rest transverse; club oval subsolid, 5-jointed. Rostrum rather short, stout, deflexed, rounded: thorax subcylindric, slightly convex, the base and apex truncate, the latter slightly attenuated: elytra elongate, subcylindric, covering the abdomen: legs short, stout; the apex of the tibiæ, which are compressed, armed with a horizontal hook.

The ten-jointed antennæ of Mecinus, combined with their elongate-subcylindric form, covered apex of the abdomen, rather short, robust rostrum, &c., are its chief points of distinction from the allied genera: the species reside in grassy places.

- Sp. 1. semicylindricus. Lineari-elongatus, niger, cinereo-pubescens, antennarum basi tarsisque ferrugineis, elytris punctato-striatis, femoribus obsoletè dentatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Cu. semicylindricus. Marsham.-Me. semicylindricus. Steph. Catal. 149. No. 1505.
- Linear-elongate, black, clothed with a delicate cinereous pubescence; thorax with a delicate transverse stria near the anterior margin, the disc obsoletely rugosepunctate: elytra punctate-striate, the interstices faintly rugulose; the apex sometimes rufescent: base of the antennæ and the tarsi ferruginous; the anterior femora obsoletely dentate.

Not uncommon within the metropolitan district: I have taken it plentifully in Battersea-fields, Hertford, Ripley, &c.: it occurs in Norfolk and near Bristol. "Among grass and on the naked sandhills, not uncommon."—L. W. Dillwyn, Esq.

- Sp. 2. hæmorrhoidalis. Lineari-elongatus, niger, subpubescens, antennarum basi, tibiis tarsisque rufo-ferrugineis, elytris margine laterali apiceque piceis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
- Cu. hæmorrhoidalis. Herbst ?--Me. hæmorrhoidalis. Steph. Catal. 149. No. 1507.
- Linear-elongate, black, slightly pubescent: thorax thickly punctate, with the margins concolorous; elytra with the lateral margin and apex piceous, striated; the striæ obscurely punctate, the interstices subrugose: femora dusky; tibiæ and tarsi rufo-ferruginous: antennæ the same, with the club black.
- Gyllenhal considers this insect as the opposite sex of the foregoing: but of that I have both sexes, not differing from each other in any other external points than the usual sexual characteristics, size and form.

Found within the metropolitan district; also in Devonshire and Somersetshire.

Sp. 3. circulatus. Lineari-elongatus, niger, villosus, lineâ pallidâ subgriseâ utroque latere marginatus. (Long. corp. 2 lin.) Cu. circulatus. Marsham.-Me. circulatus. Steph. Catal. 149. No. 1506.

Linear-elongate, black, villose: thorax with the lateral margins and an obscure dorsal line clothed with whitish down: elytra broadly margined with pale griseous-white, and a brighter white spot within the apex: body beneath whitish: legs rufous, with the femora piceous: antennæ rufous, with the club dusky.

Much less abundant than the last: it has been taken, I believe, near London; and I think Mr. Kirby told me that he once took a quantity of specimens on some palings, at Barham. "Sometimes occurs on the sand-hills, and has been taken early in the spring, under stones, in the fir-woods above Gnoll Castle."—L. W. Dillwyn, Esq.

GENUS CCLXXVI.-GYMNAETRON, Schönherr.

Antennæ geniculated, 10-jointed, short, rather slender; funiculus 5-jointed, its two basal joints obconic; the three following short, broader, with the apex somewhat rounded, the club ovate. Rostrum filiform, curved, inflexed: thorax transverse, the base slightly waved: elytra subovate, convex, not covering the apex of the abdomen: legs short: apex of the anterior tibiæ with a minute hook.

This genus, which in common with the two following has the antennæ 10-jointed, and the anterior tibiæ armed at the apex with a minute hook, differs from them by having the body ovate-convex, densely clothed with scales, and the apex of the abdomen much exposed;—the rostrum is filiform, and not received into a pectoral cavity as in Miarus.

- Sp. 1. Beccabungæ. Niger, thoracis lateribus pectoreque albido-squamosis, antennarum basi, tibiis elytrorumque plaga rufo-testaceis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Cu. Beccabungæ. Linné.-Gy. Beccabungæ. Steph. Catal. 150. No. 1508.
- Black, densely pubescent, with the sides of the thorax and the breast densely clothed with whitish scales: thorax with the disc slightly squamose: elytra pubescent, with an obscure rufo-testaceous discoidal streak towards the apex: femora clavate, black, tibiæ and tarsi rufo-testaceous; antennæ ferruginous, with the club black: rostrum black.
- It varies in having the thorax nearly entirely covered with ashy-white or ochraceous scales, the elytra dull rufo-testaceous, or immaculate, with the suture and margin dusky-black, and the legs entirely testaceous.

Apparently rare; I possess one example which was taken in Norfolk, and others captured in June, 1827, near Ripley, by myself:—they differ greatly from each other; and from Gyllenhal's description it appears to be a variable insect.

#### GENUS CCLXXVII.-RHINUSA, Kirby.

Antennæ geniculated, 10-jointed, short, somewhat stout: funiculus 5-jointed, its two basal joints obconic; the remainder transverse; club 4-jointed, ovate. Rostrum free, more or less curved, its apex generally attenuated: thorax transverse: elytra somewhat depressed, subquadrate, not covering the apex of the abdomen: legs short; anterior tibiæ with a minute hook at the apex.

Rhinusa, which has the antennæ 10-jointed, is distinguished from the immediately allied genera, by having the rostrum more or less attenuated at the apex, not inserted, during repose, in a groove beneath the thorax, the elytra depressed, subquadrate, and not covering the apex of the abdomen; and the anterior tibiæ are furnished at the tip with a minute hook :---the species frequent flowers.

Sp. 1. Antirrhini. Nigra, densè griseo-pubescens, rostro recto, apice attenuato, femoribus obsoletè dentatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>2</sup>/<sub>3</sub> lin.)
Cu. Antirrhini. Paykul.-Rh. Antirrhini. Steph. Catal. 150. No. 1509.

Ovate, black, densely clothed with short griseous-white pubescence, rostrum straight, attenuated at the apex: head gibbous behind: thorax somewhat rugosely granulated: elytra punctate-striate, the interstices rugulose, with a series of rather long griseous pubescence: femora clavate, the posterior obsoletely dentate.

Found within the metropolitan district, and in Norfolk in June, in the flowers of the Antirrhinum Linariæ; not very abundantly.

- Sp. 2. intaminata. Oblonga, tenuis, niger, pubescens, rostro recto, apice attenuato, femoribus muticis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>4</sub> lin.)
  Rh. intaminata. Kirby MSS.—Steph. Catal. 150. No. 1511.
- Oblong, slender, pubescent: rostrum straight, with the apex attenuated : thorax finely granulated : elytra striated, the interstices finely rugose and striated with cinercous down : femora slightly clavate, unarmed.

Found near London, and in Suffolk. " I believe this has been taken near Swansea."—L. W. Dillwyn. Esq.

Sp. 3. tricolor. Niger, cinereo-pilosus, antennarum basi, tibiis tarsisque rufotestaceis, elytris rufo-ferrugineis, basi, suturâ fusciisque duabus abbreviatis nigris. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Cu. tricolor. Marsham.-Rh. tricolor. Steph. Catal. 150. No. 1512.

Black, clothed with cinereous down; the latter forming a bright spot in the middle of the hinder margin of the thorax opposite the scutellum: elytra rufo-ferruginous, with the base, suture, and two abbreviated oblique fasciæ black: the antennæ at the base, the tibiæ and tarsi, rufo-testaceous: femora clavate, black.

The elytra are sometimes black, with the apex alone rufo-ferruginous.

Apparently not very common: it frequents grassy places, and has been taken in Norfolk and Suffolk; also, I believe, within the metropolitan district. "North Wales."—Rev. F. W. Hope.

#### GENUS CCLXXVIII.-MIARUS, Schönherr.

Antennæ geniculated, 10-jointed, rather slender, funiculus 5-jointed, its two basal joints obconic, the other three transverse, rounded at the apex : club 4-jointed, ovate. Rostrum filiform, slightly bent, inserted in a groove beneath the thorax, which last is transverse, with the posterior angles rounded: elytra somewhat depressed, subquadrate, not covering the apex of the abdomen: legs short; anterior tibiæ with a minute hook at the apex.

The filiform rostrum, somewhat depressed, subquadrate, abbreviated elytra, absence of a pectoral groove, and 10-jointed antennæ united, at once point out the more prominent characters of this genus, the species of which frequent herbage of various kinds.

A. With all the femora simple.

- Sp. 1. Campanulæ. Niger, pilis cinereo-albidis, elytrorum seriatis, adspersus, femoribus muticis. (Long. corp.  $1\frac{1}{2}-1\frac{3}{4}$  lin.)
- Cu. Campanulæ. Linné.—Mi. Campanulæ. Steph. Catal. 150. No. 1513.—Rh. acephala. Steph. Catal. 150. No. 1510.
- Black, clothed with ashy-white hairs, which are disposed in lines on the elytra: head retracted, rounded, obsoletely punctate; with the front impressed: thorax with the anterior margin slightly reflexed, and with a faint transverse striga, the disc finely punctate: elytra punctate-striate, the insterstices thickly rugose-punctate, each with two or three rows of short, depressed, glossy, whitish hairs: legs rather long, with the femora simple. The male has the penultimate segment of the abdomen deeply impressed, and armed with two short teeth.

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С

This insect is synonymous with the Cu. acephalus of Marsham, which I had placed in the preceding genus in my Catalogue—an error, like many others, as well orthographical as typographical, ignorantly copied in the piracy thereof.

Inhabits flowers, especially those of the Campanula rotundifolia, but not very frequently taken: it has been found in the flowers of the whitethorn, in May, in Norfolk. "Among herbage (near Swansea), not common."—L. W. Dillwyn, Esq.

#### B. With all the femora dentate.

- Sp. 2. Nasturtii. PLATE XX. f. 1. Niger, griseo-tomentosus, antennis tarsisque rufis, elytris æneis, punctato-striatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
- Ca. Nasturtii. Spence MSS .- Mi. Nasturtii. Steph. Catal. 150. No. 1514.
- Black, clothed with a griseous down: head depressed: thorax subconic, with the anterior margin not reflexed, punctate, with a dorsal channel: elytra dull greenish-brass, regularly punctate-striated, with the insterstices flat: body beneath covered with griseous scales: legs black; femora dentate: tarsi rufous: rostrum naked, black, with the apex piceous: antennæ rufous.

Rare in the south of England, but has been frequently taken in Yorkshire on the Sisymbrium Nasturtium.

#### C. With the posterior femora alone dentate.

- Sp. S. Graminis. Niger, cinereo-pubescens, rostro longiori, cylindrico, subarcuato, antennis longioribus tenuioribus. (Long. corp. 1<sup>1</sup>/<sub>4</sub>—1<sup>3</sup>/<sub>4</sub> lin.)
  Rh. Graminis. Gyllenhal.—Mi. Graminis. Steph. Catal. 150. No. 1515.
- Black, clothed with an ashy down: rostrum rather long, cylindric, a little curved, black, punctulated: thorax finely punctured: elytra deeply punctatestriate, the interstices obsoletely granulated, and clothed with rather long down, disposed in striæ: legs rather long, black, femora clavate, the posterior ones with an obtuse dentation: antennæ rather long and slender, black.

Not common: I have met with it in June at Ripley, and in other places near London. "Near Cambridge."-S. Hanson, Esq.

- Sp. 4. Linariæ. Niger, parsim cinereo-pubescens, rostro crassiusculo, valdè arcuato, antennis brevibus. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
  Cu. Linariæ. Panzer.—Mi. Linariæ. Steph. Catal. 150. No. 1516.
- Black, sparingly clothed with cinereous pubescence: rostrum rather stout, considerably bent, black: antennæ short, stout, black: thorax with an obsolete dorsal carina: elytra striated, the striæ punctate, the interstices rugulose, clothed with a whitish down: legs black, femora clavate, the posterior obso-

letely dentate.

I possess a single example of this insect, which was captured, I believe, in Norfolk : it inhabits the roots of the Antirrhinum Linaria, the pupa being enveloped in a cocoon resembling a gall.

## GENUS CCLXXIX.-CIONUS, Clairville.

Antennæ geniculated, 10-jointed, short, somewhat slender, funiculus 5-jointed, its basal joint obconic, the second elongate-subclavate, the remainder short, subtruncate at the apex, club oblong-ovate, indistinctly articulated. Rostrum elongate, rounded, curved: thorax small, transverse, narrowed anteriorly, the base and apex subtruncate: elytra large, convex, quadrate-ovate, covering the abdomen: body subglobose: legs moderate; femora clavate, dentate: tibiæ truncate at the apex, unarmed.

The species of this elegant genus may be known by their subglobose form, united to their 10-jointed antennæ, of which the third joint (or second of the funiculus) is elongate-clavate, their small thorax, and beautifully tessellated ample elytra:—they subsist both in their larva and imago states upon plants, especially those of the genera Verbascum and Scrophularia. In July, 1827, I captured a *single* example of *each species* in a garden at Ripley, upon the only Verbascum therein.

- Sp. 1. Scrophulariæ. Nigro-fuscus, thorace toto flavescente villoso, elytris striatis, interstitiis alternis elevatioribus airo alboque tessellatis, maculis duabus suturalibus magnis atro-holosericeis. (Long. corp.  $2\frac{1}{4}$ -3 lin.)
- Cu. Scrophulariæ. *Linné.*—Don. ii. pl. 60.—Ci. Scrophulariæ. Steph. Catal. 150. No. 1517.
- Blackish brown: the thorax entirely and breast densely clothed with a yellowish down: elytra punctate-striated, the alternate interstices elevated with subquadrate velvety black spots and narrow white ones alternating, the suture similarly tessellated, but, in addition, with a large oblong-ovate deepblack spot, to which a white one is appended behind, at the base, and a smaller one towards the apex, augmented both in front and behind by a white one: legs black: tarsi rufescent.

Found in June and July, chiefly on the Scrophularia nodosa, also on the Verbascum Thapsus in plenty:—also frequent upon garden plants of the same and other genera. "On Scrophularia nodosa, common (near Swansea), and sometimes on Scrophularia aquatica. Mr. Jeffreys has observed it abundant on Buddlæa globosa."—L. W. Dillwyn, Esq. Sp. 2. Verbasci. Niger, thoracis lateribus grisescente villosis, elytris striatis, interstitiis alternis elevatioribus nigro cinereoque tessellatis, maculis duabus suturalibus magnis atro-holosericeis. (Long. corp.  $2-2\frac{1}{2}$  lin.)

Rh. Verbasci. Fabricius.-Ci. Verbasci. Steph. Catal. 151. No. 1518.

- Deep black; the sides of the thorax and the breast clothed with a griseous down, the middle of the femora black: elytra striated, the alternate interstices elevated and tessellated with black and cinereous, and the suture the same, with two larger velvety black spots near the base and apex—the former with a cinereous one behind, and the latter with one both in front and behind.
- Smaller than the foregoing, of a darker hue, with the centre of the thorax black, the sides griseous, the elytra tessellated with black and cinereous, and the dorsal spots comparatively smaller.

Found principally on the Verbascum Thapsus, though it occasionally frequents other plants, towards the end of July. I have taken it plentifully in September in Battersea-fields. " Common near Swansea."—L. W. Dillwyn, Esq.

- Sp. 3. Thapsi. Fusco-brunneus, undique cinereo-virescenti pubescens, elytris maculis denudatis obsoletè tessellatis, duabusque suturalibus atro-holosericeis orbiculatis, simplicibus. (Long. corp. 2½ lin.)
- Cu. Thapsi. Fabricius.-Ci. Thapsi. Steph. Catal. 151. No. 1519.
- Fuscous-brown, clothed throughout with a greenish-ash pubescence: elytra striated with somewhat denuded spots, obsoletely tessellated, in the alternate interstices, and two orbiculate simple ones on the suture, one near the base, the other towards the apex: legs fuscescent, varied with cinereous pubescence: tarsi and sometimes the anterior tibiæ ferruginous.

Taken in June on the Scrophularia, rather plentifully in some districts, especially in a chalk-pit at Northfleet.

Sp. 4. Hortulanus. Fusco-brunneus, pube cinereo undique tectus, coleoptris maculis duabus atris dorsalibus. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)

Cu. Hortulanus. Marsham.-Ci. Hortulanus. Steph. Catal. 151. No. 1520.

Fuscous-brown; clothed throughout with cinereous down: elytra very obsoletely tessellated with dusky, with two large black spots on the suture.

Merely a variety of the preceding in my opinion.

Found also upon plants of the genera Scrophularia and Verbascum in June, less abundantly than the last. "Near Swansea, not common."—L. W. Dilleyn, Esq.

Sp. 5. Blattariæ. Fusco-brunneus, undique cinereo-griseo pubescens, elytris tessellatis, maculis duabus atris dorsalibus. (Long. corp. 1½-1¾ lin.)
Ci. Blattariæ. Clairville.—Steph. Catal. 151. No. 1521.

Fuscous-brown; clothed throughout with ashy-griseous down, with the middle of the thorax behind brown: elytra striated, the alternate interstices tessellated with brown and cinereous, with two large black spots on the suture, of which the anterior one is edged with brown, and between it and the base clouded with fuscous, with two black dots; the posterior sutural spot is orbicular and simple: legs testaceous, with the femora dusky.

Chiefly found upon the Verbascum nigrum in June and July: not uncommon in some places: I have received it from Bristol, Devonshire, and Norfolk. "Not uncommon on Scrophularia aquatica near Swansea."—L. W. Dillwyn, Esq.

### GENUS CCLXXX.-CLEOPUS, Megerle.

Antennæ geniculated, 10-jointed, moderate, rather slender; funiculus 5-jointed, its two basaljoints short, obconic, the remainder also short, subnodose; the club indistinctly quadriarticulate. Rostrum elongate, rounded, slightly bent: thorax very short, transverse, the base slightly waved: elytra ample, convex, covering the abdomen: body somewhat elongate-ovate: legs elongate; femora clavate, dentate; tibiæ truncate at the apex, unarmed.

Cleopus has the body more elongate than Cionus, with the third joint of the antennæ not longer than the second, and the remaining joints of the funiculus subnodose, and the rostrum is rather more bent: the species frequent aquatic plants.

- Sp. 1. pulchellus. Subgriseus, elytrorum lineis tribus elevatis albo nigroque tessellatis. (Long. corp.  $1\frac{1}{2}-1\frac{3}{4}$  lin.)
- Cu. pulchellus. Herbst.-Cl. Solani. Steph. Catal. 151. No. 1522.
- Fuscous-brown, clothed with griseous down: the elytra striated, the alternate interstices slightly elevated, and tessellated with velvety black spots and erect whitish fascicles of hair: thorax slightly clouded with griseous: femora dentate, black, or dusky in the middle, with the base and apex ferruginous; the tibiæ and tarsi also ferruginous: club of the antennæ fuscous.
- Var. 3. Cl. rigidus. Steph. Catal. 151. No. 1524.—Rufo-ferruginous, with the elytra striated, the alternate interstices with a few pale fascicles of whitish hair and indistinct black spots : legs and antennæ entirely rufo-ferruginous.
- Var.  $\gamma$ . Cl. flavus. Steph. Catal. 151. No. 1525.—With the entire body pale griseo-testaceous, the elytra not tessellated :—probably immature.

Taken at the end of July on the Scrophularia aquatica. "Near Swansea, not uncommon."—L. W. Dillwyn, Esq.

## GENUS CCLXXXI .-- SPHÆRULA, Megerle.

Antennæ geniculated, 9-jointed, rather long, and slender; funiculus 5-jointed, its first joint oblong-ovate, longer than the rest, the second obconic, the remainder shorter, nodose; the club acuminated at the apex, distinctly triarticulate. Rostrum elongate, rounded, a little bent: thorax conic, much narrowed anteriorly: elytra gibbous, subovate, covering the abdomen; legs rather long; femora incrassated in the middle, not dentate: tibiæ truncate at the apex, and unarmed.

The distinctly triarticulated clava of the antennæ, which are only 9-jointed, and convex body, attenuated at both ends, at once point out the distinctions of Sphærula from Cionus and Cleopus, to which genera it is mostly allied.

- Sp. 1. Lythri. Niger nitidus, griseo-subpubescens, antennarum basi pedibusque pallidis, elytris fasciá abbreviatá maculáque testaceis, albo pubescentibus. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Cu. Lythri. Paykul.-Sp. Lythri. Steph. Catal. 151. No. 1525.
- Shining black, clothed with griseous down: the elytra with an abbreviated testaceous fascia and posterior spot covered with whitish hairs; the disc deeply punctate-striate, the interstices smooth: legs pale, immaculate, or with the joints and femora above more or less spotted with black.
- Extremely variable: in some examples the thorax is rufous, in others black: the elytra are sometimes nearly entirely testaceous, the fascia and spot being more or less confluent: the rostrum, head, and abdomen are always black.

Found in the flowers of Lythrum Salicaria in July and August. "Common near Swansea."-L. W. Dillwyn, Esg.

### GENUS CCLXXXII.-OROBITIS, Germar.

Antennæ geniculated, 12-jointed, rather slender, inserted in the middle of the rostrum; the funiculus seven-jointed, its basal joint rather long, obconic, the four following very short, obconic, the two next lenticular; the club ovate, acuminate. Rostrum inflexed, inserted in a groove, not continued on the breast, slightly elongated, rather slender, curved: head nearly concealed: eyes large, depressed, approximating on the forehead: thorax very short, transverse, truncate at the base and apex: elytra rounded, very convex, glossy, attenuated posteriorly, the apex of each round and gaping: legs elongate, distinct at the base; femora with a short groove beneath; tibiæ straight; the apex truncate, unarmed: tarsi with two claws.

The singular genus Orobitis may be known from its allies by its ovate, polished, gibbous body-by the property the insects have, when alarmed, of causing their femora to droop, as it were, and project at a right angle from the body—by the pectoral groove beneath the thorax being abbreviated, the femora canaliculated, &c.

Sp. 1. cyaneus. Niger, glaber, subtus albo-squamosus, elytris nigro-cærulescentibus, striis lævibus, antennis pedibusque piceis. (Long. corp. 1-1<sup>1</sup>/<sub>2</sub> lin.)
Cu. cyaneus. Linné.-Or. cyaneus. Steph. Catal. 152. No. 1526.

Black, glabrous, very shining, beneath with white scales: rostrum punctate, substriate: head punctured: thorax sometimes tinged with bluish, or violaceous, very obsoletely punctulated: scutellum with white scales: elytra very convex, deep black-blue or violaceous, very faintly striated, the striæ and interstices impunctate, the latter flat; legs pitchy-black, with cinereous scales; tibiæ and tarsi pale rusty-brown: antennæ the same.

The sandy lane leading into Darenth-wood is the only locality I have ever found this insect in; I have there taken several examples at different periods during the month of June: the insect occurs, but sparingly, near Bristol. "On Salix argentea, and among herbage on Crwmlyn Burrows, not very uncommon."—L. W. Dillwyn, Esq.

## GENUS CCLXXXIII.-CEUTORHYNCHUS, Schüppel.

Antennæ geniculated, 12-jointed, rather slender, inserted towards the apex or the middle of the rostrum; the funiculus seven-jointed, its basal joint longer than the rest and somewhat obconic; the remainder short, lenticular: club ovate, acuminated, four-jointed. Rostrum inflexed, elongate, curved, inserted during repose in a pectoral groove, which is continued to the base of the intermediate legs, and is strongly margined; thorax considerably attenuated anteriorly, bisinuated posteriorly: scutellum minute: body somewhat rhomboid, scabrous: elytra subtriangular, shorter than the abdomen: legs moderate, stout; femora clavate, sometimes dentate; tibiæ truncate at the apex, unarmed; tarsi with two claws.

This obscure genus differs from Orobitis in having the body more or less rhomboid in shape, and rugose or scaly: the rostrum is of dissimilar form, more lengthened, and is inserted during repose in a pectoral groove, which reaches to the base of the intermediate legs, by which it differs from Nedyus: the thorax is very much constricted in front, and is sometimes tuberculated: there is considerable diversity of appearance amongst the species, which frequent trees and herbs.

A. With the thorax not tuberculated, nor reflexed in front. Sp. 1. Quercus. Nigro-fuscus, cinereo-squamosus, pedibus fusco-ferrugineis, elytris obsoletiùs punctato-striatis, testaceis, fasciis undatis cinereo-squamosis. (Long. corp.  $1-1_{\frac{1}{2}}$  lin.)

- Cu. Quercus. Herbst.-Ceu. Quercus. Steph. Catal. 152. No. 1527.
- B'ack-brown, sparingly clothed above with cinereous scales, and densely covered beneath with white ones: *elytra* obsoletely punctate-striated, *testaceous*, with various *undulated* pale-*ashy* transverse *fasciæ*; legs dusky-ferruginous.
- Differs from the next in being rather larger, of a deeper hue, but with a paler rostrum: the fasciæ on the elytra are also dissimilar.

Not uncommon in oaks throughout the metropolitan district. "Not very uncommon among grass in woods near Swansea."-L. W. Dillwyn, Esq.

- Sp. 2. melanorhynchus. Rufo-testaceus, cinereo-squamosus, elytris nebulis fasciæformibus cinereo-squamosis, pectore abdominisque basi fuscis, rostro nigro. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
- Cu. melanorhynchus. Marsham.—Ceu. melanorhynchus. Steph. Catal. 152. No. 1528.
- Testaceous-red; with a few ashy scales above, and densely clothed beneath with a whitish down: *elytra* rather faintly punctate-striate, with whitish clouds at the base, and indistinct fascize of the same hue towards the apex: the suture dusky, the breast and base of the abdomen fuscous; the head rufous, with the rostrum and eyes black.
- Closely resembling the foregoing, from which it differs in having the elytra clouded rather than fasciated with cinereous, and in having the breast and base of the abdomen fuscous, the rostrum black.

Not uncommon in various places within the metropolitan district, as at Hertford, Ripley, Darenth, &c. : also found in Somersetshire and in Norfolk.

- Sp. 3. ruber. Dilute nigro-fuscus, elytris nebulis undulatis cinerco-squamosis, pectore abdomineque nigris, rostro apice rufo. (Long. corp.  $1\frac{3}{4}$ -2 lin.)
- Cu. ruber. Marsham. Don. xi. pl. 389. f. 1. Ceu. ruber. Steph. Catal. 152. No. 1529.
- Testaceous-red, with the head and thorax fuscescent: the elytra faintly striated, the striæ indistinctly punctate; the disc clouded with ashy-white, forming a recurved fascia in the middle: the breast and abdomen black; the apex of the rostrum red.
- Considerably larger than the foregoing, from which it may be known by the tip of the rostrum being red, the breast and abdomen black, the head and thorax fuscescent, &c.

Found, not unusually, near London. "Near Swansea."-L. W. Dillwyn, Esq.

- Sp. 4. rufirostris. Nigro-fuscus, elytris dilute rufo-testaceis, immaculatis, pectore abdomineque rufis, rostro nigro, apice rufo. (Long. corp. 14 lin.)
- Cu. rufirostris. Spence? MSS .- Ceu. rufirostris. Steph. Catal. 152. No. 1531.
- Fuscous-black: the *elytra* faintly punctate-striate, pale testaceous-red, *imma-culate*; the suture slightly fuscescent: *breast and abdomen rufous*: rostrum black at the base, rufous at the apex.
- Var. B. Ceu. inermis. Steph. Catal. 152. No. 1530.—With the head and thorax brownish-black, the rostrum entirely rufous.
- It is not unlikely that this and the three preceding insects may eventually prove to be referrible to one inconstant species: the present differs from the foregoing in having the breast and abdomen rufous; the elytra immaculate, &c.

Found within the metropolitan district: also in Somersetshire.

- Sp. 5. rubicundus. Convexus, niger, cinereo-squamosus, elytris profundè punctato-striatis rufo-testaceis, suturâ fuscâ, basi albo-squamosâ, pedibus rufis. (Long. corp. 1 lin.)
- Cu. rubicundus. Paykul.-Ceu. rubicundus. Steph. Catal. 152. No. 1532.
- Somewhat convex, black, with cinercous scales above, beneath rather densely clothed with a whitish down; the elytra somewhat punctate-striate, rufo-testaceous, with the suture fuscous, its base with an elongate patch of white scales: legs rufous.
- More convex than the preceding insect; the suture of the elytra fuscous, with a patch of white scales at the base.

Taken in grassy places near London; not uncommon.

- Sp. 6. melanocephalus. Subconvexus, niger, elytris pedibusque rufis: elytris profunde striatis, striis subcrenatis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Cu. melanocephalus. Marsham.—Ceu. melanocephalus. Steph. Catal. 152. No. 1533.
- Rather convex, black, with the *legs and etytra* alone *rufous*, the latter somewhat deeply striated, the striæ slightly crenulated and obsoletely punctate.
- The dark head and thorax of this species, united to its smaller size, deeply striated immaculate elytra, and rufous legs, distinguish it from its allies.

Found not uncommonly near London, especially in Batterseafields.

- Sp. 7. hamorrhoidalis. Piceo-fuscus, elytris subcrenato-striatis, fuscis, apice rufo, pedibus rufis, rostro nigro. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)
- Cu. hæmorrhoidalis. Panzer.-Ceu. hæmorrhoidalis. Steph. Catal. 152. No. 1534.
- Pitchy-brown; the elytra somewhat deeply striated, the striæ subcrenulated; fuscous, with the apex rufous: legs also rufous: rostrum deep shining black.

The deep colour of the elytra of this species, with their rufous tip, at once points out its distinction from its congeners.

I possess a pair of this insect, captured by myself near London many years since.

- B. With the thorax tuberculated, the anterior margin elevated or reflexed.a. Thighs unarmed.
- Sp. 8. Geranii. Nèger, subtus albido-squamosus, thorace obsoletè bituberculator anticè transversim impresso, elytris striatis, interstitiis seriatim tuberculatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)

Cu. Geranii. Paykul.-Ceu. Geranii. Steph. Catal. 152. No. 1535.

- Black, beneath densely clothed with white scales: the thorax obsoletely bituberculated, with a transverse impression in front: the elytra striated, the striæ obsoletely punctate; the *interstices* each with a row of elevated squamous tubercles: legs black; tibiæ with an obtuse tooth exteriorly towards the apex: femora simple.
- The tuberculated interstices of the elytra, and the obtuse tooth near the apex of the tibiæ, and unarmed femora, sufficiently characterize this species.

Not common near London: I have taken it in Darenth-wood and at Ripley: found in Norfolk and in Devonshire. "Among herbage on Crwmlyn-burrows, and by Mr. Millard in clover."— L. W. Dillwyn, Esq. "Scotland."—Rev. W. Little.

#### b. With the femora dentate.

Sp. 9. didymus. Convexus, niger, subtus albo-squamosus, thorace canaliculato, bituberculato, elytris profundè punctato-striatis, maculis quatuor albido-squamosis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>3</sup>/<sub>4</sub> lin.)

- Convex, black; clothed with white scales beneath; thorax thickly punctate, with a dorsal groove, and a short tubercle on each side, the sides rather densely squamous: *elytra* deeply punctate-striate, with four whitish squamous spots, which are very readily abraded, one in the middle and another at the apex of each elytron: *tibiæ* and tarsi ferruginous; antennæ ferruginous, with the club dusky.
- The four-spotted elytra, ferruginous tibiæ and tarsi, and dusky club of the antennæ, are the chief diagnostics of this insect.

Found abundantly in hedges near London, and I believe in other parts; certainly in Norfolk and in Devonshire. "Common in the woods at Penllergare."—L. W. Dillwyn, Esq.

Sp. 10. Urticæ. Subconvexus, niger, subtus cinereo-squamosus; thorace impunctato, lineá mediâ exarato, elytris profundè striatis. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.)

Cu. didymus. Paykul.-Ceu. didymus. Steph. Catal. 152. No. 1536.

Cu. Urticæ. Marsham.-Ceu. Urticæ. Steph. Catal. 153. No. 1537.

- Somewhat convex, black; beneath densely clothed with cinereous scales: thorax with a dorsal channel, its disc impunctate, the sides a little clouded with whitish, and each with a short tubercle: elytra squamous, rather deeply punctate-striate, with a faint whitish spot in the middle: tibiæ and tarsi fuscescent.
- Differs from the former in having the thorax impunctate, the tibiæ and tarsi fuscescent, &c.

Not uncommon among nettles throughout the metropolitan district. "Common near Penllergare."-L. W. Dillwyn, Esq.

- Sp. 11. guttula. Subdepressus, niger opacus, subtus albido-squamosus, thorace canaliculato, elytris maculâ suturali baseos holosericeo-atrâ, apicis oblongâ albo-squamosa. (Long. corp.  $1\frac{3}{4}-2$  lin.)
- Rh. guttula. Fabricius.-Ceu. guttula. Steph. Catal. 153. No. 1538.
- Somewhat depressed, dull black, clothed beneath with whitish scales: thorax punctate, with a dorsal channel; elytra with the shoulders elevated, the disc a little convex, crenate-striated, the interstices somewhat granulated; near the base of the suture is an ovate velvety-black spot, common to both elytra, sometimes rather obscure, and towards the apex of the suture an oblong white patch: tarsi piceous: antennæ black.
- Differs from all the foregoing by the black patch at the base of the suture; and from the following by its superior size.

Rather scarce; found, however, in various places within the metropolitan district; in Norfolk, Somersetshire, &c.

- Sp. 12. fuliginosus. Subdepressus, griseo-niger, subtus albido-squamosus, elytris maculá suturali baseos holosericeo-atrá, anticè albido-squamosa, apicis oblongá albo-squamosa. (Long. corp. 1½ lin.)
- Cu. fuliginosus. Marsham.-Ceu. fuliginosus. Steph. Catal. 153. No. 1539.
- Somewhat depressed, griseous-black, beneath whitish: the elytra crenate-striate, the interstices granulated, the *suture with a deep-black velvety spot* near the base, *anterior to which is a small one*, composed of *whitish scales*, and *behind*, near the apex, is *an oblong white one*: legs and antennæ black; tarsi piceous.
- About half the size of the preceding, and differs in always having a patch of white scales at the base of the suture adjoining the black common spot on the back.

Abundant in hedges near London, and in other parts.

- Sp. 13. ruficornis. Subdepressus, nigro-piceus, subtus albido-squamosus, elytrorum interstitiis alternis cinereo-fuscis, maculá suturali nigrá, antennis rufis. (Long-corp.  $1\frac{1}{2}$  lin.)
- Ceu. ruficornis. Steph. Catal. 153. No. 1540.

- Somewhat depressed, black, whitish beneath: elytra striated, the striæ somewhat crenulated, the *alternate interstices ashy-brown*, the others deep fuscousblack, the suture with a black spot near the base: legs and *antennæ rufous*: rostrum black.
- The simple black patch near the base of the suture, the alternate pale and dark interstices on the elytra, and rufous antennæ, are the prominent characters of this insect.

Taken by myself near London several years since.

- Sp. 14. subrufus. Subdepressus, obscure rufus, elytris immaculatis, striatis, interstitiis pilosis, thorace granulato. (Long. corp. 1 lin.)
- Cu. subrufus. Marsham.-Ceu. subrufus. Steph. Catal. 153. No. 1541.
- Somewhat depressed : dull rufous, clothed with cinereous down, beneath whitish : thorax granulated : elytra immaculate, simply striated, the interstices thickly clothed with a short pile : rostrum blackish : legs and antennæ rufescent.
- The small size of this insect, united to its rufous tint, granulated thorax, immaculate, pilose elytra, &c., distinguish it from its affinities.

Found in Norfolk, and near London.

- Sp. 15. sulcicollis. Subconvexus, niger, subtus cinereo-squamulosus, thorace canaliculato, elytris leviter striatis, pectore utringue puncto densè albo-squamoso. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Cu. sulcicollis. Paykul .-- Ceu. sulcicollis. Steph. Catal. 153. No. 1542.
- Somewhat convex, dull black, with cinereous scales beneath: thorax with a dorsal channel, and obsoletely dentate: elytra simply striated, the interstices granulated: the breast on each side anteriorly with a dense patch of white scales.

The dense patch of scales on the anterior margin of the breast, with the convex form of the insect, and its dull black hue, sufficiently characterizes it.

Frequent in hedges near London: found also in Norfolk and in Devonshire. "In the spring of 1805 it was rather plentiful on the sand-hills (near Swansea), and I have not lately observed it."— L. W. Dillwyn, Esq.

- Sp. 16. affinis. Subconvexus, niger, undique squamulis cinereis-vestitus, subtus densioribus, elytris tenuè striatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Cu. affinis. Panzer.-Ceu. affinis. Steph. Catal. 153. No. 1543.
- Above convex, clothed throughout with ashy scales, especially beneath: elytra faintly striated, the interstices squamous.
- Probably a variety or more mature state of the preceding, from which it chiefly differs in being more universally clothed with scales.

Taken with the foregoing species, but less frequently.

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## GENUS CCLXXXIV.-NEDYUS, Schönherr.

Antennæ geniculated, 12-jointed, rather short, slender ; funiculus 7-jointed, its basal joint longer than the remainder, subobconic, the second elongate, rather slender, the rest short, subnodose, the club ovate, acuminate, quadriarticulate. Rostrum long, slender, curved, received during repose in a short pectoral groove, rarely extending beyond the base of the first pair of legs: thorax attenuated, and coarctate in front, bisinuated posteriorly: scutellum minute: elytra subtriangular, shorter than the abdomen: hody somewhat rhomboid, squamous: legs moderate: femora sometimes dentate: tibiæ truncate at the apex, and unarmed.

From the preceding genus Nedyus differs not only by having the pectoral cavity for the reception of the rostrum, during repose, considerably abbreviated,—scarcely reaching to the base of the first pair of legs,—but in the structure of the antennæ, the intermediate joints of the funiculus being dissimilar;—and from Rhinoncus, the elongated rostrum and quadriarticulate club of the antennæ, exclusively of other characters, readily distinguish the present genus; the species of which frequent flowers, and in their primary state cause galls upon the roots of plants.

- A. With the thorax not tuberculated, nor with its anterior margin reflexed: (femora simple.)
- Sp. 1. Sisymbrii.—PLATE XX. f. 2.—Subdepressus, niger, densè albo-squamulosus, suprà fusco-variegatus, rostro punctoque humerali elytrorum glabris nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Cu. Sisymbrii. Herbst.-Ne. Sisymbrii. Steph. Catal. 153. No. 1544.
- Somewhat depressed, black, densely clothed with whitish scales, variegated above with fuscous: the rostrum, and a spot on the shoulders of the elytra, glabrous black: elytra rather obsoletely punctate-striated, the interstices very delicately punctured: legs elongate, slender, black, densely squamous: antennæ slender, black.
- Ne. Sisymbrii is known from the other species by having the thorax simple, the body densely clothed with whitish scales,—which, from being somewhat more scanty on some parts of the elytra, give a variegated appearance thereto, except the rostrum and a spot on the shoulders, which are deep glossy black.

Not very abundant: found on the Sisymbrium amphibium, occasionally within the metropolitan district: I have received it from Somersetshire and from Norfolk.—" Netley."—*Rev. F. W. Hope.* 

- B. With the thorax tuberculated, or its anterior margin reflexed, elevated. a. Femora unarmed.
- Sp. 2. assimilis. Niger, supra tenuè, subtus densiùs, albido-squamulosus, thorace depressiusculo canaliculato, bituberculato, rostro longissimo tenuè. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Cu. assimilis. Paykul.-Ne. assimilis. Steph. Catal. 153. No. 1545.
- Rather slender, black; above sparingly, beneath densely, clothed with whitish scales; thorax somewhat depressed, deeply impressed transversely in front, with a dorsal groove, deepest at the base and apex; each side with an obtuse tubercle: elytra striated, the striæ obsoletely rugose-punctate, the interstices coriaceous: rostrum long, slender, black.
- Larger than the remaining species of this section, excepting the following, from which it differs in having the elytra more deeply striated, and the interstices coriaccous.

Inhabits Scrophularia nodosa and other flowers, especially those of the various species of Brassica :---not very uncommon near London. "In the autumn on the sand-hills (near Swansea)."-L. W. Dillwyn, Esq.

- Sp. 3. obstrictus. Niger, undique pilis brevissimis cinercis tectus, præcipuè subtus, thorace subtuberculato, elytris punctato-sulcatis. (Long. corp. 2 lin.)
  Cu. obstrictus. Marsham.—Ne. obstrictus. Steph. Catal. 153. No. 1546.
- Black, slightly depressed; clothed throughout with very short cinereous hairs, especially beneath: the thorax very slightly bituberculated, the tubercles obtuse: the elytra faintly punctate-striated, the interstices simple, pilose.
- Larger than the foregoing, of which it may be the opposite sex, but differs in being clothed with scale-like hairs, especially beneath; and in having the elytra more faintly striated, and the interstices simple: the tubercles on the side of the thorax more obtuse.

Taken occasionally within the metropolitan district: in plenty at Dover in June, 1829. "Occasionally taken on the sand-hills, and has been found plentiful on Brassica Napis by Mr. Jeffreys."— *L. W. Dillwyn, Esq.* 

- Sp. 4. Erysimi. Nigro-æneus, subnitidus, elytris cæruleis, profundè punctatostriatis, rostro pedibusque nigris, thorace canaliculato, bituberculato. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.)
- Cu. Erysimi. Paykul.-Ne. Erysimi. Steph. Catal. 154. No. 1547.
- Black-brass, rather glossy; thorax with a dorsal channel, and with a somewhat acute tubercle on each side: elytra deeply punctate-striate, the interstices slightly punctured; fine glossy blue or greenish: legs, antennæ, and rostrum black.

Known from the other minute species of this genus by its pretty shining blue or greenish, deeply punctate elytra.

Abundant in various places within the metropolitan district. "Netley."-Rev. F. W. Hope. "Not uncommon (near Swansea) among herbage and on tetradynamous plants in June."-L. W. Dillwyn, Esq.

- Sp. 5. chloropterus. Æneo-niger, rostro pedibusque nigris, elytris virescentibus tenuè punctato-striatis, humeris subprominulis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Cr. chloropterus. Kirby MSS .- Ne. chloropterus. Steph. Catal. 154. No. 1548.
- Brassy-black, with the rostrum and legs deep black, the former glossy: thorax obsoletely channelled down the back, the sides with an acute tubercle: *elytra* greenish, shining, faintly punctate-striate, with the shoulders somewhat prominent.
- Smaller than the foregoing: of a more bronzed hue, with the elytra more faintly striated in proportion, and of a more or less bright glossy green:—it is how-ever probable that it may be merely a variety.

Found near London, and in Suffolk.

- Sp. 6. contractus. Niger, subnitidus, elytris nigro-cærulescentibus profundê punctato-striatis, humeris prominulis, thorace obsoletê canaliculato. (Long. corp. 1 lin.)
- Cu. contractus. Marsham.-Ne. contractus. Steph. Catal. 154. No. 1549.
- Black, rather glossy: the thorax with an obsolete dorsal channel, its sides bituberculate: elytra bluish, deeply punctate-striated, the interstices coriaceous, somewhat tuberculated at the apex: the shoulders prominent.
- Considerably smaller than the foregoing, which it slightly resembles by its bluish elytra; but differs in having the thorax obsoletely channelled, and the shoulders very prominent, and in its minute size.

Inhabits grassy places within the metropolitan district. "Newcastle-on-Tyne."—G. Wailes, Esq.

- Sp. 7. Cochleariæ. Niger, cinereo-subpubescens, suturæ basi pectoreque albidosquamosis, thorace canaliculato, disco convexo, elytris profundè punctatostriatis, humeris rotundatis. (Long. corp.  $1-...1\frac{1}{4}$  lin.)
- Rh. Cochleariæ. Gyllenhal.-Ne. Cochleariæ. Steph. Catal. 154. No. 1550.
- Black, clothed with a cincreous pile, with the base of the suture and the breast densely clothed with white scales: the thorax bituberculate, its disc convex, with a dorsal sulcus: elytra deeply punctate-striate, the interstices a little rugose; the shoulders rounded.
- The size of the last-mentioned, but differs in being totally black, clothed with a

cinereous pile, with a bright spot of whitish scales at the base of the suture, and the breast also whitish.

Found, within the metropolitan district, on the flowers of Cochlearia officinalis, not common: taken at Ripley in 1827.

Sp. 8. nigrinus. Niger, subtus densà albido-squamosus, thorace depresso obsoleté canaliculato, bituberculato, posticè truncato, elytris obsoletiùs crenato-striatis cinereo-lineatis, humeris prominulis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)

Cu. nigrinus. Marsham .-- Ne. depressicollis. Steph. Catal. 154. No. 1551.

- Black; beneath densely clothed with whitish scales: thorax depressed, with an obsolete dorsal channel, the sides each with an acute tubercle, the hinder margin truncate: elytra obsoletely crenate-striate, the interstices with a row of short cinereous hairs; the shoulders prominent: antennæ piceous in the middle: club elongate.
- Differs from its congeners by its depressed thorax, and from the two following species, which it closely resembles, by the suture of the elytra being concolorous with the disc, the club of the antennæ being longer, &c.
- Inadvertently called Ne. depressicollis (Gyllenhal's name) in my Catalogue, Marsham's name having the priority.

Not uncommon in grassy places throughout the metropolitan district: I have obtained specimens from Somersetshire. "Among herbage on Crwmlyn-burrows, not common."—L. W. Dillwyn, Esq.

Sp. 9. constrictus. Niger, cinereo-subpubescens, subtùs densè albido-squamosus, elytris obsoletiùs crenato-striatis interstitiis cinereo-lineatis, humeris subprominulis. (Long. corp. 1 lin.)

Cu. constrictus. Marsham.-Ne. constrictus. Steph. Catal. 154. No. 1552.

- Black, with a cinereous pubescence; beneath densely clothed with whitish scales, thorax obscurely channelled; the disc convex; the hinder margin somewhat waved; the sides unituberculate: elytra with the shoulders a little prominent, the disc obsoletely crenate-striated, the interstices lineated with cinereous hairs: antennæ black.
- Allied to the last, to which Gyllenhal refers it, but differs in having the thorax convex, with its hinder margin waved, the antennæ black, &c.

Frequent throughout the metropolitan district, affecting thick herbage in lanes, fields, &c. "Among herbage on Crwmlyn and Sketty Burrows, not uncommon."—L. W. Dillwyn, Esq.

- Sp. 10. floralis. Niger, suturâ corporeque subtus densè albido-squamosis, thorace canaliculato bituberculato subconvexo, basi bisinuato elytris obsoletiàs crenatostriatis, cinereo-lineatis, humeris prominulis. (Long. corp. 1 lin.)
- Cu. floralis. Paykul.-Ne. floralis. Steph. Catal. 154. No. 1553.

- Black; the body beneath and the suture of the elytra densely clothed with whitish scales: the thorax slightly convex, with a dorsal channel, bituberculate, the base bisinuated: elytra rather obsoletely crenate-striated, the interstices lineated with cinereous hairs, the shoulders prominent.
- The white suture of this pretty little species, combined with its subconvex thorax, the base of which is waved, its prominent shoulders, &c., distinguish it from its congeners.

Found occasionally within the metropolitan district: also in Devonshire, the New Forest, &c. "Taken among herbage (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 11. monostigma. Supra cinereo-fuscus, subtus incanus, thorace bituberculato, lineâ intermediâ postice exaratâ, coleoptra striatâ, puncto albo pone scutellum, humeris prominulis. (Long. corp. 1 lin.)
- Cu. monostigma. Marsham MSS.—Ne. monostigma. Steph. Catal. 154. No. 1554.
- Above clothed with ashy-brown silken hairs, beneath hoary: thorax with an acute tooth on each side, and a dorsal groove on the disc: *elytra*, together with the apex, retuse, the disc striated, the striæ rather obsolete and somewhat crenated; near the scutellum, on the *suture*, a *white* spot, composed of two streaks; *shoulders prominent*: rostrum black, shining.
- Somewhat resembling Ne. Cochleariæ, but considerably smaller, of a different colour, the shoulders prominent, &c.

Taken near London by Mr. Marsham, and subsequently by myself.

- Sp. 12. pyrrorhynchus. Niger, subtus argenteo-albus, thorace punctulato obsoletè bituberculato, rostro rufo basi nigro, elytris subpunctato-striatis. (Long. corp. <sup>1</sup>/<sub>2</sub>-<sup>3</sup>/<sub>4</sub> lin.)
- Cu. pyrrorhynchus. Marsham.—Ne. pyrrorhynchus. Steph. Catal. 154. No. 1555.
- Black, beneath of a silvery white: thorax punctured, obsoletely bituberculated, with an abbreviated dorsal channel: the base straight: elytra somewhat faintly punctate-striate, the interstices pilose: rostrum rufous, with the base black.
- The smallest species of the genus; from all the foregoing it differs in having the rostrum rufous at the apex, and in other less evident characters, exclusively of its minute size.

From the Marshamian cabinet: I have taken the insect near London, at Ripley, in 1827.

- Sp. 13. melanarius. Niger, cinereo-pubescens, subtùs densè albido-squamosus, thorace subconvexo, bituberculato, obsoletè canaliculato, elytris profundè crenato-striatis, humeris subprominulis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Cr. melanarius. Kirby MSS.—Ne. melanarius. Steph. Catal. 154. No. 1556. MANDIBULATA. VOL. IV. 31st MARCH, 1831. D

- Black, above sparingly clothed with cinereous pile, beneath with compact whitish scales: thorax a little convex, with an obsolete dorsal channel, the base sub-truncate, and the lateral margins each with a very obtuse tubercle: elytra deceyly crenate-striate, the interstices sparingly lineated with cinereous, the shoulders slightly prominent: legs and antennæ black.
- Somewhat resembling Ne. contractus, but larger, and with the elytra deep black, the tubercles on the thorax and the form of the latter different.

Found, not commonly, near London, and in Suffolk.

- Sp. 14. sulculus. Niger, tenuè cinereo-pubescens, suturâ posticè corporeque subtus albido-squamosis, thorace subconvexo, profundè canaliculato, bituberculato, basi subtruncato, elytris obsoletiùs crenato-striatis, humeris subprominulis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)
- Cu. sulculus. Kirby (?) MSS.-Ne. sulculus. Steph. Catal. 154. No. 1557.
- Black, sparingly clothed with cincreous pubescence above, with the suture posteriorly and the body beneath densely clothed with whitish scales: thorax somewhat convex, deeply channelled down the back, the lateral margin with an obtuse tubercle, the base subtruncate: elytra obsoletely crenate-striate, the interstices lineated with cincreous, the shoulders slightly prominent.
- The small size of this insect, combined with the whitish posterior portion of the suture of the elytra, deeply channelled thorax, &c. sufficiently distinguish it from its affinities.

Found near London, in Suffolk, Norfolk, &c.: apparently not very common.

- Sp. 15. phæorhynchus. Nigricans, vellere argenteo-cinerascenti, elytris obsoletiùs striatis, thorace bituberculato, rostro ferrugineo. (Long. corp. 1 lin.)
- Cu. phæərhynchus. Marsham.—Ne. phæorhynchus. Steph. Catal. 154. No. 1558.
- Dusky or brown black, clothed throughout with a silvery down, above tinged with cinereous, beneath pure white: thorax slightly convex, its sides each with an obtuse tubercle, the base truncate: elytra faintly crenate-striated, the interstices lineated with cinerascent-silvery hairs: antennæ black, with the club ashy: rostrum ferruginous.
- The ferruginous rostrum and silvery pile on the body, exclusively of other characters, will at once point out its more prominent distinctions from the other species of the genus.

Not very common within the metropolitan district. "Taken by Mr. Millard in the nursery gardens near Fynone."—L. W. Dillwyn, Esq.

- Sp. 16. rufierus. Niger, elytris obscurè rufis cinereo-striatis, tibiis testaceis, thorace anticè rufo, obsoletè bituherculato. (Long. corp. 1 lin.)
- Cu. ruficrus. Marsham .- Ne. ruficrus. Steph. Catal. 154. No. 1559.

- Black: thorax convex, with the anterior margin rufous, the surface clothed with a delicate ashy down; the lateral margin obsoletely tuberculate: *elytra* dull *rufous*, rather faintly crenate-striate, the interstices lineated with cinereous hairs: the body beneath black, clothed with scattered whitish down: legs black, *tibiæ testaceous*.
- The testaceous tibiæ, black, convex, thorax, with its rufous anterior margin, obsolete lateral tubercles, and dull-rufous elytra, well characterize this pretty little species.

Not common: it is found near London, and I have received it from Norfolk.

Sp. 17. Ericæ. Niger, cinerascenti-villosus, suturæ basi pectoreque albo-squamosis, antennis pedibus rostroque longissimo tenuê rufis, thorace subdepresso bituberculato. (Long. corp. 1 lin.)

- Black, clothed with cinereous down: the thorax somewhat depressed, its sides with a single small tubercle, the disc granulate-punctate: elytra with the shoulders rather prominent; the disc punctate-striate, the interstices slightly rugulose and lineated with cinereous, the suture from the base to the middle clothed with whitish scales: thorax and breast beneath densely clothed with whitish scales: legs, antennæ, and rostrum—the latter long and slender rufous.
- The rufous antennæ, legs, and rostrum, with the pale base of the suture on the elytra, at once distinguish this species.

Apparently rare: I possess a single example, captured on Heath near London.

#### b. With the femora dentate.

- Somewhat depressed: black with whitish clouds and spots above, beneath entirely ashy-white: thorax with the disc and a spot on each side black, the former with a whitish dorsal line, interrupted in the middle, and terminating broadly at the base, where there is a rather deep impression: elytra striated, varied with bright white spots and black clouds, the former colour disposed in a somewhat waved spot near the base of the suture, a broad lateral patch about the middle, and a sublunate one at the apex: antennæ and legs black, tarsi obscure ferruginous.
- Var.? Ne. detritus. Steph. Catal. 154. No. 1562.-Black, varied with indistinct cinereous clouds, disposed as in the foregoing.

Rh. Ericæ. Gyllenhal.-Ne. Ericæ. Steph. Catal. 154. No. 1560.

Sp. 18. ovalis. Subdepressus, nigro cinereoque nebulosus, thorace bituberculato puncto utringue nigro, antennis pedibusque nigris, tarsis obscure ferrugineis. (Long. corp. 1½-2 lin.)

Cu. ovalis. Marsham.-Ne. ovalis. Steph. Catal. 154. No. 1561.

Frequent in weedy hedges in June near London; also in Somersetshire and Devon. "Not uncommon on thistles (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 19. Litura. Subdepressus, nigro alboque variegato-maculatus, antennarum apice tarsisque obscure ferrugineis; thorace bituberculato. (Long. corp.  $1\frac{3}{4}$  lin.)
- Cu. Litura. Paykul.—Ne. Litura. Steph. Catal. 155. No. 1574.—Cr. leucomelanus. Kirby MSS.—Ne. leucomelanus. Steph. Catal. 154. No. 1562.
- Somewhat depressed, clouded with black and white: thorax with the sides whitish, and an obsolete black spot on each; the disc with an obsolete channel: elytra striated, varied with black and white as in the foregoing insect: legs black, tarsi obscure ferruginous; femora acutely dentate: antennæ ferruginous, or piceous.
- Probably a mere variety of the preceding insect.

Not uncommon throughout the metropolitan district in thick herbage: also found in Suffolk. "Netley."-Rev. F. W. Hope.

- Sp. 20. pollinarius. Niger, subdepressus, supra piceo-cinereoque subtus albidosquamosus, thorace bituberculato, antennis tarsisque ferrugineis, femoribus dente valido armatis. (Long. corp.  $1\frac{1}{2}-1\frac{3}{4}$  lin.)
- Cu. pollinarius. Forster.-Ne. pollinarius. Steph. Catal. 155. No. 1564.
- Blackish, somewhat depressed; clothed above with ashy-piceous scales, and beneath with whitish ones: thorax granulated, with a few ashy scales, especially on the sides, which have each a large elevated acute tubercle: elytra faintly striated, and obsoletely clouded with cinereous, with a bent series of elevated tubercles towards the apex, within which is a whitish spot: legs black, with the apex, the tibiæ, and the tarsi ferruginous: antennæ ferruginous, with the basal joint piceous: rostrum black, rather elongate.

Abundant in hedges within the metropolitan district from May to August. "Rather common in nettles in the woods at Penllergare."—L. W. Dillwyn, Esq.

- Sp. 21. caliginosus. Niger, subdepressus, subtus cinereo-squamosus, thorace utrinque bituberculato, antennarum apice tibiis tarsisque ferrugineis. (Long. corp.  $1\frac{1}{3}$  lin.)
- Ne. nigrinus. Steph. Catal. 155. No. 1665.
- Black; clothed with ashy scales beneath: thorax with a rather sharp tubercle on each side: elytra somewhat faintly striated, immaculate: tibiæ and tarsi ferruginous: antennæ with the basal joint dusky, the apex ferruginous.

Found near London in June.

- Sp. 22. Borraginis. Piceo-niger, squamulis grisescentibus, tarsis rufis, elytris subtilissime punctato-striatis, fusco-griseis, thorace bituberculato. (Long. corp.  $1\frac{1}{2}$  lin.)
- Cu. Borraginis. Paykul.-Ne. Borraginis. Steph. Catal. 155. No. 1567.
- Pitchy-black, with grisescent scales, abdomen densely cinereous: thorax with the anterior margin elevated, the lateral one with a minute tooth, the disc with a deep dorsal line: elytra very obsoletely striated, the interstices rugose, slightly clouded with griseous, the base of the suture a little ashy: legs ashyred, with the tarsi rufous.

Not very common near London: found in thick herbage in June.—" Not uncommon among herbage (near Swansea)."—L. W. Dillwyn, Esq. " Cummersdale."—T. C. Heysham, Esq.

Sp. 23. Quercicola. Niger, subdepressus, subtus cinerco-squamosus, tarsis rufis, elytris cinereo-irroratis, suturæ basi alb i, thorace bituherculato. (Long. corp.  $1\frac{1}{3}$  lin.)

- Cu. Quercicola. Paykul.-Ne. Quercicola. Steph. Catal. 155. No. 1566.
- Black, somewhat depressed: clothed with ashy scales beneath: thorax with a pale dorsal line, the sides unituberculate; elytra faintly striated, sprinkled with ashy scales, the base of the suture white, towards the apex of each elytron rough elevations composed of several tubercles: femora black, with a small denticulation: tibiæ also black: tarsi rufo-ferruginous.

Also less common than some of the foregoing insects: found principally on oaks, near London, in June.

Sp. 24. pallidactylus. Niger, subdepressus, thorace anticè contracto, lateribus utrinque unituberculato, elytris striatis, cinereo-lineatis, suturæ basi albidâ; tarsis rufo-pallidis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)

Cu. pallidactylus. Marsham.-Ne. pallidactylus. Steph. Catal. 15 . No. 1568.

Black, slightly depressed: thorax punctate, with a longitudinal dorsal line, and a deep transverse impression towards the anterior margin, which last is considerably elevated and subdentate, the lateral margin unituberculate: elytra faintly striated, the interstices lineated with cinereous; the base of the suture whitish: legs black-brown; tarsi pale rufous.

Not very uncommon within the metropolitan district: I have obtained specimens from Norfolk. "Isle of Ely."-Marsham MSS.

Sp. 25. rugulosus. Subdepressus, piceo-niger, elytris cinerco-lincatis maculâ mediâ suturali oblongâ, atrâ, thorace depresso, bituberculato, tibiis tarsisq e testaceis. (Long. corp. 1 lin.)

Cu. rugulosus. Herbst.-Ne. rugulosus. Steph. Catal. 155. No. 1569.

Somewhat depressed : above *pitchy-black*, with ashy-pubescent scales, beneath densely clothed with ashy scales : *thorax depressed*, black, with a dorsal line,

and the sides whitish, the latter each with a single tubercle; the anterior margin but little constricted: elytra lineated with whitish and cinereous, with an oblong black spot on the suture: femora piceous, tibiæ and tarsi pale testaceous: antennæ piceous.

Found sometimes within the metropolitan district, but apparently abundant near Bristol. "Occasionally found among herbage (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 26. Chrysanthemi. Niger, elytris fasciis duabus albido-squamosis anteriore flexuoso-arcuatâ, posteriore undulatâ; antennis tibiis tarsisque ferrugineis. (Long. corp. 11 lin.)
- Cu. Chrysanthemi. Germar.-Ne. Chrysanthemi. Steph. Catal. 155. No. 1570.
- Black: thorax depressed, with a slender dorsal line and the sides whitish-ash, the latter unituberculate: elytra with the base and apex of the suture white, the middle deep black, the disc with a narrow squamous-white flexuous fascia, arising at the base of the suture, passing obliquely towards the middle, then suddenly bent forwards near the margin towards the shoulders; and near the apex is an indistinct undulated one: tibiæ, tarsi, and antennæ ferruginous.

Rare: I possess a single example captured by myself near Ripley, and a second taken "near Norwich."—J. Sparshall, Esq.

- Sp. 27. melanostigma. Niger, corpore subtus pallido, elytris nigro-cinerascentibus, maculá communi nigrá. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Cu. melanostigma. Marsham .-- Ne. melanostigma. Steph. Catal. 155. No. 1571.
- Black; beneath pale ashy: thorax cinereous, with an obsolete pale dorsal line; elytra ashy-black, the suture with the base whitish, the middle black; antennæ piceous: tibiæ and tarsi obscure ferruginous.

Apparently rare: my specimens were obtained from the Marshamian collection. "Among herbage about Penllergare."—L. W. Dillwyn, Esq.

Sp. 28. cinereus. Cinereus, elytris basi lineâ suturali abbreviatâ anticà albâ posticè nigrâ, tarsis rubellis. (Long. corp. 1<sup>2</sup>/<sub>3</sub>-2 lin.)
 Cu. cinereus. Marsham.-Ne. cinereus. Steph. Catal. 155. No. 1572.

Cinereous-black; beneath clothed with whitish scales; above with ashy: thorax with the sides slightly unituberculate; elytra striated, the interstices lineated with cinereous; the suture with the anterior half whitish or white, the posterior black: antennæ and legs piceous; tarsi rufescent.

From the Marshamian cabinet : captured in Suffolk.

 Sp. 29. scutellatus. Ater, cinereo-squamosus, antennis pedibusque nigris, clytris immaculatis, suturæ basi maculâ oblongå albâ. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
 Ne. scutellatús. Steph. Catal. 155. No. 1573.

Black, covered with ashy scales, especially beneath: thorax with an obsolete dorsal impression, the sides obscurely unituberculate: elytra faintly striated, immaculate, the suture with an oblong white spot at the base, the middle and apex concolorous with the disc: antennæ, legs, and tarsi black.

I possess a single example of this very distinct species, which I captured myself at Ripley in 1827.

- Sp. 30. uniguttatus. Cinerascenti-squamosus, elytris cano-nebulosis, maculá communi nigricanti, tarsis rufescentibus. (Long. corp. 1 lin.)
   Cu. uniguttatus. Marsham, i. 283.
- Black, beneath entirely clothed with hoary scales: thorax cinerascent, with an obscure dorsal line, the sides with an obtuse tubercle; elytra striated, clouded with ashy-brown and hoary, with a fuscous spot in the middle of the suture: the four anterior tibix and all the tarsi rufescent.
- Omitted by accident in my Catalogue, and as a matter of course in the piracy.

Apparently rare: my specimen I obtained from the Marshamian cabinet.

**†Sp. 31. Crux.** Ater, thorace punctis duobus baseos, elytris sutural punctisque sparsis albis. (Long. corp. 1 lin.)

Rhy. Crux. Fabricius .- Ne. Crux. Steph. Catal. 155. No. 1575.

Black; beneath whitish: thorax rounded, obsoletely bituberculated, with an oblong white spot on each side at the base: elytra striated, with the suture at the base, and several scattered spots on the disc white: legs black.

A single example of this pretty insect is in the collection at the British Museum.

- Sp. 32. Asperifoliarum. Niger, subdepressus, subtus albo-squamosus, antennis tibiis tarsisque ferrugineis, thorace submutico, elytris maculis quatuor albosquamosis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Cr. Asperifoliarum. Kirby MSS.—Ne. Asperifoliarum. Steph. Catal. 155. No. 1576.
- Black, somewhat depressed; beneath densely clothed with white scales: thorax short, the lateral margins rounded, scarcely tuberculate: elytra finely striated, black, with a common white obcordate spot towards the base of the suture, a second near the apex, and a lunate one towards the margin on each side: legs elongate, femora black, with a small tooth: tibix and tarsi ferruginous: antennæ ferruginous, with the club dusky.

Abundant in a lane near Putney in the spring; and not very uncommon in other parts of the metropolitan district in May and June: also near Dover. "Near Swansea, not common."—L. W. Dillwyn, Esg.

Dusky, somewhat depressed; beneath white: thorax with the sides rounded, and with an obsolete tubercle: elytra striated, with a white squamous spot at the base of the suture, another towards the apex, and one near the middle of the outer margin: antennæ and legs black.

Rare near London: found also in Suffolk. "Taken among herbage (near Swansea), not common."—L. W. Dillwyn, Esq.

- Sp. 34. Echii. Subdepressus, nigro-fuscus, squamosus, supra lineolis albis variegatus, pedibus nigris albo-variegatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
- Rh. Echii. Fabricius.-Ne. Echii. Steph. Catal. 156. No. 1578.
- Somewhat depressed, fuscous-black, with whitish scales above and beneath, forming various anastomosing lines on the elytra and thorax, the latter with three distinct longitudinal lines, and sometimes with three rather obscure transverse ones, those on the elytra very irregular, with a conspicuous oblique flexuous one arising at the base of the suture, continued to the centre of the disc, and terminating towards the shoulder on the outer margin: legs black, variegated with white.

Rare near London, on thistles, in June; but more abundant in Somersetshire: found also in Norfolk, and at Dover.—" Sandgate." Dr. Leach. "On thistles on Crwmlyn Burrows, and Mr. Millard has found it on Echium vulgare near Southampton."—L. W. Dillwyn, Esq.

C. With the thorax unarmed, reflexed anteriorly.

a. The elytra bearing setiform scales.

- Sp. 35. horridus. Obscure rufis, thorace elytrisque spinosis; rostro fusco, antennis testaceis, clavá fuscá. (Long. corp. 2-2½ lin.)
- Cu. horridus. Panzer .-- Ne horridus. Steph. Catal. 156. No. 1579.
- Dull rufous: forehead cinerascent: thorax gibbous, with the anterior and posterior margins elevated, the surface covered with numerous spines, and whitish hairs intermixed: elytra obscure rufous, dusky towards the suture, and sometimes with a dusky transverse central cloud, striated, the interstices with a row of erect spines, intermixed with numerous whitish hairs: legs

Sp. 33. quadrimaculatus. Nigricans, subdepressus, subtus albo-squamosus, elytris ma ulis quatuor albo-squamosis, antennis pedibusque nigris, thorace submutico. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

Cu. 4-maculatus. Linné.?-Ne. 4-maculatus. Steph. Catal. 156. No. 1577.

rufous, four posterior femora dentate: rostrum fuscous: antennæ testaceous, with the club fuscous.

More abundant in Norfolk than within the metropolitan district, where it occurs in June in thick hedges.

Sp. 36. Troglodytes. Rufo-brunneus, subtus albido-squamosus, antennis pedibusque rufo-testaceis, thorace cinereo-trilineato, elytris profundè punctatostriatis, muricatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)

Cu. Troglodytes. Fabricius .- Ne. Troglodytes. Steph. Catal. 156. No. 1580.

Red-brown, with whitish scales beneath : thorax unarmed, punctate, its elevated anterior margin slightly notched, the disc with an obsolete channel clothed with ashy-scaly spines, and a row of similar ones on each side: elytra rather deeply punctate-striate, with rows of erect, muricated, whitish scales; redbrown or ferruginous, the base and suture sometimes a little fuscescent: antennæ and legs rufo-testaceous: rostrum pitchy-black, with a deep-punctured stria at the base.

Not uncommon in hedges throughout the metropolitan district in June. "Among herbage, common (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 37. pusio. Ferrugineus, elytris punctato-striatis suturâ fuscâ, apice muricata, corpore suprà glabro subnitido; rostro rufo. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
  Cu. pusio. Panzer.—Ne. pusio. Steph. Catal. 156. No. 1581.
- Ferruginous; with the body above glabrous and slightly glossy: thorax unarmed, punctate, immaculate: elytra punctate-striate, with the suture fuscous or black, the apex with muricated scales: legs, antennæ, and rostrum rufous.

It is not improbable that this insect may prove to be a mere variety of the foregoing, as indicated in my Catalogue.

Found within the metropolitan district: at Dover, &c. "Common near Swansea." -L. W. Dillwyn, Esq.

Sp. 38. spiniger. Pallide testaceus, elytrorum sutură fuscă, rostro rufo-brunneo, antennis pedibusque pallidis, elytris spinosis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Cu. spiniger. Herbst.-Ne. spiniger. Steph. Catal. 156. No. 1582.

Pale testaceous: thorax unarmed; elytra punctate-striate, with a few scattered muricated scales; pale testaceous, the suture fuscous: legs and antennæ pale: rostrum red-brown: eyes fuscous.

Probably an immature state of Ne. pusio.

Taken near London, and in Norfolk.

#### b. The elytra not setose.

Sp. 39. marginatus. Subdepressus, niger, suturæ basi corporeque subtus albidosquamosis, femoribus obsoleté dentatis. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.) Cu. marginatus. Paykul.-Ne. marginatus. Steph. Catal. 156. No. 1583.

Somewhat depressed, black, with fuscous scales above, and white beneath: thorax black, punctated, with the sides pale and unarmed, the anterior margin reflexed: elytra faintly striated, obscure black, with minute fuscous and whitish scales; with a streak on the suture, and the outer margin anteriorly white: legs fusco-piceous, femora fuscous, with an obsolete small tooth: antennæ piceous.

Not common: occasionally taken in hedges near London. "Among herbage (near Swansea), not uncommon; and sometimes on Reseda lutea."-L. W. Dillwyn, Esq. "Black Hall Wood."-T. C. Heysham, Esq.

## GENUS CCLXXXV.-RHINONCUS, Schönherr.

Antennæ geniculated, 12-jointed, rather short, slender; funiculus 7-jointed, its basal joint incrassated and elongate, the two following also elongate, subclavate, the remainder short, subnodose; the club ovate, acuminate. Rostrum short, stout, and inserted during repose in a pectoral cavity: head rather depressed: eyes prominent: thorax slightly coarctate in front: scutellum minute: elytra shorter than the abdomen: legs moderate; femora simple; tibiæ truncate at the apex and unarmed; tarsi with two claws.

The short incrassated rostrum of this genus at once distinguishes it from Nedyus, from which it also differs in the structure of the antennæ: its head is more depressed, and the eyes more prominent:—from Mononychus the presence of two claws readily separates it.

A. With the thorax bituberculate.

a. With the thoracic tubercles obtuse.

- Sp. 1. Pericarpius. Subovatus, niger, suturæ basi corporeque albido-squamosis, antennis pedibusque ferrugineis, elytrorum interstitiis subtilitèr coriaceis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Cu. Pericarpius. Linné. ?- Rh. Pericarpius. Steph. Catal. 156. No. 1585.
- Broad, subovate, black, whitish beneath: thorax deeply punctate, with a faint dorsal channel, and an obsolete tubercle towards the base of the lateral margin: elytra convex, deeply punctate-striated, the interstices rugulose, the base of the suture with an oblong common snowy-white spot: legs stout, dull rufo-ferruginous; antennæ ferruginous, with the basal joint pale.

Frequent on thistles and docks near London, especially in a wood near Highgate. "Dalston, Cumberland."—T. C. Heysham, Esq.

- Sp. 2. Spartii. Elongato-ovatus, niger, suturæ basi corporeque cinereo-squamosis, antennis pedibusque piceis, elytrorum interstitiis subcoriaceis. (Long. corp.  $1\frac{1}{2}$  lin.)
- Rh. Spartii. Kirby MSS.-Steph. Catal. 157. No. 1586.
- Elongate-ovate, black, beneath cinereous: thorax rather deeply punctate, with a deep dorsal channel, the sides obsoletely tuberculated: elytra convex, rather deeply punctate-striated, the interstices slightly coriaceous, the base of the suture obscurely cinereous: legs and antennæ piceous.

On heaths and commons near London; and in Suffolk.

Sp. 3. tibialis. Elongatus, niger, suturæ basi corporeque subtus albo-squamosis, antennarum apice femoribusque atris, tibiis tarsisque rufo-ferrugineis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)

Rh. tibialis. Steph. Catal. 157. No. 1587.

Elongate, black, a little shining, beneath white: thorax moderately punctured, with a very obscure dorsal channel, the lateral margin obsoletely tuberculated: elytra a little depressed, moderately punctate-striated, the interstices somewhat rugulose, the base of the suture white: femora black, tibiæ and tarsi rusty-red; antennæ pale ferruginous at the base, the apex black.

Rare: I have taken it near London, and have received specimens from the vicinity of Bristol.

#### b. With the thoracic tubercles acute.

- Sp. 4. flavipes. Nigro-piceus, suturæ basi corporeque lutco-squamosis, pedibus lutco-flavis, interstitiis elytrorum tuberculatis. (Long. corp. 11 lin.)
   Rh. flavipes. Steph. Catal. 157. No. 1588.
- Pitchy-black: thorax with a dorsal and two lateral lines composed of luteous scales: elytra dark rufo-piceous, delicately striated, the interstices with a series of dusky tubercles alternating with luteous squamous spots, the base of the suture also luteous: body beneath the same: legs bright luteous-yellow.

Found near London: apparently rare.

- Sp. 5. Castor. Niger, supra cinereo-nebulosus, suturæ basi corporeque albosquamosis, pedibus rufo-testaceis, interstitiis elytrorum tuberculatis. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.)
- Rhy. Castor. Fabricius .-- Rhi. Castor. Steph. Catal. 157. No. 1589.
- Black, clouded with cinereous above: thorax as in Rh. flavipes: elytra punctate-striated, the interstices with black tubercles alternating with cinereous scales, the base of the suture and body beneath white: legs obscure testaceous-red.

Taken not uncommonly in hedges in the vicinity of London in June: also in Norfolk, Somersetshire, the New Forest, Devon-

- shire, &c. "Not uncommon, particularly on Crwmlyn and Sketty Burrows."-L. W. Dillwyn, Esq.
- Sp. 6. leucostigma. Subelongatus, niger, subtus pallidus, suturæ basi albâ, elytris nigro-cinerascentibus, interstitiis tuberculatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
  Cu. leucostigma. Marsham.—Rh. leucostigma. Steph. Catal. 157. No. 1590.
- Longer but scarcely broader than the last: black: thorax with an obsolete dorsal line, and the sides broadly pale: elytra rather deeply striated, clouded with cinereous, the interstices with black tubercles: the base of the suture with an oblong white spot, the middle dusky, and towards the apex white: legs dull piceous, anterior femora dusky.

My specimens were obtained from the Marshamian collection, and appear perfectly distinct from Rh. Castor, the form being dissimilar.

Sp. 7. interstitialis. Brevius, niger, subnudus, subtus parcè albido-squamosus, interstitiis elytrorum tuberculatis, pedibus rufis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Cu.? interstitialis. Reich.-Rh. interstitialis. Steph. Catal. 157. No. 1591.

Short; black; somewhat glabrous; with a few whitish scales beneath: thorax with an obsolete dorsal and narrow lateral pale line: elytra simply striated, with black tubercles in the interstices, alternating with ashy-white squamous spots: the base of the suture with a narrow white streak: legs rufous.

Taken near London, and in Norfolk.

Sp. 8. rufipes. Niger, supra cinereo-nebulosus, elytris tuberculatis, antennis pedibusque rufis. (Long. corp.  $1\frac{1}{2}$  lin.)

Ch. rufipes. Steph. Catal. 157. No. 1592.

Rather larger than the last: dull black, clouded above with cinereous scales: thorax immaculate, granulated, with a slight dorsal channel: elytra faintly and simply striated, the interstices slightly tubercular, the tubercles dusky, alternating with dull-cinereous scales, base of suture concolorous with the rest: legs and antennæ rather clear rufous.

Taken near London, and at Dover.

- Sp. 9. crassus. Nigro-fuscus, subtus albidus; antennarum basi, pedibusque rufescentibus, clavâ nigro-piceâ. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Cu. crassus. Marsham.-Rh. crassus. Steph. Catal. 157. No. 1593.
- Brown-black, obscure, whitish beneath: head and thorax thickly granulated, the latter *immaculate*: elytra punctate-striated, the interstices granulated, suture concolorous: legs and base of *antennæ* rufescent, club of the latter pitchy-black: rostrum black.

Apparently not very common: I have taken a specimen near London, and have received others from Norfolk.

- Sp. 10. canaliculatus. Nigro-fuscus, cinereo-subnebulosus, subtus albidus, thorace canaliculà dorsali sat profundè impressâ, antennis pedibusque piceo-rufescentibus. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
- Cu. canaliculatus. Mus. Marsham.-Rh. canaliculatus. Steph. Catal. 157. No. 1594.-Rh. inconspectus. Steph. Catal. 157. No. 1596. var.?
- Brown-black, slightly clouded with cinereous, beneath whitish: head and thorax granulated, the latter with a rather deep dorsal channel, having a dense patch of lutescent scales behind, and with a small dot of similar scales on each side, anterior to the dentation: elytra rather faintly punctate-striated, the interstices granulated and slightly clouded with lutescent scales; the base of the suture also somewhat lutescent: legs and antennæ pitchy-red.

Not common: it has occurred near London in June, and in Norfolk and Somersetshire.

B. With the thorax quadrituberculate.

- Sp. 11. quadrituberculatus. Niger, supra cinereo-nebulosus, subtus albido-squamosus, tibiis testaceis, thorace depresso, foveolato. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Rhy. 4-tuberculatus. Fabricius.—Rhi. 4-tuberculatus. Steph. Catal. 157. No. 1595.
- Black; beneath whitish: head depressed: thorax also depressed, with three foveolæ on the disc, two small tubercles on the anterior margins, and two larger acute ones on the sides: elytra rather convex, punctate-striated, the interstices coriaceous, clouded with ashy-white scales: legs elongate, slender, femora dusky, with a cinereous ring towards the apex, tibiæ and tarsi ferruginous: antennæ rufescent, with the club dusky.

Also somewhat uncommon: found at Hertford in June: it likewise occurs in Norfolk, and I believe in the New Forest.

Sp. 12. quadricornis. Niger, subtus albido-squamosus, antennis pedibusque totis testaceis, suturæ basi albá, thorace convexiori. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.)

Rhy. 4-cornis. Gyllenhal.—Rhi. 4-cornis. Steph. Catal. 157. No. 1597.

Black; with whitish scales beneath: thorax rather convex, deeply punctate, but not foveolated, the sides densely clothed with white scales; and having a single acute tubercle, the anterior margin with two small ones: elytra immaculate, punctate-striated, with the base of the suture white: antennæ and legs entirely testaceous, the apex of the femora sometimes fuscescent.

My specimens were found within the metropolitan district.

GENUS CCLXXXVI.-MONONYCHUS, Schüppel.

Antennæ geniculated, 12-jointed, short, slender; funiculus 7-jointed, the articulations obconic, the exterior ones gradually shorter; club oblong, oval, acuminated. Rostrum elongate, rather slender, bent, cylindric, lodged during repose in a pectoral groove: head longitudinally carinated: thorax transverse, much attenuated in front, coarctate, produced behind towards the scutellum: elytra subquadrate, with an impression near the scutellum, shorter than the abdomen: *femora* simple; *tibia* spurred on the outer margin near the apex, which is truncate; *tarsi* with a single simple *claw*.

Known at once by the tarsi being furnished with a single claw only, and from the three preceding genera by the antennæ being placed before the middle of the rostrum, the thorax being acuminated in the middle opposite to the scutellum, and by the tibiæ having spurs on their outer margin towards the apex: the species devour seeds.

- † Sp. 1. Pseudacori. Niger, punctatus, thoracis lateribus tenu? ferrugineis, elytris striatis, suturæ basi albidû. (Long. corp. 2 lin.)
- Rh. Pseudacori. Fabricius.—Mo. Pseudacori. Steph. Catal. 156. No. 1584.— Curtis, vii. pl. 292.
- Dull black, punctate; beneath flavescent: thorax with a dorsal channel, and the sides narrowly edged with dull ferruginous: elytra striated, with an oblong whitish or cinerascent spot at the base of the suture: legs black; base of antennæ ferruginous; and a few scales of similar hue at the base of the rostrum.

The only examples I have seen of this insect were found in Devonshire, and in the Isle of Wight.

## GENUS CCLXXXVII.—Acalles, Schönherr.

Antennæ geniculated, 12-jointed, rather stout; funiculus 7-jointed, its two basal joints obconic; the remainder subrounded, and slightly coarctate; the club short, ovate, acuminate. Rostrum longer than the thorax, stout, a little bent, inserted during repose in a deep elongate pectoral groove, which is strongly margined: eyes minute: thorax rather long, convex, lobate behind the eyes, narrowed in front, the base truncate: scutellum wanting: elytra connate, subgibbous, embracing the sides of the abdomen: legs rather stout, the intermediate pair shortest; tibiæ slightly compressed, the apex furnished with a stout tooth within.

This genus differs from Tylodes of Schönherr—which is not indigenous—by the structure of the antennæ and of the pectoral groove for the reception of the rostrum, as well as in other less evident characters; from Mononychus by having two claws at the apex of the tarsi; and from Centorhynchus and the allied genera by the elytra being connate or united.

Sp. 1. Ptimoides. Piceus, cinereo-squamosus, supra spinulis erectis nigris muricatis, antennis, rostro pedibusque ferrugineis. (Long. corp. 1-2 lin.) Cu. Ptinoides. Marsham.-Ac. Ptinoides. Steph. Catal. 157. No. 1598.

- Piceous; with scattered cinereous scales above, and erect muricated black spinulose ones: eyes brown: thorax deeply punctate: elytra dilated before the middle, attenuated posteriorly, deeply and coarsely punctate-striate; variegated with cinereous; beneath rufo-piceous, densely clothed with cinereous scales: legs and rostrum rufo-ferruginous: antennæ pale testaceous.
- Var.  $\beta$ ? Ac. variegatus. Steph. Catal. 157. No. 1599.—Considerably larger than var.  $\alpha$ , with the base of the elytra variegated with ashy scales, and the apical half entirely pale cinereous: in other respects similar to the preceding; but the elytra appear to be more deeply striated in proportion, and the legs and antennæ are of a deeper hue.

Not uncommon in sandy and gravelly places, especially in the sand-pits on Hampstead-heath, and in the gravel-pits at Coombewood: also found at Darenth, Ripley, Hertford, in Devon, &c. "Not common (near Swansea)."-L. W. Dillwyn, Esq.

# GENUS CCLXXXVIII.-RUTIDOSOMA\* mihi.

Antennæ geniculated, 12-jointed, rather short and stout: funiculus 7-jointed, the two basal joints elongate: the remainder nodose; club large, acuminated. Rostrum rather long, stout, considerably bent, inserted during repose in a pectoral groove, which extends to the base of the intermediate legs: head rounded, inserted up to the eyes, which are globose, in the thorax; the latter short, narrowed anteriorly, with the sides rounded, the base bisinuated: scutellum obsolete: elytra globose, moveable: legs rather long, stout; femora clavate, each furnished with a minute tooth; tibiæ with the apex truncate, armed with a hook.

This genus differs from Acalles by the dissimilar structure of the antennæ, the club of which is larger and acuminated; the form of the rostrum, which is longer and more bent; the short thorax; the free motion of the elytra; the elongated legs, dentate femora, &c.: by most of which characters it also disagrees with Ceutorhynchus and the allied genera.

Sp. 1. globula. Niger, subopacus, lineâ suturali pectorisque lateribus albidosquamosis, elytris profundè sulcatis punctatisque, interstitiis angustis, crenatis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)

\* Putis, ruga; σομα, corpus.

Cu. globulus. Herbst .-- N. G. globulus. Steph. Catal. 157. No. 1600.

Black, somewhat opaque; beneath clothed with ashy scales: head obsoletely punctate: thorax with an obsolete dorsal groove, and an impression on each side, towards the base, thickly and deeply punctate, with a few whitish scales in the dorsal channel and on the sides: elytra very deeply sulcate, with large deep punctures in the sulci, the interstices slightly crenate: legs pitchyblack, with ashy-white cinereous scales: rostrum black, punctate: antennæ pitchy-black.

Apparently rare: I possess three examples, taken by myself many years since on a sallow in Coombe-wood.

# GENUS CCLXXXIX .- CRYPTORHYNCHUS, \* Illiger.

Antennæ geniculated, 12-jointed, rather short and slender ; funiculus 7-jointed ; its basal joint rather stout, elongate, obconic; the two following also elongate, subclavate; the remainder gradually shortening, subnodose; club oval. *Rostrum* moderately long, bent, inserted during repose in a pectoral cavity extending to the posterior extremity of the base of the intermediate legs, where it is strongly margined; eyes lateral, ovate, remote: thorax subconic, narrowed towards the apex, and lobate behind the eyes: scutellum distinct, rounded: elytra subovate, convex, fasciculated, attenuated posteriorly, with a callosity towards the apex; the shoulders angulated: legs elongate, subdentate; tibiæ bent at the base, the apex with a hook within.

The chief characters of the only indigenous Cryptorhynchus which I have seen consist of the elongation of the three basal joints of the funiculus and the oval club of the antennæ, the elongate pectoral cavity for the reception of the rostrum, united to the distinct scutellum, tuberculated elytra, and the bent base of the tibiæ.

- Sp. 1. Lapathi. Niger, opacus, thoracis lateribus, elytrorumque fasciá baseos apiceque albo-squamosis, thorace elytrisque atro-fasciculatis. (Long. corp. 4-6 lin.)
- Cu. Lapathi. Linné.-Linn. Trans. (Curtis), i. 86. pl. 5. f. 1-5.-Cr. Lapathi. Steph. Catal. 158. No. 1601.

• With respect to Cr. Roboris, Curtis, I am ignorant; but as that most singular insect Brotheus porcatus is by that writer associated therewith, it is impossible to conjecture whether it is even allied to Cr. Lapathi: a point of greater uncertainty, as he considers that his insect may possibly be synonymous with Rh. Fraxini of Gyllenhal (which is the *type* of the genus Cleopis)! Black, opaque, head punctate; forehead with muricated black scales: thorax carinated in the middle, the sides clothed with whitish scales, the anterior margin with two fascicles of black scales, behind which are three others placed transversely: scutellum black: elytra with an irregular curved whitish fascia at the base, and with the apex entirely whitish, deeply punctate-striated, the alternate interstices with a row of elevated fascicles of scales, black towards the base of the elytra, and whitish at the apex: body beneath black, sparingly punctured: legs black, base of anterior femora and a ring round the others whitish; tibiæ dull rufescent: anterior femora bidentate in the males.

Not uncommon in willows and alders within the metropolitan district: it likewise occurs in Devonshire, the New Forest, Dorsetshire, Somersetshire, and in Norfolk and Suffolk. "Cardew-mire."—*T. C. Heysham, Esq.* 

## GENUS CCXC.-BAGOUS, Germar.

Antennæ geniculated, 12-jointed, rather short and slender; funiculus 7-jointed, its two basal joints elongate, obconic, the remainder subperfoliated, coarctate, and towards the apex gradually broader; club large, oval. Rostrum rather short, robust, arcuated: thorax subcylindric, broadly notched anteriorly and a little lobate behind the eyes, which are large, ovate: elytra oblong-ovate, with a prominent callosity towards the apex: legs elongate: femora unarmed; tibiæ long, curved inwardly towards the apex, which is armed with a hook within: tarsi slender.

Bagous may be known from the other genera of this family by the brevity of its antennæ, and the comparative bulk of the club, the long, bent tibiæ, and the slender tarsi: the species frequent damp and marshy situations, and are generally incrusted with a luteous matter, which renders their characters obscure, unless previously washed.

- Sp. 1. binodulus. Niger, dense fusco-squamosus, elytrorum interstitiis alternis elevatioribus, posticè acutè callosis, tibiis apice ferrugineis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
- Cu. binodulus. Herbst.-Ba. binodulus. Steph. Catal. 158. No. 1603.
- Black, densely clothed with fuscous scales; and generally covered with agglutinated clayey matter; head thickly rugose-punctate, with a groove between the eyes, which are black: thorax transversely impressed towards the anterior margin, finely punctate, with an obscure dorsal groove: elytra depressed anteriorly, obsoletely punctate-striate, the interstices finely granulated, and the alternate ones somewhat elevated, of which the two outer terminate behind the middle in an elevated tubercle; the apex of the elytra abruptly

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descending: femora black; tibiæ black at the base, ferruginous at the apex; tarsi pitchy-black.

Not common: found occasionally in Battersea-fields, and also in the marshes near Norwich. "Taken several years ago, I believe, on Crwmlyn-bog."—L. W. Dillwyn, Esq.

Sp. 2. lutosus. Niger, cinerco-squamosus, pedibus ferrugineis, elytris apice attenuatis, callo unico obtuso. (Long. corp. 2-21/2 lin.)
Rh. lutosus. Gyllenhal.-Ba. lutosus. Steph. Catal. 158. No. 1604.

Smaller than the last: black; clothed with ashy scales: head finely punctate, obsoletely impressed between the eyes, which are brown: thorax with two obscure approximating dorsal lines: *elytra rather convex at* the *base, suture elevated*; faintly punctate-striate, the *alternate interstices* obsoletely *elevated*, the fourth from the suture terminating in an elevated tubercle: *legs entirely* 

pale ferruginous.

Also rather uncommon: found sometimes within the metropolitan district; in the marshes near Ripley and Hertford. I have also obtained specimens from Norfolk. "Lancashire."—Mr. Hutchinson.

- Sp. 3. lutulentus. Niger, squamulis cinereis variegatus, tibiis ferrugineis, elytris apice obtusis, callo obsoleto. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Rh. lutulentus. Gyllenhal.-Ba. lutulentus. Steph. Catal. 158. No. 1605.
- Much less than the foregoing: black, variegated with cinereous scales: thorax with a dorsal line, and the lateral margins broadly cinereous: elytra with the apex rounded, barely attenuated, obsoletely punctate-striated, the alternate interstices scarcely elevated, the fourth from the suture with an obsolete tubercle at the apex: femora black; tibiæ ferruginous; tarsi fuscous.

Not so common as the last; but found occasionally within the metropolitan district. "Dalston."-T. C. Heysham, Esq.

Sp. 4. binotatus. Niger, elytris maculà rotundatà albidů, apice subattenuatis, callo obsoleto, pedibus fuscis. (Long. corp.  $1\frac{1}{2}-2$  lin.)

Cu. binotatus. Marsham? MSS .- Ba. binotatus. Steph. Catal. 158. No. 1606.

Black: thorax with the disc black, the lateral margins ashy; elytra obsoletely striated, the interstices not alternately elevated, the fourth from the suture with an obsolete tubercle at its apex; the disc with a distinct round whitish, or white, spot: legs entirely deep fuscous.

My specimens of this insect were captured by myself near London several years since, and I obtained a single example by the above name out of the Marshamian collection.

- Sp. 5. tibialis. Nigro-fuscus, elytris squamulis cinereis subnebulosis, punctisque duobus pallidis, tibiis piceo-ferrugineis. (Long. corp. 2 lin.)
  Ba. tibialis. Steph. Catal. 158. No. 1607.
- Dusky-black; thorax immaculate: elytra slightly clouded with ashy scales, each with a rather distinct round pale spot on the disc towards the apex, which is slightly attenuated; behind the discoidal spot is an obsolete tubercle: femora dusky; tibiæ pitchy-ferruginous.

Taken, but not commonly, near London.

# GENUS CCXCI.-LYPRUS, Schönherr.

Antennæ geniculated, 11-jointed, short; funiculus 6-jointed, its two basal joints somewhat longest and obconic; the four following short, coarctate, subperfoliate; club large, oval. Rostrum elongate, cylindric, bent, inserted during repose in a deep pectoral groove reaching to the base of the anterior pair of legs: thorax subcylindric, a little rounded in the middle; the anterior and posterior margins truncate: elytra elongate, subcylindric, attenuated towards the apex, compressed: femora clavate, unarmed; tibiæ a little bent within near the apex, which is furnished with a stout hook; tarsi slender, compressed.

The 11-jointed geniculated antennæ of Lyprus, united to the subcylindric, compressed, elongate body, and pectoral groove for the reception of the rostrum, are the most essential external characters of this singular little genus; which, like the Bogöi, revels among aquatic plants, and is most frequently enveloped in earthy matter.

- Sp. 1. cylindrus. Nigricans, cinereo-squamulosis, antennis tibiisque fusco-ferrugineis. (Long. corp. 11 lin.)
- Rh. cylindrus. Gyllenhal.-Ly. cylindrus. Steph. Catal. 158. No. 1608.
- Linear-elongate, dusky, with ashy scales: head rounded, finely punctured: eyes brown: thorax with a transverse impression within the anterior margin, the disc finely punctate: elytra obsoletely punctate-striate, with the interstices slightly coriaceous: femora black; tibiæ dusky-ferruginous; tarsi fuscous: antennæ piceous, or dusky-ferruginous.

Found on aquatic plants, especially upon Lemna and Sisymbrium, but apparently very rare in Britain : my specimen was given to me by my friend J. Scales, Esq. "On water-cresses in the London market."—Mr. Beck.

# GENUS CCXCII.-PACHYRHINUS, Kirby.

Antennæ geniculated, 11-jointed, rather short and slender; funiculus 6-jointed, its three basal joints rather elongate, and somewhat obconic; the remainder subnodose, all coarctate; club oblong, subovate. Rostrum very short, thick, a little bent: eyes large, somewhat rounded, prominent: thorax transverse, convex, narrowed in front, the anterior margin truncate, the posterior deeply bisinuated: scutellum minute: elytra ample, short, ovate, rounded at the apex, shorter than the abdomen: legs rather long, anterior approximating at the base; femora short, unarmed; tibiæ truncate at the apex, unarmed; tarsi various.

Pachyrhinus may be known from the preceding genera by having the antennæ 11-jointed, and by wanting a groove beneath the thorax for the reception of the rostrum; which latter is very stout and rather short:—the species frequent aquatic plants and swim well—whence the name Hydaticus, applied to them by Schönherr (who seems to be unaware of that term having been previously employed by Dr. Leach for a genus of Hydradephaga), which I have been compelled to change to the one proposed by Mr. Kirby.

#### A. With the thorax bituberculate.

Sp. 1. leucogaster. Fuscus, squamulis cinereis tectus, corpore subtus albido, thorace fusco, lateribus pallidis, elytris fusco-cinereis, striatis. (Long. corp.  $1\frac{1}{2}-1\frac{3}{2}$  lin.)

Cu. leucogaster. Marsham.-Pa. leucogaster. Steph. Catal. 158. No. 1609.

Fuscous, clothed with cinereous scales, beneath whitish: thorax fuscous, with the sides, and a faint dorsal line, whitish; each side with a minute tubercle: elytra striated, the strixe impunctate, fuscous, with an ashy down: legs rufescent, with the joints black; antennæ rufo-piceous, with the club dusky or black.

Not common: found in the vicinity of London, and in Somersetshire.

- Sp. 2. rufescens. Obscure rufo-piceus, subtus cinerascens, thorace carinulà dorsali squamis albidis tectà, elytris latis immaculatis, suturà basi albidà, antennis pedibusque piceo-rufescentibus. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)
   Pa. rufescens. Steph. Catal. 159. No. 1610.
- Obscure rufo-piceous, beneath cinerascent: thorax with an acute tubercle on each side, the disc with a longitudinal central channel, which is clothed with whitish scales: elytra broad, slightly striated, immaculate, with a small whitish patch at the base of the suture: antennæ and legs entirely rufescent.

Found near London, and in Somersetshire : apparently rare.

Sp. 3. Comari. Niger, supra cinereo-variegatus, subtus albido-squamosus, antennis tibiis tarsisque testaceis, thorace canaliculato obsoletè bituberculato. (Long. corp. 1<sup>1</sup>/<sub>4</sub>—1<sup>1</sup>/<sub>2</sub> lin.)

Cu. Comari. Herbst.-Pa. Comari.-Steph. Catal. 159. No. 1611.

Black, variegated above with cinereous, and beneath clothed with whitish scales; head finely punctured, a little sprinkled with cinereous behind: eyes brown, prominent: thorax finely punctured, with a slight dorsal channel, clothed with whitish scales, and an obsolete tubercle on each lateral margin, which latter are irregularly bordered with whitish scales: elytra as broad again as the thorax at the base, convex, striate, the striæ obsoletely punctate, the interstices convex, variegated with ashy-white scales, especially on the sides and at the apex: femora black; tibiæ and tarsi testaceous: antennæ dull pale ferruginous, with the second joint dusky.

Found on the Comarum palustre in damp meadows: rare near London: it is found near Bristol, and I believe it has been found in the New Forest by Mr. Kirby.

B. With the thorax quadrituberculate.

- Sp. 4. quadridentatus. Niger, supra cinereo, subtus albido squamosus, thorace obsoletè canaliculato, acute quadrituberculato, tibiis rufis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
   Pa. 4-dentatus. Steph. Catal. 159. No. 1612.
- Black, with ashy scales above and whitish beneath: head slightly convex, punctate: thorax with an obsolete dorsal groove, its anterior margin with two rather acute tubercles, and each lateral one with a single one, the margins themselves slightly cinerascent: elytra striated, the interstices a little elevated, immaculate: femora black: tibiæ dull rufous: tarsi dusky.

Apparently scarce: I have only seen my own examples, one of which was captured near London, the other in the New Forest: it has, I believe, been found elsewhere.

- Sp. 5. quadrinodosus. Niger, suturæ basi corporeque albido-squamosis, pedibus rufis, thorace profundè punctato, elytrisque tuberculatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
  Rh. 4-nodosus. Gyllenhal.—Pa. 4 nodosus. Steph. Catal. 159. No. 1613.
- Black, clothed beneath with whitish scales: head deeply punctured, with slight cinereous pubescence; forehead depressed: thorax also deeply punctured, with two approximating porrect tubercles on the anterior margin, and a small one on each of the lateral margins, which latter are slightly covered with ashy scales: elytra very convex, pitchy-black, deeply punctate-striate, the interior interstices somewhat rugose, and the exterior with rows of elevated slightly acute tubercles; at the base of the suture a narrow whitish line: legs deep testaceous-red, with the tips of the femora dusky.

Also uncommon: taken near London, and in the vicinity of Bristol.

- Sp. 6. Myriophylli. Subdepressus, niger, opacus, subtus dense albo-squamosus, supra fuliginoso-squamosus, albido-irroratus, pedibus testaceis. (Long. corp.  $1\frac{1}{2}$  lin.)
- Rhy. Myriophylli. Gyllenhal. iii. 152.—Cu. Hydrolapathi. Mus. Marsham.— Pa. Hydrolapathi. Steph. Catal. 159. No. 1614.
- Somewhat depressed, black, opaque, densely clothed with whitish scales beneath, and sprinkled with dirty-white ones above: head somewhat piceous, finely punctured: thorax unequal, with two small remote denticulations on the anterior margins, and a short acuminated tubercle on each lateral one, which latter are densely clothed with whitish scales, the disc with a deep central channel, and an oblique impression on each side: elytra obsoletely striated, with the inflexed lateral edge covered with whitish scales, and a small whitish spot towards the base of the suture: legs slender, rufo-testaceous, with the joints and tarsi dusky-black.

Taken on the water-dock, and other aquatic plants, in the neighbourhood of London. "Newcastle-upon-Tyne."-G. Wailes, Esq.

### GENUS CCXCIII.—ANOPLUS, Schönherr.

Antennæ geniculated, 12-jointed, short, rather stout, the basal joint reaching to the eyes, the second obovate, thick; the third to the eighth short, subperfoliate, coarctate, club ovate. Rostrum thick, slightly bent, not inserted in a pectoral groove: eyes rounded, remote: thorax attenuated anteriorly, slightly coarctate, the base bisinuated: scutellum small: elytra convex, ovate, covering the pygidium: legs stout, anterior approximating; femora subclavate, unarmed: tarsi stout, ciliated, the terminal one broad, without a claw.

The want of a claw to the terminal joint of the tarsi of this genus at once points out its prominent distinctions from its allies: the rostrum is not inserted in a pectoral cavity—is short, stout, and but little bent: the tarsi are broad, especially the terminal joint, which is emarginate at the tip, and deeply ciliated:—with such characters it is obviously improper to associate the present genus with Centorhynchus, as has been recently done, notwithstanding the excellent arrangement of Schönherr.

Rh. plantaris. Nazin.-An. plantaris. Steph. Catal. 159. No. 1615.

Sp. 1. plantaris. Niger, subnitidus, antennis basi testaceis, scutello pectorisque lateribus albidis. (Long. corp. 1 lin.)

Black: head delicately punctured: thorax with an obsolete dorsal carina, rather deeply punctured, and with a few minute scattered hairs: elytra slightly glossy, deeply and broadly crenate-striate, the interstices flat, smooth, obscurely pilose: scutellum rounded, whitish: body deeply punctured beneath, with the sides of the breast clothed with a dense whitish pubescence: antennæ black, with the two basal joints testaceous: rostrum thickly punctate at the base.

Not uncommon at Coombe and Darenth Woods, and in other places abounding in birch and alder. "Black Hall Wood."— T. C. Heysham, Esq.

Sp. 2. nitidulus. Niger nitidus, scutello concolore. (Long. corp. 1 lin.) Rh. nitidulus. Wilkin? MSS.—An. nitidulus. Steph. Catal. 159. No. 1616.

Shining black: head and thorax as in the last: elytra shining, crenate-striated, the interstices impunctate: scutellum black: legs black: antennæ piceous at the base.

Probably a variety from age of the foregoing insect.

Taken near London, and in Norfolk.

- Sp. 3. atratus. Niger nitidus, scutello antennarumque basi concoloribus. (Long. corp. 1 lin.)
- Rh. atratus. Wilkin? MSS .- An. atratus. Steph. Catal. 159. No. 1617.
- Similar to the two last: of a deep glossy black, with the scutellum and antenna entirely also deep black.

Likewise in all probability a mere variety of the first species.

Found with the foregoing insects.

# GENUS CCXCIV.-AMALUS, Schönherr.

Antennæ geniculated, 11-jointed, somewhat elongate and slender; funiculus 6-jointed, its basal joint rather long, thick, obconic, the two following also long, slender, the remainder somewhat rounded; club oblong-ovate, quadriarticulate. Rostrum free, elongate, slender, cylindric, curved: thorax convex, narrowed anteriorly, bisinuated posteriorly: scutellum minute: elytra ample, subovate, convex, shorter than the abdomen, with the shoulders obtusely angled: legs rather stout, anterior approximating at the base; femora unarmed; tibiæ straight, also unarmed.

Amalus differs from Cryptorhynchus and its allies by wanting the groove beneath the thorax for the reception of the rostrum during repose, and also by having the antennæ 11-jointed only.

Sp. 1. scortillum. Niger, subtus albido-squamosus, pedibus rubris, elytris profundè punctato-striatis, apice rufis, suturâ basi albo-squamosâ. (Long. corp. 1 lin.) Cu. scortillum. Herbst.-Am. scortillum. Steph. Catal. 159. No. 1618.

Black, beneath whitish: head slightly pubescent, thickly punctured: thorax sparingly pilose, with its lateral margins and beneath densely clothed with whitish scales: its disc rather deeply and somewhat thickly punctate: elytra anteriorly black, posteriorly rufous; with the base of the suture whitish, the disc deeply punctate-striated, with the interstices nearly smooth: legs rufotestaceous, coxæ black: antennæ rufo-piceous.

The red at the apex of the elytra varies in extent in different specimens.

Not uncommon in June in the neighbourhood of London, especially in Battersea-fields, and at Ripley.

Sp. 2. castaneus. Rufo-piceus, subtus albido-squamosus; elytris dilutiùs castaneo-rufis, apice pallidioribus; pedibus rufis. (Long. corp. 1 lin.)

Cr.? castaneus. Wilkin? MSS .- An. castaneus. Steph. Catal. 159. No. 1619.

- Rufo-piceous, beneath whitish: head and thorax as in the last: elytra of a pale rufous, inclining to castaneous, with the apex indeterminately paler; the disc punctate-striated, with the suture concolorous: legs pale rufous.
- Although this is esteemed distinct from the foregoing, I cannot believe it to be otherwise than an immature state thereof.

Found near London, and in Norfolk.

# GENUS CCXCV .- TYCHIUS, Germar.

Antennæ geniculated, 12-jointed, rather short and stout; funiculus 7- rarely 6jointed, with two or three basal joints rather long, obconic; the first incrassated; the remainder short, with the apex truncate; club oblong-ovate. Rostrum elongate, bent, rather thickened, with the apex a little attenuated; eyes large, rounded: thorax transverse, narrowed anteriorly, with the sides more or less rounded: elytra suboval, moderately convex: legs rather stout and short; tibiæ short, compressed, the apex truncate, excavated, angulated within, and furnished with a minute hook: body densely squamose.

The attenuated rostrum, and densely squamous, elongate-ovate, body, combined with its globose rounded thorax, sufficiently distinguish this genus; and from Cryptorhynchus it differs by wanting the pectoral groove.

A. With the femora dentate.

- Sp. 1. quinquepunctatus. PLATE XX. f. 3.—Niger, supra squamulis purpurascenti-aureis, subtus niveis, tectus, elytrorum suturâ maculisque quatuor albosquamosis, antennis tibiisque ferrugineis. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
- Cu. 5-punctatus. Linné.-Ty. 5-punctatus. Steph. Catal. 159. No. 1620.

Black, clothed above with purplish-gold or ashy-silvery scales, beneath with compact white ones; thorax with its lateral margins rounded and much dilated, with a snowy-white dorsal line, somewhat evanescent in front: elytra with the suture and four spots—two at the base and two near the apex—white or snowy: femora black, or rufo-piceous; tibiæ and tarsi deep ferruginous: antennæ rufo-ferruginous.

Rare; I have seen but two specimens: of which the one that I possess was taken "Near South Creek, Norfolk."—*Rev. F. Skrimshire.* 

Sp. 2. venustus. Niger, cinereo-squamosus, thorace elytrisque albido-lineatis, rostri apice, antennis tibiis tarsisque rufo-ferrugineis. (Long. corp.  $1\frac{1}{2}-2$  lin.)

Cu. venustus. Fabricius .- Ty. venustus. Steph. Catal. 159. No. 1621.

Black, densely clothed above with cinereous scales, and beneath with white: head immaculate; thorax with the lateral margins rounded, a longitudinal dorsal line and the sides whitish: elytra punctate-striated, with the suture whitish; the fourth and sixth interstices the same, and the second occasionally so, as well as the outer margin: femora obsoletely dentate, piccous; tibiæ and tarsi dusky-ferruginous: antennæ and apex of the rostrum ferruginous. Variable in colour.

Abundant on the Broom (Spartium scoparium) at Darenth and Coombe Woods: found also in other places. "Occasionally found near Swansea."—L. W. Dillwyn, Esq.

- Sp. 3. nervosus. Ater, griseo-tomentosus, elytris striatis, interstitiis alternis pallidis, rostro pedibusque rufo-testaceis. (Long. corp. 11/2 lin.)
  Cu. nervosus. Marsham.—Ty. nervosus. Steph. Catal. 160. No. 1622.
- Black, covered with griseous scales: thorax with a pale dorsal line, and the lateral margins rather broadly cinereous: elytra striated, the alternate interstices pale ashy; rostrum and legs rufo-testaceous.

Rather variable in hue; and not improbably a variety of the foregoing species.

Found near London, and in Norfolk and Suffolk.

B. With the femora simple.

a. Funiculus of the antennæ 7-jointed.

- Sp. 4. Meliloti. Rufo-piceus, pube flavescenti tectus, rostro piceo, femoribus nigricantibus. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Si. Meliloti. Kirby MSS .- Ty. Meliloti. Steph. Catal. 160. No. 1623.
- Rufo-piceous, densely clothed with a flavescent down: beneath whitish: thorax immaculate, with a slight dorsal impression: elytra striated, the interstices

of uniform colour, flavescent: femora dusky; tibiæ and tarsi rufo-testaceous: rostrum piceous.

Found on the melilot near London and in Suffolk.

- Sp. 5. flavicollis. Rufo-piceus, thorace pube flavescenti tectus, elytris grisescentibus, antennis pedibusque testaceis. (Long, corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Si. flavicollis. Kirby MSS. Ty. flavicollis. Steph. Catal. 160. No. 1624.
- Rufo-piceous, or dusky, clothed with dense pubescence, grisescent on the head and elytra, and yellowish on the thorax; beneath ashy: thorax with the lateral margins flavescent-ash: elytra rather deeply striated, the interstices of uniform colour: antennæ and legs entirely testaceous: rostrum piceous.

Taken within the metropolitan district in June; also in Suffolk.

Sp. 6. picirostris. Nigro-piceus, pube sericeâ nitidâ tectus, antennis pedibus rostrique apice rufo-ferrugineis. (Long. corp. 14 lin.)

Cu. picirostris. Paykul.-Ty. picirostris. Steph. Catal. 160. No. 1625.

Pitchy-black, clothed with an uniform olivaceous glossy silken pubescence above, beneath ashy-white: head piceous: thorax immaculate, somewhat cinerascent: elytra moderately striated, the striæ slightly punctate, the apex sometimes rufescent: antennæ, legs entirely, and apex of the rostrum, rufous.

Not uncommon in corn-fields near London: found on the Trifolium pratense. I have taken it at Ripley in plenty.—" Not common near Swansea."—L. W. Dillwyn, Esq.

Sp. 7. tomentosus. Niger, pallide tomentosus, thorace subgriseo, antennis pedibusque rufo-testaceis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

Cu. tomentosus. Herbst .- Ty. tomentosus. Steph. Catal. 160. No. 1626.

Rather larger than the foregoing: black, clothed with a pale public ence, somewhat griseous on the thorax, which is immaculate: elytra simply striated; the interstices uniform: antennæ and legs rufo-testaceous: rostrum piccous at the apex, the base black.

Not common near London, where it occurs in corn-fields in June.

Sp. 8. canescens. Piceus, capite thoracisque striis tribus obsoleté canescentibus, elytris striatis, suturá nigrá, pedibus rufo-piceis. (Long. corp.  $1\frac{1}{2}$  lin.)

Cu. canescens. Marsham.-Ty. canescens. Steph. Catal. 160. No. 1629.

- **Piceous**; clothed with a hoary pubescence: head immaculate: eyes black; thorax with a narrow dorsal line, and the sides obsoletely cinerascent: elytra rufo-piceous, striated, with the suture dusky or black; abdomen pitchy: legs and antennæ rufo-piceous.
  - Found in Devonshire, and near London.

- Sp. 9. parvulus. Piceus, parciùs olivaceo-pubescens, sutura basi rufo-fusca, antennis pedibusque rufis. (Long. corp. 1 lin.)
- Sp. parvula. Kirby MSS .- Ty. parvulus. Steph. Catal. 160. No. 1628.
- Piceous, sparingly clothed with an olivaceous pubescence, with the base of the suture rufo-fuscous; the antennæ and legs entirely rufous.

Not very common: found within the metropolitan district in the summer: also, I believe, in Suffolk.

### b. With the funiculus of the antennæ 6-jointed.

Sp. 10. cinerascens. Nigricans, parciùs cinereo-pubescens, antennarum clavâ, femoribusque fusco-piceis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Cu. cinerascens. Marsham.-Ty. cinerascens. Steph. Catal. 160. No. 1627.

Slender: dusky; sparingly clothed with a cinereous pubescence, paler beneath: thorax immaculate: elytra rather deeply punctate-striate, the interstices somewhat densely clothed with pubescence; the apex concolorous: femora black or dusky; tibiæ and tarsi ferruginous; antennæ with the club fuscous; the funiculus six-jointed.

Apparently not very uncommon within the metropolitan district in June. I have taken it abundantly in a corn-field near Ripley, on the first of January.

- Sp. 11. lineatulus. Fusco-niger, vellere plumbeo tectus, suturâ albâ; pedibus rufis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Si. lineatula. Kirby MSS.-Ty. lineatulus. Steph. Catal. 160. No. 1630.
- Fuscous-black: clothed with a lead-coloured or olivaceous pubescence; with the sides of the thorax, and a narrow dorsal line, pale: elytra simply striated, with the suture white: legs and antennæ rufous.
- Obs.—This and the preceding insect belong to Schönherr's subgenus Micco-TROGUS, differing from Tychius by having the funiculus of the antennæ 6-jointed, and the rostrum broader at the apex:—they might therefore be advantageously detached.

Found in Devonshire; I believe by Mr. Spence: also in the New Forest.

### GENUS CCXCVI.-SIBINIA, Germar.

Antennæ geniculated, 11-jointed, rather short and stout; funiculus 6-jointed, its three basal joints somewhat elongate, obconic, the first stoutest, the remaining three short, with the apex truncate; club rather stout, oblong-ovate. Rostrum elongate, free, a little bent, and somewhat attenuated towards the apex: eyes large, lateral, rounded: thorax much narrowed anteriorly, the base obsoletely bisinuated: scutellum minute: elytra short, broad, depressed on the back, each rounded at the apex, and a little shorter than the abdomen: legs rather short and stout; femora unarmed; tibiæ slightly compressed, truncate at the apex, which is a little spinose.

This genus chiefly differs from Tychius by its depressed back, and the produced posterior margin of the thorax; and by the structure of the antennæ, the funiculus of which is always 6-jointed: like Tychius, the body is very densely clothed with compact short pubescence:—the species appear rare in Britain.

- Sp. 1. Arenariæ. Atra, pube suprà grisescente, subtus albidâ tecta, suturæ basi plagâ fusco-ferrugineâ, antennis pedibusque obscure testaceis. (Long. corp.  $1\frac{1}{2}$  lin.)
- Si. Arenariæ. Kirby MSS .- Steph. Catal. 160. No. 1631.
- Black; clothed above with a grisescent public public public with whitish: thorax obsoletely bisinuated behind, with a slight transverse impression anteriorly, and the lateral margins somewhat cinereous: elytra faintly punctate-striated, with a large coarctate dusky-ferruginous patch at the base of the suture, edged posteriorly with whitish: legs and antenna obscure testaceous.

Rare near London; but more abundant in the New Forest, and in Devonshire.

- Sp. 2. primita. Nigra, pube squamulisque supra ferrugineo-aureis, subtus albidis, omnino tectus, elytris liturâ mediâ fuscâ albâque. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
   Cu. primitus. Herbst.-Si. primita. Steph. Catal. 160. No. 1632.
- Black, clothed throughout above with a golden-ferruginous squamose down, and beneath with whitish: rostrum with the apex naked and black: eyes brown: thorax distinctly bisinuated behind; with a somewhat distinct transverse impression within the apex: elytra obsoletely punctate-striated, with a common obsolete fuscous blotch, edged posteriorly with whitish, on the back: legs dusky, with the tibiæ and tarsi somewhat ferruginous: antennæ black, piceous at the base.

I possess a single example taken in the vicinity of the metropolis in June.

Cu. Viscariæ. Linné.-Si. Viscariæ. Steph. Catal. 160. No. 1632. note.

Black, deeply clothed above with a greenish-ash pubescence, and beneath with whitish: thorax with the anterior margin elevated, with a rather deep transverse impression within, the sides and posterior angles rounded, the base produced in the middle into an angle: elytra slightly convex, and faintly

Sp. 3. Viscariæ. Nigra, pube denså depresså, suprà cinereo-virescente, subtus albidå tectus, thorace postice subangulato. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

punctate-striate, *immaculate: legs black*: antennæ piceous at the base, black towards the apex.

In June, 1827, I discovered a single specimen near Ripley, which is the only indigenous example I have hitherto seen.

# GENUS CCXCVII.-ORCHESTES, Illiger.

Antennæ geniculated, 11-jointed, rather short and slender, funiculus 6-jointed, its first joint large, obconic, second and third oblong, obconic, the remainder subequal, short, truncate at the apex; club thick, oblong-ovate. Rostrum inflexed, elongate, rather stout, and rounded, bent, free: eyes large, round, prominent, approximating: thorax small, subconic, bisinuated or subtruncate behind: elytra oblong-ovate, broader than the thorax, the apex obtusely rounded: pygidium sometimes exposed: legs stout, anterior approximating, posterior longest: femora clavate, posterior generally very much incrassated, formed for leaping, sometimes denticulated.

The saltatorial hinder legs of the insects of this genus, combined with their approximating eyes, inflexed rostrum, and 6-jointed funiculus of the antennæ, at once point out their distinctions from the other genera of this extensive family: the larvæ are subcutaneous, and the imago sometimes exists throughout the winter.

A. With the hinder femora denticulated.

- Sp. 1. Quercus. Rufo-testaceus, pubescens, oculis pectoreque nigris, elytris plagû anticâ triangulari cinereo-pubescente, femoribus posticis serrato-dentatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
- Cu. Quercus. Linné.—Cu. rufus. Donovan, xi. pl. 389. f. 3.—Or. Quercus. Steph. Catal. 160. No. 1634.
- Rufo-testaceous, pubescent: eyes pitchy-black: thorax bisinuate at the base, with an obsolete dorsal channel: scutellum whitish: elytra punctate-striated, with a large triangular common blotch extending from the shoulders to beyond the middle of the suture densely clothed with a pale pubescence, the rest of the surface being less densely clothed, and the pile of a ferruginous hue: breast black; basal joints of the abdomen dusky, or black; apex ferruginous; four anterior femora, each with a minute spine in the middle, the posterior with a double series of six or seven spines on each.

Not uncommon on oaks during the summer in England.

- Sp. 2. scutellaris. Oblongus, rufo-ferrugineus, oculis, rostri apice, pectore abdomineque nigris, scutello albido-piloso, femoribus posticis unidentatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Rh. scutellaris. Fabricius.-Cu. rufus. Donovan, vii. pl. 249. f. 1.-Or. scutellaris. Steph. Catal. 161. No. 1635.

Oblong, rufo-ferruginous, with the eyes and tip of the rostrum black: thorax bisinuated at the base, with a dorsal groove; the disc rugose-punctate: scutellum rounded, clothed with dense shining whitish pubescence: elytra deeply crenate-striate, with the interstices somewhat rugose, irregularly pilose: breast and abdomen black, obsoletely rugose-punctate: anterior femora unarmed; posterior with a single small tooth in the middle.

Far from uncommon in woods in the vicinity of London; especially at Coombe and Darenth, frequenting the alder and hazel. "Dalston."—T. C. Heysham, Esq. "Common on Alnus glutinosus, particularly about Sketty-bog."—L. W. Dillwyn, Esq.

Sp. 3. semirufus. Oblongus, niger, pubescens, scutello albido-piloso, elytris, antennis pedibusque rufo-ferrugineus. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
 Rh. semirufus. Gyllenhal. iv. 597.

Oblong, black, pubescent: head with griseous pubescence, punctured: eyes brown: rostrum black, smooth: antennæ rufo-testaceous, with the club fuscescent: thorax bisinuated at the base: thickly and deeply rugose-punctate, clothed with depressed cinereous hairs: scutellum whitish: elytra large, deeply punctate-striate, entirely rufo-ferruginous, with ashy-white depressed hairs: breast and abdomen entirely black, with griseous-white down: legs dull rufo-testaceous, with the joints and hinder femora sometimes dusky, the latter armed with several denticulations.

Amongst my series of this genus I have recently detected a single example of this insect, caught by myself near London.

Sp. 4. ferrugineus. Ferrugineus, rostro capite abdomine anticè genubusque aterrimis. (Long. corp.  $1\frac{1}{2}$  lin.)

Cu. ferrugineus. Marsham .- Or. ferrugineus. Steph. Catal. 161. No. 1636.

Ferruginous, villose: rostrum and head black: thorax slightly bisinuated at the base, the disc somewhat rugose: elytra punctate-striate, the interstices granulated: breast and base of the abdomen black, the apex of the latter and the sides ferruginous: legs ferruginous, with the joints dusky or black; posterior femora spinulose.

Abundant in woods throughout the metropolitan district: also found in Devonshire and Somersetshire, on the oak. "Near Swansea."—L. W. Dillwyn, Esq.

- Sp. 5. atricapillus. Testaceus, capite sterno abdominisque basi subtus nigris. (Long. corp.  $1\frac{1}{2}$  lin.)
- Cu. atricapillus. Marsham .- Or. atricapillus. Steph. Catal. 161. No. 1637.
- Rather narrow, oblong: pale testaceous: the head and eyes black: thorax slightly scabrous: elytra punctate-striated, pale immaculate testaceous: breast and

abdomen at the base black, the apex testaceous: legs testaceous; hinder femora slightly spinose: rostrum black. The disc of the thorax is sometimes dusky.

Occasionally found near London, on the oak, in June and July.

Sp. 6. nigricollis. Niger, antennis elytris and pedibusque ferrugineis. (Long. corp.  $1\frac{1}{2}$  lin.)

Cu. nigricollis. Marsham.-Or. nigricollis. Steph. Catal. 161. No. 1638.

Oblong, pilose, black; head and thorax immaculate: elytra crenate-striated, ferruginous, with the disc rather obscure: body beneath black, with the apex rufous: antennæ and legs ferruginous; posterior femora with two rows of denticulations: apex of the rostrum ferruginous.

Found on elms within the metropolitan district, not uncommonly.

- Sp. 7. Alni. Niger, pubescens, thorace, elytris and tarsisque rufo-testaceis, elytris maculis quatuor nigris, femoribus posticis serrato-ciliatis. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$ lin.)
- Cu Alni. Linné.—Donovan, vii. pl. 249. f. 2.—Or. Alni. Steph. Catal. 161. Nc. 1639.
- Black, pubescent: thorax with the base bisinuated, rufo-testaceous, sometimes with an abbreviated black fascia in the middle of the disc: scutellum black: elytra testaceous, rather deeply punctate-striated, with an oblong black spot at the base, and a second large rounded one in the middle of the disc towards the suture: margin of the abdomen testaceous at the apex: legs black, tarsi testaceous: posterior femora angulated beneath, with a tooth in the middle, and a series of rigid cilia behind it.
- Variable in colour; being more or less rufo- or pale-testaceous, and the apical spots on the elytra being sometimes united transversely: rarely wanting, but frequently very obscure.

The most abundant species of the genus throughout the south of England, and I believe also found in the north: it is not uncommon in Norfolk and Suffolk. "Not unfrequent on elms (near Swansea)." -L. W. Dillwyn, Esq.

- Sp. 8. depressus. Nigro-fuscus, tenuè pilosus, rostro rubro, antennis tibiis tarsisque rufescentibus, thorace lineolâ dorsali impressâ obsoletâ. (Long. corp.  $1\frac{3}{4}$  lin.)
- Cu. depressus. Marsham .- Or. depressus. Steph. Catal. 161. No. 1640.
- Brown-black; sparingly clothed throughout with very short fuscous hairs: thorax bisinuated, with an obsolete dorsal channel: elytra broad, depressed,

rather deeply striated, immaculate, the scutellum concolorous : tibiæ and tarsi rufescent : hinder femora multi-dentate : antennæ rufescent : rostrum rufous.

Taken occasionally in woods near London; and I possess one specimen from Somersetshire.

- Sp. 9. pilosus. Oblongo-ovatus, niger, densè cinereo-pubescens, antennis basi testaceis, scutello pectorisque margine albidis, elytris maculis quinque denudatis. (Long. corp. 14-14 lin.)
- Cu. pilosus. Paykul.-Or. pilosus. Steph. Catal. 161. No. 1642.
- Oblong-ovate, black, densely clothed with a cinereous pubescence: rostrum black: antennæ pale testaceous, with the club fuscous-black: thorax somewhat trisinuated at the base, with an evident dorsal channel: scutellum whitish: elytra punctate-striate, the interstices flat, irregularly clothed with depressed cinereous hairs, forming five somewhat denuded spots, of which one is at the base of the disc of each elytron, another on the suture, and one on each near the apex: sides of the breast whitish: legs black; tarsi somewhat ferruginous: posterior femora angulated beneath, and armed with a minute tooth.

Not uncommon on oaks and birch in the woods throughout the metropolitan district: also frequent in Somersetshire, Devon, the New Forest, Norfolk, Suffolk, &c. "On oaks (near Swansea) not common."—L. W. Dillwyn, Esq.

Sp. 10. Ilicis. Oblongo-ovatus, niger, pube cinereo-albidá variegatus, antennis tarsisque testaceis, femoribus posticis serrato-dentatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
 Cu. Ilicis. Paykul.—Or. Ilicis. Steph. Catal. 161. No. 1641.

Oblong-ovate, black: head pubescent: rostrum black, rugose-punctate: thorax rugose-punctate, pubescent, with an irregular whitish dusky-pubescent patch; scutellum densely whitish: elytra punctate-striate, the interstices flat, subrugose, variegated with a ferruginous and whitish-ash pubescence, with an oblong white streak at the base of the suture; the suture posteriorly and the alternate interstices obsoletely tessellated with whitish hairs and denuded spots: four anterior femora with a single tooth in the middle; posterior ones with a tooth in the middle and a series of small spines: tarsi and antennæ entirely testaceous.

Very abundant on oaks in the woods and copses throughout the metropolitan district. "On oaks (near Swansea) not common."— L. W. Dillwyn, Esq.

Sp. 11. Fagi. Oblongus, niger, immaculatus, tenuè pubescens, antennis tarsisque pallidè testaceis, femoribus omnibus unidentatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
Rh. Calcar. Fabricius.—Or. Calcar. Steph. Catal. 161. No. 1643.

Oblong, black, immaculate, slightly pubescent: head closely punctured : rostrum

black, rugose-punctate: thorax with the base somewhat trisinuated, the disc obsoletely channelled, and the apex with a transverse impression: *elytra* rather long, finely punctate-striated, the interstices flat, nearly smooth, sparingly clothed with a fuscous pubescence: *legs* short, *black*; tarsi pale testaceous; the *four anterior femora with* a small straight *spine* in the middle; the *posterior* angulated, with a stouter spine, and ciliated.

Var. 6.? Cu. Fragariæ. Steph. Catal. 161. No. 1644.—With the pubescence on the elytra of a rich greenish hue, the striæ more deeply impressed.

Common in woods and hedges near London in June and July. "Among grass in woods (near Swansea) not common."—L. W. Dillwyn, Esq.

Sp. 12. rhodopus. Rugosus, fuscus, subpubescens, antennis pedibusque rufis, elytris obsoletissimè striatis. (Long. corp. 1 lin.)
Cu. rhodopus. Marsham.—Or. Populi. Steph. Catal. 161. No. 1645.

Oblong, rugose, fuscous; slightly pubescent: rostrum rufo-piceous: head finely punctured: eyes brown: thorax faintly punctured, the base obscurely bisinuated: elytra very faintly striated, somewhat rugose and but slightly pubescent: legs dull rufous, tarsi palest: antennæ also rufous.

Whether this be synonymous with the Rh. Populi of Fabricius, I am doubtful.

Obtained from the Marshamian cabinet: I am uncertain of its locality, but it has been taken within the metropolitan district.

B. With the posterior femora simple.

- †Sp. 13. Loniceræ. Ovalis, luteo-ferrugineus, pubescens, oculis, pectore abdomine femorumque posticorum fasciâ nigris, elytris puncto humerali fasciaque mediâ dentatâ nigro-fuscis. (Long. corp. 14 lin.)
- Rhy. Loniceræ. Fabricius, Syst. Eleut ii. 495.-Cu. Loniceræ. Herbst. Col. vi. 427. pl. 93. f. 9.
- Oval, luteo-ferrugineous: head pale: eyes brown: thorax truncate, the sides rounded; disc obsoletely punctate, opaque: elytra broad, with the shoulders somewhat rectangular, deeply sulcate-punctate; the interstices narrow, elevated; on the humeral callus a round fuscous black spot, and an irregular narrow fascia in the middle, both sometimes fuscescent: breast and abdomen black; legs luteo-testaceous; posterior femora with a black ring towards the apex: antennæ pale.

Specimens of this insect have *long* been in the collection at the British Museum. "Found on the Lonicera Xylosteum at Spitch-week."—*Dr. Leach.* 

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- Sp. 14. Avellanæ. Ovatus, niger, antennis tibiis tarsisque testaceis, elytris plagă magnâ lobatâ baseos fasciâque postică abbreviată albido-pilosis. (Long. corp.  $1-1\frac{1}{4}$  lin.)
- Cu. Avellanæ. Donovan, vi. pl. 205. f. 3.-Or. signifer. Creutzer.-Steph. Catal. 161. No. 1646.
- Ovate, black: head opaque, slightly pubescent: eyes dusky brown: rostrum black, substriated: antennæ pale testaceous, with the club dusky: thorax rather broad, with whitish pubescence, more densely clothed in front: elytra obscure black, punctate-striate, with a large lobate common patch, composed of two lunules of whitish hairs at the base, and extending down the suture to the middle; and beyond this towards the apex is an abbreviated white transverse narrow fascia, and at the apex itself are some ferruginous hairs: femora black; tibiæ and tarsi testaccous.
- Donovan's name was published at least six years before Creutzer's, consequently has the priority, although my inadvertence has again been implicitly followed.

Found abundantly on hazels within the metropolitan district, especially in Coombe and Darenth Woods: also near Bristol.

- Sp. 15. X-album. Ovatus, niger, coleoptris striatis lunulis duabus coadunatis albidis baseos, tibiis tarsisque testaceis. (Long. corp. 14 lin.)
   Or. X-album. Kirby MSS.—Steph. Catal. 162. No. 1647.
- Ovate, black, slightly pubescent: elytra striated, each with a lunular whitish spot at the base, united in the centre, and forming an Italian X, the apex immaculate: tibiæ and tarsi obscure testaceous.
- Probably a variety of the foregoing insect, wanting the posterior fascia on the elytra, and having a black spot near the scutellum within the pale lunules at the base.

Found in the vicinity of London, and in Suffolk.

- Sp. 16. bifasciatus. Ovatus, niger, antennis tarsisque testaceis, elytrorum suturâ baseos fasciisque duabus macularibus, approximatis, albido-pilosis. (Long. corp.  $1-1\frac{1}{4}$  lin.)
- Cu. bifasciatus. Paykul.-Or. bifasciatus. Steph. Catal. 162. No. 1648.
- Ovate, black: head opaque, slightly pubescent: eyes dusky brown: thorax with the base somewhat bisinuated, the disc rather glossy, deeply punctate and irregularly clothed with whitish pubescence: scutellum black: elytra a little shining, moderately punctate-striate, the interstices slightly convex and smooth, with an elongate densely pilose white stria near the scutellum, a slightly bent fascia of whitish spots towards the middle, and a little behind another nearly straight, which is sometimes ochraceous: legs black; tarsi alone testaceous: antennæ pale testaceous.

Less abundant than Or. Avellanæ, but far from rare within the metropolitan district: in woods in June. "Taken in the woods at Penllergare."—L. W. Dillwyn, Esq.

- Sp. 17. decoratus. Ovalis, niger, antennis tarsisque rufo-testaceis, scutello alho, elytris fasciis duahus obsoletis e lineolis albidis compositis. (Long. corp.  $1\frac{1}{4}-1\frac{1}{3}$  lin.)
- Sa. decoratus. Germar, M. iv. 333.—Or. confusus. Kirby MSS.—Or. confinis. Steph. Catal. 162. No. 1649.
- Oval, black: head finely punctate: eyes large: thorax very short, the base truncate, disc depressed, obsoletely punctate, pubescent: scutellum elevated, whitish: elytra broad, the shoulders high, the back depressed anteriorly, moderately punctate-striate, insterstices flat, subcoriaceous; pubescent; with two dorsal, abbreviated, approximating fasciæ of distinct whitish pubescent spots, one a little before, the other behind, the middle: legs black, tarsi rufo-testaceous; posterior tibiæ angulated, with a tooth-like fascicle of hairs without: antennæ rufo-testaceous; with the club dusky.
- The name Or. confinis of Kirby, employed in my Catalogue, is a mere typographical error; confusus being the term employed by him: the insect has been, however, described by Germar, whose name of course I have adopted.

Found, but not commonly, within the metropolitan district in June.

- Sp. 18. affinis. Ovatus, niger, subpubescens, antennis tarsisque ferrugineis, scutello, albido, elytris immaculatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
   On efferie Sturk (lett.) 200 No. 1650
- Or. affinis. Steph. Catal. 162. No. 1652.
- Rather larger than the last: ovate; black; head a little pubescent: eyes brown: thorax with the base obscurely bisinuated, the disc slightly punctate, convex: scutellum whitish: elytra punctate-striated, slightly depressed, immaculate: femora and tibiæ black; the latter all simple; tarsi ferruginous: antennæ entirely ferruginous.
- This may probably be a variety of the last, but it is larger, and of a deeper colour, &c.

Taken within the metropolitan district.

## GENUS CCXCVIII.---TACHYERGES, Schönherr.

Antennæ geniculated, 12-jointed, rather short, and slender; funiculus 7-jointed, its basal joint large, obconic; second and third oblong, obconic; the four following short, truncate at the apex; club thick, oblong-ovate. Rostrum as long as, or longer than, the head, rather stout, a little bent, somewhat rounded and inflexed: eyes larger, nearly united on the forchead: thorax

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small, subconic; the base subtruncate: *elytra* subovate, with the shoulders obtusely angulated: *legs* stout, with the hinder *femora* more or less incrassated, unarmed, and formed for leaping; *tibiæ* externally obliquely truncate and grooved.

Exclusively of the difference between Tachyerges and Orchestes in the structure of the funiculus of the antennæ, the former genus is generally less publicent, more depressed, with the femora less incrassated, and always simple.

- Sp. 1. Salicis. Ovatus, niger, scutello fasciisque duabus elytrorum undatoflexuosis albido-pilosis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)
- Cu. Salicis. Linné.—Ta. Salicis. Steph. Catal. 162. No. 1651.—Cu. Caprææ. Donovan, iv. pl. 121. f. 5—7.
- Deep-black, ovate: head deeply and thickly punctate; eyes brown: thorax opaque, thickly rugose-punctate, with a slender pilose-griseous dorsal line: scutellum small, densely clothed with nivcous pile: elytra slightly convex, deeply striated, the stria subcrenate, the interstices somewhat smooth, the disc anteriorly with a common unequal bent, pilose, white fascia, not touching the margins, broader within, and reaching on the suture to the scutellum; in each elytron is a small anterior twig, and another pointing backwards near the suture; in the middle of this fascia, near the suture, is a rufo-ferruginous patch, and towards the apex is another abbreviated fascia of whitish spots, bent outwards at the tips: legs black: antennæ rufo-piceous, with the club dusky: rostrum rugose-punctate.

Abundant in woods on willows, throughout the metropolitan district, in the summer. "Cummersdale."—T. C. Heysham, Esq. "Sometimes on nettles (near Swansea), and in salices not uncommon, particularly about Crwmlyn-bog."—L. W. Dillwyn, Esq.

- Sp. 2. Saliceti. Oblongo-ovatus, niger, subpubescens, antennarum basi tibiisque testaceis, elytris convexis profund punctato-striatis, pectore albido-pubescente. (Long. corp. 1 lin.)
- Rh. Saliceti. Fabricius.-Ta. Saliceti. Steph. Catal. 162. No. 1652.
- Oblong-ovate, black, slightly pubescent: head opaque, finely punctate: rostrum delicately punctured: thorax transversely convex in the middle, depressed at the base and apex, thickly punctulate: scutellum whitish: elytra a little convex, deeply punctate-striate; very sparingly clothed with a short ashy pubescence: breast entirely covered with a dense ashy-white pubescence: femora black; posterior slightly thickened: tibix pale testaceous; tarsi a little obscure: antennæ testaceous, with the club fuscous.

Not very uncommon on willows and poplars near London: also found in Norfolk and Somersetshire.

- Sp. 3. scutellatus. Oblongo-ovatus, niger, subpubescens, antennarum basi pedibusque rufo-fuscis, tibiis dilutoribus, scutello albido. (Long. corp. 1 lin.)
- Or. scutellatus. Wilkin? MSS.—Ta. scutellatus. Steph. Catal. 162. No. 1653.
- Oblong-ovate, black, slightly pubescent: head and thorax, as in the foregoing: elytra moderately crenate-striated, the interstices a little rugose, and elevated; scutellum whitish: legs dull rufo-fuscous, with the tibiæ pubescent, the hinder femora dusky: antennæ dull rufo-fuscous at the base, the club dusky. Probably a variety of the foregoing insect.

Taken near London, and in Norfolk.

Sp. 4. Populi. Oblongo-ovatus, niger, antennis pedibusque pallide testaceis, femoribus posticis fasciá nigrá, pectore albido-pubescente. (Long. corp. 1<sup>1</sup>/<sub>3</sub> lin.)
Rh. Populi. Fabricius, Eleut. ii. 495?

Resembling Orchestes Fagi: oblong-ovate; black: head finely punctate; eyes brown, meeting on the forehead: thorax transversely convex, depressed towards the base and apex, finely and thickly rugose-punctate: scutellum whitish: elytra a little depressed, deeply crenate-striated, the interstices flat, finely rugose: breast densely clothed with a whitish pubescence: legs pale testaceous, the hinder femora with a black ring: antennæ pale testaceous.

I possess a single example of the above insect, which I obtained from the Marshamian Cabinet.

- Sp. 5. rufitarsis. Oblongo-ovatus, niger, nitidus, scutello concolore, antennis tarsisque rufo-testaceis. (Long. corp.  $1\frac{1}{2}$  lin.)
- Or. rufitarsis. De Jean?-Ta. rufitarsis. Steph. Catal. 162. No. 1655.
- Oblong-ovate, rather depressed, black, shining: rostrum short, rugose at the apex: thorax narrowed anteriorly, with an obsolete transverse impression: scutellum black: elytra rather long, faintly punctate-striate, with the interstices a little elevated: legs black, with the tarsi alone rufo-testaceous: antennæ entirely pale rufo-testaceous.

Of this distinct species I have also a single specimen, taken by myself near London several years since.

- Sp. 6. Stigma. Oblongo-ovatus, convexus, niger, scutello niveo-piloso, rostro longitudine thoracis, elytris profundè crenato-striatis, interstituis rugosis, oculis coadunatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)
- Salius Stigma. Germar .-- Ta. Stigma. Steph. Catal. 162. No. 1656.
- Oblong-ovate, convex, black: head punctured: eyes dusky, united in front: rostrum thickly rugose-punctate: thorax very narrow anteriorly, the disc moderately convex, thickly rugose-punctate, covered, especially on the sides and beneath, with fine cinereous down: scutellum elevated, densely clothed

with white pubescence: elytra moderately convex, with a transverse impression before the middle, deeply punctate-striated, the interstices convex, somewhat rugose transversely: legs entirely black.

Var.? 3. Ta. nitidulus. Steph. Catal. 162. No. 1655.— More glossy than the preceding, with the margins of the thorax concolorous, the scutellum snow-white.

Frequently taken within the metropolitan district: also found in Norfolk and Somersetshire. "Not uncommon on willows and alders (near Swansea)."—L. W. Dillwyn, Esq.

# GENUS CCXCIX.-BALANINUS, Germar.

Antennæ geniculated, 12-jointed, long, slender, inserted behind the middle of the rostrum; funiculus 7-jointed, its two basal joints longest, subelavate, or obconic, the remainder short, obconic; club oblong-ovate, distinctly articulated, or ovate and subsolid. Rostrum very long, filiform, and slender, bent: eyes depressed, large: thorax oblong, subconic: scutellum rounded, elevated: elytra united, somewhat triangular, or subcordate, the apex of each rounded: legs stout, rather long: femora clavate, sometimes dentate; tibiæ with the apex rounded-truncate, excavated, the anterior armed with a very minute hook within.

The very long, slender, bent rostrum of the insects of this genus, combined with their subtriangular, pubescent body, the structure of the articulations of the antennæ, slight armature of the anterior tibiæ, form the more prominent characters of the genus; the larvæ of which are nucivorous.

A. The pygidium, or apex of the abdomen, not covered by the elytra.

- Sp. 1. Nucum. Niger, subdepressus, densè flavescenti-villosus, antennis pedibusque ferrugineis, rostro extrorsùm rufo. (Long. corp. 3-5 lin.)
- Cu. Nucum. Linné.-Ba. Nucum. Samouelle, pl. ii. f. 20.-Ba. Nucum. Steph. Catal. 162. No. 1657.
- Slightly depressed, black, densely clothed with flavescent or griseous pubescence, with deeper shades and irregular fasciæ: head furnished with a very long and slender rostrum, which is outwardly rufous; thorax subcarinated: scutellum flavescent or whitish: elytra punctate-striated, the interstices thickly rugulose: body beneath also pubescent, with the pubescence very dense on the anterior angle of the breast: legs dull ferruginous, with the joints somewhat piceous; femora acutely dentate: antennæ dull ferruginous.
- Very variable in the colour of the pubescence, but the rostrum in both sexes appears longer than in the following species.

Very abundant during the summer on hazels in Coombe and Darenth Woods: I have also taken it at Hertford, Ripley, and near Dover: the larva feeds upon the nut, is fleshy-white, with a brown scaly head. "Black Hall Wood."—T. C. Heysham, Esq. "Not unfrequent on Corylus avellanus (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 2. glandium. Ater, subdepressus, densè cinereo-tomentosus, scutello albido, rostro pedibusque rufis, femoribus acutè dentatis. (Long. corp. 4-5 lin.)
Cu. glandium. Marsham.—Ba. glandium.—Steph. Catal. 162. No. 1658.

- Black, somewhat depressed, densely clothed with a cinereous pubescence, which is variegated with darker shades on the elytra: scutellum whitish, or pale cinereous: elytra striated, the strike punctate; interstices somewhat rugulose: legs, antennæ, and rostrum rufous, the latter about the length of the body or shorter: anterior angles of the breast whitish.
- The resemblance between this and the foregoing insect I conceive too close to admit of their being distinct: both are extremely variable in the colour of the pubescence; this species appears, however, to have a rather shorter rostrum, and to differ slightly in form from the preceding.

Found in oaks in the woods within the metropolitan district. "Probably near Swansea, acorns being frequently found with a larva within, apparently of this genus."-L. W. Dillwyn, Esq.

- Sp. 3. villosus. Niger, subdepressus, parciùs grisco-pubescens, antennis ferrugineis, rostro nigro, scutello elytrorumque fasciá posticá lutescentibus. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-4 lin.)
- Cu. villosus. Herbst.-Ba. villosus. Steph. Catal. 163. No. 1659.
- Black, slightly depressed, sparingly clothed with griseous pubescence: rostrum black, very long and slender: thorax with a whitish dorsal line: elytra punctate-striated, irregularly varied with flavescent down, with a somewhat distinct, abbreviated, broad, transverse fascia of the same hue behind the middle; scutellum also flavescent: legs black, with griseous pubescence; femora slightly dentate.
- There is again far too great a resemblance between this and the following insect to warrant their separation as distinct species, were it not from the evident dissimilarity of length in the rostrum : and amongst my series of specimens there are evidently four lengths of that part, whence one cannot but presume that (other characters considered) they must belong to two distinct species<sup>\*</sup>.

• Sexual dissimilarities are sometimes totally overlooked by writers: witness a recent reference to my male Ægeria stomoxyformis, with ciliated antennæ, as the female of Æg, culiciformis!! Not very common: found on oaks within the metropolitan district, and in Devonshire.

- Sp. 4. tenuirostris. Niger, subdepressus, pube albidá variegatus, rostro longissimo nigro, antennis rufis, scutello elytrorumque fasciá posticâ albidis. (Long. corp.  $2\frac{1}{2}-3\frac{1}{2}$  lin.)
- Cu. tenuirostris. Herbst.—Donovan, vii. pl. 249. f. 3.—Ba. tenuirostris. Steph. Catal. 163. No. 1660.
- Smaller than the foregoing: black, slightly depressed; variegated with a whitish pubescence: rostrum very long, black, shining: antennæ rufous, with the club ashy: thorax with some scattered whitish hairs, and a distinct line of the same on the back: scutellum whitish: elytra slightly punctate-striated, varied with whitish, or cinerescent, pubescence, with a distinct, abbreviated, somewhat curved, whitish fascia behind the middle: legs black, femora slightly dentate.

Somewhat local within the metropolitan district, but found in plenty on the oaks in Epping-forest, near Laytonstone, Wanstead, &c. in June and July. "Has been taken in the neighbourhood (of Swansea)."—L. W. Dillwyn, Esq.

- Sp. 5. Betulæ.-PLATE XX. f. 4.-Rufo-brunneus, subdepressus, pube flavescenti variegatus, scutello albido, rostro rufo, longitudine corporis, pedibus testaceis, femoribus obsoletà dentatis. (Long. corp. 2-3 lin.)
- Bu. Betulæ. Steph. Catal. 163. No. 1661.
- Red-brown, slightly depressed, variegated with a pale yellowish or lutescent pubescence: rostrum as long as the body, rufous, glossy, the base a little striated: thorax with a slight transverse impression in front, and a small impressed fovea towards the middle of the base, on each side; the disc rather obsoletely punctulate, with a faint dorsal line and the lateral margins flavescent: scutellum whitish: elytra delicately punctate-striate, varied with irregular undulated, flavescent, pilose fasciæ: legs rufo-testaceous, with the femora clavate, and each with a rather obsolete tooth : antennæ long, rufo-ferruginous.
- Slightly variable in colour, and in size:—I have retained the name which I applied to this insect several years since, although it has been previously described by Herbst, by the name of Rh. Cerasorum; but as Fabricius has also described an insect by that name, (which he states is English—one of the foregoing insects—) and his name has probably the priority, the present appellation will therefore prevent confusion; and Herbst's name is obviously inapplicable, as it resides upon the birch.

Rare: in June, 1816, I met with several examples on a birch in Coombe-wood, where it has once or twice occurred since. "Lord Spencer's park, near Wimbledon."—Mr.~G.~Waterhouse.

- B. With the pygidium nearly covered by the elytra.
- Sp. 6. Salicivorus. Niger, supra cinereo subpubescens, scutello corporeque subtus albo-squamosus, antennarum articulo primo obscure ferrugineo, rostro longissimo atro. (Long. corp.  $1\frac{3}{4}-2$  lin.)
- Cu. Salicivorus. Paykul.-Ba. Salicivorus. Steph. Catal. 163. No. 1662.
- Black; above slightly clothed with cinereous pubescence, with the scutellum snow-white, and the under surface white: head finely punctulate: rostrum very long, glossy-black, a little striated at the base: antennæ with the basal joint obscure ferruginous; the rest fuscous-black, pilose: thorax punctured: elytra somewhat deeply punctate-striate, the interstices each with a double series of minute depressed cinereous scales: legs black; femora clavate, all acutely dentate.

Not uncommon on willows and pot-herbs within the metropolitan district; and I believe in other parts. "At times plentiful (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 7. curvatus. Ater, supra cinereo subpubescens; subtus albo-squamosus, antennis rufis, clavâ fuscescente. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
   Cu. curvatus. Marsham.—Ba. curvatus. Steph. Catal. 163. No. 1663.
- Black: above slightly clothed with cinereous, beneath with white scales: rostrum very slender, bent, about two-thirds the length of the body, glabrous and polished: head slightly punctate: thorax opaque, slightly rugose: elytra punctate-striated, the interstices with cinereous down; antennæ pale rufo-ferruginous, with the club alone dusky.

Abundant in hedges and gardens within the metropolitan district. "Not uncommon in hedges (near Swansea.)"—L. W. Dillwyn, Esq.

- Sp. 8. pyrrhoceras. Ater, supra subcinereo-pubescens, subtus albus, antennis rostrique apice rufis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Cu. pyrrhoceras. Marsham.-Ba. pyrrhoceras. Steph. Catal. 163. No. 1666.
- Black; above slightly clothed with cinerascent pubescence, beneath with white: head with a whitish patch of scales round the eyes: rostrum rather short, villose at the base, black; the apex glabrous, rufous: antennæ testaceous, with the club slightly fuscescent: thorax very thickly punctured: elytra deeply striated, the interstices slightly clothed with hoary pubescence: legs black; femora rather acutely dentate.

Less abundant than some of the foregoing insects, but far from uncommon in hedges within the metropolitan district in June. Sp. 9. scutellaris. Ater, supra cinereo subpubescens, subtus albus, scutello niveo, antennis nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

- Black; slightly clothed above with cinereous pubescence, beneath white: scutellum snow-white: elytra rather faintly punctate-striated, the interstices a little rugulose, and slightly pubescent: legs and antennæ black, the former with the femora acutely dentate.
- This insect, which I formerly received by the above MSS. name, appears evidently to belong to the present genus.

Taken in June near London, and in Norfolk.

Sp. 10. intermedius. Ater, supra cinereo subpubescens, subtus albus, rostro thorace breviore, antennis testaceis. (Long. corp. 1-14 lin.)

Cu. intermedius. Marsham.-Ba. intermedius. Steph. Catal. 163. No. 1665.

Less than either of the foregoing species: black, above slightly clothed with cinereous pubescence; beneath white: rostrum entirely black, smooth, glossy, a little bent, shorter than the thorax; the latter somewhat opaque and slightly scabrous; elytra punctate-striated; the interstices slightly cinereous: legs black: antennæ entirely testaceous.

Far from rare within the metropolitan district in June, on willows and in thick hedges. "On willows and alder (near Swansea), not uncommon."—L. W. Dillwyn, Esq.

Sp. 11. brunneus. Nigro-piceus, subpubescens; thorace scabro, elytris profundè punctato-striatis, pedibus totis testaceis. (Long. corp. 1 lin.)
Cu. brunneus. Marsham.—Ba. brunneus. Steph. Catal. 163. No. 1667.

*Pitchy-black*; slightly pubescent, whitish or cinerascent beneath: thorax with the disc scabrous, with numerous elevated points: elytra deeply striated, the striæ composed of impressed points: legs entirely testaceous: femora obsoletely dentate: antennæ piceous.

Seemingly very rare: I possess one specimen only, which I obtained from the Marshamian collection: it is very distinct from any others of the genus: — Marsham inadvertently places it in a wrong division, from the dentations of the femora being very obscure.

### GENUS CCC.—ANTHONOMUS, Germar.

Antennæ geniculated, 12-jointed, long, slender, inserted behind the middle of the rostrum; funiculus 7-jointed, its two basal joints rather long; the remainder short, obconic, equal; club elongate, rather narrow, acuminated at the apex.

Rh. scutellaris. Wilkin.? MSS .- Ba. scutellaris. Steph. Catal. 163. No. 1570.

Rostrum long, slender, filiform, a little bent; eyes rounded, prominent: thorax subconic, truncate anteriorly, somewhat bisinuated posteriorly; deeply emarginated in front beneath: scutellum elevated, distinct: elytra generally ample, oblong-ovate, convex, especially behind: legs somewhat elongate, the anterior longest and stoutest; femora robust, dentate; anterior tibiæ dilated within in the middle, and furnished at the apex with a minute tooth, all obliquely truncate at the apex.

The insects of this very pretty genus are generally found feeding upon flowers—whence their name : the typical ones may be at once known from all the other genera of this family by their dilated anterior tibiæ, exclusively of their other characters : from Balaninus they differ by having the rostrum shorter, the elytra behind very convex and somewhat dilated towards the apex, and covering the tip of the abdomen :—the species of the first division are extremely variable.

A. With the femora acutely dentate.

- Sp. 1. incurvus. Fusco-piceus, cinereo-pubescens, elytris nigro-fuscis, humeris margineque ferrugineis, fasciá posticâ obliquâ, obsoletâ, albidâ, pube flavescente obductâ, scutello niveo. (Long. corp. 2-3 lin.)
- Cu. incurvus. Panzer.—An. incurvus. Steph. Catal. 163. No. 1668.—Cu. fasciatus. Don. xii. pl. 414. f. 3.
- Pitchy-brown, with cinereous pubescence; head and rostrum black: thorax black, with the anterior margin elevated and ferruginous; the sides and a longitudinal line in the middle whitish pubescent: scutellum snowy: clytra black, with the shoulders and sides ferruginous; an oblique, somewhat duplicated, pubescent white fascia behind the middle on the back; sometimes with a few flavescent hairs: femora rusty-piceous, strongly dentate: tibiæ and tarsi pale ferruginous: antennæ ferruginous, with the club dusky.

Not common near London: I have taken it at Coombe-wood in June: but apparently not very scarce in the vicinity of Bristol, whence I have received many examples.

- Sp. 2. Pomorum. Fusco-piceus, cinereo-pubescens, elytris ferrugineis, fasciâ posticâ obliquâ albidâ, nigro inclusâ, scutello niveo. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
   Cu. Pomorum. Linné.—An. Pomorum. Steph. Catal. 163. No. 1669.
- Fusco-piceous; clothed with cinereous pubescence: head pitchy-black, densely pubescent, with an impression on the forehead: thorax rufo-piceous; the disc more obscure, with a broad line in the middle, and a bent one on

each side of dense ashy-villi: scutellum snowy: elytra dusky ferruginous, punctate-striate, with an oblong brownish spot near the scutellum, a denuded very oblique fascia of the same colour in the middle, and behind another somewhat transverse, obsolete one, the space between the fasciæ densely covered with whitish pubescence: legs rufo-ferruginous; femora dusky in the middle; anterior with a very stout tooth: antennæ ferruginous, with the club dusky: rostrum piceous.

Not uncommon on the blossoms of whitethorn, and on other plants, in June and July, in woods and gardens.

- Sp. 3. Ulmi. Rufo-testaceus, subpubescens, capite, rostro tenuè arcuato elongato, pectoreque nigro-piceis, thoracis lineâ mediâ, scutello elytrorumque fasciâ posticâ, transversâ, albis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>4</sub> lin.)
  Cu. Ulmi. De Geer.—An. Ulmi. Steph. Catal. 164. No. 1670.
- Testaceous-red: slightly pubescent: head pitchy-black, with a frontal impression: thorax thickly punctured, with a slender, whitish pubescent, dorsal line: scutellum snowy-white: elytra with an obsolete transverse impression near the base, moderately punctate-striated; each elytron before the middle with a large oblong-quadrate fuscous-brown patch, and behind it a transverse whitish one: body beneath ferruginous: legs rufo-ferruginous: antennæ ferruginous, with the club dusky: rostrum black.

Less abundant than the foregoing species: found during the summer on the elm and service trees, within the metropolitan district, and near Bristol.

- Sp. 4. fasciatus. Fusco-piceus, subpubescens, rostro antennis pedibusque rufis, elytris fusco-ferrugineis, albido-fasciatis, scutello albo. (Long. corp. 2 lin.)
- Cu. fasciatus. Marsham.—An. fasciatus. Steph. Catal. 164. No. 1671.—An. Pomonæ. Germar, M. iv.
- Pitchy-brown; clothed with ashy pubescence: thorax dusky-ferruginous, with a white dorsal line: scutellum white: elytra brunneous, with the base and apex paler, and with two very irregular whitish pilose fascix, one near the base, the other behind the middle, the latter scarcely touching the suture; the disc slightly punctate-striate: breast and abdomen pitchy-black: legs, antennæ, and rostrum rufous, the latter sometimes fuscescent at the apex. Immature specimens are sometimes entirely testaceous.

Common on the flowers of the whitethorn and apple in the hedges and woods throughout the metropolitan district. "On hedge-roses, and particularly on the flowers of Rosa spinosissima on Sketty-burrows, not uncommon."—L. W. Dillwyn, Esq.

Sp. 5. pedicularius. Ruber, subpubescens; elytris griseis, obsoletè albidofasciatis, antennis pedibus rostroque subrecto testaceis. (Long. corp. 2 lin.)
Cu. pedicularius. Linné.—An. pedicularius. Steph. Catal. 164. No. 1672.

Rufous, slightly pubescent: head ferruginous: thorax with a slight dorsal line: elytra finely punctate-striated, rufo-testaceous or griseous, with a whitish obsolete fascia behind the middle, and variegated with whitish clouds towards the apex: legs, antennæ, and nearly straight rostrum, testaceous, the tip of the latter sometimes fuscescent.

Occasionally taken on flowers during the month of June, in woods and hedges near London; also in the New Forest, Devonshire, near Bristol, &c.—" Not uncommon among grass in woods (near Swansea.)"—L. W. Dillwyn, Esq.

Sp. 6. Druparum. Rufo-testaceus, griseo-pubescens, rostro tenui, subrecto, elytris fasciis duabus undato-dentatis, denudatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>--2<sup>1</sup>/<sub>2</sub> lin.)

Cu. Druparum. Linné. - An. Druparum. Steph. Catal. 164. No. 1673.

Testaceous-red, clothed with griseous pubescence: head slightly pubescent, finely punctured, with a small frontal impression: thorax much narrowed anteriorly, clothed with rather long, ashy-yellow pubescence: scutellum ferruginous: elytra ample, very convex, punctate-striate, the interstices coriaceous, covered with a dense depressed ashy-yellow pubescence, with an obscure fascia in the middle, and another posteriorly somewhat denuded, and dentate on either side: legs pale rufescent; femora bidentate, the interior tooth large, the other small: antennæ pale testaceous, with the club obscure: rostrum somewhat straight, rufous.

Not very abundant within the metropolitan district, but apparently more so in some parts of Somersetshire.

B. With the femora very obsoletely dentate.

Sp. 7. obscurus. Nigro-piceus, subpubescens, antennarum basi, tibiisque rufopiceis, scutello nigro. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)

An. obscurus. Steph. Catal. 164. No. 1674.

Pitchy-black, slightly pubescent, and a little shining: beneath a little cinerascent: head and thorax scabrous, the latter somewhat opaque: scutellum black: elytra deeply crenate-striated, the interstices somewhat rugose and convex: femora black, obsoletely dentate, tibiæ rufo-piceous; tarsi obscure: antennæ with the basal joint rufo-piceous.

Two of my specimens of this species were captured by myself near London in June; others I have received from the vicinity of Bristol.

Sp. 8. ater. Niger, subpubescens, scutel's concolore, thorace opaco scabriusculo, antennis atris. (Long. corp. 2 lin.) Cu. ater. Marsham.-An. ater. Steph. Catal. 164. No. 1675.

Black, slightly pubescent, somewhat cinereous beneath: head rather glossy, finely punctured: thorax opaque, somewhat rugose, with a transverse impression within the anterior margin: scutellum black: elytra punctate-striate, the interstices convex and a little shining: antennæ totally and legs black: rostrum opaque, elongate, somewhat scabrous, slender.

Found near London in gardens and meadows where willows abound. "I believe it has been taken (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 9. Rubi. Niger, tenuè pubescens, scutello albo, antennarum basi, genubus, tarsisque piceis, thorace confertissimè subtilitèr punctulato. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>2</sup>/<sub>3</sub> lin.)
- Cu. Rubi. Herbst.-An. Rubi. Steph. Catal. 164. No. 1676.
- Black, slightly pubescent, beneath somewhat cinereous : head slightly punctate, with a frontal impression : thorax a little narrowed in front, opaque, finely granulate-punctate, clothed with a short cinereous pubescence : scutellum white : elytra opaque, deeply punctate-striate, with the interstices sparingly clothed with ashy down : legs black, with the base of the femora, the joints, and the tarsi fusco-piceous : antenna with the base ferruginous or piceous, the apex and club black : body beneath with the apex sometimes piceous; and the pubescence on the thorax occasionally disposed in three obsolete lines.

Not uncommon in gardens upon willows and potherbs, throughout the metropolitan district: also found in Devonshire, Norfolk, Suffolk, &c.

- Sp. 10. clavatus. Niger, subpubescens; elytris striatis, scutello atro, rostro clavato, clavá compressá. (Long. corp. 1½ lin.)
- Cu. clavatus. Marsham.-An. clavatus. Steph. Catal. 164. No. 1679.
- Black, slightly pubescent: head small: thorax large, somewhat globose, the sides rounded, opaque, scabrous: scutellum black: elytra opaque, striated, the interstices somewhat flat, and clothed with ashy pubescence: legs black: body beneath clothed with silvery scales: rostrum slender at the base, the apex abruptly clavate, the club compressed; palpi large, exposed, testaccous.
- Marsham considered the exposed palpus of my example of this odd insect (the only one I have seen) to be a sort of hook attached to the rostrum, the singular structure of which one might suppose originated in a monstrosity, were it not that there is no other indigenous species to which it could possibly belong; I therefore conclude that it is one of those unique productions that nature so constantly throws in the way of the naturalist.
  - I know not the locality of this insect.

### GENUS CCCI.-HYDRONOMUS, Schönherr.

Antennæ geniculated, 12-jointed, stout, rather short; funiculus 7-jointed, its first joint obovate, thick, second elongate, obconic, remainder nodose, considerably thickened towards the club, which is large, and short-ovate. Rostrum rather short, somewhat stout, and a little bent: eyes lateral, ovate, depressed; thorax slender, very much emarginated anteriorly, and lobate behind the eyes, truncate behind: scutellum small: elytra oblong, attenuated at the apex, covering the abdomen, the shoulders obtusely angulated: legs elongate, slender, the anterior approximating: femora incrassated in the middle, unarmed: tibiæ all curved, the interior apex armed with a stout hook.

Closely resembling the genus Bagoüs in habit, but readily known therefrom by the absence of the pectoral groove: like the insects of that genus, they frequent damp and marshy places, and float about on the water: from the other allied genera the curvature of the tibiæ, combined with the attenuated elytra and deeply emarginated thorax, sufficiently distinguish it.

Sp. 1. Alismatis. Niger, squamis cinereo-albidis variegatus, thorace utrinque impresso, tibiis testaceis. (Long. corp. 2-24 lin.)

Cu. Alismatis. Marsham.-Hy. Alismatis. Steph. Catal. 164. No. 1678.

Black, variegated with cinercous scales: head with a deep impressed groove between the eyes: thorax with an obsolete transverse impression within the apex, the disc with an obsolete dorsal line, and towards the middle of the margin on each side a faint-impressed fovea: elytra slightly convex, obsoletely punctate-striate, the interstices flat, coriaceous, irregularly clothed with ashy-white scales, the latter forming an oblique conspicuous spot rather beyond the middle of the elytra near the suture: legs obscure testaceous: femora with the apex dusky, tarsi fuscescent.

Not very abundant near London: I have taken it in boggy parts of Wimbledon-common, and also in the ditches in Battersea-fields. " Common on Alisma Plantago (near Swansea)."—L. W. Dillwyn, Esq.

# GENUS CCCII.—GRYPIDIUS, Schönherr.

Antennæ geniculated, 12-jointed, rather long and slender, the basal joints touching the eyes; funiculus 7-jointed, its two basal joints rather long, obconic, the remainder short, nodose, equal; club oblong-ovate. Rostrum elongate, slender, curved, cylindric: thorax globose, truncate at the base and apex, its sides equally rounded, and distinctly lobed behind the eyes, which are depressed: scutellum small, oblong: elytra subovate, tuberculate, the shoulders a little prominent anteriorly, and obtusely angled, the back anteriorly somewhat convex, posteriorly gibbous, declining : *legs* stout, subequal, anterior approximating : *femora* unarmed; *tibiæ* nearly straight, the apex angulated within, the anterior armed on the inner margin with a minute bent hook.

Grypidius, which resembles the insects of the three following genera in several respects, may be readily known therefrom by the gibbosity of the elytra, which are tuberculated, deflexed at the apex, and somewhat acute—by the small oblong scutellum, the structure of the antennæ, and slight dissimilarity in the anterior legs. The only indigenous species is found in damp fields and hedges.

Sp. 1. Equiesti. Niger, squamulis albidis variegatus, elytris limbo, punctisque duobus disci albidis. (Long. corp. 3-4<sup>1</sup>/<sub>2</sub> lin.)
Rh. Equiseti. Fabricius. -Gr. Equiseti. Steph. Catal. 164. No. 1679.

Black, variegated, with whitish scales: head small, thickly punctured; eyes duskybrown: thorax black, somewhat opaque, very thickly rugose-punctate, with an impression in the middle of the base, its under surface and sides densely clothed with whitish and dirty-flavescent scales; scutellum whitish: elytra faintly punctate-striate, the interstices finely coriaceous, the alternate ones tuberculate, with the outer margin from the shoulder to the middle unequally, and the apex broadly, clothed with scales as on the sides of the thorax, the disc with a few whitish spots, of which one towards the middle of the suture is largest: femora black, with a white ring; tibiæ dull ferruginous; tarsi dusky-black.

Not uncommon in June, in some of the hedges in Batterseafields, and near Coombe-wood; also at Hertford, Ripley, &c. "On Equisetum arvense, not uncommon (near Swansea)."—L. W. Dillwyn, Esq.

## GENUS CCCIII.-ERIRHINUS, Schönherr.

Antennæ geniculated, 12-jointed, elongate, somewhat slender; funiculus 7jointed, its two basal joints rather long, obconic; the remainder also short, nodose; club oblong-ovate. Rostrum very long, curved, subfiliform: head short, broad: eyes depressed: thorax subtruncate at the base and apex: scutellum rounded: elytra oblong, with the shoulders obtusely angulated, the apex moderately convex and rounded: legs moderate, anterior approximating; femora incrassated, simple; tibiæ slightly curved within at the apex, and armed with a minute hook.

In employing the term Erirhinus for this genus-in which particular, however, I have been followed-I feel scarcely justified, according to the correct principles of nomenclature, inasmuch as the type of Erirhinus of Schönherr is Rh. æthiops of Fabricius, congenerous with Notaris acridulus, thus previously named, though not published, by Germar; but as the insects included in this genus form the second section of Schönherr's Erirhinus, and no other generic name had been applied, I left his name in my Catalogue to designate them, not choosing to augment the immense host of generic names already so extensively proposed :-- the present genus may be known from Notaris by the difference in the structure of the antennæ and by its elongate body, and from Grypidius by the latter character, as well as the absence of tubercles on the elytra, the rounded apex of the latter, and the rounded scutellum :---the species all frequent marshy situations, subsisting upon aquatic plants.

- Sp. 1. Festucæ. Oblongus, fuscus, densè cinereo-squamosus, rostro pedibusque rufo-ferrugineis. (Long. corp. 4 lin.)
  Cu. Festucæ. Herbst.-Er. Festucæ. Steph. Catal. 165. No. 1680.
- Oblong, fuscous, densely clothed with ashy scales: head with minute punctures, and thickly covered with griseous scales and pubescence: eyes brown: thorax above opaque brown; beneath, and the lateral margins, clothed with minute ashy-white scales; the back with a few griseous hairs: scutellum whitish; elytra obsoletely punctate-striate, the interstices finely coriaceous, with minute whitish scales, more or less denuded, so as to appear variegated, with a distinct ovate spot in the middle of the base, and another oblique one a little behind the middle, more densely squamose: sides of the breast and abdomen clothed with compact whitish scales: legs and rostrum rufo-testaceous: antennæ piceous, with the club pubescent.

Found on the flowers of Carex acutus and other aquatic plants: rare in England.

Sp. 2. Nereis. Lineari-elongatus, fuscus, suprà obscurè ferrugineis, densè cinercosquamosus, rostro pedibusque rufo-ferrugineis, elytris anticè piceis. (Long. corp. 2½ lin.)

Linear-elongate, fuscous, above obscure ferruginous, densely clothed with ashy scales: head piceous, subglabrous: thorax thickly punctulated, with the sides MANDIBULATA. VOL. IV. 30TH APRIL, 1831. G

Cu. Nereis. Paykul.-Er. Nereis. Steph. Catal. 165. No. 1681.

and beneath densely squamous, the back somewhat glabrous and convex : scutellum black : elytra obsoletely crenate-striate, with the sides and apex obscure ferruginous and densely squamose; the back anteriorly at the base of the suture somewhat denuded and pitchy-black : legs and suture rufo-ferruginous: antennæ dusky-ferruginous, with the club obscure.

Much more abundant than the last described; but, nevertheless, somewhat rare within the metropolitan district : it occurs in Norfolk, and in Oxfordshire. "Among herbage in the moist parts of Crwmlyn-burrows and other similar situations: sometimes plentiful in summer."—L. W. Dillwyn, Esq.

Sp. 3. inquisitor. Oblongus, ater, cinereo-squamosus, thoracis disco, pedibusque piceis, elytris cincreo-variegatis, antennis rufo-fuscescentibus. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)

Cu. inquisitor. Herbst.-Er. inquisitor. Steph. Catal. 165. No. 1682.

- Oblong, rather broad, black, with cinereous scales above: thorax punctulated, the disc piceous, with an obsolete, pale ashy dorsal line, and the sides broadly cinereous: elytra obsoletely punctate-striate, piceous, the entire surface variegated with cinereous scales, the middle of the sides somewhat dilated : legs piceous: antennæ reddish-brown: base of rostrum piceous, apex rufescent.
- Closely resembling the foregoing, but distinguished chiefly from its being broader, though of the same length, with the elytra not subglabrous anteriorly, &c.

Also occasionally taken within the metropolitan district in June, frequenting aquatic plants.

Sp. 4. Arundineti. Lineari-elongatus, piceus, suprà obscurè ferrugineus, densè cinereo-squamosus, rostro pedibusque rufo-piceis, elytris cinereo-variegatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

Rh. Arundineti. Kirby? MSS.-Er. Arundineti. Steph. Catal. 165. No. 1683.

Linear-elongate, piceous, above dull ferruginous, densely clothed with cinereous scales: thorax with the disc rather denuded, punctured, the sides densely squamose: elytra faintly punctate-striated, variegated throughout with ashy scales, with a larger patch of the same on the disc, behind the middle, towards the suture: rostrum and legs rufo-piceous: antennæ rufo-ferruginous, with the club dusky.

Rare near London: found in damp hedges in June: also found in Suffolk.

## GENUS CCCIV.-NOTARIS, Germar.

Antennæ geniculated, 12-jointed, inserted towards the apex of the rostrum, rather stout; funiculus 7-jointed, its two basal joints slightly elongate, obconic; the remainder short, nodose, subequal; club oblong-ovate, acuminate at the apex. Rostrum very long, bent, cylindric: head small, convex: eyes depressed: thorax somewhat globose, slightly truncate anteriorly and posteriorly, lobate behind the eyes: scutellum small, triangular: elytra oblong, rather convex, the apex simple: legs moderate, stout, anterior approximating; femora simple; tibiæ straight; anterior a little bent at the apex, and armed within with a minute hook.

From the preceding insects, Notaris may be known by its shorter and stouter body, the thorax being somewhat globose, the antennæ placed nearer towards the apex of the rostrum, with the basal joints of the funiculus longer, the terminal ones more truncate, the body less squamous, and in other less evident distinctions; and from Dorytomus the simple femora distinguish it:—the species frequent damp and humid situations.

- Sp. 1. Acridulus. Niger, griseo-subpubescens, antennis pedibusque rufo-piceis, elytris profundè punctato-striatis, interstitiis rugosis. (Long. corp.  $1\frac{3}{4}-2\frac{1}{2}$ lin.)
- Cu. Acridulus. Linné.-No. Acridulus. Steph. Catal. 165. No. 1684.
- Black, slightly clothed with griseous pubescence: head deeply punctate; eyes brown: rostrum shining black, punctulate; striated in the males: thorax rather deeply punctured, with an obsolete dorsal carina: scutellum piceous: elytra rather deeply crenate-striate, the interstices finely rugulose transversely: body slightly glossy beneath, the apex piceous: legs pale rufo-testaceous, with the femora sometimes dusky: antennæ rufo-ferruginous, with the club more or less dusky.
- Var.? ß Rh. punctum. Fabricius.—No. punctum. Steph. Catal. 165. No. 1685.
  —With a round patch of whitish or ashy hairs on the elytra, a little behind the middle, towards the suture.
- Variable in colour; being sometimes dull pitchy-black.
- As it is probable this may be only a variety of the foregoing (as indicated in my Catalogue), I have ceased to distinguish it as a species.

Found in plenty in the marshes within the metropolitan district, especially in Battersea-fields, in the spring and summer months, and occasionally during the winter. "Rather common among herbage (near Swansea) throughout the summer : var.  $\beta$ . on Crwm-

lyn-burrows, and occasionally among grass at Penllergare."-L. W. Dillwyn, Esq. "Cardew-mire."-T. C. Heysham, Esq.

Sp. 2. bimaculatus. Niger, fusco-pubescens, elytris obsoleté striatis, interstitiis rugosis, puncto disci albo-piloso. (Long. corp. 4-5 lin.)

Rh. bimaculatus. Fabricius.-No. bimaculatus. Steph. Catal. 165. No. 1686.

Black, clothed with fuscous pubescence: head shining, very finely punctate: eyes brown: thorax thickly and coarsely rugose-punctate, clothed with griseous down, with a slightly elevated, slender, smooth carina in the middle, and on each side a somewhat curved oblique line of compact griseous hairs: scutellum fuscous: elytra obsoletely striated, the interstices thickly rugulose transversely, the disc with a small, distinct, whitish spot behind the middle, towards the suture: femora black: tibiæ and tarsi pitchy-brown: antennæ piceous.

Rare near London; found in boggy places; occasionally on Wimbledon-common: also in Norfolk, and near Bristol. "On nettles about the borders of Crwmlyn-bog, not uncommon; and Mr. Jeffreys has taken several on the barren sand-hills."—L. W. Dillwyn, Esq. "Cardew-mire."—T. C. Heysham, Esq.

GENUS CCCV.-DORYTOMUS, Germar.

Antennæ geniculated, 12-jointed, inserted towards the apex of the rostrum; slender, long; funiculus 7-jointed, its basal joint very long, slender, clavate; second elongate; but shorter than the first, obconic; the remainder short, subnodose; club oblong-ovate. Rostrum very long, slender, curved, the apex slightly incrassated: eyes depressed: thorax short, transverse, a little constricted anteriorly, the sides rounded: scutellum small: elytra elongate, rounded at the apex, simple: legs moderate, anterior sometimes elongate; femora slightly incrassated, dentate beneath; tibiæ straight, the anterior a little curved towards the apex, and armed within with a minute hook.

The Dorytomi (especially the typical species) differ from the insects of the two foregoing genera by having the anterior legs—which approximate at the base—considerably elongated, the femora but slightly incrassated, and dentate, the thorax coarctate anteriorly : the species usually frequent trees of the willow and poplar kind, and occur during the summer.

A. With the anterior legs elongated.

Sp. 1. vorax. Fusco-piceus, cinereo-pubescens, elytris ferrugineo cinereoque variegatis, pedibus tenuibus ferrugineis, anticis elongatis. (Long. corp.  $3\frac{1}{2}$ -4 lin.)

Cu. vorax. Herbst - Do. vorax. Steph. Catal. 165. No. 1687.

Pitchy-brown, with ashy pubescence: head small, rounded, punctulated, densely pubescent: eyes dusky-brown: thorax with an obsolete transverse impression in front, densely pubescent, with a dorsal and two lateral streaks somewhat denuded: *elytra* punctate-striate, dull ferruginous, *variegated with irregular* united *black spots* and dense cinereous pubescence: sides and apex of the abdomen beneath pale ferruginous: *legs dull ferruginous*, with the joints fuscescent; *anterior* very *long* in the male, rather shorter in the female.

Found sometimes on poplars and willows near London: I have taken it at Coombe-wood, but not very frequently: it is far more abundant in Norfolk, and has been found in Suffolk and Warwickshire. "Netley."—Rev. F. W. Hope. "Dalston-hall."—T. C. Heysham, Esq.

Sp. 2. ventralis. Dilute rufo-testaceus, immaculatus, pedibus pallidioribus, rostro pectoreque fuscis. (Long. corp. 4-4<sup>1</sup>/<sub>2</sub> lin.)

Do. ventralis. De Jean ?- Steph. Catal. 165. No. 1688.

Pale rufo-testaceous, slightly clothed with pale ashy pubescence: head punctulate: cyes black: thorax with a faint transverse impression in front, the disc immaculate testaceous: elytra faintly punctate-striate, immaculate testaceous: breast dull fuscous; abdomen pale rufo-testaceous; legs somewhat ferruginous: antennæ the same; rostrum fuscous.

My examples of this insect I obtained from the north of England: it is not found, to my knowledge, near London.

B. With the anterior legs not elongated.

- Sp. 3. Tortrix. Pallide testaceus, subnitidus, immaculatus, tenuissimè pubescens, pectore fusco, rostro mediocri apice fuscescenti, elytris convexioribus. (Long. corp. 3 lin.)
- Cu. Tortrix. Linné.-Do. Tortrix. Steph. Catal. 165. No. 1689.
- Pale testaceous, slightly glossy and pubescent, *immaculate*: forehead impressed: eyes dusky-brown: thorax suddenly contracted anteriorly, with a transverse impression, rather deeply punctate, and slightly carinated: scutellum rounded: elytra convex, entirely pale testaceous, punctate-striate, with all the interstices obsoletely punctulate: breast pitchy-brown, densely clothed with pubescence, obsoletely punctulate: legs pale testaceous yellow, with the femora slightly clavate and dentate.

The colour is sometimes of a deeper hue.

Not uncommon formerly on some aspen-trees at the London entrance of Coombe-wood, but of late I have not taken it in that locality: the insect has been found in other parts, but not abundantly, I believe. "Cardew-mire." -T. C. Heysham, Esq.

- Sp. 4. arcuatus. Pallide testaceus aut flavescens, pectore nigricante, rostro longiori, apice fusco, elytris profunde punctato-striatis. (Long. corp. 3 lin.)
- Cu. arcuatus. Panzer ?- Do. arcuatus. Steph. Catal. 166. No. 1690.
- Pale testaceous or flavescent, slightly publicscent: thorax rather obscure, punctate: elytra shining, deeply punctate-striate, immaculate; breast dusky; rostrum rather long, fuscous at the tip: femora rather acutely dentate.
- Panzer, in his description of this insect, says "femora mutica;" but as his figure represents them dentate, I have little hesitation in referring it to this insect: its vastly superior size manifestly distinguishes it from the following, which it at first sight greatly resembles.

Found occasionally within the metropolitan district in June on willows.

- Sp. 5. pectoralis. Rufo-testaceus, cinereo-pubescens, pectore nigricante, rostro longiori punctato, apice fusco, elytris cinereo fuscoque variegatis. (Long. corp. 2 lin.)
- Cu. pectoralis. Panzer.-Do. pectoralis. Steph. Catal. 166. No. 1691.
- Rufo-testaceous, slightly cinereo-public cent: forehead impressed: eyes duskyblack: thorax abruptly coarctate, rather coarsely punctate: elytra somewhat deeply punctate-striate, variegated with a dense ashy-white public encoded and with obsolete fuscescent denuded spots on the disc: breast dusky-black or piceous, abdomen dull ferruginous, sometimes fuscescent at the base: legs rufo-testaceous, femora robust, with a stout tooth: rostrum rather slender, long, punctate, with the apex fuscous.

Taken near London in June and July, but not abundantly, on the willow.

- Sp. 6. melanopthalmus. Rufo-testaceus, cinereo-pubescens, rostri apice oculisque fusco-brunneis, elytris convexioribus oblongo-ovatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>—2 lin.)
- Cu. melanopthalmus. Paykul.—Do. melanopthalmus. Steph. Catal. 166. No. 1692.
- Rufo-testaceous, with ashy pubescence: head ferruginous: eyes black: thorax a little coarctate anteriorly, the disc very finely punctulate: elytra ferruginous, slightly pubescent, punctate-striate, somewhat convex, and oblong-ovate: breast, abdomen, and legs ferruginous, with whitish, or hoary, pubescence; all the femora slightly dentate: rostrum filiform, bent, the apex somewhat fuscescent; antennæ ferruginous, with the club concolorous.

Far from uncommon within the metropolitan district, frequenting willows and poplars. "Taken in the neighbourhood (of Swansea) by Mr. Jeffreys."—L. W. Dillwyn, Esq.

Sp. 7. affinis. Niger, densiùs cinereo-pubescens, antennis pedibusque obscurè

ferrugineis, rostro crassiori rugoso, elytris ferrugineo cinereoque variegatis. (Long. corp. 2 lin.)

- Cu. affinis. Paykul.-Do. affinis. Steph. Catal. 166. No. 1693.
- Black, rather densely clothed with cinereous pubescence; head rounded, thickly punctulate, the forehead rather densely villose; eyes dusky-black: thorax rather faintly and thickly punctate, clothed with a longer pubescence, with a slight dorsal carina, and three denuded dorsal lines, and an obscure spot on each side without: scutellum black: elytra black, punctate-striate, varied with irregular denuded spots and blotches; legs dull ferruginous, or pale rufescent, femora anteriorly dentate, with the base of the tibiæ blackish.
- Sometimes pale variegated with fuscous; or with the shoulders, suture, and sides of the elytra ferruginous, and the margins of the abdomen rufous.

Not common, but found within the metropolitan district : frequenting the flowers of willows. "Among herbage (near Swansea)."— L. W. Dillwyn, Esq.

- Sp. 8. Tremulæ. Fusco-ferrugineus, cinereo-pubescens, rostro tenui atro, substriato, elytris cinereo fuscoque variegatis, genubus nigricantibus. (Long. corp. 2-24 lin.)
- Cu. Tremulæ. Paykul.-Do. Tremulæ. Steph. Catal. 166. No. 1694.
- Dusky-ferruginous, clothed with cinereous pubescence: head rounded, with a frontal impression: eyes brown: thorax with an obsolete transverse impression; the disc posteriorly convex, dusky-testaceous, more or less blotched with fuscous, finely punctured, with the disc nearly smooth, densely pubescent, with three denuded lines: scutellum dusky-testaceous: *elytra* somewhat convex, punctate-striated, dusky-ferruginous, *marbled with* various misshapen denuded fuscous or black spots, and pubescent ashy ones more or less confluent: breast rather obscure: legs with the joints dusky: rostrum slender, black, slightly striated: antennæ pale testaceous.

Not uncommon within the metropolitan district, and found occasionally in other parts. "Among grass in woods (near Swansea), not common."—L. W. Dillwyn, Esq.

- Sp. 9. fumosus. Obscurè fusco-ferrugineus, pubescens, capite, thoracis fasciâ mediá, elytrorum disco, pedibusque fusco-piceis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
- Cu. fumosus. Rossi.-Do. maculatus. Steph. Catal. 166. No. 1695.
- Obscure dusky-ferruginous; pubescent; head fusco-piceous: thorax the same, with the anterior and posterior margins broadly rufo-testaceous, the disc obscurely punctured, the sides more distinctly so: elytra marbled with cinereous and pitchy-brown, with the suture and margin fusco-ferruginous, with two whitish spots towards the apex of the disc, one behind the other: breast and base of the abdomen fusco-piceous: legs rufo-ferruginous, with the joints sometimes fuscescent.
- Rather variable in the colour of the elytra and in the disposition of the spots.

Very abundant within the metropolitan district, appearing so early as March, upon willows in blossom. "In fields about Sketty, and on alders in June; and beneath the bark of old trees of the same kind."—*L. W. Dillwyn, Esq.* "Cardew-mire."—*T. C. Hey*sham, *Esq.* "Willows, Knockholt, Kent."—*Mr. Ingpen.* 

- Sp. 10. tæniatus. Fusco-piceus, pedibus testaceis, thorace posticè subangustiori, basi apiceque testaceo, elytris pallidis fusco-maculatis, rostro crassiori rugoso. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
- Rh. tæniatus. Fabricius .-- Do. tæniatus. Steph. Catal. 166. No. 1696.
- Fusco-piceous: head punctate, clothed with cinereous pubescence; forehead impressed: rostrum rather stout, rugose, carinated: thorax a little contracted anteriorly, the lateral margins rounded and somewhat narrowed posteriorly, the disc transversely fusco-piceous, obsoletely punctate; the anterior and posterior margins unequally testaceous: scutellum piceous: elytra punctatestriate, pale testaceous, with depressed cinereous pubescence, variegated with irregular denuded fuscous spots: apex of the abdomen dull ferruginous: legs pale, immaculate, rufo-testaceous: antennæ ferruginous.
- Sometimes black, with the thorax rufous, spotted with fuscous, the elytra rufoferruginous, variegated with ash-colour and fuscous; legs rufo-ferruginous.

Inhabits willows, not very abundantly, in the vicinity of London.

- Sp. 11. majalis. Niger, cinereo-pubescens, thorace, elytris, antennis, pedibus anoque rufo-ferrugineis, rostro crassiori rugoso, elytrorum disco fusco-nebuloso. (Long. corp. 2 lin.)
- Cu. majalis. Paykul.-Do. majalis. Steph. Catal. 166. No. 1697.
- Black, clothed with cinereous pubescence: head thickly punctate and slightly pubescent: thorax rufo-testaceous, somewhat thickly punctate, with a rather smooth dorsal line; scutellum minute, dusky-testaceous: elytra punctatestriate, rufo-testaceous, variegated with ashy pubescence, and denuded irregular fuscous spots: breast and base of abdomen black, pubescent; apex of the latter rufo-testaceous: legs entirely rufo-testaceous; femora with a minute tooth, posterior sometimes unarmed: rostrum rather stout, thickly rugosestriated.
- + Sp. 12. dorsalis. Niger, ferè glaher, elytris rubris, margine suturaque antica dimidiatá nigris, rostro longiusculo, crassiori, striato.
- Cu. dorsalis. Linné.—Berkenhout (!).—Do. dorsalis. Steph. Catal. 166. No. 1698 note.
- Black, nearly glabrous; elytra rufous, with the margins and anterior half of the suture black; rostrum rather long, stout, and striated.
- Said by Berkenhout and others to inhabit Britain; but I have not hitherto seen an indigenous example.

Rather variable, like its congeners; the thorax sometimes having a black spot on the disc; or the general colour being pale flavescent or testaceous.

Taken in the spring on the flowers of willows.

## GENUS CCCVI.-PISSODES, Germar.

Antennæ geniculated, 12-jointed, rather short and stout; funiculus 7-jointed, with basal joint obconic, rather short, the remainder very short, truncate at the apex, and gradually increasing in diameter to the club, which is oval, acuminate at the apex. Rostrum elongate, slender, curved, and rounded: eyes distant, depressed: thorax considerably narrowed in front, bisinuated posteriorly, slightly convex: scutellum small, rounded at the apex: elytra oblong, with a collar towards the apex, the shoulders obtusely angulated: pygidium covered: legs stout; femora unarmed; tibiæ rounded, armed within at the apex with a subhorizontal stout hook; tarsi short, broad: body oblong, head variegated with pale scales.

The prettily spotted surface of the insects of this genus renders them very conspicuous: all the species frequent pines and resinous trees: they are rare in the south of Britain, but appear to be more abundant in the north :—from Hylobius, which resembles them in their colouring, they differ by having the femora simple: the basal joint of the funiculus of the antennæ is comparatively short, the thorax narrowed in front, and the body of a very hard texture.

- Sp. 1. Pini. Rufo-piceus, pallido-squamosus, rostro ferrugineo, elytris profundè punctato-striatis, fasciis duabus macularibus pallido-squamosus. (Long. corp. 4-5 lin.)
- Cu. Pini. Linné.-Pi. Pini. Steph. Catal. 166. No. 1699.
- Rufo-piceous, with pale lutescent scales: rostrum ferruginous: head dusky, with an impression between the eyes: thorax dark piceous, very thickly rugose-punctate, with an obsolete dorsal carina, and two large, somewhat remote foveæ on the disc, densely filled with flavescent scales, and a similar impression, also squamous, before the scutellum,—which is whitish yellow: on the margin on each side is an interrupted oblique line of scales, with a pale dot without, placed in a line with the two dorsal foveæ: elytra deeply striate, the striæ composed of oblong-quadrate punctures; the disc, especially towards the apex, with some smaller lutescent scales, with an oblique abbreviated fascia of squamous spots before the middle, and a second broader transverse one behind: legs pale rufo-piceous, tibiæ with a narrow ring of whitish scales.

I have hitherto seen but about four specimens of this handsome

species, all of which were captured in the neighbourhood of Edinburgh; but even there it does not appear to be abundant. "Near Dunkeld in Perthshire, about September."—Dr. Leach.

- † Sp. 2. notatus. Rufo-piceus, pallido-squamosus, rostro tenui nigro-piceo, elytris tenuius punctato-striatis, fasciis duabus latioribus abbreviatis pallidosquamosus. (Long. corp. 3-5 lin.)
- Li. notatus. Fabricius.-Pi. notatus. Steph. Catal. 167. No. 1700.
- Rufo-piceous, with pale lutescent scales: rostrum pitchy-black, with the base paler; head as in the last: thorax thickly punctate, with an obsolete dorsal carina, with four whitish transverse spots: scutellum niveous: elytra moderately punctate-striate, the striæ composed of small oblong-quadrate punctures, the alternate interstices elevated; the disc before the middle with an indistinct transverse fascia, and behind with a broad transverse anteriorly dilated one, both composed of whitish or flavescent scales: body beneath piceous, with whitish scales: legs rufo-ferruginous, with a whitish squamous ring on the tibiæ.

A pair of this species, which belonged to Mr. Sparhall, I was informed was captured in some fir-trees in the neighbourhood of London—at Coombe-wood, I believe; but as the information was obtained through an interested dealer, some deception (as is too frequently the case) might have been practised as to its exact location: the insect has been several times taken in Scotland. "Rivelstone-wood."—Dr. Leach.

- Sp. 3. Fabricii. PLATE XXI. f. 1.—Rufo-piceus, pallido-squamosus, rostro piceoferrugineo, elytris tenuius punctato-striatis, fasciis duabus interruptis pallidosquamosus. (Long. corp. 4<sup>1</sup>/<sub>2</sub> lin.)
- Pi. Fabricii. Leach MSS.-Steph. Catal. 167. No. 1701.
- Elongate, rufo-piceous, with pale lutescent scales; rostrum rusty-piceous, slender: thorax coarsely punctured, a little glossy, with a distinct dorsal carina, and four transverse luteous spots on the disc, as in the former species: scutellum luteous: elytra elongate, not very deeply punctate-striate, the alternate interstices not elevated, the disc sparingly sprinkled with minute flavescent scales with an interrupted fascia towards the base, and a second slender one behind the middle, of similar scales: legs dusky-piceous, with an indistinct whitish ring of scales round the tibiæ.

Specimens of this beautiful insect are in the collection of the British Museum: they were captured in Scotland—" Rivelstone-wood, near Edinburgh, by Mr. Wilson."—Dr. Leach. " Jedburgh, Roxburghshire."—Rev. W. Little.

## GENUS CCCVII.-GRONOPS, Schönherr.

Antennæ geniculated, 12-jointed, short, rather stout, the scape not touching the eyes; funiculus 7-jointed, its basal joint somewhat elongated, obconic; the five following very short, nodose, coarctate, gradually thickened; the seventh very thick; club large, stout, ovate. Rostrum somewhat elongate, robust, deflexed: eyes oblong, large, lateral: thorax subcylindric, deeply emarginate anteriorly, somewhat bisinuated at the base, lobate behind the eyes: elytra oblong, slightly convex, deflexed posteriorly, costated, the costæ terminating in a callus, the apex rounded, covering the pygidium, the shoulders angulated: legs rather long, stout, approximating at the base; femora clavate, unarmed: tibiæ rather short, straight; the apex with a minute hook; tarsi slender.

This singular genus may at once be known from all the indigenous genera by its costated elytra and deeply emarginated anterior edge of the thorax: it greatly resembles the genus Bogoüs; but from that genus it differs by having the tibiæ straight, with a minute hook at the apex, and the rostrum differently constructed: —the species frequent sandy places.

- Sp. 1. lunatus. PLATE XX. f. 5.—Niger, dense cinereo-squamosus, thorace tripunctato, elytris lineis tribus elevatis, calloque didymo. (Long. corp. 2-34 lin.)
- Cu. lunatus. Fabricius.-Gr. lunatus. Steph. Catal. 167. No. 1702.
- Black, densely clothed with cinereous scales; head retracted; eyes brown: thorax with three somewhat transverse and rather deep impressions within the apex, with the disc obsoletely carinated, and thickly punctate: scutellum fuscous: elytra obsoletely punctate-striate, the alternate interstices from the suture narrow, elevated, and united behind into a duplex callus, covered with cinereous scales, with a lighter lunular fascia in the middle: legs fuscous, variegated with cinereous.
- Var. Rh. costatus. Gyllenhal.—Gr. costatus. Steph. Catal. 167. No. 1703.— Elytra costated, without the lunular pale mark on the disc.

Frequents sandy lanes and hedges in June within the metropolitan district, but rare: it also occurs in Suffolk and Norfolk. "In a lane near Richmond."—*Fabricius, l. c.* "South Creek, Norfolk."—*Rev. T. Skrimshire.* Var.  $\alpha$ . "In corn-fields at Livermere, by Mr. Lathbury." Var.  $\beta$ . "In sandy places near Barham, by Mr. Sheppard."—*Marsham MSS.* 

# GENUS CCCVIII.-ORTHOCHÆTES, Müller.

Antennæ geniculated, 12-jointed, inserted between the base and the apex of the rostrum: the scape reaching the base of the latter, and a little incrassated at the tip; funiculus 6-jointed, slender, its basal joint rather largest, clavate; remainder lenticular, setose, subequal; club thick, ovate-globose, subsolid. Rostrum as long as the thorax, rather stout, a little bent, rugose, carinated above: eyes small, globose: thorax cylindric, coarctate towards the apex, slightly emarginate beneath: scutellum wanting: elytra oblong-oval, united: legs short, subequal; femora unarmed; tibiæ within a little sinuated, with the apex truncate, unarmed.

The extraordinary insect which forms the present genus may be known from its allies by its elongated apterous body---the elytra being connate, or united---covered throughout with erect, somewhat rigid setæ: the thorax is cylindric, coarctate; the scutellum is wanting: the antennæ have a six-jointed funiculus;---by which character it evidently differs from the genus Styphlus of Schönherr, which that writer says has seven joints, but the indigenous species agrees with Germar's definition.

- Sp. 1. setiger. Rufescens, elytris subpunctato-sulcatis, interstitiis alternis elevatioribus, carinatis, seriatim setosis. (Long. corp. 1-1<sup>1</sup>/<sub>2</sub> lin.)
   Or. setiger. Germar.—Steph. Catal. 167. No. 1704.
- Dull ferruginous, with the abdomen dusky: thorax with an obsolete dorsal channel, sparingly clothed with compressed decumbent griseous setæ: elytra deeply sulcate, the sulci obsoletely punctate, the interstices convex, the alternate ones and the suture elevated, forming ribs, each bearing a simple series of erect griseous setæ: legs also clothed with griseous setæ.

I have thrice picked up examples of this extraordinary insect in the neighbourhood of London; once in a flooded cart-rut on Eppingforest, near Walthamstow, under some aspen-trees, in March; and a second time near Hertford, and again near Ripley: it likewise occurs in Norfolk, so that it appears pretty widely dispersed. "Near Fakenham."—*Rev. T. Skrimshire.* 

# GENUS CCCIX .-- PROCAS \* mihi.

Antennæ geniculated, 12-jointed, somewhat elongate, slender; funiculus 7-jointed, the two basal joints elongate, obconic, subequal; remainder short, nodose,

<sup>\*</sup> Procas : nomen viri.

subtruncate, gradually increasing in breadth; club oblong-ovate, acuminate. Rostrum long, subclavate, rounded, and slightly bent: eyes depressed, lateral: thorax with the sides rounded, the base bisinuated, disc convex: scutellum minute, rounded: elytra oblong-ovate, glabrous; the shoulders obtusely angulated: legs rather slender; femora subclavate, unarmed; tibiæ straighttruncate, unarmed.

Although the insects in this genus considerably resemble those of the succeeding one, from which they chiefly differ externally by being nearly destitute of the squamous covering, that forms generally so prominent an ornament of the insects in this family, I have adhered to the separation proposed in my Systematic Catalogue: the rostrum is, however, considerably longer; the thorax more globose, and evidently sinuated behind; the legs longer and more slender, pilose; and the antennæ slightly different in structure, and more slender.

Sp. 1. picipes. Niger, obscurus, elytris punctato-striatis, interstitiis transversim rugosis, antennis tarsisque rufo-piceis. (Long. corp. 3-4 lin.)
Cu. picipes. Marsham.-G. n. picipes. Steph. Catal. 167. No. 1705.

Black, obscure: rostrum rugose, slightly carinated: head finely punctured; thorax with a smooth dorsal carina; the disc very thickly and somewhat coarsely punctate: elytra punctate-striated, the interstices thickly and transversely rugose, granulated, obsoletely clouded with a few cinereous hairs: legs black or pitchy-black, pilose, with pale griseous hairs on the tibiæ; tarsi rufo-piceous: antennæ rufescent, villose.

Rare near London: it has, however, been taken several times in Battersea-fields in June:—it occurs in Norfolk, and in Somersetshire.

- Sp. 2. pyrrhodactylus. Niger, obscurus, elytris profundè striatis, interstitiis subpunctatis, antennarum basi, ungulisque rufis. (Long. corp. 3 lin.)
- Cu. pyrrhodactylus. Marsham.—N. G. pyrrhodactylus. Steph. Catal. 167. No. 1706.
- Black, obscure: rostrum rather short: head pubescent: thorax slightly pubescent, with an obsolete dorsal carina, the disc punctured: *elytra* clothed with a slight olivaceous pubescence, deeply *striated*, the interstices *finely punctured*: legs black, with cinereous hairs; *claws rufous*: body beneath clothed with cinereous scales; antennæ rufous at the base, the terminal joints and club dusky-black.

Very rare: my specimens (which are the only examples I have seen) I obtained from the Marshamian cabinet.

#### GENUS CCCX.-Hypers, Germar.

Antennæ geniculated, 12-jointed, moderate, somewhat slender; the scape clavate, nearly reaching to the eyes; funiculus 7-jointed, its basal joints incrassated and elongated; second obconic, also slightly elongate; remainder short, nodose: club oblong, oval. Rostrum about as long again as the head, somewhat incrassated, rounded, a little curved: eyes lateral, placed obliquely, somewhat depressed, and oblong: thorax generally with the sides rounded, the base and apex subtruncate; rarely subcylindric: scutellum minute, subtriangular: elytra oblong or short ovate, densely squamous, with the shoulders obtusely angulated or somewhat rounded: legs moderate; femora elongate, unarmed; tibiæ straight, truncate at the apex, unarmed.

There is considerable diversity of appearance amongst the insects at present associated in this genus, notwithstanding I have lopped off the genus Procas, and have reverted to the succeeding genus (Ellescus) of Megerle; and with respect to some of the species hereafter given as new I may be mistaken, for it is probable they may be elsewhere described, it being obviously impossible, in a general work, to collate every insect with the nicety of a monograph. The larvæ of this genus are found upon plants, and form a beautiful reticulated cocoon about the size of a large pea, in which they change to pupæ.

A. With the body short, ovate: the rostrum short and stout.

Sp. 1. punctata. Niger obscurus, grisco-squamulosus, thorace cinereo-trilineato, elytris fasciculis nigris seriatis. (Long. corp. 4-5 lin.)

Cu. punctatus. Fabricius .- Hy. punctata. Steph. Catal. 167. No. 1707.

- Dull black, densely clothed with griseous scales: head rounded: eyes brown: thorax a little widened in front, slightly convex, thickly punctulated, with the under surface and sides clothed with cinereous and fuscous scales and pubescence, the disc somewhat denuded, with a slender, more or less obsolete dorsal line of ashy scales: elytra ovate, deeply punctate-striate: the dorsal striæ disposed in pairs, the alternate ones being broadest and somewhat elevated, densely squamous, with a row of dusky or black fascicles of scales; body beneath varied with ashy-white and fuscescent scales: legs dusky-black, with ashy pubescence, the femora with a whitish ring at the tip; rostrum shorter than the thorax, stout, black: antennæ piceous.
- The colour of the pubescence on the surface varies considerably.

Not uncommon in hedges, &c. throughout the metropolitan district

in June. "Wetheral."—T. C. Heysham, Esq.—" Netley, in Salop."—Rev. F. W. Hope.

- Sp. 2. fasciculosa. Niger, dense albido fuscoque squamulosus, thorace albo-trilineato, antennis tibiisque ferrugineis. (Long. corp. 3–4 lin.)
- Cu. fasciculatus. Herbst.—Hy. fasciculosa. Curtis, iii. pl. 116.—Steph. Catal. 168. No. 1708.
- Black, densely clothed with white and fuscous scales: head short, with the forehead depressed, covered with white scales: thorax slightly depressed, the sides rounded, the disc thickly punctured, clothed with brassy-brown scales and hairs, with three lines of silvery white ones, united anteriorly, the spaces between white, and the sides variegated with black fascicles: elytra ample, obsoletely punctate-striate, densely clothed throughout with scales, of which those towards the suture are dusky-brown, the outer ones whitish, all with rows of whitish hairs; suture white, tessellated with quadrate black fascicles; the alternate interstices also fasciculated with black; at the base are two abbreviated velvety black streaks, and towards the middle of the disc a curved line of the same, beyond which, on the shoulder, is a large white, nearly immaculate patch: legs piceous, variegated with cinereous: tibiæ and antennæ dull ferruginous.

Rare: it has been taken several times in Norfolk, and in the Isle of Thanet. "Deal."—Rev. F. W. Hope.

- B. With the body oblong. a. Winged.
- Sp. 3. Polygoni. Niger, pubescens, thorace lineis tribus albis, elytris cinereosquamosis, suturâ dentatâ, lineisque tribus abbreviatis nigris. (Long. corp. 3 lin.)
- Rh. Polygoni. Fabricius .- Hy. Polygoni. Steph. Catal. 168. No. 1708.
- Oblong, black, pubescent, head fuscous, with a delicate griseous pubescence; forehead impressed, with a whitish pilose line reaching from the middle of the rostrum to the vertex: thorax very thickly punctured, clothed with duskyash scales and hairs, with three distinct testaceous white or greenish lines: scutellum whitish: elytra punctate-striate, interstices densely covered with cinereous scales, the suture anteriorly white, posteriorly dentated with black and white, disc with three abbreviated black lines, alternating with elongated white ones: legs cinereous: antennæ ferruginous, with the club fuscous.

Not common in the neighbourhood of London, and I believe elsewhere: I have received specimens from the vicinity of Bristol.

- Sp. 4. arator. Fuscus, pubescens, thorace lineis tribus testaceis, elytris testaceis, suturâ nigrâ dentatâ lineisque brunneis. (Long. corp. 3-3½ lin.)
- Cu. arator. Linné.-Hy. arator. Steph. Catal. 168. No. 1710.

Fuscous, clothed with griseous pubescence: thorax deep fuscous, with three narrow testaceous lines, the lateral ones a little curved: elytra testaceous, punctate-striate, the interstices finely coriaceous, the suture pale, immaculate at the base, the apex strongly dentate with black and white, the disc with an abbreviated black streak at the base, towards the scutellum, faintly edged externally with ashy; a second black streak towards the apex, strongly edged within with testaceous ash; and a third, abbreviated at each extremity near the outer margin, bordered without with a pale line: antennæ ferruginous, with the club dusky.

Very closely allied to, if not a variety of, the foregoing species.

More abundant than the last; found in corn-fields within the metropolitan district, in June. "Moss-head, Cumberland."—*T. C. Heysham, Esq.* "Inverness."—*Mr. G. Waterhouse.* "Near Edinburgh."—*Rev. W. Little.* 

Sp. 5. canescens. Niger, squamis canescentibus omninò tectus, thorace trilineato, antennis piceis clavá fuscá. (Long. corp. 3 lin.)

Hy. canescens. Steph. Catal. 168. No. 1711.

- Black, densely clothed throughout with hoary scales: head small, with a deep frontal impression: thorax hoary testaceous, with three rather obscure pale cinereous lines: elytra punctate-striate, the interstices slightly elevated, and all uniformly clothed with hoary scales: body beneath and legs black, with hoary scales; the tarsi somewhat piceous.
- Some examples are a little inclined to fuscous or testaceous; but all have the elytra immaculate, and of an uniform colour.

Taken in the vicinity of London, and also near Bristol; but not very abundantly.

- Sp. 6. Viciæ. Niger, cinerco-squamulosus, rostro breviori, thorace subdepresso, lateribus validè dilatato, elytris seriatim fusco-maculatis. (Long. corp. 3 lin.)
   Rh. Viciæ. Gyllenhal.—Hy. Viciæ. Steph. Catal. 168. No. 1712.
- Black, clothed with cinereous scales: head slightly pubescent: forehead with a depression: thorax slightly depressed, with the sides considerably dilated, and densely squamous, the back somewhat denuded, with an obscure whitish line in the middle: scutellum griseous: elytra entirely clothed with ashy-white scales and hairs, with five rows of denuded fuscous spots: body beneath densely clothed with silvery-white scales: legs rather long, black, with an ashy pubescence: antennæ black, piccous at the base.
- Rather variable in the colour of the scales, which are sometimes æneous, or of a golden hue:—the breast, abdomen, and elytra are sometimes testaceous, with brassy-yellow scales, and the head, thorax, and legs of a dull fuscous-brown, with the rostrum black; probably immature.

Not very common: found in June within the metropolitan dis-

strict, and in the New Forest. I believe I have also received specimens from the neighbourhood of Bristol.

Sp. 7. alternans. PLATE XX. f. 6.—Nigra, olivaceo squamulosa, thorace trilineato, elytris striatis, interstitiis alternis fuscescentibus. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
Hy. lineata. Steph. Catal. 168. No. 1713.

- Black, densely squamous; head punctulate, covered with olivaceous or æneous scales, with a deep frontal impression: thorax with the sides broadly olivaceous, the disc somewhat denuded, with a very obsolete dorsal line: *elytra* rather *deeply punctate-striate*, the interstices clothed alternately with fuscous and olivaceous scales, and the outer margin of the latter colour: legs black, delicately covered with olivaceous scales, the tarsi slightly rufescent: antennæ piceous, with the club fuscous.
- Variable: in some examples the pale lines on the thorax and on the elytra are of a bright testaceous-ash, or of a griseous hue.
- Herbst having a Curculio lineatus which is synonymous with one of the foregoing species, it becomes necessary to change the name of this beautiful insect, which may possibly be the Hy. parallela of Sturm, an undescribed species.

Also found near Bristol, but apparently uncommon: I have also specimens from the neighbourhood of London and from Suffolk. "Bottisham."—Rev. L. Jenyns.

Sp. 8. picicornis. Atra, tenuè cinereo-squamosa, thorace obsoletè trilineato, antennis omninò piceis. (Long. corp. 4 lin.)

Hy. picicornis. Steph. Catal. 168. No. 1714.

Black, slightly clothed throughout with cinereous: head with a slight frontal impression: thorax with the lateral margins obscurely cinereous, the back with a faint line of the same: elytra punctate-striate, the interstices somewhat rugulose, and slightly clothed with immaculate ashy scales: legs black: tarsi with the terminal joint piceous at the base: antennæ entirely piceous.

Of this large species I possess a single example, which was captured near Bristol.

- Sp. 9. Rumicis. Nigra, squamulis cinereo-albidis nitentibus variegata, rostro breviori subrecto, thorace subcylindrico, lineis duabus fuscis. (Long. corp. 3-3½ lin.)
- Cu. Rumicis. Linné.-Hy. Rumicis. Steph. Catal. 168. No. 1715.
- Black, variegated with shining ashy-white scales: head small, thickly punctured: thorax subcylindric, with the sides a little rounded and ashy; the disc black, with a more or less distinct pale streak, leaving two dark or fuscous lines: elytra striated, densely clothed with ashy-white scales, with a subquadrate spot round the scutellum, and some minute scattered dots, fuscous or black; a patch on each elytron towards the suture being immaculate ashy-MANDIBULATA. VOL. IV. 31st JULY, 1831. H

white: rostrum short, rather straight: antennæ dull ferruginous, with the club obscure.

Extremely variable in tint, some examples having the scales of an olivaceous hue, others testaceous, greenish or brownish: the dorsal spot is sometimes large, at others small.

Very abundant in hedges and marshes where docks abound. "Grimsdale."—T. C. Heysham, Esq. "Bottisham."—Rev. L. Jenyns. "Plentiful on Crwmlyn-burrows."—L. W. Dillwyn, Esq.

- Sp. 10. palustris. Atra, squamulis cinereo-albidis nitentibus subtessellata, rostro longiori subrecto, thoracis lateribus cinereo-albidis, paulò dilatatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)
- Ph. palustris. Leach MSS.-Hy. palustris. Steph. Catal. 168. No. 1716.
- Black; somewhat tessellated with ashy-white scales: head finely punctured and slightly squamous: thorax with the sides a little dilated and cinereous, the disc fuscous, or black, immaculate: elytra punctate-striate, irregularly tessellated with ashy-white or somewhat testaceous scales: legs and antennæ black: rostrum rather long, and straight.

Extremely abundant in grassy banks in Battersea-fields: I have also received specimens from the neighbourhood of Bristol. "Bottisham."—Rev. L. Jenyns. "Swansea."—L. W. Dillwyn, Esq.

- Sp. 11. sublineata. Nigra, squamulis fusco-cinereis tecta, rostro breviori subcrasso, thorace disco fusco lineis tribus obsoletis albidis, antennis tibiis tarsisque rufo-piceis. (Long. corp. 3 lin.)
- Hy. sublineata. Kirby MSS.-Steph. Catal. 168. No. 1717.
- Black; rather densely clothed with ashy scales: head punctulated, with the forehead pilose: thorax with the sides rather dilated and cinereous, the disc fuscous, with three obsolete whitish lines, one central, the others lateral, united to the ashy border: *elytra* punctate-striated, clothed throughout with fuscous-ashy scales, with a subquadrate patch at the base surrounding the scutellum: femora black: *tibiæ*, *tarsi*, and antennæ dull rufo-piceous; rostrum rather short and stout.
- Rather variable; in some instances the elytra have each one or more of the interstices slightly paler than the others.

Found in Suffolk, near London, and in the vicinity of Bristol.

Sp. 12. nebulosa. Atris, squamulis cinereis nebulosa, rostro breviori subcrasso, antennis rufo-piceis, clavâ obscuriore, pedibus nigris. (Long. corp. 3 lin.)
Hy. nebulosa. Steph. Catal. 168. No. 1718.

Black, clouded with cinereous scales: head broad, faintly punctured between the eyes: thorax with the sides slightly dilated, each with a faint streak of shining ashy scales; the disc immaculate: elytra deeply punctate-striate, clouded with

cinereous: legs black, with a slight tinge of rufous at the apex of all the tibiæ and beneath the tarsi: antennæ dull rufo-piceous, with the club rather obscure.

I possess a single example taken in the vicinity of London.

- Sp. 13. Pollux. Nigra, squamulis cinereo-albidis nitentibus variegata, rostro breviori subarcuato, elytris lineis tribus distinctioribus albis, nigro-tessellatis. (Long. corp. 3-3½ lin.)
- Ph. Pollux. Fabricius.-Hy. Pollux. Steph. Catal. 168. No. 1719.
- Black, variegated with shining ashy-whitish scales: head finely punctured: thorax with the sides dilated and rounded, fuscescent, with three pale streaks: elytra punctate-striate, the *interstices* densely squamose, and irregularly tessellated with subquadrate denuded and *blackish* spots, the *fifth* at the base and the *seventh* and *ninth* being of a *whitish* hue: body beneath and *legs black*, with the apex of the tibiæ and the tarsi somewhat ferruginous: antennæ dull ferruginous, with the club dusky: rostrum rather short, a little bent. The colour of the scales varies a little.

Not uncommon in grassy places within the metropolitan district: also found in Norfolk, near Bristol, &c. "Bottisham."—Rev. L. Jenyns. "On Crwmlyn-burrows, not common."—L. W. Dillwyn, Esq.

- Sp. 14. villosula. Nigra, squamulis villisque cinereo-albidis densè tecta, antennis tarsisque piceo-rufis, elytris immaculatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
  Hy. villosula. Wilkin? MSS. Steph. Catal. 168. No. 1720.
- Black, densely villose, and clothed throughout with ashy-white scales: head with a slight longitudinal carina between the eyes: thorax with the sides slightly dilated and a little rounded, bright shining ashy-white, the disc fuscescent, with a very obscure central pale line: elytra finely punctate-striate, and densely clothed throughout with ashy-white scales, *immaculate*: legs black, tarsi rufo-piceous, antennæ the same: rostrum rather long, a little incrassated, and straight.
- Slightly variable in the colour of the scales, but in all the varieties the elytra are immaculate.

Also found within the metropolitan district, in Norfolk, Suffolk, and in Somersetshire. "Bottisham."-Rev. L. Jenyns.

- Sp. 15. picipes. Angustior, atra squamulis albo-cinereis sparsim tecta, thorace subtrilineato, antennis obscure ferrugineis, pedibus atro-piceis, tibiis tarsisque pallidioribus. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)
- Hy. picipes. Steph. Catal. 168. No. 1721.
- Rather narrow; sparingly covered with whitish-ash scales: head finely porrected, pubescent between the eyes: thorax with the sides a little rounded, each with a faint pale line and a more obscure one on the disc: elytra finely punctate-striate, the interstices obsoletely spotted with fuscous, but of uniform

tint: body beneath black; femora dark piceous; tibiæ and tarsi rather pale piceous; antennæ dull ferruginous.

The back has sometimes a longitudinal somewhat denuded patch at the base of the elytra.

Found within the metropolitan district.

- Sp. 16. murina. Nigra, densè griseo-squamosa, antennis tibiisque ferrugineis, thorace subdepresso rotundato, elytris striis albidis nigro punctatis. (Long. corp.  $2\frac{1}{2}-3\frac{1}{2}$  lin.)
- Cu. murinus. Fabricius.-Hy. murina. Steph. Catal. 168. No. 1722.
- Black, densely clothed with griseous scales: head finely punctured, pilose between the eyes: thorax a little depressed, the sides rounded, with a broad ashy-whiteline, the disc with a very glossy, but slender, silvery-green one; the space between sparingly covered with rather dull scales: elytra punctate-striate, the interstices coriaceous, with a common broad patch on the back rather fuscescent: the third, fifth, and seventh interstices rather paler than the rest, and somewhat spotted with fuscous, and on the shoulder is frequently an abbreviated striga of the same hue: body beneath and femora black, clothed with metallic scales: tibiæ and tarsi ferruginous or testaceous: antennæ ferruginous.

Not common; found near London and Bristol. "Common on the sand-hills (near Swansea)."-L. W. Dillwyn, Esq.

- Sp. 17. nigrirostris. Nigro-picea, antennis pedibusque rufo-testaceis, rostro mediocri glabro, thorace longiori, lineis tribus viridibus, elytris viridi-squamosis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
- Cu. nigrirostris. Fabricius .- Hy. nigrirostris. Steph. Catal. 169. No. 1723.
- Pitchy-black, clothed with green scales: rostrum black, rather short, glabrous and slender: head finely punctured: thorax slightly elongate, the sides rounded, adorned with three green stripes, of which the central one is narrowest: elytra punctate-striate, entirely clothed with clear rich green scales, sometimes a little spotted with fuscous: legs and antennæ rufo-testaceous.
- Variable: in some examples the ground colour is testaceous, and the scales pale green or brassy-bronze, the antennæ and legs pale testaceous:--probably immature.

Extremely abundant throughout the metropolitan district, in hedges, gardens, &c. "Bottisham."—*Rev. L. Jenyns.* "Raehills, not common."—*Rev. W. Little.* "Hebden-bridge."—*Mr. S. Gibson.* 

Sp. 18. fulvipes. Atra, squamis virescentibus sparsim tecta, rostro antennis pedibusque rufo-fulvis. (Long. corp. 2 lin.)
Hy. fulvipes. Steph. Catal. 169. No. 1724.

Black, sparingly clothed with greenish scales: head slightly punctured: thorax with the sides rounded, a faint central greenish line, and the lateral margins

edged with the same: elytra pitchy-black, sparingly clothed with greenish scales, punctate-striate; immaculate: antennæ, legs, and rostrum rufo-fulvous. It is not impossible that this may be only a variety of the foregoing species.

Taken within the metropolitan district.

#### b. Apterous.

Sp. 19. Plantaginis. Nigra, cinereo-squamulosa, pedibus fusco-ferrugineis, thorace subdepresso, utrinque valdè dilatato, elytris maculâ magnâ laterali denudatâ. (Long. corp. 2–3 lin.)

Cu. Plantaginis. De Geer.-Hy. Plantaginis. Steph. Catal. 169. No. 1725.

- Black, clothed with ashy scales: head convex, finely punctulated, with an impression between the eyes: thorax short, with the sides considerably rounded, dilated, and obsoletely angular, above slightly depressed, black, very finely punctulated, with the under surface and sides ashy-white, sometimes a little metallic; the disc with a distinct silvery or greenish line: elytra blackishbrown, rather obsoletely punctate-striate, densely clothed with ashy-white scales, with a large oblong denuded patch on the disc of each, placed somewhat laterally, bordered without by a series of fuscescent spots; and at the apex of the suture an abbreviated black line: legs stout, rufo-ferruginous: femora piceous: antennæ rufo-ferruginous, with the club dusky.
- Slightly variable in bulk, and considerably so in colour; the latter the probable result of immaturity.

Very abundant in clover-fields near Darenth-wood, and in other parts of the metropolitan district : also in the vicinity of Bristol. "Bottisham."--Rev. L. Jenyns.

Sp. 20. Trifolii. Nigra, cinerco-pubescens, antennis tibiisque ferrugineis, rostro tenuiori mediocri, thorace brevi depresso trilineato, pectorc aneo-squamoso-(Long. corp. 2–3 lin.)

Cu. Trifolii. Herbst.-Hy. Trifolii. Steph. Catal. 169. No. 1726.

Black, with cinereous pubescence : head small: thorax short, depressed, with the sides considerably dilated, a little convex above, with a slender central line, and a somewhat curved one on each side of whitish or virescent squamous hairs : elytra slightly convex, black, delicately punctate-striate, sparingly clothed with small scales and hairs and whiter fascicles of hair, more or less variegated with abbreviated streaks and denuded obscure spots, with the suture fuscous anteriorly, and whitish, spotted with fuscous posteriorly : body beneath thickly punctured, with the breast densely clothed with silvery or greenish scales : legs moderate ; femora dusky or black, tibix and tarsi for the most part ferruginous or dull testaceous : antennæ ferruginous, with the club cinereous.

Less common than the last, but not unfrequent within the metropolitan district: also found in Norfolk and Suffolk.

- Sp. 21. straminea. Testacea, cinereo-pubescens, antennís tibiisque ferrugineis, thorace suprà ferrugineo, lineis tribus pallidis, rostri apice nigro. (Long. corp. 1<sup>3</sup>/<sub>2</sub> lin.)
- Cu. stramineus. Marsham.-Hy. straminea. Steph. Catal. 169. No. 1727.
- Testaceous, clothed with cinereous pubescence: eyes black: thorax above ferruginous, with three longitudinal pale lines, of which the central one is most slender: elytra faintly punctate-striate, with obsolete ferruginous streaks and points, and short pubescence; with the suture obscurely elevated: antennæ and tibiæ ferruginous: rostrum testaceous, with the tip black.

Found within the metropolitan district. "Cummersdale."— T. C. Heysham, Esq. "Crwmlyn-burrows"—L. W. Dillwyn, Esq.

Sp. 22. postica. Nigra, parum cinereo-pubescens, antennis, tibiis, elytrorumque apice ferrugineis, rostro breviusculo, thorace brevi depresso, pectore albidosquamoso. (Long. corp. 2½ lin.)

Rh. postica. Gyllenhal.-Hy. postica. Steph. Catal. 169. No. 1728.

Black, sparingly clothed with an ashy pubescence: rostrum rather short, punctured, glabrous, black: antennæ ferruginous: thorax short, depressed, with the anterior margin often rufo-piccous, the sides rather densely clothed with ashy scales or hairs: *elytra with the apex* compressed, slightly attenuated, more or less *rufo-piccous;* the base pitchy-black, rather deeply punctatestriate, and sparingly clothed with cinereous hairs and scales: body beneath slightly pubescent, with the apex testaceous or pitchy, the breast clothed with an ashy-white down: legs rather stout, with the femora pitchy-black, the tibiæ and tarsi ferruginous.

Not uncommon within the metropolitan district; also found near Bristol. "Raehills."—Rev. W. Little.

Sp. 23. phæopa. Angustior, nigra, parum cinereo-pubescens, antennis ferrugineis, pedibus piceis, femoribus fuscis. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
Hy. phæopa. Steph. Catal. 169. No. 1729.

Rather narrow: black, slightly clothed with ashy down; head obscurely punctured, with a depression between the eyes; thorax rather short, with the sides considerably dilated, thickly punctured, fuscous: elytra somewhat deeply punctate-striated, the punctures remote; the apex concolorous: femora fuscous; tiblæ and tarsi dull piceous; antennæ ferruginous: rostrum rather short and stout.

Taken near Darenth-wood in June.

Sp. 24. rufipes. Angustior, atra, punctata, parum cinereo-pubescens, antennis pedibusque totis piceo-rufis; rostro longiori. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
Hy. rufipes. Steph. Catal. 169. No. 1730.

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Rather narrow: black, sparingly clothed with an ashy pubescence: head very obscurely punctulated: thorax finely punctured, immaculate; elytra rather faintly punctate-striate, with the apex immaculate: body beneath clothed with ashy pubescence: legs entirely and antennæ pitchy-red: rostrum rather long, and a little attenuated.

Found near Coombe-wood, and in other places near London.

- Sp. 25. variabilis. Nigra, cinereo squamulosa, antennis tibiisque ferrugineis, thorace subdepresso lateribus rotundato, lineis duabus dorsalibus, punctoque utrinque fuscis, elytris fusco punctatis. (Long. corp. 3 lin.)
- Cu. variabilis. Herbst.-Hy. variabilis. Steph. Catal. 169. No. 1731.
- Black, clothed with ashy scales: head short, slightly pubescent, and obsoletely punctured, with a faint depression between the eyes: thorax slightly depressed, with the sides equally rounded, fuscous, with a broad pale streak on the sides, and a narrow one in the middle, frequently with a metallic gloss, and a little before the middle with a denuded fuscous spot: elytra fuscous-brown, punctate-striate, with a large denuded common patch at the base, the alternate interstices whitish, interrupted with denuded fuscous spots, especially behind; beneath black-brown: legs moderate; femora pitchy-black, with the tibiæ and tarsi ferruginous: antennæ pale ferruginous.
- Slightly variable in tint, some specimens being of a pale ferruginous hue; evidently the result of immaturity.

Very abundant within the metropolitan district in June; also in Somersetshire and in Devonshire.

- Sp. 26. Arundinis. Nigra, squamulis pilisque densis lutescentibus tecta, thorace subcylindrico, fusco bilineato, rostro breviori subarcuato. (Long. corp.  $4-4\frac{1}{2}$  lin.)
- Cu. Arundinis. Fabricius.-Hy. Arundinis. Steph. Catal. 169. No. 1732.
- Black, densely clothed with compact lutescent scales : rostrum rather long, black, pubescent, with the apex glabrous: head convex, punctured with a longitudinal impression between the eyes: thorax subcylindric, with two fuscous longitudinal stripes, separated by a very narrow line: elytra faintly punctatestriated, densely clothed with lutescent scales, which are brightest on the sides; and at the apex of the suture is a small common fuscous spot: body beneath also lutescent: legs black, sparingly clothed with an ashy-down: antennæ black, with the base piceous.

Rare; taken in marshy places near Exeter, and I believe in Norfolk.

Sp. 27. elongata. Atra, cinereo-pubescens, rostro breviori arcuato, thorace rotundato subtrilineato, elytris elongatis, obsoleté fusco-maculatis. (Long. corp. 3½ lin.) Cu. elongatus. Paykul.-Hy. elongata. Steph. Catal. 169. No. 1733.

Black, clothed with cinereous pubescence: head short, slightly pubescent, flat between the eyes: rostrum rather short, slightly thickened and curved, with an obsolete carina, and a little pubescent: thorax rounded, somewhat trilineated, obsoletely channelled in the middle: elytra rather elongated, a little depressed anteriorly, the apex declining, moderately punctate-striate, the lateral interstices obsoletely marked with fuscous and cinereous: legs elongate, stout, ashy-pubescent: antennæ ferruginous, with the club dusky black.

Also rare: my specimens were from the Marshamian collection, but I have seen several that were captured near Edinburgh. "Raehills, rare."—*Rev. W. Little.* 

Sp. 28. pedestris. Nigra, pube squamulisque cinereis æqualitèr obducta, rostro breviori arcuato, thorace convexo utrinque rotundato. (Long. corp. 3 lin.)
Cu. pedestris. Paykul.—Hy. pedestris. Steph. Catal. 169. No. 1734.

Black: regularly and rather sparingly clothed with cinercous scales and a slight pubescence: rostrum rather short, curved, with the apex glabrous: thorax slightly pubescent, immaculate, convex, rounded on both sides: elytra also sparingly pubescent, punctate-striate, without denuded spots: body beneath clothed with silver-ashy scales: legs black.

Also rare, and found near Edinburgh: I possess a pair from the Marshamian cabinet:—the insect has been taken within the metropolitan district.

- Sp. 29. Miles. Atra, densè cinerco-pubescens et squamulosa, rostro breviori arcuato, thorace convexo utrinque rotundato, elytris fusco-punctatis. (Long. corp. 3 lin.)
- Cu. Miles. Paykul.-Hy. Miles. Steph. Catal. 169. No. 1735.
- Black; densely clothed with an ashy pubescence and scales: head thickly punctured, with a channel between the eyes: rostrum rather short, curved, pubescent, punctured, with the apex glabrous: thorax moderately convex, rounded on both sides, which, with the inner surface, are clothed with short hair-like shining metallic scales, and on the back a narrow longitudinal streak of the same: elytra rather short, broad and convex, slightly depressed from the middle to the apex, striated, the striæ evidently punctate; the interstices rather convex, clothed with ashy or metallic-brown scales, the alternate ones with a series of denuded spots: body clothed with silvery scales beneath: legs short, black, with ashy pubescence; the claws ferruginous.

Not common: taken near London and in Somersetshire. "On Crwmlyn-burrows."-L. W. Dillwyn, Esq.

# GENUS CCCXI.-ELLESCUS, Megerle.

Antennæ geniculated, 12-jointed, moderate, rather incrassated; funiculus 7jointed, its basal joint longer than the second; the remainder short, nodose, club oblong-oval. Rostrum deflexed, rather elongate and slender, a little curved: eyes slightly prominent: thorax narrowed anteriorly, with the sides a little rounded, the base truncate, densely squamous: scutellum rounded: elytra rather oblong, densely squamous, with a denuded central spot: legs moderate; femora clavate, unarmed; tibiæ straight, with the apex truncate, also unarmed.

The genus Ellescus, which Schönherr reunites to Hypera in his admirable work, is nevertheless very different in habit to the one last mentioned, and exclusively of its densely pubescent body, it may be known by the third joint of the antennæ being shorter than the second, whereas in Hypera the third is longer than the second.

Sp. 1. bipunctatus. Nigra, dense cinereo-pubescens, antennis, tibiis tarsisque testaceis, elytris utrinque maculà denudatà nigrà. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
Cu. bipunctatus. Linné.-El. bipunctatus. Steph. Catal. 170. No. 1736.

Black, densely clothed with an ashy pubescence: head somewhat griseous: rostrum shining black, punctulated: thorax thickly punctured, the pubescence immaculate: elytra slightly convex, rather deeply punctate-striate, with the interstices somewhat smooth, the pubescence rather long, with a large denuded black spot in the middle of the disc, towards the suture, emarginate behind; slightly pubescent beneath, and punctured: femora black, tibiæ and tarsi testaceous.

My specimens were taken in the New Forest by Mr. D. Bydder nearly twenty years since, where the insect has subsequently been frequently taken : in the neighbourhood of Edinburgh it appears more abundant. "Raehills, and Whim, Peebles-shire, not rare." — Rev. W. Little.

## GENUS CCCXII.-PLINTHUS, Germar.

Antennæ geniculated, 12-jointed, moderate, rather stout; the scape incrassated at the apex, and nearly touching the eyes; funiculus 7-jointed, the two basal joints obconic, and a little elongate, the remainder short, nodose, and gradually increasing in breadth; club short, subovate. Rostrum deflexed, elongate, rather thickened, rounded, a little bent, and rather incrassated at the apex: eyes small, oblong, immersed: thorax with the sides rounded, a little convex above, and carinated down the back, with a small lobe behind the eyes: scutellum wanting: body oblong, hard: elytra oblong-ovate, united, the shoulders slightly prominent: femora slightly clavate, dentate: tibiæ obliquely truncate at the apex, and furnished with a stout hook within.

Plinthus has the body oblong, glabrous, hard, and apterous : the elytra are united, scutellum wanting, the tibiæ furnished at the apex with a stout hook, the antennæ with the club short, &c., by which characters it may be known from the two preceding and the following genera :—in the indigenous species the elytra are deeply punctured, the punctures divided by elevated lines, which produce a net-like appearance.

- Sp. 1. caliginosus. Fuscus, thorace varioloso carinato, elytris striis elevatis, punctis inter strias impressis. (Long. corp. 4<sup>1</sup>/<sub>2</sub>-5 lin.)
- Cu. caliginosus. Fabricius.—Ph. caliginosus. Steph. Catal. 170. No. 1737.— Cu. didymus. Don. xvi. pl. 570.
- Deep fuscous, or black: suture longitudinally rugose at the base; head obscurely punctured: thorax with deep excavated spots and a distinct elevated line or carina: elytra with four elevated strigæ, the interstices each with a double series of large excavated punctures, and between the punctures obsolete transverse lines: legs pitchy-black: antennæ piceous, with the club cinereous.

Apparently very rare, but widely dispersed. "Charlton-wood." —Marsham MSS. "On paling, between Highgate and Hampstead."—Dr. Leach. "Near Dover."—Mr. B. Standish.

# GENUS CCCXIII. -- MOLYTES, Schönherr.

Antennæ geniculated, 12-jointed, rather short, thickened, with the scape not touching the eyes, the funiculus 7-jointed, the two first elongate, obconic, the five following short, transverse, somewhat rounded, the last thicker, cupshaped, applied to the club, which is oblong-ovate. Rostrum deflexed, rather long, and thick, smooth, convex, with an obsolete stria on each side above the eyes, which are oblong and depressed: thorax oblong-rounded, coarctate anteriorly at the sides, the base and apex truncate: scutellum minute, triangular: body ovate, hard, apterous: elytra united, ovate, thickly punctured, but not striated : femora clavate, dentate; tibiæ slightly compressed, bisinuated within ; the apex obliquely truncate, and furnished within with a large horizontal hook.

Liparis, a name which has been with propriety restored to a genus of fishes, differs too slightly in sound from Liparus, and the more recent appellation Lipara, to be retained for the present genus, of which I am not positive that either of the indigenous

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species form the type; I have therefore, in order to prevent confusion, adopted the term proposed by Schönherr :---the broad ovate form of body, with the hardness of the latter, united to its glabrous surface, minute scutellum, large horizontal hook at the apex of the tibiæ, which are bisinuated within, sufficiently point out some of the more remarkable characters of the genus.

- Sp. 1. germanus. Niger, thorace profundiùs punctato, lateribus rotundato, elytris inæqualibus, maculis plurimis flavescenti-pilosis, femoribus obsoletè dentatis. (Long. corp. 8-10 lin.)
- Cu. germanus. Linné.—Martyn, C. pl. 22. f. 68.—Liparus germanus. Steph. Catal. 170. No. 1738.
- Black: thorax very deeply punctured, with the sides rounded, rugulose, with dull-yellowish hairs disposed in three irregular spots on each side: elytra unequal, finely rugulose, the surface thickly impressed with obsolete round foveolæ, and adorned with numerous dull-yellow spots composed of depressed lines: anterior femora shady smooth, the posterior furnished with an obsolete tooth.

This magnificent species appears to be peculiar to chalky districts, and I believe has hitherto been found only in the counties of Kent and Sussex :--near Dover I have found it, formerly, in plenty; and it has also occurred near Hastings, Sandgate, Ashdown, &c. "Maidstone."—*T. Marshall, Esq.* 

- Sp. 2. anglicanus. Niger, nitidus, thorace subtilitèr punctulato, lateribus parum rotundato, elytris æqualibus concinnè coriaceis, femoribus acute dentatis. (Long. corp. 6-9<sup>1</sup>/<sub>2</sub> lin.)
- Cu. anglicanus. Martyn.—Don. i. pl. 24. f. 2.—Li. anglicanus. Steph. Catal. 170. No. 1739.
- Shining black: thorax very finely punctured, with a narrow smooth line in the middle; the base and apex fringed with flavescent cilia, the sides slightly rounded and finely granulated, each with two flavescent spots: elytra prettily coriaceous, glossy, in fine specimens with a few flavescent hairs: abdomen on both sides with a series of flavescent spots, and the breast with yellowish hairs; femora all armed with an acute tooth.

Not uncommon also in chalky districts, and in various places within the metropolitan district in June: at Darenth and Hertford I have very frequently taken it; also in Copenhagen-fields. "On the sand-hills (near Swansea), not common."—L. W. Dillwyn, Esq.

#### GENUS CCCXIV.-LEIOSOMA, Kirby.

Antennæ geniculated, 12-jointed, rather short and stout, the scape not reaching to the eyes; funiculus 7-jointed, the basal joint elongate, obconic, second rather shorter, also obconic, the remainder very short, transverse, gradually increasing in width to the club, which is oblong-ovate, rather acute. Rostrum deflexed, stout, rather long, longitudinally striated : eyes ovate : thorax oblong, rounded, with the base and apex truncate : scutellum very minute, triangular : elytra united, ovate, deeply punctate, the punctures disposed in striæ : femora clavate, with an obscure tooth : tibiæ with a small horizontal hook at the apex within : body ovate, hard, apterous.

Exclusively of the punctate-striate elytra of this genus, the articulations of the antennæ are slightly different from those of Molytes, and the minute bulk of the only species evidently points out its distinction from the genus last mentioned; like which the exterior integuments of the body are extremely hard, so as with difficulty to be pierced with a fine pin.

- Sp. 1. punctata. Ater, thorace punctato, elytris punctato-striatis. (Long. corp.  $1\frac{1}{2}$  lin.)
- Cu. punctatus. Marsham.-Le. punctata. Steph. Catal. 170. No. 1740.
- Deep shining black: thorax thickly and deeply punctate: elytra striate, the striæ composed of large impressed points, the disc immaculate: antennæ and tarsi beneath rufescent: anterior fuscous, slightly dentate: body beneath immaculate.

It varies in having the thorax and legs entirely pale rufo-ferruginous, with the rostrum pitchy.

Not uncommon in weedy banks within the metropolitan district; in profusion at Ripley; also found in Norfolk, Suffolk, Devonshire, and not uncommon in the north. "Raehills, common."—Rev. W. Little. "On the sand-hills (near Swansea)."—L. W. Dillwyn, Esq.

# GENUS CCCXV .--- Hylobius, Germar.

Antennæ geniculated, 12-jointed, rather short and slightly thickened; the scape not reaching to the eyes; funiculus 7-jointed, the two basal joints rather long, obconic; four following short, subrounded, with the apex truncate, and gradually increasing in breadth, the terminal one being widest; club closely united, oblong-ovate. Rostrum elongate, somewhat rounded, with an impressed stria reaching to the middle of the eyes, which are oblong and slightly prominent: thorax with the sides rounded: scutellum distinct, the apex rounded: elytra oblong-ovate, with a callous towards the tip; shoulders obtusely angulated: femora clavate, more or less unidentate: tibix with the apex furnished with a hook within.

Hylobius differs from the foregoing genus, to which it is allied, by having the elytra free and the body winged, exclusively of its other distinctions: all the known species delight in the sap of firtrees of various kinds.

- Sp. 1. Abietis. Nigro-piceus, opacus, flavescenti-pilosus, thorace anticè coarctato, elytris tenuiùs cancellato-striatis, interstitiis valdè rugosis fasciis macularibus flavescenti pilosis. (Long. corp. 5–9 lin.)
- Cu. Abietis. Linné.-Hy. Abietis. Steph. Catal. 170. No. 1741.-Cu. Pini. Don. v. xv. pl. 529.
- Pitchy-black, opaque: head thickly rugose-punctate, with an impression between the eyes, and a tuft of flavescent hairs near the latter: thorax thickly and deeply rugose-punctate, with an obsolete central carina, and some scattered yellowish hairs on the sides and dorsal line: elytra with cancellated striae, the interstices ruggedly tuberculate, with several spots composed of yellowish depressed hairs, and disposed in irregular fasciae, varying somewhat in different individuals; an abbreviated one towards the base, near the suture, but not touching it, and an oblique one laterally rather behind, are most constant and distinct: the sides of the abdomen have also some tufts of similar hairs, forming a row of spots: legs pitchy-black.

Rarely found in the south of England, but apparently very abundant in the north, whence I have seen hundreds of specimens: how far south it extends in plenty I am not aware, but it has been frequently captured in the fir plantations in Norfolk. "Brompton."—Mr. G. Waterhouse.

† Sp. 2. Pinastri. Nigro-piceus, subnitidus, cinereo-pilosus, thorace lateribus rotundato, elytris profundè cancellato-striatis, interstitiis subtiliùus rugosis, fasciis macularibus albido-pilosis, pedibus rufis. (Long. corp. 6 lin.)
Rh. Pinastri.—Gyllenhal.—Hy. Pinastri. Steph. Catal. 170. No. 1742.

Pitchy-black, slightly shining : head, rostrum, and antennæ rufo-piceous : thorax with the sides rounded, sparingly clothed with cinereous hairs : elytra rather deeply cancellate-striated, with the interstices finely rugose, adorned with two rather distinct fasciæ of whitish hairs, and other scattered irregularly placed

ones: body beneath slightly clothed with ashy hairs: legs clongate, rufoferruginous; femora acutely dentate.

I believe there is a specimen of this insect in the collection at the British Museum, which was taken in Scotland.

## GENUS CCCXVI.-TANYSPHYRUS, Germar.

Antennæ geniculated, 12-jointed, moderate, slightly attenuated, the scape nearly touching the eyes; the funiculus 7-jointed, its basal joint thick, short; second obconic; four following minute, transverse, coarctate; club large, subglobose, with the articulations closely united. Rostrum elongated, stout, round, curved, the apex slightly depressed: eyes oblong, depressed: thorax convex, with the sides a little rounded: elytra oblong-ovate, attenuated at the apex, which is deflexed, the shoulders somewhat rectangular: legs elongate, stout, anterior approximating at the base: tibiæ rounded, the apex furnished within with a stout acute tooth.

This very minute genus differs from Hylobius by having the second joint of its antennæ short and thickened, as well as by its general structure and habit:—the only known species is found on the leaves of the common duckweed.

Sp. 1. Lemnæ. Nigro-piceus, antennis pedibusque rufo-piceis, elytris ovatis, profundè punctato-striatis, cinereo-nebulosis. (Long. corp. <sup>7</sup>/<sub>8</sub>-1<sup>1</sup>/<sub>4</sub> lin.)
 Rh. Lemnæ. Fabricius.—Ta. Lemnæ. Steph. Catal. 171. No. 1743.

Pitchy-black : head finely punctured ; rostrum punctulated at the base : thorax thickly punctate, and generally with a line of cinereous pubescence on each side: scutellum very minute: elytra very deeply punctate-striate, the interstices somewhat smooth ; towards the base and on the disc are several cinereous patches, composed of delicate pubescence, that is readily abraded: body beneath punctated and finely pubescent: legs and antennæ rufo-piceous.

Not uncommon in several of the ponds round London, especially on Wandsworth-common:—it also occurs near Darenth, in the vicinity of Bristol, and in Devonshire, and I believe also in Norfolk.

## GENUS CCCXVII.—ALOPHUS, Schönherr.

Antennæ geniculated, 12-jointed, moderate, rather slender, the scape clavate, nearly touching the eyes; funiculus with the two first joints rather long, obconic, the remainder somewhat rounded; the club oblong, subovate. Rostrum rather long, rounded, incrassated towards the apex: eyes lateral, subovate, depressed: thorax somewhat oblong, convex, with the sides slightly rounded, and lobate behind the eyes: scutellum minute, but distinct: elytra oblongovate, convex, united: body oblong, apterous: legs moderate; femora incrassated in the middle, unarmed; tibiæ rounded, anterior sinuated within, all dilated at the apex, truncate, but not hooked; tarsi elongated. Alophus is distinguished from the foregoing genera not only by its form and structure, but by its habits; the present insects affecting dry and arid sandy heaths: the rostrum is shorter, the scutellum, although small, is very distinct, the elytra are attenuated to the apex, and the antennæ rather more slender; the apex of the tibiæ is not furnished with a hook, and the tarsi are longer, and the body is apterous.

Sp. 1. triguttatus. Nigricans, coleopteris griseis, maculis tribus albidis, posteriori majore cordată communi. (Long. corp. 3–4 lin.)

Cu. triguttatus. Fabricius .- Al. triguttatus. Steph. Catal. 171. No. 1744.

Blackish; clothed with pale griseous hairs: head obscurely punctured: thorax with a deep dorsal line, fuscous, immaculate: elytra slightly striated, the striæ composed of remote impressed dots, each with a rounded white spot towards the base, and an arcuated one near the apex, reaching to the suture, and forming by the union of the two a distinct V: legs piceous, with the tarsi dull and ferruginous: antennæ also dull ferruginous.

Rather variable: in some cases the elytra are thickly varied with whitish or cincreous clouds, at others they have only the white spots.

Very abundant in the sand-pits on Hampstead-heath; also near Charlton in Kent, and at Hertford. "Raehills, common."—*Rev. W. Little.* "Sand-hills (Swansea), common."—*L. W. Dillwyn, Esq.* 

- Sp. 2. Vau. Griseus, oblongus, elytris maculá et figurá V communi albis. (Long. corp. 3-4 lin.)
- Cu. Vau. Schranck.—Don. xii. pl. 414. f. 1.—Al. Vau. Steph. Catal. 171. No. 1745.
- Oblong, griseous, clothed with cinereous pubescence: rostrum thick, rather short: thorax with a deep puncture on the disc anteriorly: elytra rather faintly striate, the striæ composed of remote punctures; the disc of each with a white spot behind the middle, and an oblique one towards the apex, the latter forming by the union of the elytra a V-like mark: legs piceous, with the tarsi rufescent: antennæ also rufescent.

Found with the preceding insect, of which I suspect it may be only a variety of the female.

Sp. 3. trinotatus. Niger, cinereo-pilosus, elytris fulvescentibus striatis maculá obscurá albidá. (Long. corp. 34 lin.)

Cu. trinotatus. Marsham MSS.-Al. trinotatus. Steph. Catal. 171. No. 1746

Black, with cinereous pubescence: thorax densely clothed with cinereous, without an impressed point in the front of the disc: elytra attenuated, rather clavate-striate, with the interstices punctate, the punctures slightly impressed; clothed with dull fulvescent scales; with an obscure whitish spot on each elytron towards the middle: body beneath pitchy-black: antennæ dull ferruginous.

Taken in Cornwall, and also near London.

GENUS CCCXVIII.-BARYNOTUS, Germar.

Antennæ geniculated, 12-jointed, moderate, slightly gracile; the scape clavate, reaching to the eyes; the two basal joints of the funiculus rather long and obconic, the remainder short, subnodose, scarcely increasing in breadth towards the apex; club oblong-ovate, acuminate. Rostrum rather short and a little thickened, rounded, carinated, the apex slightly incrassated: eyes lateral, rounded, depressed: thorax somewhat transverse, with a longitudinal carina; truncate anteriorly and posteriorly, with the sides rounded: scutellum minute: elytra subovate, with the base emarginate anteriorly, the shoulders slightly prominent, the suture towards the apex clevated: legs moderate, stout, equal: femora clavate, smooth: tibiæ rounded, the apex with a very minute hook at the apex.

Barynotus has the body apterous, the elytra being connected or united, with an emargination at the base within, by which it may be known from Alophus: from Merionus it differs in having the rostrum and thorax carinated, and the body ovate.

- Sp. 1. Mercurialis. Niger, squamulis fusco-cupreis adspersus, elytris punctatostriatis, suturâ posticâ interstitiisque alternis elevatis, antennis tibiisque rufopiceis. (Long. corp. 3 lin.)
- Cu. Mercurialis. Fabricius.-Ba. Mercurialis. Steph. Catal. 171. No. 1747.
- Black, clothed with dull golden or brownish-copper scales: eyes brown: head with a small fovea between the eyes: thorax obsoletely punctate, the dorsal carina very slightly elevated: elytra moderately punctate-striate, the lateral striæ deepest; the alternate interstices and the suture posteriorly rather elevated, the surface densely clothed with golden or cupreous scales, with obscure dusky spots: femora black, with metallic hairs; tibiæ and tarsi rufoferruginous; antennæ rufo-piceous, with the club dusky.

Not uncommon in chalky districts, especially in the neighbourhood of the metropolis. "Has been taken in the neighbourhood (of Swansea)."—L. W. Dillwyn, Esq.

## GENUS CCCXIX .- MERIONUS, Megerle.

Antennæ geniculated, 12-jointed, moderate, a little incrassated, the scape clavate and reaching to the eyes; the two basal joints of the funiculus rather long, obconic, the second most slender, the remainder subnodose, slightly increasing

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in thickness to the club, which is very distinct and oblong-ovate. Rostrum rather short, thick, incrassated at the apex, with a longitudinal groove: eyes lateral, depressed: thorax nearly transverse, truncate anteriorly and posteriorly, the sides rounded, the back with a longitudinal chanuel: elytra subovate, slightly emarginate at the base interiorly, the shoulders prominent anteriorly, the suture a little elevated behind: legs moderate: femora clavate, curved; tibiæ armed with a very minute hook at the apex within.

Merionus, which Schönherr unites with Barynotus, differs from that genus by having the middle of the rostrum and of the back longitudinally grooved instead of carinated, and the contour of the insects, as well as their habits, are evidently dissimilar.

- Sp. 1. obscurus. Nigro-piceus, squamulis fuscis cinereisque variegatus, rostro glabriori unisulcato, foveolis oblongis ruguloso, elytris obsoletiùs punctatostriatis. (Long. corp. 4<sup>1</sup>/<sub>2</sub>-5 lin.)
- Cu. obscurus. Fabricius.-Me. obscurus. Steph. Catal. 171. No. 1748.
- Pitchy-black, variegated with fuscous and cinereous scales: rostrum rather glabrous, with a single longitudinal groove and oblong rugulose punctures: thorax punctured anteriorly, with the sides and hinder portion obsoletely granulated: elytra rather obsoletely punctate-striate, the interstices thickly and finely coriaceous, the alternate ones and the suture posteriorly slightly elevated, and clothed with minute scales, and a row of cinereous hairs towards the apex, the fifth and seventh striæ connected near the shoulder: legs black, with the tible and tarsi sometimes ferruginous.

Not uncommon in dry sandy places among grass or beneath stones, throughout the metropolitan district. "Under stones on Crwmlyn-burrows; and on the sand-hills not uncommon."—L. W. Dillwyn, Esq. "Raehills, frequent."—Rev. W. Little.

Sp. 2. elevatus. Nigro-piceus, squamulis cinereis unicoloribus tectus, rostro squamuloso quinque-sulcato, elytris profundiùs punctato-striatis. (Long. corp. 4-4<sup>1</sup>/<sub>2</sub> lin.)

- Pitchy-black, clothed with uniformly coloured cinereous scales: rostrum scaly, with five sulci, a deep central one and two oblique shorter ones on each side: thorax punctured: elytra rather deeply punctate-striate, clothed with uniform ashy scales, with the alternate interstices and the apex of the suture elevated, the fifth and sixth striæ united near the shoulders: legs black, with the tibiæ and tarsi pitchy.
- Var. & with the antennæ ferruginous, and the legs rufo-piceous.

Somewhat rare: found in dry stony hedges, or in fields among grass, within the metropolitan district, and also in Norfolk, Suffolk,

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Cu. elevatus. Marsham .-- Me. elevatus. Steph. Catal. 171. No. 1749.

and Devonshire. "Among grass, in woods (near Swansea), not common."—L. W. Dillwyn, Esq. "Raehills."—Rev. W. Little.

### GENUS CCCXX.-LEIOPHLÆUS, Germar.

Antennæ geniculated, 12-jointed, rather long and slender, with the scape clavate and reaching beyond the eyes; funiculus with the three basal joints rather long, obconic; the fourth shorter, also obconic; the remainder gradually shorter, turbinated; the club elongate-ovate, acuminate. Rostrum nutant, short, rounded, rather thick, with the apex stouter: eyes rounded, a little prominent: thorax transverse, truncate anteriorly and posteriorly, with the sides considerably rounded, the disc transversely convex: scutellum triangular, distinct: elytra ample, very convex, equal, not emarginated anteriorly, the shoulders obtusely angulated: body apterous: legs rather long, stout: femora clavate, armed with a small tooth: tibiæ rounded, dilated at the apex, truncate, unarmed: tarsi ciliated.

Leiophlæus may be known from its allies by not having the elytra emarginated within at the base, combined with its distinct scutellum, moderately long and thickened rostrum, and ample elytra: the species are always apterous.

- Sp. 1. nubilus. Niger, opacus, densè cinereo-squamosus, antennis rufo-piceis, thorace subtilitèr coriaceo, subcarinato, elytris punctato-striatis, maculis fuscosquamosis tessellatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-5<sup>1</sup>/<sub>2</sub> lin.)
- Cu. nubilus. Fabricius.-Millard, pl. 2. f. 9.-Li. nubilus. Steph. Catal. 172. No. 1750.
- Black, opaque, densely clothed with ashy-scales: head with a small impression between the eyes: rostrum finely coriaceous: thorax finely granulate-coriaceous, clothed with narrow, depressed, ashy scales, especially on the sides and beneath, and with an obsolete, abbreviated, elevated dorsal line: scutellum ashy: elytra punctate-striate, clothed with cinereous scales, the alternate interstices tessellated with fuscous spots: body with ashy-white scales beneath: legs black.
- Male smaller, with the scales of the elytra of a whiter hue, and the tessellations consequently more apparent.

Common in thick shady hedges throughout the metropolitan district, and I believe frequent in other parts, in the months of June and July. "Not unfrequent under stones on Crwmlynburrows, and I have taken it at Penllergare."—L. W. Dillwyn, Esq. "Once near Cambridge."—Rev. L. Jenyns. "Richardby, &c."—T. C. Heysham, Esq.

Sp. 2. maurus. Niger, subopacus, elytris punctato-striatis. (Long. corp. 4-5 lin.)

Cu. maurus. Marsham.-Li. maurus. Steph. Catal. 172. No. 1751.

Black, somewhat opaque, without scales: head with a deep impression between the eyes: thorax somewhat rough, with a small abbreviated central carina: elytra distantly punctate-striate, of an uniform dullish-black: antennæ and legs also black.

Taken in the hedges near Coombe and Darenth Woods, not very abundantly. "On the sand-hills, and not uncommon among grass and the roots of grass about Crwmlyn and Sketty Burrows: Mr. Millard has most commonly found it at the roots of the sea pink at Tenby."—L. W. Dillwyn, Esq.

GENUS CCCXXI.-OTIORHYNCHUS, Germar.

Antennæ geniculated, long, generally slender, rarely stout, 12-jointed, the scape reaching beyond the eyes; funiculus with its two basal joints rather long, obconic; the remainder rather short and obconic, or robust and lenticular; the club narrow oblong, or subovate, acuminate. Rostrum incrassate at the apex, dilated, emarginated, the apex divaricating: eyes rounded, moderately or but little prominent: thorax with the sides rounded, convex above: elytra united, ovate or oblong-ovate: body apterous: scutellum minute: abdomen concave towards the base in the males: legs moderate, stout: femora clavate, sometimes dentate, at others unarmed; tibiæ sometimes crenulated within, the apex dilated, truncate, furnished with a minute horizontal denticulation, or unarmed.

Otiorhynchus to the present day contains a multitude of dissimilar insects, which however may generally be known by having the groove for the antennæ nearly straight, the rostrum somewhat longer than the head, dilated at its apex and furnished on each side with a kind of lobe or winglet; the body usually ovate, glabrous, and always apterous.

A. With the femora dentate. a. Body ovcte.

- Cu. Ligustici. Linné .-- Otio. Ligustici. Steph. Catal. 172. No. 1752.
- Black, clothed with griseous scales and scattered hairs: head rugose-punctate: antennæ pitchy-black: thorax with the sides considerably rounded, the disc a little convex, with an obsolete longitudinal dorsal impression, and having

Sp. 1. Ligustici. Niger, griseo-squamosus, thorace granulato, elytris scabris, versu's margines punctato-striatis. (Long. corp. 6-7 lin.)

throughout *elevated* rounded *tubercles*, which are largest and most thickly placed on the back: *scutellum wanting*: elytra very convex, opaque, thickly granulate-tuberculate, roughly punctate-striate towards the margins: body beneath dusky, clothed with whitish scales: legs black, with ashy pubescence; femora with a small tooth towards the apex: rostrum rugose-punctate, with a carina from the base to beyond the middle, slightly bifd at the apex.

Rare; but found in the vicinity of the metropolis. "Between Godstone and Hartfield in May."—Dr. Leach. "In a gravel-pit near Barham."—Rev. W. Kirby. "Southend."—Rev. F. W. Hope.

#### b. With the body oblong.

- Sp. 2. sulcatus. Oblongus, niger, antennis piceis, thorace scabro, elytris profundè sulcatis maculis sparsis pallido-pilosis, rostro sulcato. (Long. corp.  $4\frac{1}{2}$  –  $5\frac{1}{2}$  lin.)
- Cu. sulcatus. Fabricius.-Ot. sulcatus. Steph. Catal. 172. No. 1753.
- Black: head finely punctured, pubescent, with an impression between the eyes: rostrum rugosc-punctate, with a deep broad channel: thorax with an obsolete dorsal groove, slightly glossy, with numerous thickly planted tubercles throughout, and some scattered pale-ashy hairs: scutellum black: *elytra* somewhat *deeply sulcate*, with the interstices and sulci very ruggedly tuberculate, and irregularly *spotted with* depressed pale *ferruginous* hairs: legs rather long, with the femora obtusely dentate: antennæ piceous.

Very abundant in gardens within the metropolitan district; in my own garden, and at Hertford, I have seen the insect in great abundance: also at Ripley, Darenth, Dover, &c.; it likewise occurs in Norfolk, Somersetshire, and Devonshire. "On the sand-hills (near Swansea), not uncommon."—L. W. Dillwyn, Esq.

- Sp. 3. notatus. Piceus, thorace granulato, elytris striatis, ocellato punctatis pedibus rufo-piceis, femoribus subdentatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4 lin.)
   Cu. notatus. Bonsdorf.—Otio. notatus. Steph. Catal. p. 172. No. 1754.
- Piceous: head with a faint impression between the eyes, the forehead slightly rugose: thorax globose, granulated, with an obsolete longitudinal channel, and the sides rather densely squamous: elytra thickly clothed with fuscous and ashy scales and a few hairs, striate, the strike composed of small annular impressions, and the interstices with a series of elevated, piceous, glabrous tubercles: legs rather long, rufo-piceous, or rufous, with the femora slightly dentate: antennæ fuscous.

Abundant in hedges throughout the metropolitan district. "In woods (near Swansea), not common."—L. W. Dillwyn, Esq. "Hebden-bridge."—Mr. S. Gibson. "Scarborough."—T. Bean, Esq.

- Sp. 4. singularis. Fuscus, thorace granulato, elytris striatis, squamulis albidis seriatim dispositis. (Long. corp. 3 lin.)
- Cu. singularis. Linné?-Otio singularis. Steph. Catal. p. 172. No. 1755.
- Fuscous: head slightly rugose: thorax globose, thickly granulated, the sides clothed with whitish scales: elytra with ten striæ, the striæ smooth, but broadly excised, with rows of whitish and fuscescent scales, and rigid hairs between: body blackish-brown, with whitish hairs: legs rufous, the anterior femora slightly dentate: antennæ fuscous.

Common in weedy hedges throughout the metropolitan district. "Common (near Swansea)."-L. W. Dillwyn, Esq.

Sp. 5. squamiger. Testaceus, capite fusco, elytris elevato-striatis, squamis pallidis testaceisque marmoratis. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)

Cu. squamiger. Marsham.-Otio. squamiger. Steph. Catal. p. 193. No. 1756.

Testaceous: head fuscous, punctate, with whitish hairs: thorax globose, with elevated tubercular points, sides with pale scales: elytra striated, with about six elevated interstices, bearing some rigid setæ, and clouded throughout with whitish and testaceous scales: body beneath testaceous, with short pale hairs: legs moderately long: femora clavate, very obsoletely dentate.

Not uncommon within the metropolitan district. "Occasionally (near Swansea)."-L. W. Dillwyn, Esq.

Sp. 6. scaber. Atro-cinereus, thorace granulato, elytris striatis squamulis albidis, pedibus rufis. (Long. corp. 21 lin.)

Cu. scaber. Linné? Otio. scaber. Steph. Catal. 173. No. 1757.

Dark cinereous: head obscurely punctured: thorax granulated: elytra rugose, with whitish scales, punctate-striate: antennæ and legs rufous.

Probably a variety of the following insect.

Rarely taken within the metropolitan district.

- Sp. 7. rugifrons. Niger, opacus, parcè cinereo-pubescens, elytris punctato-striatis, dorso subdepressis, fronte rostroque longitudinalitèr rugosis. (Long. corp. 3 lin.)
- Cu. rugifrons. Gyllenhal.-Otio. rugifrons. Steph. Catal. 173. No. 1758.

Black, opaque, with a slight cinereous pubescence: head with the vertex smooth, the forehead and rostrum flat above, irregularly marked with several slender elevated lines, with a few scattered hairs: thorax thickly and coarsely punctate, the sides somewhat tuberculate: elytra a little depressed anteriorly, striated with oblong-quadrate points, with the interstices rugulose tuberculate, with rows of fine cinereous hairs: legs rather long: femora black, with a minute tooth near the apex: tibiæ and tarsi piceous: antennæ black.

Rare near London; found on the banks of the Severn; also in the "Isle of Arran."—Dr. Leach. "Raehills."—Rev. W. Little.

- Sp. 8. ovatus. Niger, subnitidus, antennis pedibusque rufo-ferrugineis, fronte rostroque subtilissimè coriaceis, thorace subgloboso, rugoso, femoribus validè dentatis. (Long. corp. 2-3 lin.)
- Cu. ovatus. Marsham. Otio. ovatus. Steph. Catal. 173. No. 1759.
- Black, slightly glossy: head with the vertex smooth, the forehead and rostrum flat and finely rugulose-punctate, with a few cinereous hairs: eyes brown: antennæ rufo-ferruginous: thorax very convex, subglobose, thickly crowded with elevated tubercles, frequently united and forming longitudinal wrinkles in the middle of the back, and having a few ashy-hairs: elytra above convex, with the back slightly depressed anteriorly, coarsely punctate-striate, with the interstices rugose-granulate and sparingly pubescent: legs rather long, stout, rufo-ferruginous: femora clavate, especially the anterior; all with a stout, elongate, acute tooth.

Extremely abundant in hedges, &c. throughout the vicinity of London; also in Devonshire and near Bristol. "On thistles on Crwmlyn-burrows."—L. W. Dillwyn, Esq.

- Sp. 9. pabulinus. Fusco-ferrugineus, elytris subglobosis punctato-striatis, antennis pedibusque testaceis. (Long. corp. 2–3 lin.)
- Cu. pabulinus. Panzer.-Otio. pabulinus. Steph. Catal. 173. No. 1760.
- Dusky-ferruginous, slightly shining: head dull, ferruginous, punctate: eyes black: thorax globose, with numerous more or less crowded shining elevated tubercles, and a little sprinkling of downy pubescence: elytra subglobose, gibbous, punctate-striated, the apex slightly acuminate: legs testaceous, rather long, stout: femora clavate, acutely and strongly dentate: body beneath glossy ferruginous: antennæ testaceous.
- Probably an immature state of the foregoing species, but its form and sculpture appear slightly dissimilar.

Taken within the metropolitan district.

- Sp. 10. Dillwynii. Niger obscurus, antennis pedibusque piceis, elytris punctatostriatis, fronte rostroque subrugosis, thorace subgloboso, medio rugoso. (Long. corp. 3 lin.)
- Pach. Dillwynii. Kirby MSS .- Otio. Dillwynii. Steph. Catal. 173, No. 1761.
- Black, obscure: head obsoletely punctured, and transversely wrinkled between the eyes: rostrum longitudinally rugose: thorax very thickly granulated, subglobose, with the centre distinctly rugose: elytra punctate-striate, the punctures rather large and deep, the interstices convex, and slightly scabrous, especially on the sides: legs and antennæ pitchy-black: femora rather acutely dentate.

The only examples I have seen of this insect were captured in the vicinity of Swansea; where they were discovered by my friend, L. W. Dillwyn, Esq., to whom the species is dedicated B. Femora unarmed. a. Elytra not distinctly striated.

- Sp. 11. Lima. Oblongo-ovatus niger totus, punctis prominulis scaber. (Long. corp. 8 lin.)
- Cu. Lima. Marsham.-Otio. Lima. Steph. Catal. 173. No. 1762.
- Oblong-ovate, entirely black; covered throughout with scabrous elevated points, placed somewhat regularly on the thorax, and disposed in slightly transverse wrinkles on the elytra, especially on the sides: rostrum with a longitudinal carina: abdomen ovate, rather acute behind.

Of this very remarkable insect I have hitherto seen but one specimen, which I obtained from the Marshamian collection; of its locality I am not aware.

- Sp. 12. tenebricosus. Niger, subnitidus, pedibus elongatis rufo-piceis, elytris oblongo-ovatis, obsoletissimè striatis, apice attenuatis, thorace angusto. (Long. corp. 4-6 lin.)
- Cu. tenebricosus. Herbst.—Otio. tenebricosus. Steph. Catal. 173. No. 1763. Cur. maritimus, var. Donovan, xv. pl. 533. f. 2.
- Black, slightly shining: head and thorax finely coriaceous; the latter narrow, subcylindric, with the sides very slightly dilated, the disc very convex, and in recent perfect specimens, sparingly clothed with a few delicate hairs: elytra oblong-ovate, attenuated posteriorly, but the extreme apex rounded: above very convex, with some very obsolete striæ composed of minute punctures, the interstices transversely, but obsoletely, rugulose, and in fine specimens more or less clothed with cinereous hairs, sometimes united into minute patches: legs elongate, rufo-ferruginous or rufo-piceous, with the tarsi dusky; the femora slender at the base and clavate towards the apex; antennæ black; rostrum thickly rugose-punctate, with a carina in the middle, obsoletely bifid in front, the apex of the rostrum deeply emarginate.

Very abundant in hedges, &c. throughout the metropolitan district, and not uncommon in the metropolis itself: also found in Devonshire, Norfolk, Suffolk, &c. " On the sand-hills (near Swansea), common."—L. W. Dillwyn, Esq.

Sp. 13. atroapterus. Niger subnitidus pedibus rufo-piceus, thorace lateribus dilatato, elytris ovatis, obtusis, obsoletissimè sulcatis, granulatis. (Long. corp. 4 lin.)

Cu. atroapterus. De Geer .- Otio. atroapterus. Steph. Catal. 173. No. 1764.

Black, slightly shining: head short, finely punctured, with a small impression between the eyes: thorax with the sides rounded and dilated, above convex and slightly pulvinated, with a transverse impression at the base and apex, the disc finely punctured, and having some minute griseous hairs: *elyt. a* ovate, obtuse, very convex, obsoletely sulcate, and the entire surface covered with minute elevations, and some delicate cinereous hairs: legs rather long, stout, rufo-piceous: femora very stout: rostrum thickly rugose-punctate, with an elevated carina not reaching to the apex, which latter is scarcely emarginated: antennæ black.

Common on most of the coasts of England, and on those of Wales. "Babbicombe-cliffs, in abundance."—Marsham MSS. "Not uncommon on the sand-hills! (near Swansea)."—L. W. Dillwyn, Esq. "Tynemouth."—G. Wailes, Esq. "Barmouth."—Rev. F. W. Hope and C. Darwin, Esq.

- Cu. ater. Herbst.-Otio. ater. Steph. Catal. p. 173. No. 1765.-Cu. maritimus. Donovan, xv. pl. 533. f. 1.
- Black; head very finely punctured, with the forehead depressed: rostrum thickly and finely punctulate, with the apex a little emarginate, above with an elevated carina, bifid at the tip: thorax narrow, finely rugose-punctate, with a delicate pubescence on the sides: elytra very obsoletely sulcate, the sulci with slightly impressed broad punctures, and the interstices narrow and transversely rugose, especially towards the sides: legs rather long, stout, rufescent; femora stout, clavate, with the apex black; tarsi also black: antennæ black, with ashy down.

Less abundant than the last, but found also on several of the coasts. "On the coast of Cornwall, by Mip-hill."—Marsham MSS. "Common on the sand-hills (near Swansea)."—L. W. Dillwyn, Esq. "Sea-shore, Cramond."—Rev. W. Little.

Sp. 15. lævigatus. Niger nitidus, antennis pedibusque piceis, thorace subtilitèr punctulato, elytris subtilissimè punctato-striatis posteriùs angustatis, rostro non carinato. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)

Cu. lævigatus. Fabricius.-Otio. lævigatus. Steph. Catal. p. 173. No. 1776.

Black, shining: head glabrous, finely punctate: suture thickly rugose-punctate, not carinated, with the apex emarginated: thorax rounded and dilated on the sides, the disc very convex, glossy, glabrous, thickly punctate, the sides and beneath finely granulated: elytra very convex, shining, and glabrous, very delicately punctate-striate, with the interstices flat and very obscurely, but thickly and irregularly punctured: legs elongate, black, or dull rufo-piceous; tibiæ curved and scabrous: tarsi slightly pubescent.

Apparently rare: I possess three examples from the coast of

Sp. 14. ater. Niger, pedibus rufis, tarsis genubusque nigris, thorace angusto, elytris rugosis, obsoletissimè sulcato-punctatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)

Glamorganshire. "On the sand-hills (near Swansea) common."-L. W. Dillwyn, Esq.

b. Elytra deeply striated, glabrous.

Sp. 16. piceus. Piceus, nitidus, antennis pedibusque rufescentibus, abdomine ovato. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)

Cu. piceus. Marsham .- Otio. piceus. Steph. Catal. p. 174. No. 1767.

Piceous, very shining and glabrous : head finely punctured : thorax subglobose, coarsely and rather thickly punctured : elytra glabrous, deeply punctate-striate ; the interstices narrow and smooth : abdomen ovate : antennæ, femora, tibiæ, and tarsi beneath rufo-ferruginous.

Variable in colour, according to the state of maturity.

Extremely common in hedges and on heaths throughout the metropolitan district, and I believe in other parts. "Netley."—*Rev. F. W. Hope.* "Near Swansea."—*L. W. Dillwyn, Esq.* 

c. Elytra striated, more or less scabrous.

Sp. 17. scabrosus. Oblongo-ovatus, scaber, thorace fusco, elytris striatis antennis pedibusque brunneis, femoribus subdentatis. (Long. corp. 3 lin.)

Cu. scabrosus. Marsham.-Otio. scabrosus. Steph. Catal. p. 174. No. 1768.

Oblong-ovate, rough: head punctate between the eyes; vertex smooth: thorax fuscous, thickly granulated: elytra rufo-piceous, striated, the striæ composed of coarse punctures; the interstices transversely rugose, and very sparingly furnished with short ashy hairs: antennæ and legs dull rufo-ferruginous: femora very slightly dentate.

Abundant in sandy and gravelly places within the metropolitan district. "Hebden-bridge."—Mr. S. Gibson. "Netley."—Rev. F. W. Hope. "On the sand-hills (near Swansea), not common." —L. W. Dillwyn, Esq. "Dalmeny."—Rev. W. Little.

- Sp. 18. scabridus. Niger, aut piceo-ater, thorace granulato, elytris striatis, interstitiis subrugosis, antennis tibiis tarsisque nigro-piceis. (Long. corp.  $1\frac{1}{2}-2$  lin.)
- Pach. scabridus. Kirby MSS .- Otio. scabridus. Steph. Catal. p. 174. No. 1769.
- Black, or piceous: head very thickly but finely punctured : thorax globose, thickly and coarsely granulated : elytra rather convex, piceous, somewhat deeply punctate-striate; with the interstices slightly rugose transversely, and rather thickly studded with short griseous hairs: femora black, clavate: tibia and tarsi, as well as the antennæ, pitchy-black, or dull rufous.

Found near London, and in Suffolk and Somersetshire. "Cramond."-Rev. W. Little.

- Sp. 19. rugicollis. Ovatus, ater, opacus, elytris obsoletè punctato-striatis, interstitiis scabrosis, thorace granulato, disco longitudinalitèr rugoso. (Long. corp.  $3\frac{1}{2}$  lin.)
- Otio. rugicollis. Steph. Catal. 176. No. 1770.
- Ovate, black, opaque: head smooth posteriorly, between the eyes and the rostrum thickly and closely wrinkled longitudinally: thorax globose, thickly and rather coarsely granulated, the centre longitudinally wrinkled, with a moderately deep channel: elytra ovate, scabrous, obsoletely striated, the striæ punctate and most visible on the sides; the interstices having fine, short, pale hairs: legs and antennæ deep black.

The only example I have seen of this very distinct species I captured at Dover in June, 1819.

- Sp. 20. maurus. Niger, subnitidus, parcè cinereo-pubescens, antennis pedibusque rufo-piceis, thorace confertissimè granulato, elytris ovatis punctato-striatis, interstitiis sublævibus. (Long. corp. 3<sup>3</sup>/<sub>4</sub>-4<sup>1</sup>/<sub>2</sub> lin.)
- Cu. maurus. Gyllenhal.-Otio. maurus. Steph. Catal. 174. No. 1771.
- Black, slightly shining: head with the vertex smooth, the forehead sparingly punctate: rostrum rugose-punctate, with a bifid elevated carina: thorax with the sides rounded and dilated, the disc moderately convex and thickly covered with rounded granular elevations, and a few cincreous hairs: elytra ovate, with the apex obtusely rounded, very convex, regularly, but not deeply punctate-striate, with the interstices slightly rugose, or nearly smooth, sometimes a little pilose: body opaque beneath, the breast deeply, and the abdomen obsoletely punctate: legs and antennæ rufo-piceous, pubescent, femora slightly clavate.

Two of my specimens of this insect (which appears rare) were captured in Yorkshire, I believe near Scarborough; the other in Wales.

Sp. 21. raucus. Niger, antennis pedibusque rufo-piceis, elytris profundè punctatostriatis, pube griseâ fuscâque nebulosis, posticè carinatis, thorace subcarinato. (Long. corp. 2-3<sup>1</sup>/<sub>2</sub> lin.)

Cu. raucus. Fabricius .- Otio. raucus. Steph. Catal. p. 174. No. 1772.

Black: head with the front slightly punctate and pilose, the vertex smooth, glabrous: rostrum thickly rugose-punctate, with a few griseous hairs, and an obsolete, abbreviated carina: thorax with the sides rounded and dilated, above moderately convex, black, opaque, thickly rugose-punctate, with a few rigid griseous hairs and an abbreviated narrow central carina: elytra ovate, with the shoulders rounded, deeply and coarsely punctate-striate, with the interstices narrow and finely coriaceous, the suture posteriorly elevated, and the surface rather densely clothed with griseous and fuscous hairs intermixed; legs moderate, pubescent, rufo-ferruginous; the femora sometimes deep pitchyblack, with the apex paler.

Not very uncommon in the chalky lanes near Darenth and Greenhithe in Kent. "Among herbage and on nettles (near Swansea); and sometimes, early in summer, is plentiful on the naked sandhills."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

# GENUS CCCXXII.-TRACHYPHLÆUS, Germar.

Antennæ geniculated, 12-jointed, rather short and thick, the scape very thick and reaching beyond the eyes; the funiculus with its basal joint thick, short, obconic, the second shorter, less incrassated and obconic, the remainder very short, transverse, subcoarctate, lenticular, the club 4-articulate, small, ovate. *Rostrum* as long as the head, linear, rather flat above, with an elongate, nearly straight deep groove for the reception of the antennæ: eyes rounded, somewhat depressed: thorax transverse, with the base and apex truncate, the sides considerably expanded and rounded: scutellum wanting: elytra ample, united, subovate, moderately convex: body ovate, and irregularly clothed above with short setæ: legs rather short, stout: femora subclavate, unarmed: tibiæ straight, rounded, all with the apex angulated within, hooked and spinous, tarsi and claws short.

Trachyphlæus differs from the insects of the foregoing genus by having the upper surface of the body more or less hispid or setose, the thorax shorter, generally constricted in front, the rostrum and antennæ slightly dissimilar, the body ovate, rostrum deflexed, &c.

Sp. 1. tessellatus. Nigro-fuscus, elytris valdè striatis squamulis fuscis cinerascentibusque variis obtectis. (Long. corp. 2 lin.)

Cu. tessellatus. Marsham .- Tra. tessellatus. Steph. Catal. 174. No. 1773.

Fuscous-black: head and thorax covered with fuscous scales, the anterior margin of the thorax whitish: elytra deeply striated, the interstices setose and irregularly tessellated with fuscous and ash-coloured scales: body beneath and legs dull rufous: antennæ fuscous.

Not very common; found near London and in Somersetshire; also in Norfolk.

Sp. 2. confinis. Nigro-fuscus, elytris substriatis, squamulis griseis aut fuscescentibus omninò tectis. (Long. corp. 2 lin.)

Tra. confinis. Steph. Catal. 174. No. 1774.

Deep fuscous, clothed with lighter scales : head and thorax very obscurely punctured, the latter unequal : elytra rather faintly striated, clothed throughout with uniform fuscous or griseous scales, and a few dusky or cinereous hairs, especially behind: antennæ rufescent at the apex: legs black, with the apex of the tibiæ and the tarsi rufescent.

Taken near London and in Norfolk.

Sp. 3. ventricosus. Griseo fuscoque varius, thorace canaliculato, coleoptris sulcatis brevitèr setosis, rostro sulcato. (Long. corp. 2 lin.)
 Tr. ventricosus. Germar.—Steph. Catal. 174. No. 1775.

Varied with griseous and fuscous: rostrum deeply sulcated, griseous: antennæ piceous: thorax transverse, griseous, rugose, with a slight dorsal channel: elytra globose, as broad again as the thorax, deeply sulcate, with the interstices convex, varied with griseous and fuscous, and irregularly armed with short setæ: body beneath and legs griseous.

Found near London and in Somersetshire.

Sp. 4. scabriculus. Niger, densè fusco squamosus, antennis pedibusque fuscoferrugineis, elytris squamis erectis albidis seriatis, muricatis, thorace rostroque canaliculatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)

Cu. scabriculus. Linné.-Tr. scabriculus. Steph. Catal. 174. No. 1776.

Black, densely clothed with fuscous scales: head depressed, thickly rugosepunctate; rostrum rather broad, also rugose-punctate, with a deep groove in the middle: thorax with a transverse impression near the apex, the base slightly bisinuated, and towards each side an oblong fovea, the disc finely rugose-punctate, with a few scattered whitish setæ: elytra punctate-striate, with the interstices slightly convex and thickly rugose-punctate, each with a series of broad, erect, whitish, scales, larger and more closely placed posteriorly: body piceous beneath: legs dusky-ferruginous, pubescent: femora generally obscure, setose.

The most abundant species of the genus within the metropolitan district, frequenting sandy and gravelly places. "Moss, Coombewood, in March."—Mr. Ingpen. "Found occasionally on the sand-hills (near Swansea), not common."—L. W. Dillwyn, Esq.

Sp. 5. hispidulus. Niger, densè squamosus, antennis pedibusque piceo-fuscis, elytris fusco cinereoque obsoletè tessellatis, posteriùs tantum muricatis. (Long. corp. 2 lin.)

Cu. hispidulus. Herbst.-Tr. hispidulus. Steph. Catal. 174. No. 1777.

Black, densely clothed with fuscous scales: head depressed, finely rugosepunctate: thorax transversely impressed near the anterior margin, and a small fovea on each side: elytra obsoletely tessellated with fuscous and cinereous, with a few scattered setæ, and muricated behind: antennæ and legs pitchybrown.

Also found within the metropolitan district.

- Sp. 6. spinimanus. Nigro-fuscus, antennis pedibusque piceo-rufis, elytris subtilitèr striatis vageque setosis, tibiis anticis extus bidentatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Tr. spinimanus. Germar.-Steph. Catal. 174. No. 1778.
- Fuscous-black, clothed with an ashy-brown substance: rostrum above flat, very obsoletely channelled: antennæ piceous, with the club paler: thorax with the sides constricted towards the base, then considerably rounded, the anterior margin elevated, and the disc somewhat depressed, with a very obscure groove, and most obsoletely rugulose: elytra moderately convex, finely striated, irregularly armed with stout, erect, whitish setæ in the interstices, which are broad and flat: legs piceous, with the anterior tibiæ acutely bidentate at the apex without.

Rare: I have taken the insect in the sand-pits on Hampsteadheath.

- Sp. 7. digitalis. Brevior, ovatus, indumento denso cinereo tectus, antennis pedibusque ferrugineis, thorace depresso, vix canaliculato, tibiis anticis externè spinis duabus longioribus, acutis, armatis. (Long. corp. 2 lin.)
- Cu. digitalis. Gyllenhal, Ins. Suec. iv. 615.
- Short, ovate, densely clothed with cinereous, with the antennæ and legs ferruginous: rostrum flat above, obsoletely channelled: thorax very short, transverse, much narrowed anteriorly, with the sides constricted and considerably rounded; above slightly depressed, with a very obsolete channel, and towards the margin with a few erect muricated scales: elytra generally covered with a thick pigment as to appear very obsoletely striated, with a few scattered whitish erect scales, especially towards the apex: body beneath piceous, with whitish scales: legs stout, ferruginous: tibiæ slightly ciliated, the anterior towards the apex with two long acute denticulations.

Also rare: found near London.

### GENUS CCCXXIII.—Philopedon, Schönherr.

Antennæ geniculated, 12-jointed, rather short and stout, pilose; funiculus with the two basal joints rather long, obconic; the remainder short, nodose; the club short, ovate. Rostrum very short, rather broad, stout, flat above, with the apex emarginate: eyes small, rounded, slightly prominent: thorax transverse, suborbiculate, with the base and apex truncate, a little narrowed anteriorly: scutellum very small, triangular: elytra short, ovate, convex above, obtuse: legs simple: tibiæ nearly straight, unarmed.

Philopedon is distinguished from the foregoing genera by the

remarkable rotundity of its elytra, compared to its short transverse thorax: the rostrum is broad, short, obsoletely channelled and divided from the head, as it were, by a transverse suture: the species mostly frequent the coast, but one occurs in plenty in sandy inland districts.

Sp. 1. geminatus. Niger densè fusco squamosus, cinereo lineatus, elytris albido setosis. (Long. corp. 2-4 lin.)

Cu. geminatus. Fabricius .- Ph. geminatus. Steph. Catal. 174. No. 1779.

Black, densely clothed with fuscous scales, and *lineated with cinereous* or hoary: head varied with cinereous or fuscescent scales, and a slight concolorous pubescence, the forehead somewhat depressed: thorax finely rugulose, punctate, very densely squamose, with its under surface and two broad, curved, dorsal lines ashy-white, the rest obscure fuscous, with a griseous pubescence: scutellum black: elytra very globose, faintly punctate-striate, with the interstices flat, finely coriaceous, densely clothed with fuscous or ashy scales, varying considerably in different individuals; sometimes they are of an uniform ash-colour or vice versa; at others they are alternately fuscous and cinereous, and sometimes the colours are partially tessellated, and in general the edges are more or less indented; the surface is also sparingly clothed with an ashy rigid pubescence, especially towards the apex: antenne fusco-ferruginous.

Extremely variable in the disposition of the coloured scales, as well as in size.

Extremely abundant on most parts of the coasts of Great Britain. "Common on the sand-hills (near Swansea), and on the stalks of Arundo arenaria."—L. W. Dillwyn, Esq. "Southend, Deal, Barmouth, &c."—Rev. F. W. Hope. "Tynemouth."—G. Wailes, Esq. "Cramond."—Rev. W. Little.

Sp. 2. parapleurus. Niger, hispidus, elytris striatis fuscis maculis lateribusque albidis, antennis rufis. (Long. corp. 3 lin.)

Cu. parapleurus. Marsham .-- Ph. parapleurus. Steph. Catal. 175. No. 1780.

Black; head finely punctured, clothed with fuscous scales: thorax the same and slightly pilose: elytra fuscous, punctate-striate, with the sides and some irregular spots white; the interstices slightly depressed, and having a few cinereous hairs, especially towards the apex: body beneath and legs black, with a whitish pubescence: rostrum black, punctate: antennæ rufous.

Less abundant than the foregoing, of which I suspect it may be a mere variety. "On the sand-hills (near Swansea), not uncommon." L. W. Dillwyn, Esq.

- Sp. 3. exaratus. Fuscus, elytris cinereis sat profundè striatis, striis punctatis. (Long. corp.  $2\frac{1}{4}-4$  lin.)
- Cu. exaratus. Marsham.—Don. xii. pl. 414. f. 2.—Ph. exaratus. Steph. Catal. 175. No. 1781.
- Fuscous, clothed with ashy scales: rostrum rather broad, and with the head and thorax deep fuscous, immaculate: elytra paler or cinereous, with moderately deep punctate-stria, of which the six dorsal ones are the most evident, the three lateral ones on each side being rather faint: body thickly clothed with short whitish or cinereous hairs beneath: legs fuscous.

Extremely variable in size and slightly so in colour.

Very common on sandy heaths in the vicinity of the metropolis, never in company with the preceding. "Swansea."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

Sp. 4. plumbeus. Plumbeus, oculis antennisque rufis, pedibus nigro-piceis, tibiis tarsisque pallidioribus. (Long. corp. 3 lin.)

Cu. plumbeus. Marsham.-Ph. plumbeus. Steph. Catal. 175. No. 1782.

- Black, thickly clothed with an ashy down: head and thorax immaculate, the latter finely granulated: elytra large, rather deeply striate, the striæ punctate, the interstices convex and slightly punctured: eyes rufous, with a brilliant fiery splendour: antennæ rufous: femora deep pitchy-black: tibiæ and tarsi paler, with a rufescent tinge.
- The brilliant phosphorescent or fiery lustre of the eyes of this species still exists in both the specimens which I obtained from the Marshamian collection, although thirty years have elapsed since they were described by Mr. Marsham.

"Taken near Hastings in August."-Marsham l. c. in Syst. Catal.

### GENUS CCCXXIV.-STROPHOSOMUS, Billberg.

Antennæ geniculated, 12-jointed, rather long and slender, the scape clavate, reaching to the upper margin of the eyes; funiculus with the two basal joints rather long, the second longest, obconic, the remainder short, rounded: club oblong-ovate, acuminate. Rostrum short, broad, frequently divided from the head at the base by a transverse suture, the apex deeply emarginate: head short, broad, often with a longitudinal impressed frontal line: eyes globose, very prominent: thorax short, transverse, narrowed anteriorly, with the sides a little rounded, convex above, truncate anteriorly and posteriorly, the base sometimes bisinuated: scutellum minute: elytra ample, ovate, convex: legs rather short, simple: tibiæ nearly straight, truncate, unarmed. The extremely prominent eyes of the insects of this genus distinguish them from all the allied genera, except Philopedon, from which they differ by having the third joint of the antennæ longer than the second, as well as by the less globose form of body, general habit and manner:—they form a portion of the genus Thylacites, as originally proposed, but from the type of that genus being widely dissimilar, Billberg's name is here employed.

### A. With the thorax truncate at the base.

a. Rostrum divided, as it were, from the head by a transverse striga.

- Sp. 1. Coryli. Niger, squamulis densis fuscis cinereisque variegatus, suturû basi nigrû, antennis pedibusque, rufo-ferrugineis, fronte rostroque sulcatorugosis. (Long. corp. 2-3 lin.)
- Cu. Coryli. Fabricius.—Martyn, C. pl. 19. f. 20.—Str. Coryli. Steph. Catal. 175. Nc. 1783.
- Black, variegated with fuscous and cinereous scales: rostrum black at the apex, unequal, rugose and canaliculated: head short, and considerably wrinkled longitudinally, with a deeper impression in the middle: eyes very prominent: thorax thickly rugose-punctate, with three obscure fuscescent dorsal lines: elytra pubescent, more or less variegated with fuscous and cinereous, and a few whitish scales, with the basal half of the suture black, rather deeply punctate-striate, the interstices convex, and nearly smooth: body beneath piceous, with white scales: legs stout, rufo-ferruginous: antennæ the same.

Extremely abundant on the nut-tree in June within the metropolitan district, and I believe equally common throughout the south of England. "Swansea."—*L. W. Dillwyn, Esq.* "Netley."—*Rev. F. W. Hope.* "Baron-wood."—*T. C. Heysham, Esq.* 

- Sp. 2. rufipes. Niger, squamulis densis fuscis cinereisque variegatis, antennis piceis, pedibus rufis, fronte haud sulcato, puncto impresso. (Long. corp.  $1\frac{1}{2}$  lin.)
- St. rufipes. Steph. Catal. 175. No. 1784.
- Black, densely squamose: head rather deeply puntate-rugose: rostrum with a deep impressed fovea, not sulcate: thorax finely and not very thickly punctured: elytra rather deeply punctate-striated, the interstices flat, densely clothed with fuscescent scales, more or less variegated or tessellated with cinereous; the suture concolorous: antennæ piccous: legs rufous.

Found in woods in the vicinity of the metropolis, not very common.

Sp. 3. Asperifoliarum. Niger, densè cinereo squamosus, thorace lineis tribus fuscis; elytris striatis albido fuscoque marmoratis, antennis piceis, pedibus rufescentibus. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

- Th. Asperifoliarum. Kirby MSS.—St. Asperifoliarum. Steph. Catal. 175. No. 1785.
- Black, densely clothed with cinereous scales: rostrum with an obsolute abbreviated groove: head finely punctured: thorax rather coarsely punctured, with a dorsal and two lateral fuscous stripes: elytra ample, moderately punctate-striate, marbled with fuscous and cinereous, with a small quadrate black spot at the base of the suture: legs rufescent, densely clothed with ashy scales: antennæ piceous, with the funiculus and club rufescent.

Found in the neighbourhood of London, and in Suffolk.

- Sp. 4. obesus. Brevior, crassus, fusco-cinereo squamosus, elytris obsoletè punctato-striatis, pedibus rufescentibus, antennis piceis; rostro obsoletè sulcato. (Long. corp. 2 lin.)
- Cu. obesus. Marsham.-St. obesus. Steph. Catal. 175. No. 1786.
- Short, stout, black, clothed with ashy-brown scales: rostrum with a very obsolete channel, the surface slightly rugose: head faintly punctate: thorax with the side sslightly rounded, somewhat granulated: elytra obsoletely striated, the striæ composed of minute impressions: legs dull rufescent, with cinereous scales: antennæ piceous.

Taken in woods in June, within the metropolitan district; also near Bristol. "Not uncommon (near Swansea), particularly in woods."—L. W. Dillwyn, Esq.

- Sp. 5. cognatus. Augustior, niger, fusco squamosus, thorace punctato, elytris distinctè punctato-striatis, antennis pedibusque rufo-piceis, rostro haud sulcato. (Long. corp. 2½ lin.)
- St. cognatus. Steph. Catal. 175. No. 1787.
- Rather narrow: black clothed throughout with fuscous scales: rostrum obscurely rugose, with a central channel: thorax rather coarsely punctured: elytra somewhat deeply punctate-striate and slightly hispid, the interstices obsoletely rugose: antennæ and legs pitchy-red, with ashy-brown scales on the latter.

Not uncommon within the metropolitan district.

Sp. 6. atomarius. Griseus, atomis maculisque minutis fuscis, pedibus rufis, elytris tenuè striatis. (Long. corp.  $1\frac{1}{2}-1\frac{3}{4}$  lin.)

Entirely of a deep rufo-griseous, sprinkled throughout with minute fuscous or blackish spots, especially on the thorax, which last is somewhat ruggedly punctate: elytra faintly striated, the strix composed of elongate punctures: legs rufous: antennæ rufo-ferruginous.

Not very common: found in woods among thick herbage within the metropolitan district, and in Norfolk, Suffolk, and Somerset-MANDIBULATA. VOL. IV. 30TH SEPT. 1831.

Cu. atomarius. Marsham.-St. atomarius. Steph. Catal. 175. No. 1788.

shire. "Not unfrequent among herbage (near Swansea), and in clover-fields towards the end of summer."-L. W. Dillwyn, Esq.

Sp. 7. subrotundus. Griseus, antennis pedibusque rufescentibus, abdomine ovato subrotundo, thorace ovato. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)

Cu. subrotundus. Marsham.-St. subrotundus. Steph. Catal. 175. No. 1789.

Griscous, uniformly clothed with cupreous or fuscescent scales: head moderate, and, with the rostrum, having a longitudinal channel: thorax ovate, thickly punctured, with a longitudinal groove: elytra somewhat gibbous, rather faintly punctate-striate, with the interstices a little rounded: legs and antennæ dull rufescent.

Not uncommon within the metropolitan district, and in Somersetshire. "In woods (near Swansca) not uncommon."—L. W. Dillwyn, Esq.

b. With the rostrum not divided from the head by a transverse striga.

Sp. 8. nigricans. Niger, squamulis cinereo-fuscis obtectus; thorace scabriusculo' elytris obsoletè striatis, pedibus rufescentibus. (Long. corp. 2 lin.)

Th. nigricans. Kirby MSS.-At. nigricans. Steph. Catal. 175. No. 1790.

Black, clothed with ashy-brown scales: head depressed, with a faint longitudinal channel: thorax slightly rugose or granulated: elytra faintly striated: legs and antennæ rufescent.

Not uncommon within the metropolitan district. "Neighbourhood of Edinburgh."-Rev. W. Little.

- Sp. 9. scrobiculatus. Niger, squamulis rufescentibus obtectis, thorace fove& utrinque magnâ, elytris obsoleté striatis, pedibus nigris. (Long. corp. 2 lin.)
   Cu. scrobiculatus. Marsham.—St. scrobiculatus. Steph. Catal. 176. No. 1791.
- Black, clothed with rufescent scales: antennæ rufous: thorax punctate, with a large, not very deep lateral fovea on each side on the disc: elytra slightly hispid, and very obsoletely striated: legs black.

The Marshamian specimen of this insect is the only one I have yet seen : of its locality I am not aware.

Sp. 10. squamulatus. Fuscus, densè albo-squamosus pilosusque, antennis tibiis tarsisque testaceis, thorace brevissimo, æquali, elytris tenuè striatis. (Long. corp.  $1\frac{1}{2}$  lin.)

Cu. squamulatus. Fabricius .- St. squamulatus .- Steph. Catal. 176. No. 1792.

Subglobose, fuscous, densely clothed with whitish scales and hairs: rostrum rather broad, emarginate, head above flat: eyes small, prominent: thorax very short, transverse, slightly convex, equal: elytra ample, very convex, slightly striated, the striæ obsoletely punctate, the interstices with whitish scales and short erect

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hairs: beneath fuscous: legs moderate: femora fuscous at the apex: tibiæ, tarsi, and base of the femora pale testaceous: antennæ testaceous, with the *club dusky*-brown.

Found near London, but not abundantly: apparently more frequent in the vicinity of Bristol. "Near Edinburgh."—Rev. W. Little.

- Sp. 11. retusus. Niger, squamulis cupreo-cinereis tectus, thorace brevi scabrisculo, antennis pedibusque rufescentibus. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
  Cu. retusus. Marsham. St. retusus.—Steph. Catal. 176. No. 1793.
- Black, clothed with cinereous scales, tinted or glossed with cupreous: head flat above: thorax short, round, rather thickly granulated: elytra slightly striated: abdomen ovate, robust: legs and antennæ rufescent: eyes very prominent.

Frequent in the sand-pits on Hampstead-heath, in May and June. "At times rather plentiful on Crwmlyn Burrows."—L. W. Dillwyn, Esq.

 Sp. 12. nebulosus. Fuscus; squamulis cinereis fuscisque nebulosus, elytris punctato-striatis, interstitiis alternis subelevatis, antennis pedibusque rufo-testaceis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

St. nebulosus. Steph. Catal. 176. No. 1794.

Fuscous; clouded above with fuscous and cinereous scales : head rather depressed: rostrum with a deep longitudinal sulcus: eyes moderate, not very prominent: thorax short, slightly granulated : elytra punctate-striate, the striæ not very deep; the alternate interstices slightly elevated : antennæ and legs entirely rufo-testaceous.

Found by myself near London; but I do not remember its exact locality. I possess one specimen which I found near Ripley, in June, 1827.

B. With the thorax bisinuated at the base.

- Sp. 13. chætophorus. Subglobosus, niger, squamulis cinereis pilisque griseis densè obtectus, thorace posticè transversè impresso, elytris obsoletissimè striatis, antennis pedibusque atris. (Long. corp. 3½ lin.)
- St. chætophorus. Steph. Catal. 176. No. 1795.
- Subglobose, black, densely clothed with ashy scales and short rigid griseous hairs or setæ: head with a longitudinal sulcus: thorax with a faint longitudinal channel, and a deep transverse one near the hinder margin, the disc uniformly clothed with ashy scales: elytra very obsoletely striated, the striæ scarcely punctured: interstices thickly and irregularly clothed with short griseous hairs: legs and antennæ deep black.

Taken near London; in Dorsetshire, and near Bristol.

- Sp. 14. Sus. Niger, nitidus, e'ytris ovatis, suturæ basi linelique laterali argenteo-squamosis. (Long. corp. 2-31/2 lin.)
- Th. Sus. Kirby MS .- St. Sus. Steph. Catal. 176. No. 1796.
- Black, shining, nearly glabrous: head coarsely punctured: eyes brown: thorax short, punctured, with a dorsal channel: elytra ovate, coarsely punctate-striale, the lateral margins broadly clothed with silvery scales; base at the suture the same: legs pitchy-black: antennæ piceous.

Common in sandy districts throughout the metropolitan district. "Cramond."—Rev. W. Little. "In woods (near Swansea), not common."—L. W. Dillwyn, Esq.

- Sp. 15. pilosellus. Niger, griseo-hirtus squamosusque, fronte canaliculatâ, thorace suprà cinereo, quadriculato, elytris anticè angustoribus. (Long. corp. 3-3½ lin.)
- Cu. pilosellus. Gyllenhal.- St. pilosellus. Steph. Catal. 176. No. 1797.
- Black, clothed with griseous hairs and scales: head slightly coriaceous, forehead depressed, with a rather deep longitudinal channel: rostrum with an obsolete transverse fovea at the base: thorax very short, fuscous, with four longitudinal cinereous stripes and a faint dorsal channel, united to a transverse impression near the base: elytra coarctate at the base, rather deeply punctate-striate, the alternate interstices a little narrowed, the broader ones having a row of compact ashy scales: legs short, black: antennæ piceous.

Very abundant within the metropolitan district in June.

- Sp. 16. septentrionis. Fusco-rufescens, squamulis cinerco-albidis variegatus, antennis pedibusque dilutioribus, elytrorum interstitiis alternis carinatis seriatosetiferis. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)
- Cu. septentrionis. Herbst.-St. septentrionis. Steph. Catal. 176. No. 1798.
- Reddish-brown, variegated with ashy-white scales: head rather narrow, thickly punctured, with an impression between the eyes, which are black: thorax very convex, thickly granulated: elytra attenuated posteriorly, somewhat deeply, but remotely striate, with the suture and alternate interstices elevated, and having a series of close, erect, short, piceous setx: legs and antennæ, the last rather long, rufo-ferruginous.

Occasionally found within the metropolitan district.

### GENUS CCCXXV.-Sciaphilus, Schönherr.

Antennæ geniculated, 12-jointed, rather long and slender: scape elongate, clavate, sometimes extending above the eyes: funiculus with its two basal joints rather long, obconic; the remainder sensibly shorter, subnodose; club elongateovate, acuminated. Rostrum scarcely longer than the head and a little narrower, somewhat flat above, with the apex emarginate: eyes small, rounded, but little prominent: thorax gently transverse, with the sides slightly rounded: body oblong-ovate, winged: elytra large, oblong-ovate, setose, convex above, especially behind, with the apex slightly acuminated: legs rather long, slender: femora strongly clavate, and slightly dentate: tibiæ straight, with the apex unarmed.

Sciaphilus differs from Strophosomus and the following genus, not only by having the elytra free, and in possessing wings, but by the texture and form of body, dissimilarity in the structure of the antennæ, dentate femora, &c.

Sp. 1. muricatus. Fusco-cinereus, hispidus, densè cinerco-squamosus, antennis pedibusque fusco-ferrugineis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
Cu. muricatus. Fabricius.—Sc. muricatus. Steph. Catal. 176. No. 1799.

Fuscous-ash, densely clothed with shining ashy scales: head somewhat rugulose: rostrum with the apex glabrous and black: thorax cinereous, with the sides and a narrower dorsal line whitish: scutellum piceous: elytra pale rufopiceous, punctate-striate, the interstices rather smooth, more or less distinctly varied with ashy and fuscescent scales, and each with a series of compact ashy-brown hairs: legs elongate, generally rufo-ferruginous, sometimes with the femora fuscescent: antennæ rufescent, with the club dusky.

Far from uncommon in the woods about London, especially at Darenth, in shady places : also in Somersetshire. "Not uncommon (near Swansea)."—L. W. Dillwyn; Esq. "Black Hall Wood."— T. C. Heysham, Esq.

**Sp. 2.** asperatus. Obscure-cinereus, fusco-maculatis, thorace lineis tribus cinerascentibus, antennis pedibusque rufescentibus. (Long. corp. 3 lin.)

Cu. asperatus. Fabricius .- Sc. asperatus. Steph. Catal. 176. No. 1800.

- Dull cinereous, clouded with fuscous: head immaculate: thorax fuscous, with three cinerascent lines, one dorsal, the others lateral and broader: elytra faintly striated, the interstices spotted with fuscous, and having short scattered hairs or sets: antennæ and legs reddish.
- Although darker in colour than the preceding, the antennæ and legs are paler: the insect may nevertheless be only a variety.

Found occasionally within the metropolitan district. "On willows and on Crwmlyn-burrows, not common."—L. W. Dillwyn, Esq.

Sp. 3. pusillus. Grisco-cinercus, haud variegatus, elytris tenuè striatis, interstitiis subhispidis, antennis rufo-piceis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
Sc. pusillus. Steph. Catal. 176. No. 1801. Griseous-ash, not variegated or spotted: head slightly rugulose: thorax piceous, immaculate: elytra faintly punctate-striate, the interstices slightly clothed with a series of cinereous or grisescent hairs: legs rufescent: antennæ rufopiceous.

Found near London.

### GENUS CCCXXVI.-BRACHYSOMUS, Schönherr.

Antennæ geniculated, 12-jointed, slightly elongated and thickened, setose; scape a little incrassated towards the apex, and slightly curved, reaching to the eyes; funiculus with the two basal joints rather long, subconic; the third stoutest; the remainder short, subequal truncate at the apex; club ovate. *Rostrum* very short, aboveflat, smooth, the antennal groove short, small, curved, deep at the base, obsolete at the apex: eyes rounded, slightly depressed: thorax small, short, the sides a little rounded, above rather convex: body small, ovate, apterous: *clytra* ample, united, above convex, subglobose: *legs* rather short.

The singular little insect which forms the type of this genus may be known from the species of the preceding genus by having the elytra united, and the body consequently apterous, the antennæ stouter, the antennal groove less distinct, and the body very much rounded.

Sp. 1. hirsutulus. Nigro-fuscus, pubescens, antennis pedibusque rufo-testaceis, elytris globosis, hispidis, profundè punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>2</sup>/<sub>3</sub> lin.)
Cu. hirsutulus. Fabricius.—Br. hirsutulus. Steph. Catal. 176. No. 1802.

Black-brown, pubescent; head black, clothed with whitish hairs: forehead flat: thorax punctulated, with the anterior margin, sides and a faint dorsal line whitish-ash, and clothed throughout with erect, stout hairs: elytra punctate-striate, with ashy-white scales on the interstices, and rigid, erect, spinelike hairs throughout: body beneath clothed with cinereous scales: antennæ and legs rufo-testaceous.

Very abundant in hedges and sandy lanes within the metropolitan district; also in woods and meadows. "Braedhills, near Edinburgh."—*Rev. W. Little.* "Among herbage (near Swansea), not common."—*L. W. Dillwyn, Esq.* "Bottisham."—*Rev. L. Jenyns.* 

### GENUS CCCXXVII.—SITONA, Germar.

Antennæ geniculated, 12-jointed, rather short and slender; the scape elongate, clavate, reaching to the middle of the eyes; funiculus with the first and second

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joints rather long, obconic; the remainder short, nodose; elub elongate-ovate, acuminate. Rostrum short, nearly horizontal; the apex emarginate, above flat, with an impressed longitudinal line or groove: eyes rather large, sometimes rounded, moderately prominent, or oblong and very prominent: thorax rounded, with the sides a little dilated beyond the middle, or dilated in the middle: scutellum minute, rounded: elytra elongate, with the apex rounded, the shoulders obtusely angulated: legs moderate: femora incrassated in the middle: tibiæ truncate at the apex, unarmed.

Sitona, as at present constituted, contains two very distinct groups, or probably genera, one of which is characterized among other particulars by having the eyes of moderate size and round, the thorax rounded behind the middle, &c.:—the other by having the eyes very prominent and oblong, the thorax considerably dilated in the middle, the rostrum longer, &c.:—the last group, or the subsequent section B., forms the subgenus Charagmus of Schönherr.

Sp. 1. Ulicis. Atra, squamulis cinereis variegata, thoracis lateribus lineáque medio pallidis, elytris haud lineatis, humeris liturá pallidá. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3<sup>1</sup>/<sub>4</sub> lin.)

Black: variegated with asky scales, tinted with a greenish-copper on the head and thorax: the rostrum broad, with a deep groove: thorax with the sides considerably dilated and pale, the disc with a slender pale line, and finely punctured: elytra rather obsoletely punctate-striate: the interstices broad, varied with ashy scales, and the shoulder with a pale streak: legs black, with the tibiæ and tarsi somewhat piceous: antennæ piceous with the club dusky.

Not uncommon throughout the metropolitan district on sandy heaths, and also near Bristol. "Raehills, rather common."—Rev. W. Little. "Not unfrequent (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 2. Spartii. Nigra, squamulis virescentibus variegata, thoracis lateribus pallidis, elytris tenuè punctato-striatis, antennarum basi, tarsisque atro-piceis. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

Si. Spartii. Kirby MSS .- Steph. Catal. 177. No. 1804.

Black, variegated with greenish scales: rostrum moderate, with a slight longitudinal groove: head and thorax thickly and finely granulated, the latter with

<sup>A. With the eyes small, somewhat depressed.
a. Elytra hispid. 1. Apterous.</sup> 

Si. Ulicis. Kirby MSS.-Steph. Catal. 177. No. 1803.

the margins dilated and pale: elytra rather delicately punctate-striate, the interstices varied with fuscous and greenish, and each with a row of griseous set or hairs: femora black: tibiæ and tarsi dark-pitchy: antennæ with the basal joint dark-piccous, the remainder dusky.

Found also on sandy heaths throughout the metropolitan district; also in Suffolk and Norfolk. "Swansea."—L. W. Dillwyn, Esq.

Sp. 3. femoralis. Nigra, squamulis virescentibus subnebulosa, antennis pedibusque piceis, femoribus magnis atris. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
Si. femoralis. Steph. Catal. 177. No. 1805.

Black, slightly clouded with greenish scales: head and thorax rather thickly but finely granulated; the rostrum with a deep groove: elytra rather deeply punctate-striate, the interstices narrow and varied with greenish scales, and a few scattered hairs: femora, especially the anterior, large, deep pitchy-black: tibiæ, tarsi, and antennæ entirely pitchy.

Found near London, and in the vicinity of Bristol.

Sp. 4. pleuritica. Nigra, squamulis virescenti-cinereis tenuè obtecta, elytris cinereo hispidis, pleuribus argento cinereis. (Long. corp. 1½-2¼ lin.)
Si. pleuritica. Kirby MSS. Steph. Catal. 177. No. 1806.

Black, delicately clothed above with greenish-ashy scales: rostrum with a deep channel, and with the head and thorax slightly punctate; the latter immaculate: elytra regularly but slightly clothed with greenish-ashy scales, and rather thickly furnished with ashy hairs, striate, the strix moderately deep and punctured, and placed rather irregularly in pairs: pleur& bright silvery-ash: legs and antennæ dark-piccous, with the tibiæ and tarsi rather paler.

Taken in the vicinity of the metropolis, and in Suffolk.

#### 2. Winged.

Sp. 5. hispidula. Nigra, fusco-squamosa, femoribus piceis, tibiis tarsisque testaceis, thorace profundè punctato, cinereo lineato, elytris cinerco-variis, piliserectis albidis seriatis. (Long. corp. 2-2<sup>1</sup>/<sub>4</sub>lin.)

Cu. hispidulus. Fabricius .- Si. hispidula. Steph. Catal. 177. No. 1807.

Black, with fuscous scales: head short, rather deeply punctured with an impressed line between the eyes: thorax deeply punctate, with a narrow dorsal line on the lateral margin ashy-white: elytra rather deeply punctate-striate, densely varied with fuscous and ashy scales, and a series of rigid whitish hair, in each interstice: body black beneath, with the thorax and breast somewhat metallic: legs moderate: femora fuscous: tibiæ and tarsi testaceous: antennæ ferruginous, with the club fuscous. Abundant on sandy heaths, &c., throughout the metropolitan district; also found in Devonshire; near Bristol; in Norfolk, Suffolk, &c. "Raehills."—Rev. W. Little. "In moist meadows and on the naked sand hills (near Swansea)."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns. "Harrowby."—T. C. Heysham, Esq. "Epping."—Mr. Doubleday.

- Sp. 6. pallipes. Niger, fusco squamosa, pedibus pallidè testaceis, thorace subpunctato, lateribus pallidis, elytris immaculatis, pilis erectis cinereis seriatis. (Long. corp. 21 lin.)
- Si. pallipes. Steph. Catal. 177. No. 1808.
- Black, with fuscous scales: head slightly punctate, with a faint frontal channel: thorax rather convex, faintly punctate; with the lateral margins pale: elytra not very deeply punctate-striate, the interstices immaculate, fuscous, with a row of ashy-hairs in each: legs entirely and antennæ pale testaceous; the club of the last slightly dusky.

Inhabits the metropolitan district, and near Bristol.

b. Elytra pubescent, but not hispid.

- Sp. 7. lineata. Nigra, supra fusco-subtus cinereo-squamulosa, thorace elytrisque albido lineatis. (Long. corp. 2-21/2 lin.)
- Cu. lineatus. Linné.-Don. xi. pl. 389. f. 2.-Si. lineata. Steph. Catal. 177. No. 1809.
- Black, above clothed with fuscous, beneath with ashy, or silvery scales: head very finely punctured: thorax with a moderately deep transverse impression near the apex, which latter is slightly elevated; on the disc is a slender dorsal pale line, and the lateral margins are also pale: elytra regularly punctatestriate, with the alternate interstices whitish, especially the humeral one: femora black: tibiæ, tarsi, and antennæ rufescent.
- Var. B. Si. pisivora. Steph. Catal. l. c. No. 1810.—Rufescent, with the upper surface clothed with griseous, and the lower with silvery scales; the thorax and elytra with white lines.

An extremely variable species; but may be always known by its lineated elytra.

Abundant in gardens, fields, &c., especially where peas are grown, throughout the south of Britain. "Common (near Swansea)."—L. W. Dillwyn, Esq. "Harrowby."—T. C. Heysham, Esq. "Bottisham."—Rev. L. Jenyns.

Sp. 8. grisea. Nigra, supra squamulis griseo fuscis subtus cinereis tecta, thorace albido-lineato, elytris striatis, haud lineatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
Cu. griseus. Fabricius.-Si. grisea. Steph. Catal. 177. No. 1811.

Black, clothed above with griseous and beneath with cincreous scales: thorax with three whitish lines: elytra striated, immaculate, not lineated: femora dusky: tibiæ, tarsi, and antennæ rufescent.

Less common than the last, but generally distributed throughout the south of Britain. "Raehills."—Rev. W. Little. "Among herbage (near Swansea), not common."—L. W. Dillwyn, Esq. "Harrowby."—T. C. Heysham, Esq. "Bottisham."—Rev. L. Jenyns.

Sp. 9. ruficlavis. Nigra nitidiuscula, antennis omninò tibiis tarsisque rufis, elytris punctato-striatis. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

Cu. ruficlavis. Marsham.-Si. ruficlavis. Steph. Catal. 177. No. 1812.

Black, slightly shining: head faintly punctured: thorax ovate, punctured, rather narrower than the elytra united; the latter faintly punctate-striate, the interstices immaculate: femora black: tibiæ and tarsi pale rufous: antennæ entirely of the latter colour.

Not very common; found within the metropolitan district, and near Bristol. "Among herbage on Crwmlyn Burrows."—L. W. Dillwyn, Esq.

- Sp. 10. nigriclavis. Nigra obscura, antennis tibiis tarsisque rufis, antennarum clavâ nigrâ. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)
- Cu. nigriclavis. Marsham.-Si. nigriclavis. Steph. Catal. 177. No. 1813.

Oblong-ovate; dull black: thorax ovate, slightly punctured, and about as narrow again as the *elytra* united; the latter rather faintly punctate-striate, immaculate: femora black: tibiæ and tarsi rufous: antennæ rufous, with the club black.

Also rather uncommon; found throughout the metropolitan district, and in Somersetshire and Devonshire; also, I believe, in Norfolk and Suffolk.—" On a quince-tree at the Willows (near Swansea), in June."—*L. W. Dillwyn, Esq.* 

Sp. 11. canina. Nigra, densè fusco squamosa, thorace longiori subtilissimè punctulato, obsoletè trilineato, antennarum basi tibiisque ferrugineis. (Long corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

Cu. canina. Fabricius.-Si. canina. Steph. Catal. 177. No. 1814.

Black, densely clothed above with fuscous scales: head very finely punctured, slightly glossed with coppery; with the eyes blackish: thorax rather long, with the lateral margins slightly dilated, the disc moderately convex, with a narrow dorsal line and the margins whitish, marked with four small yellowish white dots between, sometimes obsolete: elytra punctate-striate, entirely clothed

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with dusky-testaceous scales, sometimes variegated with whitish in the alternate interstices : *femora black* : tibiæ, tarsi, and base of the antennæ ferruginous : club of the latter dusky.

Common on sandy heaths, especially near Hampstead, within the metropolitan district. "Raehills."—Rev. W. Little. "Swansea."—L. W. Dillwyn, Esq.

Sp. 12. flavescens. Flavescens, oculis nigris, thorace punctis lineisque albidis obsoletissimis, elytris atomis nigris. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

Cu. flavescens. Marsham.-Si. flavescens. Steph. Catal. 177. No. 1815.

Yellowish, with black eyes: head small, faintly punctate: throat rather elongate, with four or six whitish spots, and the lateral margins pale: elytra yellowish, with a few scattered black dots: antennæ and legs entirely pale yellow.

Apparently rare: I possess two examples from the Marshamian Collection; of their locality I am not aware.

Sp. 13. puncticollis. Nigra, densè fusco aut griseo squamosa, thorace trilineato punctisque duabus pallidis, antennis tibiis tarsisque ferrugineis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)

Cu. puncticollis. Kirby MSS. ?-Si. puncticollis. Steph. Catal. 177. No. 1816.

Black, densely clothed with fuscous or griseous scales: thorax with three pale ashy, or griseous lines, between which are two pale or round spots placed transversely; the disc is obsoletely punctured, and the sides slightly rounded: elytra rather faintly and somewhat distantly punctate-striate, the interstices flat, clothed with fuscous or griseous scales, two of them very frequently with an interrupted fuscescent streak, and towards the shoulder is generally a paler line: femora pitchy-black: tibiæ, tarsi, and antennæ ferruginous.

Frequently taken in grassy places near the metropolis, especially in Battersea-fields. "Raehills."—Rev. W. Little. "Bottisham." —Rev. L. Jenyns.

Sp. 14. longiclavis. Nigra, griseo squamosa, thorace obsoletissimè trilineato lateribus haud dilatato, elytris immaculatis, antennarum capitulo atro elongatoque, basi pedibusque piceo-ferrugineis. (Long. corp. 3 lin.)

Cu. longiclavis. Marsham MSS .- Si. longiclavis. Steph. Catal. 178. No. 1817.

Black, densely clothed with griseous scales: thorax somewhat cylindric, the sides not dilated, and having three very obsolete pale streaks of scales: elytra faintly punctate-striate, the interstices immaculate: legs entirely pitchy ferruginous: antennæ the same at the base; the club elongate and black.

Less abundant than the last; found within the metropolitan district.

Sp. 15. suturalis. Atra, squamulis cinereis aut virescentibus obtecta, thoracis lateribus, suturâ, lineâque longitudinali elytrorum pallidioribus, antennarum basi pedibusque ferrugineis. (Long. corp. 2-2<sup>1</sup>/<sub>4</sub> lin.)

Si. suturalis. Steph. Catal. 178. No. 1818.

Black, not very thickly clothed with ashy or greenish scales: rostrum and forehead with a slightly impressed longitudinal line: thorax with the lateral margins—and in some instances with a narrow central line—pale; the suture and a streak down the centre of each elytron also pale; the elytra faintly punctate-striated: legs and base of the antennæ ferruginous; club of the latter, and sometimes the femora, dusky or black.

Taken near London; but more abundantly in the vicinity of Bristol.

Sp. 16. subaurata. Nigra, squamulis subauratis tenuè obtectis, thorace subtilissimè punctulato, obsoletè trilineato, antennis pedibusque testaceo-ferrugineis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)

Si. subaurata. Kirby MSS .- Steph. Catal. 178. No. 1819.

Black, slightly clothed with cupreous or golden scales; thorax very finely and thickly punctured, with three very obscure pale lines, one central, the others lateral: elytra punctate-striate, the striæ rather close, and the interstices a little varied: legs and antennæ rusty-testaceous: the femora and club of the antennæ are sometimes dusky; in which it closely resembles the following species, of which (were it not from its smaller size) it might seem to be a variety.

Common throughout the metropolitan district, and at Dover. "Raehills, rare."-Rev. W. Little.

 Sp. 17. tibialis. Nigra, parciùs cupreo squamulosa, thorace subtilissimè punctulato, suprà trilineato, pectoris lateribus lineà argenteà utrinque, tibiis testaceis. (Long. corp. 2-24 lin.)

Cu. tibialis. Herbst.-Si. tibialis. Steph. Catal. 178. No. 1820.

Black, sparingly clothed with coppery scales; head and thorax very finely punctured, the latter with three rather obsolete silvery-white lines, the lateral ones continued to the margins of the breast: elytra rather faintly punctate-striate, the interstices clothed with coppery-brown scales; femora generally black; tibiæ, and frequently the tarsi, pale ferruginous: antennæ pale ferruginous, with the club rather dusky.

Abundant, not only in the vicinity of the metropolis, but in other places in the south of England.

3p. 18. humeralis. Nigra aut fusca, griseo aut cinereo squamulosa, thorace obsoletè trilineato, elytris tenuè punctato-striatis, scutello, lineolâque humerali pallidis; antennis pedibusque rufo-ferrugineis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>2</sub> lin.) Si. humeralis. Kirby MSS.-Steph. Catal. 178. No. 1821.

Black or fuscous, clothed with griseous or cinereous scales: thorax with three rather obsolete pale lines, one narrow in the centre, the others lateral, broader, and more distinct: elytra rather faintly punctate-striate, with a distinct abbreviated streak at the shoulders, continuous with the pale lateral lines on the thorax, and the scutellum whitish or ashy: legs entirely and the antennæ pale rufo-ferruginous: club of the latter and femora sometimes a little suffused with dusky.

Common within the metropolitan district; also near Barham and in other parts. "Raehills."—Rev. W. Little. "Bottisham."— Rev. L. Jenyns.

Sp. 19. Pisi. Nigra, cinereo squamosa, thoracis lateribus scutelloque pallidis, antennarum basi tibiis tarsisque rufo-testaceis. (Long. corp. 2-2½ lin.)
Si. Pisi. Steph. Catal. 178. No. 1822.

Black, rather densely clothed with cinereous scales; thorax with the lateral margins pale; the disc fuscous and finely punctured; scutellum pale: elytra rather faintly punctate-striate; the interstices immaculate, the shoulders sometimes with an obsolete pale dash: femora black: tibiæ and tarsi pale rufotestaceous: base of the antennæ the same: club black.

Found in gardens within the metropolitan district, frequenting peas.

#### B. With the eyes large, prominent.

a. Elytra hispid.

Sp. 20. crinita. Rufo-griseis, squamulis cinereo-albidis tecta, thorace trilineato, elytris maculis minutis nigris, tibiis tarsisque rufis. (Long. corp. 2 lin.)
Cu. crinitus. Olivier.—Si. crinita. Steph. Catal. 178. No. 1823.

Rufo-griseous, clothed with ashy-white scales: thorax slightly punctured, short, with three pale lines, one central, the others lateral: elytra faintly punctatestriate, the interstices varied with small rounded black or deep fuscous spots, and furnished with griseous hairs: femora dusky or black: tibiæ, tarsi and antennæ rufous, the club of the latter dusky.

Not very common : found within the metropolitan district. "Near Swansea."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

- Sp. 21. lineella. Nigra, squamulis setisque fuscis tecta, thorace albido lineato, elytris lineá utrinque unicâ inæquali, albidâ nigro-maculatâ. (Long. corp. 2 lin.)
- Cu. lineellus. Linné.-Si. lineella. Steph. Catal. 178. No. 1824.
- Black, clothed with fuscous scales and hairs: head and thorax rather deeply punctate, the latter with three pale or whitish hairs, one dorsal, the others

lateral: elytra punctate-striate, clothed with short, erect, ashy-brown setæ, and with an irregular white streak from the base of the shoulders to the apex, in which are some black spots placed somewhat at random : femora black; with a whitish ring at the apex : tibiæ and tarsi rufo-testaceous : antennæ ferruginous, with the club dusky.

Less common than the foregoing; found near London and in Suffolk. "Neighbourhood of Swansea."-L. W. Dillwyn, Esq.

Sp. 22. albescens. Nigra, squamulis albido-cinereis tecta, thorace sublineato elytris immaculatis, pedibus rufo-testaceis. (Long. corp. 2 lin.)
Si. albescens. Kirby MSS.—Steph. Catal. 178. No. 1825.

Black, clothed with whitish scales and pale cinereous hairs: head and thorax moderately punctured; the latter with three faint lines: elytra punctatestriate, immaculate: legs entirely rufo-testaceous: antennæ pale ferruginous, with the club concolorous.

Not common; found within the metropolitan district, and in Suffolk.

b. Elytra slightly pubescent. 1. Body short, ovate.

Sp. 23. cambrica. Nigra, immaculata, suprà parciàs cinereo-fusco subtus cinereo squamosa, antennis pedibusque concoloribus. (Long. corp. 3-3<sup>1</sup>/<sub>2</sub> lin.)
 Si. cambrica. Kirby MSS.—Steph. Catal. 178. No. 1826.

Black, immaculate, above slightly clothed with ashy-brown scales, beneath with cinereous: head and thorax obsoletely rugulose, the latter with the margins a little dilated: elytra rather coarsely punctate-striate, the interstices sometimes faintly rugulose, and the scales occasionally a little clouded with a deeper hue, producing an obscure tessellated appearance: legs and antennæ entirely black, with ashy pubescence: body beneath rather densely clothed with ashy scales.

Found occasionally in gravel pits near London: I have frequently taken it at Hertford, and once or twice at Ripley. "Not uncommon on Crwmlyn-burrows."—L. W. Dillwyn, Esq.

2. Body elongate, sublinear.

Sp. 24. fusca. Nigro-fusca, suturâ pallidâ, corpore subtus albido, antennis pedibusque piceo-atris. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4<sup>1</sup>/<sub>4</sub> lin.)
Cu. fuscus. Marsham.-Si. fusca. Steph. Catal. 178. No. 1827.

Bluck-brown, clothed above with fuscous and beneath with whitish scales : rostrum with a narrow and rather deep, elongate channel : thorax somewhat convex, with a faint longitudinal groove, and an obscure fovea on each side towards the anterior edge: *elytra* not very deeply punctate-striate, the suture *with a* broad *pale*, *common streak*: legs deep black, with a pitchy tinge, especially on the tibiæ and tarsi, clothed with a fuscescent pubescence: antennæ similar: anterior femora rather stouter than the rest.

Frequent in sand and gravel pits near London, especially at Hampstead and on Wimbledon-common. "Common on Crwmlynburrows."—L. W. Dillwyn, Esq.

## GENUS CCCXXVIII.-POLYDRUSUS, Germar.

Antennæ geniculated, 12-jointed, rather long and slender, the scape clavate, sometimes extending beyond the eyes; the two basal joints of the funiculus elongate, obconic; the others variable, sometimes very short and obconic, at others nodose; club ovate, acuminate, 4-articulate. Rostrum short, rather thick, slightly rounded, narrower than the head; antennal groove linear, curved, united beneath: eyes rounded, slightly prominent: thorax small, short, truncate anteriorly and posteriorly: elytra convex above, especially behind, the shoulders obtusely angulated: legs moderate: femora sometimes with an obtuse tooth, or unarmed: tibia with the apex unarmed, of the posterior dilated.

Polydrusus differs from the foregoing genera by having the body more densely clothed with scales, and elongate or oblong; and by having the second and third joints of the antennæ nearly of equal length:—the species are all furnished with wings and inhabit trees; they differ slightly in habit, but are evidently dissimilar to the Phyllobii and Nemoici, with which genera they have recently been reunited.

A. With the femora dentate.

Sp. 1. amaurus. Niger, squamulis glauco-argenteis undique tectus, antennis pedibusque testaceis, femorum clavâ nigricante, posticorum dentato. (Long. corp. 2<sup>1</sup>/<sub>4</sub> lin.)

Cu. amaurus. Marsham.-Po. amaurus. Steph. Catal. 178. No. 1828.

Black, clothed throughout with glaucous-silvery scales: thorax convex, rather deeply punctate-rugose: elytra very convex, especially behind, moderately punctate-striate, the interstices flat, nearly smooth: body black beneath, with the apex obscure testaceous: legs elongate, dull testaceous, with whitish pubescence: femora clavate, the clava black, or fuscous; and of the posterior femora, armed with an obtuse stout tooth: antennæ rufo-testaceous, with the club dusky. Rare near London, and I believe not common in other parts. "On the sand-hills (near Swansea), not common."—L. W. Dillwyn, Esq.

- Sp. 2. confluens. Niger, squamulis cinereo-argenteis adspersus, antennis pedibusque testaceis, femoribus clavatis nigris, omnibus dentatis. (Long. corp. 2½ lin.)
- Po. confluens. Kirby MSS.—Steph. Catal. p. 178. No. 1829.
- Black, slightly clothed with ashy-silvery scales, a little varied on the elytra: head and thorax slightly punctate, the latter somewhat globose, with the lateral margins densely squamous: elytra moderately punctate-striated, the interstices rather broad and flat: legs slightly elongate: femora black—the base sometimes pale—all dentate; tibiæ and tarsi testaceous: antennæ the same, with the club occasionally dusky.

Rare: taken near London, and in Suffolk.

- Sp. 3. marginatus. Rufo-griseus, squamulis piliformibus cinereo-griseis tectus, thoracis elytrorumque lateribus albidis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>4</sub> lin.)
  Po. marginatus. Steph. Catal. 178. No. 1830.
- Rufo-griseous, clothed with hair-like griseous-ash scales : thorax slightly globose, with an obsolete impressed transverse line at the base, the scales on the lateral margins, and on a narrow line in the centre, rather whitish, and more densely placed: elytra rather deeply punctate-striate, clothed on the back with griseous ash, and on the sides with whitish-ash scales : legs entirely pale rufo-testaceous: femora clavate, and all dentate : antennæ also pale rufo-testaceous.
- The tips of the posterior and intermediate femora are sometimes slightly suffused with dusky externally.

Found at Birch-wood in May and June, frequenting juniper bushes.

- Sp. 4. pulchellus. Ater, squamulis aureo-griseis, parciùs tectus, elytris lineis duabus marginibusque pallidioribus, antennis pedibusque rufo-testaceis. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
- Po. pulchellus. Steph. Catal. 178. No. 1831.
- Slender, black, clothed rather sparingly with golden-griseous scales; rostrum short: head broad: thorax with an impressed transverse line within the anterior margin, the disc subglobose: elytra slightly punctate-striate, the interstices narrow, the second and fifth from the suture and the marginal one densely clothed with pale griseous scales, the remainder rather sparingly so: antennæ and legs entirely of a pale dull griseous-testaceous: femora slightly dentate.

Of this beautiful species I possess a single example, which I captured at Darenth-wood many years since.

- Sp. 5. cervinus. Niger, squamulis cinereis aut aureis undique adspersus, elytris maculis denudatis fuscis, antennarum basi rufescente, tarsis rufis. (Long. corp. 2<sup>1</sup>/<sub>4</sub>-2<sup>3</sup>/<sub>4</sub> lin.)
- Cu. cervinus. Linné.-Po. cervinus. Steph. Catal. 179. No. 1832.
- Black, clothed throughout with glossy cinereous or golden—sometimes virescent —scales: thorax with a transverse impression within the base and the apex, the lateral margins and a narrow line in the middle sometimes more densely squamous than the rest: elytra with the shoulders prominent, rather deeply punctate-striate, the interstices varied with unequal denuded fuscous spots: body beneath clothed with silvery-ash scales: legs black, with cinereous pubescence: tarsi rufous: all the femora with a small, acute tooth: antennæ slender, rufescent, with the club black.

Extremely variable in the colour of the scales, and also in size.

Not uncommon in hedges in the vicinity of woods, during the month of June, within the metropolitan district. "In woods (near Swansea), not common."—L. W. Dillwyn, Esq. "Kingsmoor."— T. C. Heysham, Esq.

- Sp. 6. melanotus. Niger, squamulis virescentibus adspersus, elytris immaculatis, antennarum basi rufescente, capitulo atro. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
   Po. melanotus. Kirby? MSS.—Steph. Catal. 179. No. 1833.
- Black, clothed with shining greenish scales: thorax with the disc somewhat convex, the apex with a transverse impression, from the centre of which an obscure abbreviated dorsal carina arises; the base simple: elytra punctatestriate, the interstices immaculate: legs, including the tarsi, entirely black, with an ashy-pubescence: antennæ rather slender, with the capitulum black.

Found in the vicinity of the metropolis, and in Suffolk.

- Sp. 7. sericeus. Niger squamulis viridibus opacis tectus, antennis pedibusque pallide testaceis, femoribus subdentatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
- Cu. sericeus. Schaller.-Po. sericeus. Steph. Catal. 179. No. 1834.
- Black, clothed throughout with opaque greenish scales : head porrect, with deep green scales and an impression between the eyes: thorax rather convex, obsoletely impressed transversely within the base and the apex: elytra large, with the suture slightly elevated behind, rather faintly punctate-striate, the interstices clothed with opaque greenish scales and immaculate : legs pale testaceous, with the femora rather thickened, armed with an obsolete tooth, slightly dusky, and clothed with greenish scales without : antennæ rather slender, pale testaceous, with the club dusky.
  - Apparently rare: I have found it near London; but most of my MANDIBULATA. Vol. IV. 31st Oct. 1831. L

specimens were received from the vicinity of Bristol. "In woods (near Swansea), not common."—L. W. Dillwyn, Esq.

B. Femora unarmed, posterior sometimes slightly dentate.

Sp. 8. undatus. Elongatus, niger squamulis cinereo-argenteis tectus, antennis pedibusque rufis, elytris fasciis tribus undatis fusco-squamosis, thorace angusto, cylindrico. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

Cu. undatus. Fabricius .- N. G. undatus. Steph. Catal. p. 179. No. 1837.

Elongate, black, rather densely clothed with ashy scales: rostrum black, about as long as the head: thorax subcylindric, narrow, the sides most densely squamous: elytra ample, moderately punctate-striate, the scales somewhat silvery on the sides and apex, and on the back of an obscure ashy-white, the surface varied with three waved squamous fascia, sometimes of a deep-brown hue, at others very pale, or nearly obliterated: legs rufescent: antennæ slender, of the same hue.

Not uncommon in woods and thick hedges within the metropolitan district. "Taken in oaks at Briton Ferry, by Mr. Millard; and among herbage in the Penllergare woods, not common."— L. W. Dillwyn, Esq. "Raehills and Roxburghshire."—Rev. W. Little.

- Sp. 9. fulvicornis. Elongatus, rufo-brunneus, cinereo-squamosus, antennis pedibusque rufo-testaceis, elytris fasciis tribus denudatis, thorace inequali. (Long. corp. 2 lin.)
- Cu. fulvicornis. Fabricius .- N. G. fulvicornis. Steph. Catal. 179. No. 1838.
- Red-brown, clothed with ashy-scales: rostrum rufo-ferruginous, rather shorter than the head: thorax small, with the sides unequal, the disc transversely convex, with minute ashy-hairs and scales, and on each side behind the middle an abbreviated, slightly impressed, line: elytra ample, moderately punctatestriate, clothed with small scales, and short ashy-white hairs, having three denuded fasciæ: legs elongate, slender, pale reddish: antennæ slender, reddish.

Rare; but found occasionally within the metropolitan district in June.

- Sp. 10. micans. Niger, squamulis aureo-cupreis, aut virescentibus adspersus, antennis pedibusque rufis, femoribus posticis subdentatis. (Long. corp. 3-5 lin.)
- Cu. micans. Fabricius.—Po. micans. Steph. Catal. 179. No. 1835. Cu. Pyri. Don. iv. pl. 121. f. 314.

Black, clothed with narrow brilliant coppery-gold or greenish scales : head and

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thorax punctured, the latter small, and the punctures rather coarse: elytra ample, rather deeply crenate-striate, with the interstices smooth, and clothed with hair-like scales of variable hue: legs entirely rufo-testaceous, with the femora slightly clavate, the posterior ones armed with a minute tooth: antennæ pale testaceous, with the club dusky.

Extremely variable in the colour of the scales, and in some examples-probably immature-the ground colour is pitchy-red.

Not very abundant within the metropolitan district, frequenting the flowers of various trees. "(Near Swansea) not common."— L. W. Dillwyn, Esq. "Davidson's-bank."—T. C. Heysham, Esq.

- Sp. 11. flavipes. Niger, squamulis viridi-sericeis, pilisque fuscis tectus, antennis pedibusque pallidè testaceis, femoribus omnibus muticis. (Long. corp. 3–4 lin.)
- Cu. flavipes. De Geer.-Po. flavipes. Steph. Catal. 179. No. 1836.
- Black, densely clothed with brilliantly glossy grass-green or bluish-green scales, and short fuscous hairs: rostrum very short: head rather large, eyes globose, brown: thorax very short, transverse, finely granulated: elytra ample, punctate-striate, the interstices smooth, squamous, and having a few short griseousbrown hairs: legs elongate, slender, entirely testaceous or flavescent, except the apex of the claws, which is black: antennæ also entirely testaceous, and very slender.

Common in the neighbourhood of London. "Not uncommon (near Swansea)."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

- Sp. 12. speciosus. Niger, impubis, squamulis viridi-sericeis tectus, antennarum basi pedibusque rufo-testaceis, elytris punctato-sulcatis. (Long. corp. 3-4 lin.)
  Po. speciosus. Steph. Catal. 412. No. 1836 \*. Curtis, vi. pl. 278.
- Black, glabrous, densely clothed with brilliant silky-green scales—sometimes tinted with bluish: rostrum moderate, with an impression at the base: head moderate: thorax slightly elongate, with a faint dorsal carina, the disc punctured: elytra oblong, rather deeply punctate-striated, or somewhat sulcate, the sulci naked, the interstices densely clothed with scales: legs entirely rufotestaceous: femora unarmed: antennæ moderately slender, pale testaceous, with the club deep black, or dusky.
- Excepting in having the club of the antennæ black, and the disc of the thorax not transversely convex, this elegant species closely resembles Po. corruscus of Germar.

This beautiful insect was discovered by my friend the Rev. G. T. Rudd, near Kimpton, in Hants, and to him I am indebted for a fine series.

## GENUS CCCXXIX.-NEMOICUS, Dillwyn.

Antennæ geniculated, 12-jointed, rather slender, the basal joint reaching beyond the eyes; the two basal joints of the funiculus of nearly equal length, somewhat elongate, the remainder shorter and slightly obconic, the club elongateovate. Rostrum short, rather stout, with the tip rather narrowed: eyes rounded, prominent: thorax small, slightly elongate: body pilose, winged: elytra elongate, slightly convex, clothed with a few hair-like scales, the apex rounded: legs rather long, stout, subequal: femora rather thick at the apex, and armed with a stout tooth: tibiæ curved.

Nemoicus differs from the preceding and the following genera by having the body more elongate, and scarcely clothed with scales; the elytra oblong, somewhat cylindric, and rounded at the apex: the legs rather long and slender, with the femora all acutely dentate.

- Sp. 1. oblongus. Niger, aut brunneus, antennis pedibusque rufo-ferrugineis, elytris pallidè ferrugineis, margine nigro. (Long. corp. 2-2½ lin.)
- Cu. oblongus. Linné.-Martin, C. pl. 20. f. 33.-N. G. oblongus. Steph. Catal. 179. No. 1839.
- Black, with the antennæ and legs entirely of a rufo-ferruginous hue: head thickly punctured, clothed with depressed, elongate, ashy hairs: rostrum with the apex rufo-piceous: thorax with a transverse impression within the base and apex, pilose like the head: elytra punctate-striate, deep ferruginous, or brown; or pale testaceous, with the lateral margin black or dusky, the surface clothed with an ashy pubescence: legs stout, rufo-ferruginous, or pale testaceous: antennæ pale testaceous, with the club dusky.
- Variable in colour; sometimes brunneous, or of a very pale testaceous, according to its state of maturity.

Not uncommon in woods and bushy hedges throughout the metropolitan district. "Common in woods (near Swansea)."—L. W. Dillwyn, Esq. "Raehills and Peebleshire, common."—Rev. W. Little. "Bottisham."—Rev. L. Jenyns. "Epping."—Mr. Doubleday.

# GENUS CCCXXX.-PHYLLOBIUS, Schönherr.

Antennæ geniculated, 12-jointed, moderately stout, the scape nearly reaching to the thorax, and distinctly incrassate towards the apex: funiculus with the two basal joints elongate, obconic; the remainder short, sometimes obconic, at others nodose: club elongate, narrower or subovate, acuminate. Rostrum short, somewhat rounded, the apex deeply notched: eyes round, prominent: thorax small, somewhat coarctate anteriorly, the sides rounded, the disc above transversely convex: body squamous, winged: elytra oblong, broader than the thorax, with the apex somewhat rounded: legs stout, subequal: femora robust, frequently armed beneath, at the apex, with a stout tooth: tibiæ rounded: tarsi rather long.

Phyllobius differs from the foregoing genus, not only by having the body densely clothed with scales, but by the dissimilarity of its form, the structure of its antennæ, &c.

#### A. Femora dentate.

- Sp. 1. Pyri. Oblongus, niger, squamulis angustis viridi-sericeis tectus, antennis basi pedibusque rufo-ferrugineis, elytris obsoletè nebulosis. (Long. corp. 3–4 lin.)
- Cu. Pyri. Linné.-Ph. Pyri. Steph. Catal. 179. No. 1840.
- Oblong, black, clothed with narrow silken-green scales: head porrect, with hairlike scales; furnished with an obsolete carina, and an oblong impression between the antennæ: thorax clothed like the head: elytra moderately punctate-striated, clothed with minute short, golden or satiny-green, scales, obsoletely varied with darker ones, and towards the tip of the suture a few short hairs: apex of abdomen piceous: legs rufo-ferruginous, with the tarsi obscure: antennæ with the basal joint rufo-ferruginous, the rest dusky.
- The femora are sometimes dusky: and the colour of the scales varies considerably.

Frequently taken in woods within the metropolitan district, but not very common: also near Bristol, and in Norfolk. "Sometimes rather common about midsummer in the sands at Penllergare."— L. W. Dillwyn, Esq. "Raehills, very abundant."—Rev. W. Little. "Epping."—Mr. Doubleday. "Bristol."—G. Waring, Esq.

- Sp. 2. cæsius. Niger, squamulis angustis viridibus tectus, antennis pedibusque rufo-ferrugineis, elytris immaculatis. (Long. corp. 4 lin.)
- Cu. cæsius. Marsham.-Ph. cæsius. Steph. Catal. 180. No. 1841.
- Black, clothed rather densely with narrow green scales, somewhat resembling hairs on the head and thorax : elytra faintly punctate-striate, clothed throughout with bright green or bluish scales : legs and antennæ entirely rufo-ferruginous.
- It is probable that this may be a mere variety, or the opposite sex, of the preceding.

Taken in hedges within the metropolitan district.

- Sp. 3. Alneti. Niger, squamulis angustis cæruleo-virentibus, aut subauratis tectus, pedibus nigris. (Long. corp. 3½-4 lin.)
- Cu. Alneti. Fabricius.-Ph. Alneti. Steph. Catal. 180. No. 1842.
- Black, clothed with narrow, blue-green, or golden scales, most densely on the elytra, the latter faintly punctate-striate, and immaculate: legs entirely black: antennæ dusky or piceous.
- Variable in the tint of the scales :---this species is evidently very distinct from either of the foregoing.

Common amongst nettles throughout the vicinity of London, and not uncommon in other parts. "Not uncommon in woods (near Swansea)."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns. "Near Edinburgh, rare."—Rev. W. Little.

- Sp. 4. maculicornis. Oblongus niger, cærulescenti vel viridi-squamosus, alboque subsetosus, antennis ferrugineis, clavâ scapique apice nigro, pedibus nigris tarsis piceis. (Long. corp. 3 lin.)
- Ph. maculicornis. Germar. Steph. Catal. 180. Nc. 1843.
- Oblong, black, clothed with blue or greenish scales, and a few whitish hairs: head and thorax obsoletely punctate: elytra punctate-striate, the interstices with a few whitish setæ, and blue-green rounded scales: body beneath also with blue-green scales, with the abdomen glabrous: legs black, with bluish scales: femora acutely dentate: tarsi pitchy: antennæ rufous, with the apex of the scape and the club black.

Apparently rare: I have one specimen captured by myself near London, and a pair taken near—" Inverness."—Mr. Waterhouse. " Bottisham."—Rev. L. Jenyns.

- Sp. 5. argentatus. Niger, squamulis rotundatis viridi-argenteis tectus, pilisque erectis pallidis adspersus, antennis tibiis tarsisque flavescentibus. (Long. corp.  $2\frac{1}{2}$ -3 lin.)
- Cu. argentatus. Linnè.—Don. iii. pl. 107.—Ph. argentatus. Steph. Catal. 180. No. 1844.
- Black, densely clothed with rounded, brilliant, silvery, or blue-green scales and a few pale hairs: head oblong, thickly but finely coriaceous: thorax with an impression within the base and apex, the disc transversely convex: elytra not very deeply punctate-striate, the interstices flat, smooth, densely clothed with green scales and pale hairs, immaculate: legs stout: femora, thick clavate, sometimes black, with green scales, and armed with a short, acute tooth: tibiæ and tarsi pale or yellowish: antennæ also flavescent, or pale-testaceous.
- Variable in the tint of the scales, with which the upper surface of the body is clothed.

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Extremely abundant on oaks within the metropolitan district. "Common (near Swansea)."—L. W. Dillwyn, Esq. "Raehills, common."—Rev. W. Little. "Black Hall Wood."—T. C. Heysham, Esq.

- Sp. 6. Mali. Oblongus, niger, squamulis angustis cupreo-aureis adspersus, antennis pedibusque testaceis, scutello albo-squamoso. (Long. corp. 3-4 lin.)
- Cu. Mali. Fabricius.—Martyn, Col. pl. 19. f. 21, 22.—Ph. Mali. Steph. Catal. 180. No. 1845.
- Oblong, black, clothed with scattered, narrow, golden-cupreous scales, sometimes greenish: head thickly rugose-punctate, with the forehead depressed, clothed with griseous hair-like scales, tinted with golden and coppery hues in certain lights: thorax similar, depressed anteriorly and posteriorly: scutellum white: elytra rather narrow and very convex, delicately punctatestriate, rather irregularly clothed with broader and brighter coloured scales than the head and thorax: legs rufo-testaceous: femora clavate, all with a moderate acute tooth: antennæ also rufo-testaceous, with the club sometimes rufescent.
- The femora are sometimes piceous at the apex, and the colour of the upper surface varies considerably.

Abundant on trees in woods within the metropolitan district, and near Bristol. "Not uncommon (near Swansea)."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

#### B. Femora unarmed.

- Sp. 7. Pomonæ. Niger, viridi-squamosus, antennis tibiisque ferrugineis, thorace transverso, apice angustato, abdomine densè squamoso. (Long. corp. 2-21 lin.)
- Cu. Pomonæ. Olivier .-- Ph. Pomonæ. Steph. Catal. 180. No. 1846.
- Black, with green scales : head oblong, and with the thorax densely squamous; thorax short, the sides but little rounded, narrow from the middle to the apex : elytra convex, with the apex acuminated, punctate-striate and densely squamous: breast and abdomen also densely squamous; legs ferruginous: femora obscure : antennæ rather slender, with the five last joints of the funiculus lenticular.
- Variable in colour, the scales being of different tints of green and bluish; sometimes pale or griseous.

Not common; found on trees within the metropolitan district.

- Sp. 8. uniformis. Niger, squamulis pallidè viridibus, opacis, tectus, antennis crassiusculis, tibiis tarsisque testaceis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)
- Cu. uniformis. Marsham.-Ph. uniformis. Steph. Catal. 180. No. 1847.

Black, clothed with opaque pale green scales: rostrum with the apex nearly glabrous, the base and head rather densely squamous: thorax short, with the sides moderately rounded, and obsoletely impressed within the base and apex, thickly squamous: elytra slightly convex, the apex rounded, punctatestriate, the interstices flat, densely clothed with scales: body beneath squamous, the abdomen somewhat naked: legs moderate: femora pitchy-black, with green scales: tibiæ and tarsi testaceous.

Variable in the colour of the scales, which are sometimes whitish or blue-green.

Abundant in hedges within the metropolitan range. "In woods (near Swansea), about midsummer."—L. W. Dillwyn, Esq. "Raehills, common."—Rev. W. Little. "Bottisham."—Rev. L. Jenyns.

 Sp. 9. albidus. Ater, squamulis albidis opacis densè obtectus, antennis tenuibus tibiis tarsisque testaceis, femoribus piceis. (Long. corp. 2 lin.)
 Ph. albidus. Steph. Catal. p. 180. No. 1848.

Black, rather densely clothed above with opaque whitish scales: rostrum piceous at the apex: elytra punctate-striate, the interstices uniformly clothed with whitish scales: abdomen beneath less densely squamous: femora pitchy: tibiæ and tarsi testaceous: antennæ rather slender, also testaceous.

Found also not uncommonly in the neighbourhood of London.

Sp. 10. parvulus. Niger viridi-squamosus, antennis tibiisque testaceis, femoribus fuscis. (Long. corp.  $1\frac{3}{4}-2$  lin.)

Black, densely clothed with green scales: head and thorax with the scales rather elongate, the latter with an obscure impression within the base and apex: elytra rather deeply punctate-striate, the interstices squamose: abdomen rather slightly squamous, and piceous at the apex: femora dusky or fuscous: tibiæ testaceous: tarsi somewhat obscure: antennæ entirely pale testaceous.

Also common in the vicinity of the metropolis.

- Sp. 11. minutus. Niger viridi-squamosus, antennis pedibusque piceo-ferrugineis, femoribus obscurioribus. (Long. corp. 14-13 lin.)
   Ph. minutus. Steph. Catal. 180. No. 1850.
- Black, rather densely clothed with bluish-green scales: head and thorax somewhat glossy, the latter very short, somewhat coarctate in front, transversely convex behind: elytra moderately punctate-striate, the interstices narrow and squamous: body beneath densely clothed with glossy scales: femora fuscescent: tibiæ and tarsi pitchy-ferruginous: antennæ the same, but paler. Slightly variable in the colour of the scales.

Cu. parvulus. Fabricius.-Steph. Catal. 180. No. 1849.

 Sp. 12. viridicollis. Niger nitidus, antennis crassiusculis, tibiis tarsisque ferrugineis, thoracis lateribus pectoreque viridi-squamosis. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
 Cu. viridicollis. Fabricius.—Pl. viridicollis. Steph. Catal. 180. No. 1851.

Black, shining: head rather large, thickly rugose-punctate, and sparingly clothed with hair-like greenish scales: thorax with the sides rounded, the disc moderately convex, thickly rugose punctate, and sparingly clothed with narrow silvery-green scales, the sides densely clothed with the same, as well as the under surface: elytra with the apex acuminated, above convex, shining black, nearly glabrous, and rather deeply punctate-striate, the interstices flat and smooth: breast densely squamous, abdomen pitchy, sparingly clothed with scales: femora black, tibiæ and tarsi ferruginous: antennæ rather short; also ferruginous: with the club obscure.

Apparently rare, at least inland; I possess a single specimen only of whose locality I am not certain: it frequents the coast, and is found on the Artemisia maritima, according to Gyllenhal. "Newcastle."—J. G. Children, Esq. "Near Edinburgh, not rare."— Rev. W. Little.

### GENUS CCCXXXI.-TANYMECUS, Germar.

Antennæ geniculated, 12-jointed, moderate, rather slender, the scape reaching to the upper margin of the eyes; funiculus with the two basal joints obconic, the second shortest, the remainder shorter and subturbinated, club oblong, ovate, acuminated. Rostrum short, rather thick, with the antennal groove curved and abbreviated before the eyes; the latter rounded, and somewhat depressed: thorax oblong, truncate anteriorly and posteriorly, with the sides moderately rounded, and the hinder margin a little elevated: elytra elongate, with the apex acuminated: legs rather long, and stout: femora unarmed: tibiæ truncate, also unarmed: tarsi rather long.

Tanymecus not only differs from Phyllobius by the greater elon-

GENUS CCCXXXII.-BRACHYDERES, Schönherr.

- Antennæ geniculated, 12-jointed, slender, longer than the thorax, the scape extending beyond the eyes; funiculus with the basal joints elongate, the second joint longer than the first, the remainder shorter, all obconic; club narrow, oval. Rostrum very short, stout, above somewhat flat: eyes rounded, prominent: thorax very short, with the sides rounded: elytra subovate: legs rather long, stout: femora unarmed.
- Sp. 1. incanus. Elongatus, niger, fusco-pubescens, antennis tenuibus ferrugineis. (Long. corp. 7? lin.)

gation of its body, but by the dissimilarity in the structure and position of its antennæ; its longer thorax, &c.

- Sp. 1. palliatus. Niger, pilis squamulisque densis, supernè fuscis, subtus et lateribus cinereo-albidis tectus, pedibus concoloribus. (Long. corp. 4-5½ lin.)
  Cu. palliatus. Fabricius.—Ta. palliatus. Steph. Catal. 181. No. 1852.
- Black, densely clothed with short hairs and scales, above fuscous, beneath and on the sides whitish-ash: rostrum with an obsolete longitudinal impression: thorax with an obscure abbreviated channel in front, and an obsolete impression on the middle of each side: scutellum clothed with whitish scales: elytra rather faintly punctate-striate: legs and antennæ black, clothed with griseous-white scales.
- Var.  $\beta$ ? Ta. affinis. Steph. Catal. l. c. No. 1853.—With the body more elongated and narrowed in proportion, with the sides concolorous: this may probably be the male.

Not common; found occasionally within the metropolitan district, at Darenth, in Epping-forest, &c.—" Bottisham."—*Rev. L. Jenyns.* "On nettles, near Walthamstow."—*A. Cooper, Esg.* 

### GENUS CCCXXXIV.—CLEONUS, Schönherr.

- Antennæ geniculated, 12-jointed, rather short, moderately slender; the scape not touching the eyes: the basal joint of the funiculus rather longer than the remainder, subobconic, the second to the sixth short, the seventh stouter, closely applied to the club, which is somewhat oblong-ovate, acuminate. *Rostrum* very short, rather thick, generally carinated or having a channel above: eyes oblong, depressed: thorax subconic, obsoletely constricted towards
- Cu. incanus. Linné.—Berkenhout (!)—Br. incanus. Steph. Catal. 181. No. 1854. note.

Elongate, black, clothed with fuscous pubescence : antennæ slender and ferruginous.

Said by Berkenhout to be indigenous, but I have never seen a specimen.

#### GENUS CCCXXXIII.-BROTHEUS mihi.

Antennæ not geniculated, 12-jointed, curved, the basal joint, or scape, slightly elongate, robust, clavate, the following joint also a little robust and subglobose-conic, the next smaller, somewhat obconic, the remainder of the funiculus short, subnodose, the eighth joint being transverse: club large, ovate, acuminate. Rostrum very short and robust, inserted during repose in a deep, short groove on the anterior margin of the thorax beneath, the latter oblongthe apex, the anterior margin slightly bisinuated, the base more deeply so: *elytra* elongate, generally with a protuberance near the apex, the latter rounded: *legs* short, subequal: *femora* unarmed: *tibia* with the apex slightly widened, and furnished within with a short horizontal hook.

The insects of this genus are of large size, and are distinguished by their elongated public body, united to the stout, short rostrum, bearing the antennæ towards the apex, and having the basal joint of the funiculus longer than the second, the thorax subconic, obsoletely constricted towards the apex, the elytra with a callosity behind, &c. :---their larvæ subsist upon the roots of plants, to which they are at times very injurious.

### A. With the rostrum carinated.

Sp. 1. distinctus. Niger, cinereo-varius, thorace anticè lituris duabus flexuosis, elytrisque maculis duabus, subocellatis cinereo-albidis.

Cu distinctus. Fabricius.-Cl. distinctus. Steph. Catal. 181. No. 1855.

Black, varied with cinereous pubescence: rostrum with two deep sulci, divided by a longitudinal carina: thorax with an obscure dorsal carina, the sides with a whitish flexuous, interrupted streak, most distinct on the anterior portion; the base with an irregular transverse black fascia: elytra obscurely striated, with several obscure rows of elevated ashy hairs, and each with two distinct white spots, behind the middle, the anterior of which is somewhat divided; towards the base are some paler dashes: on the breast are some fascicles of ashy down, and the margins of the abdominal segments are pale: legs black, with cinereous pubescence.

I have seen but two examples of this rare insect, one of which is in the collection of N. A. Vigors, Esq., the other in my own cabinet: the latter was captured near Coombe-wood, about twenty years since.

quadrate, with the disc longitudinally porcate, the anterior margin lobate behind the eyes; these last depressed, concealed? during repose: elytra broad; convex, the apex abruptly retuse, the disc unequal: legs 'short, stout: femora unarmed: tibiæ straight, with a hook at the apex within: tarsi broad, stout, setose, armed at the tip with two long, distant claws.

This singular genus of Curculionidæ, named as above from its deformity, the most conspicuous of all the indigenous groups of the family, approaches closely to the genus Cryptops of Schönherr, but from that genus there are many points of dissimilarity, especially in the structure of the antennæ, the porcate thorax, and elytra; though it agrees in having the anterior under surface

- Sp. 2. nebulosus. Niger, densè cinereo-pubescens, elytris acuminatis, profundiùs punctato-striatis, fasciis obliquis denudatis. (Long. corp. 6–10 lin.)
- Cu. nebulosus. Linné.-Cl, nebulosus. Steph. Catal. 188. No. 1856.
- Elongate, black, densely, but irregularly clothed with an ashy pubescence: rostrum uniformly pubescent, with a naked longitudinal carina: thorax coarsely rugose-punctate, with an abbreviated central carina, and on each side a flexuous series of glabrous, tubercular granules, curved outwardly in the middle, and bending inwards at the base; on the outer edge thereof is a whitish streak: elytra acuminated, moderately punctate-striate, the interstices irregularly clothed with patches of cinercous hairs, having several denuded spots and two distinct oblique fasciæ; the tubercle towards the apex is also denuded: legs and antennæ black, with ashy pubescence.
- The pubescence on the head and on the sides of the thorax, as well as upon the legs, is frequently of a bright griseous, or brilliant red :—there are also occasionally one or two pale reddish lines on the elytra, and the suture of the latter is sometimes of similar hue.

Rare near London, but very abundant in some parts of the

of the thorax grooved to receive the rostrum : the legs very stout, with the tarsi robust, setose, and furnished with long distant claws :—at first sight it remotely assimilates with Cryptorhynchus, but the straight antennæ and totally dissimilar legs at once point out its discordancy with that genus, with which it has lately been associated, merely from the circumstance of my having improperly placed the genera in juxta-position, in my Catalogue.

- Sp. 1. porcatus. Ater thorace porcis duabus elevatis crenatis, thorace femoribus tibiisque cinereo-albido squamosis. (Long. corp. 3 lin.)
- Cu. porcatus. Marsham.-Br. porcatus. Steph. Catal. 158. No. 1602.

Deep velvety black; with the thorax, femora beneath, and tibiæ densely clothed with rounded ashy-white scales; the thorax porcate and irregularly and very deeply foveolate, the bases of the foveæ black: elytra very irregular, gibbous, the disc with two considerably elevated, longitudinal crenated ridges, of which the interior is curved inwardly, and interrupted at the apex, and the exterior is nearly straight; these ridges extend about two-thirds of the length of the elytra, and the apex from their terminations, and also the sides from the outer ridge, are very suddenly deflexed, the latter bear four rows of very deeply impressed subquadrate impressions: the femora above, and the tarsi are deep black: claws and antennæ piceous.

Of this extraordinary insect I have hitherto seen only my own specimen, which was taken "at the roots of an Ornithogalum, in his garden at Hammersmith, by Mr. Lee,"—Marsham: which has induced me to place its description in a note, as the group to which it belongs is probably South African.

country, especially in the New Forest, Hants, whence I have received numerous specimens from J. C. Dale, Esq. "Wimbledon-common."—Mr. Waterhouse. "Martlesham-heath, Suffolk."— Marsham MSS.

- Sp. 3. glaucus. Brevior, niger, vellere cinereo-brunescente tectus, elytris subacuminatis, profundè punctato-striatis, fasciis arcuatis nudioribus. (Long. corp. 7 lin.)
- Cu. glaucus. Fabricius .-- Cl. glaucus. Steph. Catal. 181. No. 1857.
- Short, black, clothed with an ashy-brown down: rostrum as in the foregoing: head with two round impressions between the eyes, and a naked carina: thorax deeply rugose-punctate, with a considerably abbreviated carina in front, terminating in a fovea, and various dorsal impressions, and two flexuous strigæ as in the foregoing insect: elytra slightly acuminated, rather densely and regularly clothed with pale ashy, or bruneous down, having two transverse, anteriorly curved fasciæ, as well as the posterior tubercle, somewhat denuded : legs and antennæ black, with ashy pubescence.

This insect is decidedly a rare species. In June, 1815, seven examples were taken by Mr. Neale on the common between Cobham and Ripley, one of which I possess, and although I have diligently searched that spot during many succeeding years, I have hitherto been unsuccessful in my researches to capture specimens.

B. With the rostrum grooved.

- Sp. 4. sulcirostris. Niger densè cinereo-pubescens, elytris tenuè punctato-striatis, fasciis obliquis denudatis, rostro sulcis tribus subæqualibus. (Long. corp. 7-10 lin.)
- Cu. sulcirostris. Linné.—Donovan, xv. pl. 509. f. 1.—Cl. sulcirostris. Steph. Catal. 181. No. 1858.
- Black, densely clothed with ashy down: rostrum with three deep subequal channels, the ridges between naked: thorax granulated, with a densely pubescent slender longitudinal dorsal line, impressed anteriorly and posteriorly, and marked in the middle with a naked, short elevation; on each side is a double ashy pubescent streak: elytra delicately punctate-striate, with the interstices transversely rugulose, and densely clothed with ashy or hoary down, excepting two very oblique streaks and the posterior tubercle: legs and antennæ black, with ashy pile.

Local, but not uncommon: I have taken it in plenty on a chalk hill near Hertford, in September, and in other places in the spring. "Southend."—Rev. F. W. Hope. "Bottisham, once taken."— Rev. L. Jenyns. "Weston-super-Mare."—G. Waring, Esq. "Occasionally found on nettles and thistles on Crwmlyn-burrows, and is not uncommon on the naked sand-hills."—L. W. Dillwyn, Esq.

## GENUS CCCXXXV.-BOTHYNODERES, Schönherr.

Antennæ geniculated, 12-jointed, rather short and stout; the scape slightly touching the eyes, with the apex incrassate; funiculus with the basal joint short and stout; the second as long again as the first, subobconic; the four following short, coarctate: the seventh broader, receiving the club, which is subfusiform. Rostrum longer than the head, rather thick and linear, deflexed and carinated: eyes ovate, subdepressed: thorax narrowed anteriorly, the sides slightly rounded, the base bisinuated, and with an impression in the middle: elytra oblong, with a tubercle towards the apex, which is obtuse: legs moderate: femora unarmed: tibiæ with a short horizontal claw within: tarsi elongate.

There is evidently very close resemblance between the insects of this and the preceding genus, but the present may be known by the dissimilarity in the structure of the antennæ, the two basal joints of the funiculus being short and thick, and the remaining ones coarctate, and very short :—the pubescence on the body is very different, and the species are of much smaller size, the rostrum dissimilar, &c.

- Sp. 1. albidus. Niger, albido-pubescens, thoracis dorso, elytrorum fasciú maculisque quatuor denudatis, rostro bisulcato. (Long. corp. 5-6 lin.)
  Cu. albidus. Fabricius.—Bo. albidus. Steph. Catal. 181. No. 1859.
- Black, variegated with whitish pubescence: head with the forehead rugosepunctate, the vertex smoother, with a slightly fulvescent pubescence: thorax coarsely rugose punctate, with an obsolete carina in the middle and a deep impression behind; the sides and under surface clothed with a dense whitish pubescence, including a rounded naked spot near the apex: elytra moderate, punctate-striate, densely clothed with a white or snowy pubescence, except a humeral spot, a central waved fascia, and a small patch including the apical tubercle, nearly denuded: legs black: femora with a whitish ring at the apex: antennæ black, with the base ferruginous.

Very rare, but widely dispersed. "Taken by Mr. Hooker in a gravel pit at Hilsdon, near Norwich, and by the Rev. R. Sheppard in a similar situation near Ipswich."—Marsham MSS. "Portobello, near Edinburgh."—Dr. Leach.

### GENUS CCCXXXVI.-LIXUS, Fabricius.

Antennæ geniculated, 12-jointed, rather short, deflexed, slender, inserted behind the middle of the rostrum; funiculus with the two basal joints elongate, obconic; the four following short, truncate at the apex; the next stouter, closely applied to the club, which is oblong, fusiform. Rostrum elongate, moderately robust, rounded or cylindric, nearly straight, or very little curved: thorax oblong, conic, a little coarctate on the sides anteriorly, the base bisinuated: elytra oblong, cylindric, sometimes attenuated and gaping at the apex: legs long, slender: femora cylindric, unarmed: tibiæ with a hook within at the apex.

From the foregoing genera, of this group of the Curculionidæ, the present may be known by the greater length and tenuity of the rostrum, and by having the antennæ placed towards the base thereof; the body elongate, publicent, and not varied :---the larvæ are destructive to the roots of plants.

A. With the elytra acuminated at the apex.

- \$\$ Sp. 1. Ascanii. Cylindricus ater, flavescenti-pollinosus, thoracis elytrorumques marginibus cœrulescenti-albidis. (Long. corp. 6 lin.)
   Cu. Ascanii. Linné.—Li. Ascanii. Steph. Catal. 182. No. 1860.
- Cylindric, *black*, clothed above with yellowish powder: rostrum glabrous, black: head with two whitish streaks before the eyes: thorax slightly convex in front, with a depression in the middle of the base, the lateral margins a little rounded and bluish-white: *elytra* rather faintly punctate-striate, *with the* apex slightly mucronated, and the *lateral margins bluish-white*: body beneath densely clothed with hoary pile, with some denuded spots: legs black, with whitish pubescence; antennæ the same.

I have seen a British pair of this species, I believe in the possession of J. Sparshall, Esq. of Norwich, but I do not well remember.

- Sp. 2. paraplecticus. Fusco-cinereus pubescens, lutescente-farinosus, elytris apice mucronatis, antennis ferrugineis clavâ nigrâ. (Long. corp. 8–9 lin.)
- Cu. paraplecticus. Linné.—Don. x. pl. 348. f. 2.—Li. paraplecticus. Steph. Catal. 182. No. 1861.
- Fuscous-ash, pubescent, more or less sprinkled with a lutescent or greenish powder: head small, obsoletely punctured: rostrum a little thickened, the apex black and glabrous: thorax oblong, with an obsolete dorsal carina; the base with two broad longitudinal flavescent streaks: *elytra subcylindric*, with the apex attenuated, and terminating in a short mucro, the disc punctatestriate, the striak disposed in pairs, the alternate interstices more densely clothed

with lutescent down than the intermediate, and the lateral margins more densely than the back: legs black, clothed with yellowish-ashy down: antennæ ferruginous, with a black club.

Very rare in Britain : I possess a pair captured about thirty years since in the Isle of Ely : the larva, which feeds on plants of the genera Phellandrium and Sium, is said to be very injurious to cattle, when they happen to swallow it with their food. "Brugh-marsh." -T. C. Heysham, Esq.

Sp. 3. productus. Elongatus, fusco-cinereus pubescens, virescenti-farinosus, elytris lateribus luteis, apice mucronatis, mucrone in spinam productâ, antennis pallidè ferrugineis, clavá fuscâ.

Cu. productus. Marsham MSS .- Li. productus. Steph. Catal. 182. No. 1862.

Elongate, ashy-brown, clothed with a cinereous pubescence and a greenish or dull flavescent powder: head very small; rostrum long, rather slender; thorax elongate, with the sides and two dorsal lines densely clothed with lutescent down: elytra elongate, cylindric, regularly punctate-striate, the lateral margins clothed with rather bright luteous down; the apex attenuated, and produced into an elongate more or less diverging acute spiniform mucro: legs rather slender, clothed with an ashy pubescence: antennæ pale ferruginous, with the club fuscous.

Local; and, at times, very plentiful near London, especially on the banks of the Thames, between Fulham and Barnes, in the autumn. "Common in the fens about Ely, the larvæ inhabiting the hollow stems of the Sium latifolium."—*Rev. L. Jenyns.* 

B. With the elytra rounded at the apex.

- Sp. 4. angustatus. Cylindricus ater, flavescenti pulverulentus, thorace scabro, elytris obtusis, punctato-striatis, rostro sulcato. (Long. corp. 6–9 lin.)
- Li. angustatus. Fabricius.-Martyn, C. pl. xx. f. 43.-Steph. Catal. 182. No. 1863.
- Cylindric, black, powdered with yellowish: head rounded, finely punctured; rostrum rather short, a little curved, somewhat coarsely punctured, with an interrupted longitudinal channel: thorax rugose, the anterior margin somewhat smooth: elytra subcylindric, with a transverse impression at the base; the apex obtuse, with several rows of shallow points disposed in striæ: legs black, with an ashy pubescence: antennæ ferruginous, with the club dusky.

I possess a pair of this rare species, one from the collection of Mr. Marsham, the other taken in July, 1818, at Hickstead, in Sussex. I have seen a third specimen in the collection of Mr. Ingall, who informs me that it was captured in the neighbourhood of Sydenham.  Sp. 5. lateralis. Angustatus, niger, castaneo-fulvo pollinosus, thoracis lateribus flavo-albidis, elytris punctato-striatis basi impresso. (Long. corp. 5 lin.)
 Li. lateralis. Steph. Catal. 412. No. 1672 \*.

Black, clothed above with a fulvous-chesnut powder, especially on the sides: rostrum glabrous and black, with a carina: thorax with an abbreviated obscure carina in front, terminating in an impression behind, the disc slightly granulated, the lateral margins rather broadly yellowish-white : elytra subcylindric, punctate-striate, the apex rounded, the lateral margins somewhat dusky: body clothed with ashy down beneath : legs black, with ashy pubescence : antennæ with the base piceous, the club dusky.

Taken in the Isle of Thanet in June.

## GENUS CCCXXXVII.-LARINUS, Schüppel.

Antennæ genieulated, 12-jointed, short, deflexed, rather stout, funiculus 7-jointed, its two basal joints somewhat elongate subconic, four following short, half rounded, the next thicker, the club oblong-ovate, acuminate. Rostrum rounded, shorter than the thorax, rather thickened, carinated at the base, straight: eyes ovate, depressed: thorax conic, with the base deeply bisinuated, the sides coarctate in front, with a minute lobe behind the eyes: elytra broad, ovate, rather flat on the back, the apex rounded; the shoulders obtusely angulated: scutellum minute: legs stout: tibiæ armed at the base within with a stout hook.

Larinus differs not only in the robustness and length of the rostrum from Rhinobatus, but in habit and form; its antennæ are situated towards the base of the rostrum, while in the allied genus they are placed towards the apex; their structure is also slightly dissimilar, the club being more acuminate in Larinus.

Sp. 1. Sturnus. Niger, thorace rugoso-punctato, elytris subtilitèr transversim rugulosis, punctato-striatis, griseo fasciculatis.

Cu. Sturnus. Herbst?-La. Sturnus. Steph. Catal. 182. No. 1864.

Black, thorax rugose-punctate, its lateral margins unequal, and ashy-white; the disc with an irregular transverse impression: elytra punctate-striate, the interstices transversely rugose, with fascicles of griseous hairs; the third interstice from the suture with an interrupted whitish longitudinal fascia, and the lateral margins irregularly whitish: legs black, with ashy pubescence: antennæ piceous, with the club dusky.

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# GENUS CCCXXXVIII.-RHINOBATUS, Megerle.

Antennæ geniculated, 12-jointed, short, moderately stout, placed towards the apex of the rostrum; the two basal joints of the funiculus slightly elongate, obconic; the remainder short, subnodose, the last being broadest; club elongate ovate, subacute. Rostrum rather slender, longer than the thorax, obscurely bent: thorax conic, with the base very much bisinuated, the centre produced opposite to the scutellum: elytra broad, ovate, slightly convex, obtuse: scutellum minute: legs rather stout: femora thickened, unarmed: tibiæ with a minute hook at the apex within.

Rhinobatus differs from Larinus in having the rostrum more slender and longer in proportion to the bulk of the insect, with the antennæ placed towards the apex, and having the club rather obtuse at the tip :—the proportions of the articulations of the antennæ are somewhat dissimilar, and the general habit is different :—the larvæ of the insects of this and the next following genera are said to possess great efficacy in the cure of the tooth-ache.

- Sp. 1. planus. Niger, griseo-nebulosus, thorace scabriusculo, elytris subcylindricis, punctato striatis, subtilitèr coriaceis. (Long. corp. 4<sup>1</sup>/<sub>2</sub>-5 lin.)
- Cu. planus. Fabricius.—Rh. planus. Steph. Catul. 182. No. 1865.—Cu. ebeneus. Don. xv. pl. 509. f. 2.
- Black: rostrum punctate, the base obsoletely carinated: head obscurely punctured; thorax with the lateral margins oblique, faintly rounded, clothed with a griscous pile; the disc thickly rugulose with confluent punctures, and in fine specimens slightly pulverulent: elytra with the sides straight, rather deeply punctate-striate, the interstices finely coriaceous, and having fascicles of griseous cinereous down; which also clothes the body beneath: antennæ dull piceous.

Rare in Britain: I have found it at Dover; and it has occurred in other parts of Kent, and in Sussex near Brighton. "Westonsuper-Mare."—G. Waring, Esq.

## GENUS CCCXXXIX.--RHINOCYLLUS, Germar.

Antennæ not geniculated, 12-jointed, very short, thick; the articulations transverse, subperfoliated, somewhat coarctate, increasing in breadth to the club, which is 4-articulate ovate, the joints closely united. Rostrum short, stout, angulated, deflexed, a little bent, the base bicarinated: eyes oval, narrowed beneath: thorax subconic, deeply bisinuated behind: scutellum very minute: elytra oblong, sublinear, convex, with the base of each rounded, the apex obtuse: legs stout; tibiæ armed within at the tip, with a minute hook.

The straight antennæ of this genus at once points out its great discrepancy from any of the foregoing genera;—the rostrum is also very short and incrassated, with the antennæ inserted towards the apex, &c.

- Sp. 1. thaumaturgus. Niger, cinereo nebulosus, capite thoraceque cinereo-fusco villosis, elytris striatis, interstitiis subpunctatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
- Cu. thaumaturgus. Rossi.—Rh. thaumaturgus. Steph. Catal. p. 182. No. 1866. -Cu. Cardui. Don. xv. pl. 502.
- Black, clouded with cinereous: rostrum carinated above, and an abbreviated carina on each side at the base, adjacent to which are two oblong small tubercles: thorax obsoletely granulated, clothed with rather long ashy-brown hairs; the lateral margins whitish: elytra striate, the interstices obscurely punctured, and furnished more or less with ashy pile, disposed in waved lines: legs clothed with whitish down: antennæ piceous-black.

More abundant in England than the foregoing species, but nevertheless not very common: it appears to occur most frequently on the southern coast, at no great distance inland, as at Brighton, Bognor, the Isle of Wight, Weymouth, the New Forest, &c. "Near Canterbury."—*Mr. Ingpen.* 

### GENUS CCCXL.-CHLOROPLANUS, Dalman.

- Antennæ not geniculated, 12-jointed, inserted towards the apex of the rostrum; the basal joint elongate, the joints of the funiculus obconic, gradually shortening; club ovate, acuminate. Rostrum short, with a longitudinal carina in the middle, the apex deeply notched: eyes rounded, moderately prominent: thorax oblong, narrowed anteriorly, the base bisinuated: scutellum small, triangular: elytra ample, ovate, the apex with a small pilose mucro: legs elongate: anterior tibiæ curved within, the apex with a small hook.
- <sup>‡</sup> Sp. 1. viridis. Niger, supra parciùs viridis squamosus, subtus lateribusque densè flavo-virescens. (Long. corp. 5-6 lin.)
- Cu. viridis. Linné.-Stewart (!)-Ch. viridis. Steph. Catal. 183. No. 1867. note.
- Black, above sparingly clothed with green scales; with the body beneath and sides densely clothed with yellowish-green.
- Introduced by Stewart as an indigenous insect, but apparently without sufficient authority.

### GENUS CCCXLI.—MAGDALIS, Germar.

Antennæ moderate, placed in the middle of the rostrum, slightly geniculated, 12-jointed, curved; the basal joint elongated and touching the eyes, slightly clavate and a little curved; the second short, stout, obconic; the third smaller; the five following short, coarctate, somewhat cup-shaped, the exterior ones largest; club 4-articulate, oblong-ovate, acuminate. Rostrum as long again as the head, curved, cylindric: eyes large, approximating: thorax bisinuated behind, the anterior edge acuminated at the angle: elytra subcylindric, convex, each produced anteriorly and slightly concealing the base of the thorax: legs moderate: femora more or less dentate: tibiæ with a stout hook within.

Magdalis not only differs from Rhinodes by the form of the thorax, but by the dissimilarity in the structure of the antennæ, rostrum, and femora, the latter of which are always more or less dentate, and the lateral margins of the thorax are generally furnished with a spine-like process at the anterior angle, and are sometimes crenulated.

- Sp. 1. carbonaria. Atra, subnitida, glabra, thorace profundè punctato, opaco, elytris sulcato-striatis, striis punctatis. (Long. corp. 3-3½ lin.)
  Cu. carbonarius. Linné.-Ma. carbonaria.-Steph. Catal. 183. No. 1868.
- Black, slightly shining, glabrous; antennæ with the club fuscescent: thorax thickly and deeply punctate, the surface entirely opaque, the anterior angle of the lateral margin produced into a spiniform process: clytra rather deeply punctate-sulcate, the interstices slightly convex and smooth; femora with a denticulation towards the apex.

Not uncommon in the south of England on plum, cherry, and pear-trees in June. "West-walls.—*T. C. Heysham, Esq.*—" Bot-tisham."—*Rev. L. Jenyns.* 

- Sp. 2. atramentaria. Nigra, subnitida, glabra, thoracis lateribus crenulatis, elytrorum striis cancellatis, interstitiis convexis sublævibus. (Long. corp.  $2\frac{1}{2}-3\frac{1}{4}$  lin.)
- Cu. atramentarius. Marsham.—Ma. atramentaria. Steph. Catal. 183. No. 1869. Ma. carbonarius. Curtis, v. pl. 212?
- Black, slightly shining and glabrous: head obsoletely punctured: thorax transversely depressed, thickly and deeply punctured, opaque, with an abbreviated line in the front of the disc; the lateral margins crenulated, and terminating on both sides in a short, more or less distinct, tooth; the hinder angles

acute: elytra more glossy, deeply striated, the striæ crenate, the interstices somewhat smooth, or obsoletely wrinkled transversely: femora armed with a stout tooth: antennæ pubescent, the club fuscous, most robust in the male, and placed more towards the apex of the rostrum, which is shorter and broader than in the females.

Less abundant than the foregoing, frequenting similar trees, and also the birch and hazel, within the metropolitan district, and elsewhere. "Has been taken near Swansea in a birch tree, not common."—L. W. Dillwyn, Esq.

- Sp. 3. aterrima. Atra, opaca, thorace subquadrato, anticè utrinque dentato parciàs punctulato, elytris satis profundè punctato-striatis, interstitiis subtilissimè coriaceis. (Long. corp. 1½-2½ lin.)
- Rh. aterrimus. Fabricius .- Ma. aterrima. Steph. Catal. 183. No. 1870.
- Black, opaque, glabrous: head very obsoletely punctured: thorax subquadrate, with the sides nearly straight, and produced into an acute tooth anteriorly, the hinder angle nearly prominent; the disc rather sparingly, but finely, punctured; elytra moderately punctate-striate, the interstices flat and very finely coriaceous: femora with a stout, acute, tooth: antennæ short, piceous, with the club black.

Very frequent on the common sloe-tree in hedges, and on the cherry-tree in orchards and gardens, in June. "Bottisham."—*Rev. L. Jenyns.* "Among herbage, in woods (near Swansea), not common."—*L. W. Dillwyn, Esq.* 

- Sp. 4. Asphaltina. Atra, opaca, thorace granulato, anticè utrinque dento acuto armato, elytris punctato-striatis, interstitiis obsoletissimè punctulatis, antennis rufo-ferrugineis, clavá piced. (Long. corp. 3½ lin.)
- Ma. asphaltina. Germar.-Ma. Cerasi. Steph. Catal. 183. No. 1871.
- Black, opaque, glabrous: head obsoletely punctured: thorax subquadrate, the lateral margins slightly rounded in the middle, and terminating anteriorly in a strong acute tooth; the disc very thickly and rather coarsely punctured. with a rather obsolete carina in the middle: elytra punctate-striate, the interstices slightly convex, and very minutely punctured: legs black, pubescent; anterior femora with a very strong acute tooth towards the apex, the rest with a smaller one: antennæ pale rufo-ferruginous at the base, the club pitchy.

Rare: I have seen but a pair, one of which, a male, I found at Ripley, in June, 1827: the other I have possessed many years; it was captured in the west of England.

### GENUS CCCXLII.-RHINODES, De Jean.

Antennæ not geniculated, 12-jointed, arising from the middle of the rostrum, curved, the basal joint elongate clavate, the second short, robust, obconic, the third smaller, the five following short, somewhat cup-shaped, gradually thickening to the club, which is 4-articulate, elongate-ovate, acuminate. Rostrum scarcely longer than the head, nearly straight, cylindric: eyes large, approximating: thorax posteriorly subtruncate: elytra somewhat cylindric, convex, subtruncate anteriorly: legs moderate: femora simple, or obsoletely dentate: tibiæ with a minute hook at the apex within.

In the dissimilar form of the thorax, and diversity of structure in the antennæ, as well as of that of the elytra and general habit, the femora being simple, &c. the present genus differs from the foregoing:—the larvæ are sluglike and glossy, and found upon the leaves of trees of the cherry and plum kind.

- Sp. 1. Pruni. Niger, subopacus, antennis ferrugineis, thorace bituberculato, elytris crenato-striatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
- Cu. Pruni. Linné.-Rh. Pruni.-Steph. Catal. 183. No. 1872. Rh. caliginous. Steph. Catal. 183. No. 1873. var.
- Black, nearly opaque; head large, thickly but obsoletely punctured, with a narrow impressed line between the eyes: thorax with the hinder angles prominent, above slightly convex, closely punctate-granulate, with a few scattered lines, with an obsolete channel in the middle of the anterior margin, and on each side, in the middle of the lateral margins, an elevated obtuse tubercle: elytra elongate, crenate-striate, with the interstices narrow, convex, and ruggedly punctate: antennæ ferruginous.
- Var. With the club of the antennæ dusky or black.

Very abundant on the sloe-trees within the metropolitan district in June. "West-walls."—T. C. Heysham, Esq.—" Bottisham." —Rev. L. Jenyns.

- Sp. 2. Cerasi. Ater, opacus, thorace anticè punctatissimo, elytris striatis, interstitiis creberrimè granulato-coriaceis. (Long. corp. 2-21/2 lin.)
- Cu. Cerasi. Linné.—Rh. Cerasi. Steph. Catal. 183. No. 1874.—Rhi. Rhina. Steph. Catal. 184. No. 1875, male.
- Black, opaque: head obsoletely punctured, with a faint impression on the forehead: thorax short, coarctate and depressed anteriorly, the sides very much rounded, and the hinder margin deeply bisinuated, with the outer angles acuminated, the disc rather deeply and thickly rugose-punctate: elytra rather

deeply punctate-striate, the interstices convex and very closely granulatecoriaceous: legs rather long, moderately stout: femora incrassated, with a very obscure rudimentary tooth towards the apex: *antennæ black*, with the apex fuscescent; rather stouter in the males, and the rostrum shorter and slightly incrassated in the same sex.

Not uncommon on cherry and pear trees, as well as the sloe and hazel, within the metropolitan district.

## GENUS CCCXLIII.-PANUS, Schönherr.

Antennæ not geniculated, 12-jointed, curved, rather stout, the basal joint reaching to the eyes, clavate, and a little bent, second short, thick, suborbiculate; third smaller, obconic, four following very short and coarctate, subæqual, eighth stout and broader, perfoliate; club very large, equal to half the length of the antennæ, robust, subcylindric, with the apex subacuminate, composed of four closely united joints. Rostrum as long as the head, rather thick, and a little bent: eyes large, somewhat approximating: elytra subcylindric, convex, with the base and apex of each rounded : legs moderate: femora unarmed.

The immensely disproportioned pubescent club of the antennæ of this genus, exclusively of other discordant characters, sufficiently point out the necessity of separating it from the two foregoing genera.

- Sp. 1. barbicornis. Niger, subopacus, antennis infernè ferrugineis, clavâ longissimâ nigro-fuscâ, thorace suprâ planiusculo, foveolato, elytris nitidioribus sulcato punctatis, interstitiis convexis, subtilissimè strigosis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
- Rhyn. barbicornis. Latreille.-Pa. barbicornis. Steph. Catal. 114. No. 1876.
- Black, somewhat opaque: head thickly, but finely, punctured: thorax above somewhat flat, the anterior margin slightly elevated and a little emarginate; the lateral margins very much rounded, the base narrowed, with the posterior angles acute, the base with three obsolete impressions; the disc very thickly punctate, with an abbreviated smooth carina in front: elytra rather glossy, sulcate, the sulci obscurely punctate, with the interstices convex, delicately strigose: legs black; tarsi piceous: antennæ ferruginous beneath, with the club fuscous.

Rare: I have taken a specimen at Ripley in June:—it is found, however, in various parts of the country, as I have received specimens from Norfolk and Somersetshire.

# GENUS CCCXLIV.-APION, Herbst.

Antennæ not geniculated, 11-jointed, inflexed beneath the head, towards the middle, or at the base of the rostrum, the basal joint slightly elongate, clavate, the second somewhat obconic, the six following very short, equal, conic-rounded, or somewhat turbinated, the remainder united, and forming an oval, acute, triarticulate club. Rostrum porrect, slender, cylindric, more or less curved; the base sometimes thick, with the apex subulated : head elongated behind: eyes lateral, rounded, prominent: thorax conic or subcylindric, with the base and apex truncate: elytra ovate, arched, covering the apex of the abdomen : legs elongate, unarmed : tibiæ rounded, and thickening to the apex:-body somewhat pear-shaped, winged.

Of the insects of this singularly neat and pretty genus, an admirable paper is given in the 9th volume of the Linnean Transactions by Kirby, to which a supplement appeared in the 10th :---of these valuable observations and descriptions I have availed myself in the following pages, as well as from those contained in the 3d and 4th parts of Gyllenhal, and the 2d and 3d volumes of Germar's Magazine :---the genus may be well known from its subporrect rostrum, straight antennæ, and pear-shaped body : there is considerable diversity of appearance amongst the species, and I have in some measure followed Germar's subdivisions, in order to get more readily at any given insect.

#### A. With the rostrum subulated at the apex.

#### a. Rostrum short.

 Sp. 1. Craccæ. Atrum villoso-subincanum, rostro crassiusculo apice attenuato, antennis basi testaceis, coleoptris subglobosis. (Long. corp. 14-14 lin.)
 Cu. Craccæ. Linné.—Ap. Craccæ. Steph. Catal. 184. No. 1877.

Obscure, black, with a slight hoary-white pubescence: head punctured, rugulose between the eyes: rostrum compressed, with the base incrassated and rugulose, the apex subulated: antennæ testaceous at the base, with the club shining: thorax somewhat rounded and finely punctured, with a dorsal line abbreviated at each end, the anterior margin slightly notched: coleoptra subglobose, sulcate-striate, the striæ punctate, with the interstices somewhat flat.

Not very uncommon; found in June on the Vicia Cracca, within the metropolitan district as well as in Norfolk. "Dorking, in July."—Mr. Waterhouse.

- Sp. 2. ruficorne. Atrum villoso-incanum, rostro crassiusculo, apice subulato, antennis totis testaceis, coleoptris subglobosis. (Long. corp.  $1\frac{1}{4}-1\frac{1}{3}$  lin.)
- Ap. ruficorne. Herbst.—Steph. Catal. 184. No. 1878.
- Black, obscure, with hoary pile: head rather densely pilose, with an intermediate glabrous line: rostrum rather short, clothed with cinereous pile, with the base thickened, the apex subulated: antennæ rather slender, entirely testaceous: thorax very minutely punctured, with an obsolete dorsal line, abbreviated in front: coleoptra subglobose, sulcate-striate: the striæ punctate, with the inter-stices rather flat.

Found with the preceding, of which it is most probably the opposite sex.

- Sp. 3. Pomonæ. Atrum villoso-subincanum, rostro crassiusculo, apice subulato, coleoptris obovatis, atro-cæruleis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>3</sub> lin.)
- Cu. Pomonæ. Fabricius.—Ap. Pomonæ. Steph. Catal. 184. No. 1879.—Ap. cærulescens. Linn. Trans. ix. pl. 1. f. 4.
- Black, with a slightly hoary pile: head punctate, rugulose between the eyes: rostrum punctured, thick, with the apex subulated, deflexed, the middle dilated beneath: antennæ basal: thorax behind with a short impressed line before the scutellum: coleoptra obovate, bluish, sulcate-striate, the sulci punctate, the interstices flat.
- Male with the sulci between the eyes, and the first joint of the antennæ rufous at the base.

Abundant on fir trees in the neighbourhood of Hertford: Mr. Kirby says that it inhabits the white-thorn. "Southend."—Mr. Waterhouse. "Common every where in Cambridgeshire."—Rev. L. Jenyns.

- b. With the rostrum elongate.
- Sp. 4. subulatum. Atrum, subpilosum, rostro apice attenuato, coleoptris subglobosis. (Long. corp. 1<sup>2</sup>/<sub>3</sub> lin.)
- Ap. subulatum. Kirby.-Linn. Trans. ix. pl. 1. f. 5. Steph. Catal. 184. No. 1880.
- Black, opaque, with a delicate hoary pile: head punctured, striated between the eyes: rostrum moderate, the base incrassate and obscure, the apex subulated, glossy: antennæ placed behind the middle, with the basal joint obscurely rufous, the club rather large: thorax punctured, with an abbreviated line in front: coleoptra ovate-subglobose, punctate-striate, with the interstices flat.

Not common: found in July on the Lathyrus pratensis in the vicinity of the metropolis, as well as in Suffolk.

- Sp. 5. Marshami. Caruleo-atrum, subpilosum, rostrum elongatum, apice attenuato, coleoptris subglobosis, thorace scabriusculo. (Long. corp. 2 lin.)
   Ap. Marshami. Steph. Catal. 184. No. 1881.
- Obscurely-bluish-black, slightly pilose: head obscurely punctured; deeply striate between the eyes: rostrum elongate, with the apex attenuated: antennæ somewhat basal, the basal joint dull piceous, the club moderate: thorax very rugose, with an obsolete abbreviated dorsal line behind: coleoptra subglobose, punctatesulcate, the interstices flat.

I possess a pair of this species, which appears to be intermediate between the preceding and following, which I captured many years since in the vicinity of the metropolis. "Dorking."—Mr. Waterhouse.

- † Sp. 6. Platalea. Atrum, griseo-subpilosum, thorace cylindrico, punctulato, canaliculato, coleoptris oblongo-ovalibus, punctato-sulcatis, rostro ante apicem plano, dilatato. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. Platalea. Germar.-Curtis, v. fo. 211 (!). Steph. Catal. 412. No. 1881\*.
- Black, with fine griseous pile: head punctate, striated between the eyes: rostrum rather long, depressed, and a little dilated before the apex: antennæ with the two basal joints reddish: thorax cylindric, finely punctulated, with an abbreviated dorsal line; coleoptra oblong-ovate, punctate-sulcate.

Recorded as British, but I have not seen a specimen : the above notice is from Germar.

B. With the rostrum filiform, or subcylindric.

- a. Rostrum short. 1. Antennæ placed about the middle of the rostrum.
- Sp. 7. Limonii. Æneum suprà purpurascenti-cupreum, coleoptris obovatis, rostro crassiusculo. (Long. corp. 1-2 lin.)
- Ap. Limonii. Kirby.—Linn. Trans. ix. pl. 1. f. 20. Steph. Catal. 184. No. 1882.
- Brassy, with extremely short, decumbent pile, above purplish-copper or violet: head smooth behind, punctured between the eyes: rostrum stout, punctulate, beneath black: antennæ and eyes black: thorax somewhat cylindric, finely and distinctly punctured, with a large puncture behind, opposite to the scutellum: coleoptra globose-ovate, punctate-striate, the interstices rather flat: legs obscure purplish-coppery; abdomen the same, obscurely punctured, with the first segment brassy.
- Variable in the colour of the upper surface: in some examples it is of a rich purplish copper, others violaceous, or bright golden-green, or brassy-black.

Found on the Statices Limonium, and apparently not uncommon

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on the coasts of Suffolk and Norfolk, especially in the northern part of the latter about Clay, and in the neighbourhood of Burnham Market; from the last locality I have received a beautiful and extensive series from the Rev. T. Skrimshire.

Sp. 8. Rumicis. Atrum, subglabrum, nitidiusculum, coleoptris obovatis obtusis violaceis nigrisve, rostro mediocri. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
 Ap. Rumicis. Kirby.—Steph. Catal. 184. No. 1883.

- Black, subglobose, shining: head short, punctured: rostrum short, rather stout, also punctured: antennæ rather long, with the club thickened: thorax distinctly punctured, with a short impressed line behind: coleoptra obovate, dark violet, obtuse, punctate-striate, the interstices rather flat.
- Sometimes found entirely of an obscure bluish-black, with the rostrum thicker and shorter.

Not uncommon: taken on the Rumex obtusifolia in June, in the neighbourhood of London, and in Suffolk. "Dorking."—Mr. Waterhouse.

- Sp. 9. affine. Atrum, glabrum, nitidiusculum, coleoptris obovatis obtusis viridiscentibus, rostro breviori crassiusculo. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
   Ap. affine. Kirby.—Steph. Catal. 184. No. 1884.
- Black, glabrous, slightly shining: head rather large, punctulated: rostrum short and thick, subfiliform: antennæ moderate, with the club a little thickened: thorax somewhat rounded, globose, with large punctures, and before the scutellum an impressed line: coleoptra globose-ovate, greenish, with the apex obtuse; punctate-striate, with the interstices flat:—the other sex has the rostrum more slender.

Not common within the metropolitan district. "Near Bottisham."—Rev. L. Jenuns. "Southend."—Mr. Waterhouse.

- Sp. 10. Curtisii. Atrum glabrum, nitidiusculum, coleoptris obovatis atro cæruleis aut viridibus, thorace punctato. (Long. corp.  $1\frac{1}{4}$  lin.)
- Ap. Curtisii? Kirby MSS.-Steph. Catal. 184. No. 1885.
- Black, glabrous, slightly shining: head broad, faintly punctured between the eyes: rostrum moderate, rather short, punctured: antennæ moderate: eyes rather prominent: thorax slightly elongate, subcylindric, finely punctured throughout, but without a dorsal fovea or line: coleoptra obovate, a little obtuse, deep blue or greenish, punctate-striate, the interstices slightly convex.

I possess a pair of this species captured near London;—it has been found in Norfolk:—probably A. brevirostre, Herbst.

- Sp. 11. Spartii. Atrum glabrum, coleoptris obovatis, atro-cæruleis, fronte punctato, rostro mediocri. (Long. corp. 1 lin.)
- Ap. Spartii. Kirby .- Steph. Catal. 184. No. 1886.
- Black, very smooth, slightly shining: head rather broad, punctured between the eyes, the punctures confluent: rostrum moderate, filiform, a little glossy, punctate its entire length: antennæ moderate: thorax scarcely broader than the head, subcylindric, distinctly and slightly punctate, with a larger puncture before the scutellum: coleoptra deep blue, obovate, rather gibbous behind, punctate-striate, the interstices slightly convex.

Not very abundant; found on the common broom within the metropolitan district, and in Suffolk. "Dorking, July."—Mr. Waterhouse.

Sp. 12. curtirostre. Atrum, obscurum, subpilosum: coleoptris subovatis, rostro breviori crassiusculo. (Long. corp. 1<sup>1</sup>/<sub>3</sub> lin.)

Ap. curtirostre. Germar.-Steph. Catal. 185. No. 1887.

Black, obscure, with a delicate hoary pile: head punctate, the punctures confluent and rugulose between the eyes: rostrum rather short, thickened, punctate, with the apex glossy: antennæ rather long, with the slub somewhat thick: eyes scarcely prominent: thorax subcylindric, rather deeply punctate, with a short dorsal line: coleoptra subovate, sulcate, the sulci punctated, the interstices rather flat.

Not very uncommon in the neighbourhood of London. "Dorking, July."—Mr. Waterhouse. "Among herbage, and on nettles (near Swansea), and not uncommon on the naked sand-hills."— L. W. Dillwyn, Esq.

Sp. 13. humile. Nigrum, griseo pilosum, thorace cylindrico, punctato, posticè impresso, coleoptris oblongo obovalibus, punctato-sulcatis, rostro brevi. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Ap. humile. Germar.-Steph. Catal. 185. No. 1888.

Black, with a griseous pile: head broad, punctured, slightly rugose between the eyes: rostrum short, as long as the head in the male, punctate, opaque, with the apex shining: antennæ short: thorax cylindric, punctate, with an impressed elongate line behind, before the scutellum: coleoptra oblong, oboval, punctate-sulcate.

Closely allied to the preceding, but rather different in form.

Also found within the metropolitan district; not very abundantly. "Dorking, July."-Mr. Waterhouse.

Sp. 14. velox. Atrum, rostro breviori crassiusculo, coleoptris obovatis sulcatis, sulcorum interstitiis angustissimis. (Long. corp.  $\frac{3}{4}$ -1 lin.)

Ap. velox. Kirby .- Steph. Catal. 185. No. 1889.

Black, slightly obscured, with a whitish pile: head with confluent wrinkles between the eyes: rostrum short, thick, smooth: antennæ rather long, placed behind the middle of the rostrum, with a whitish pubescent club: eyes rather large, somewhat prominent; thorax rounded, rather widened in the middle, confluently punctured, with an obsolete dorsal line behind: coleoptra of a glabrous, obovate form, punctate-sulcate, the sulci broader than the interstices.

Frequent in some places near London, especially at Coombewood, on willows. "Dorking, July."—Mr. Waterhouse.

- Sp. 15. simile. Atrum, coleoptris obovatis aneo-nigris, subsericeo nitidis, rostro femineo longiore. (Long. corp. 1-14/4 lin.)
  Ap. simile. Kirby.-Steph. Catal. 185. No. 1890.
- Black, with a slight obscure pile: rostrum rather long, filiform, slightly curved, with the apex shining, a little thickened in the middle: antennæ moderate, placed behind the middle of the rostrum: eyes large, somewhat incurved: thorax slightly cylindric, with confluent punctures, and a dorsal line behind: coleoptra obovate, black, brassy, faintly adorned with a satiny gloss, striate, the striæ somewhat punctate, with the interstices flat.

Male with the rostrum shorter and stouter than in the female.

Not common: I have taken specimens at Ripley and at Hertford. "Taken near Hunstanton in Norfolk."—*Kirby, l. c.* "Dorking, July."—*Mr. Waterhouse.* 

- Sp. 16. tenue. Aterimum angustum subglabrum nitidiusculum, coleoptris oblongis, rostro mediocri. (Long. corp. 1 lin.)
  Ap. tenue. Kirby.-Steph. Catal. 185. No. 1891.
- Very slender, deep black, rather glossy, with a very delicate black pile: head rather shorter than the thorax, punctate, the punctures confluent: rostrum moderate, shining: antennæ rather long, placed a little behind the middle of the rostrum: eyes moderate, prominent: thorax cylindric, scarcely broader than the head, punctulate, with a larger puncture behind, in front of the scutellum: coleoptra oblong, striate, the striæ subpunctate, the interstices somewhat flat.

Rather local; I found several specimens in a chalk pit at Little Blakenham in Suffolk, in Sept. 1821, and a quantity under moss in January, 1824, at Ripley. "Cramond."—*Rev. W. Little.* "Southend."—*Mr. Waterhouse.* "Found plentiful (near Swansea), on Medicago sativa, by Mr. Jeffreys."—*L. W. Dillwyn, Esq.* 

Sp. 17. Seniculus. Atrum, angustum, piloso-canescens, coleoptris ovato-oblongis, rostro longiori. (Long. corp. 1¼ lin.)
 Ap. Seniculus. Kirby.—Steph. Catal. 185. No. 1892.

Slender, black, clothed with whitish decumbent pile: head shorter than the thorax, scarcely punctate between the eyes: rostrum rather long, shining: antennæ moderate, placed behind the middle of the rostrum: eyes large, prominent: thorax rather broadest behind, the anterior margin with some slender white hairs, the disc finely punctured, with a larger puncture before the scutellum: coleoptra oblong-ovate, finely striated, the striæ subpunctate, the interstices somewhat flat.

Rare in England: I possess a pair which I captured near Ripley. "Long-parish, Hants."—Mr. J. H. Griesbach.

- Sp. 18. plebeium. Nigrum, griseo pilosum, angustum, thorace cylindrico, postice canaliculato, coleoptris elongato-ovalibus punctato-subsulcatis. (Long. corp.  $1\frac{1}{3}$  lin.)
- Ap. plebeium. Germar.-Steph. Catal. 185. No. 1893.
- Slender, black, with a delicate griseous pile: head short and small, finely punctured: rostrum rather long, opaque, glossy at the tip: antennæ long, placed a little behind the middle; club small: thorax cylindric, thickly punctured, with an impressed line before the scutellum: coleoptra elongate-oboval, subsulcate, the sulci punctured.

Rather less than the preceding, of which it may be a variety.

Also found at Ripley, and in other parts of the metropolitan district.

- Sp. 19. violaceum. Atrum glabrum coleoptris oblongo-obovatis violaceis, rostro brevi crassiusculo. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
- Ap. violaceum. Kirby.-Linn. Trans. ix. pl. 1. f. 16.-Steph. Catal. p. 185. No. 1894.
- Black, very glabrous: head rather shorter and narrower than the thorax, wrinkled with confluent punctures, and obsoletely channelled between the eyes: rostrum short, very stout, punctulate, with the extreme tip smooth and very glossy: antennæ somewhat basal, a little elongate, the club rather stout: eyes slightly prominent: thorax nearly cylindric, very much punctured, with a larger puncture before the scutellum: coleoptra oblong-ovate, fine violet, with a very delicate obscure pile, sulcate-striate, the striæ punctate, the interstices a little convex.
- Variable in the colour of the elytra: and the head and thorax are sometimes tinted with æneous.

Found on the dock, near Hertford and Ripley. "Near Kesgrave by Ipswich and Hunstanton, in Norfolk."—Kirby, l. c. "Common (near Swansea)."—L. W. Dillwyn, Esq. "Lancashire." —Mr. Hutchinson.

- Sp. 20. Hydrolapathi. Atrum, glabrum, coleoptris oblongo-obovatis cæruleis viridescentibusve, rostro brevi crassiusculo. (Long. corp. 1<sup>1</sup>/<sub>3</sub>-1<sup>3</sup>/<sub>4</sub>.lin.)
- Cu. Hydrolapathi. Marsham.—Ap. Hydrolapathi. Lin. Trans. ix. pl. 1. f. 17. --Steph. Catal. 185. No. 1895.
- Black, very glabrous: head nearly as broad as the thorax, punctate, the punctures confluent and disposed in striæ between the eyes: rostrum extremely short, very much punctured, obscure, rather flat above: antennæ seated a little behind the middle of the rostrum, hairy, with the club stout: eyes somewhat prominent: thorax subcylindric, thickly punctured, with a dorsal furrow, most deeply impressed behind: coleoptra oblong-ovate, blue or green, rather glossy, punctate-striate, interstices rather flat.

Found abundantly on the dock (Rumex Lapathus) throughout the metropolitan district, and in other parts. "Etterby."—T.C.*Heysham, Esq.* "Near Ely, abundant on Rumex maritimus."— *Rev. L. Jenyns.* "At times very plentiful (near Swansea.)"— *L. W. Dillwyn, Esq.* 

- Sp. 21. cæruleopenne. Atris, glabrum, colcoptris oblongo-obovatis cæruleis, rostro longiori, thorace punctato lineolâ impresså. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
   Ap. cæruleopenne. Steph. Catal. 185. No. 1896.
- Black, glabrous, slightly shining: head very coarsely and thickly punctured, obsoletely striated between the eyes: rostrum rather long, punctured, the apex shining: antennæ somewhat basal: eyes slightly prominent: thorax coarsely punctured, with a dorsal channel reaching from base to apex: elytra oblong-ovate, blue, punctate-striate; the interstices convex.

Taken in January, 1824, near Ripley, beneath moss.

- Sp. 22. Malvæ. Nigrum, cinereo-villosum, elytris antennis pedibusque testaceis. (Long. corp. 1 lin.)
- At. Malvæ. Fabricius.—Ap. Malvæ. Kirby.—Linn. Trans. ix. pl. 1. f. 2.— Steph. Catal. 185. No. 1897.
- Black, clothed with whitish decumbent hairs: head finely punctured: rostrum short, rather thick, villose, with the apex glabrous: antennæ long, placed rather behind the middle of the rostrum, testaceous, thickish, with the club somewhat large: thorax rather broadest behind: coleoptra oblong, testaceous, striated, the striæ scarcely punctured, each elytron with the inner edge of the base obliquely dusky: legs testaceous; coxæ black; trochanter testaceous. Male with the rostrum rather stouter and thicker.

Very abundant on mallows within the metropolitan district, and not uncommon in other parts of the country. "Bottisham."—Rev. L. Jenyns. "Cambridge."—C. C. Babington, Esq. "Not uncommon (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 23. hæmatodes. Rufum, oculis nigris, rostro brevissimo. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.)
- Ap. hæmatodes. Kirby .- Steph. Catal. 185. No. 1898.
- Dull rufous: head punctulated: rostrum very short, rather stout, punctulate, the apex glossy: antennæ somewhat long, medial, the club rather large: eyes black, prominent; thorax subcylindric, finely punctured: coleoptra somewhat oblong, punctate-striate; interstices convex, scarcely broader than the striæ.
- I possess a specimen lately given to me by Mr. Ingall, that appears to be totally distinct from the above; its form being more slender, the rostrum considerably elongated, slender, and bent, the colour paler, and the surface rather thickly public entries.

Not uncommon on heaths amongst furze, in various places within the metropolitan district. "Cummersdale."—T. C. Heysham, Esq. "Near Cambridge, but not common."—Rev. L. Jenyns. "Cramond."—Rev. W. Little. "Caernarvon."—C. C. Babington, Esq. "Epping."—Mr. Doubleday. "Not uncommon on the sand-hills (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 24. frumentarium. Sanguineum, oculis nigris, thorace subgloboso, postie canaliculato, rostro breviori. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)
- Cu. frumentarium. Linné.- Ap. frumentarium. Steph. Catal. 185. No. 1899.
- Clear sanguineous: head short, punctulate: rostrum also short, rather stout, with the base punctulate, the apex smooth and glossy: antennæ rather long, placed a little behind the middle of the rostrum; the club with the joints somewhat distinct: thorax subglobose, margined anteriorly, punctulated, with a channel behind: coleoptra oblong-ovate, sulcate, the sulci punctured, the interstices convex, scarcely broader than the sulci.
- Slightly variable in tint; being occasionally of a pale testaceous-red.

Very common on the dock, within the metropolitan district. "Raehills."—Rev. W. Little. "Neighbourhood of Ely."—Rev. L. Jenyns. "Caernarvon and Cambridge."—C. C. Babington, Esq. "Epping."—Mr. Doubleday. "Common on docks about the sand-hills, and particularly on Rumex obtusifolius on Crwmlynburrows."—L. W. Dillwyn, Esq.

2. Antennæ placed towards the base of the rostrum.

- Sp. 25. vernale. Fusco-nigricans, cinereo villosulum, elytris fasciis duabus fuscis. (Long. corp. 1 lin.)
- Cu. vernalis. Paykul.- Ap. vernale. Steph. Catal. 185. No. 1900.
- Rather slender, dusky-fuscous, with whitish pile: head with ashy pile: rostrum moderate, filiform, slightly bent, glabrous, shining, thickened behind the antennæ: antennæ moderate, testaceous: eyes prominent, encircled with dense

whitish hairs: thorax with ashy pile, the sides whitish, rather broadest behind, and with a short channel behind: coleoptra oblong-ovate striate, the striæ subpunctate; with decumbent ashy pile, with two oblique, undulated, fuscous, glabrous, fasciæ: legs testaceous, with the joints of the tarsi black: coxæ black. Male smaller, with the rostrum shorter and clothed with an ashy pile.

Common in the spring on the Ballota, Lamium, and Urtica, near Hertford, and in Suffolk. "Common on Urtica dioica (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 26. Onopordi. Atrum, glabrum, coleoptris ovatis nitidè viridi-æneis cærule-scentibusve, thorace scabro. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)
  Ap. Onopordi. Kirby.—Steph. Catal. 185. No. 1901.
- Black, glabrous, rather shining: head short, punctate, elevated behind, depressed in front, rugulose, with confluent punctures between the eyes: rostrum moderate, with the apex shining, a little incrassate behind the antennæ; the latter rather long, with the club ovate: eyes prominent: thorax subcylindric, rough, with very large excavated confluent punctures, and a deeper short dorsal line: coleoptra ovate, shining brassy-green or blue, sulcate, the sulci subpunctate, interstices rather flat.

Not uncommon on Onopordum Acanthium, and according to Mr. Spence on docks and thistles. "Common near Bottisham on the Onopordum Acanthium."—*Rev. L. Jenyns.* "Among herbage, near Danygraig."—*L. W. Dillwyn, Esq.* 

- Sp. 27. rugicolle. Atro æneum, glabrum, nitidum, thorace punctato-rugoso, lateribus rotundato, coleoptris ovalibus punctato-sulcatis, interstitiis striato punctatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. rugicolle. Germar. Mag. ii. 201. pl. 3. f. 18.—Ap. scabricolle. Steph. Catal. 185. No. 1902.
- Brassy-black, glabrous, shining: head short and small, punctate, obscurely striated between the eyes, which are rather prominent: rostrum short, round, moderately stout: antennæ stout, moderate: thorax with the lateral margins rounded, the disc very coarsely punctured, the punctures confluent and slightly wrinkled: coleoptra ovate, punctate-striate, with the interstices faintly punctate, the punctures disposed in striæ.

My specimens of this species I captured several years ago in the vicinity of London.

Sp. 28. penetrans. Atrum, griseo pilosum, thorace oblongo, posticè canaliculato, coleoptris oblongo-ovalibus, punctato-sulcatis. (Long. corp. 1½ lin.)

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- Ap. penetrans. Germar. Mag. ii. 244. pl. ii. f. 11.—Ap. caliginosus.—Steph. Catal. 185. No. 1903.
- Black, with griseous pile: head punctate, striated between the eyes: rostrum rather long, rounded, punctured, with the apex glossy: antennæ long, naked, the first joint long, club ovate: eyes slightly prominent: thorax oblong, coarsely punctate, with a posterior channel: elytra oblong-oval, punctate-striate.

The elytra are sometimes obscurely tinted with blue.

Found near London, but not common.

- Sp. 29. bifoveolatum. Atrum, glabrum, vertice bifoveolato, fronte striato, thorace subcylindrico punctato, coleoptris oblongo-ovatis atro cærulescentibus. (Long. corp.  $1\frac{1}{2}$  lin.)
- Ap. elongatum. Steph. Catal. 186. No. 1904.
- Black, glabrous: head broad, punctured, striated between the eyes; the vertex with two foveæ: rostrum long, shining, filiform, obscurely striated at the base: antennæ rather long: eyes moderately prominent: thorax subcylindric, punctured, with a larger impression behind: coleoptra oblong-ovate, deep blue, punctate-striate, the interstices slightly convex, and obscurely punctatestriate.
- The rostrum is much longer in this species than in any other of this section; in habit, at first sight, it closely resembles Ap. Onopordi, excepting in the length of its rostrum.

Of this remarkable species I also possess specimens captured many years since by myself near London.

Sp. 30. Radiolus. Atrum, glabrum, coleoptris ovatis acutis nigro-æneis, antennis posticis, rostro mediocri. (Long. corp.  $1\frac{3}{4}-2$  lin.)

Cu. Radiolus. Marsham.-Ap. Radiolus. Steph. Catal. 186. No. 1905.

Black, shining, slightly pilose; shuttle-shaped: head wrinkled between the eyes: rostrum moderate, shining, punctulated: antennæ long, basal: eyes rather prominent: thorax delicately punctured: coleoptra ovate, acute, brassy-black, or bluish, sometimes green, striate, the striæ obscurely punctured; the interstices slightly convex.

Abundant on mallows within the metropolitan district. "Near Ely, on mallows abundantly."—*Rev. L. Jenyns.*—" Crwmlyn-burrows."—*L. W. Dillwyn, Esq.* 

- Sp. 31. nigrescens. Atrum, glabrum, coleoptris ovatis acutis nigris, antennis posticis, rostro longiori. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. nigrescens. Steph. Catal. 186. No. 1906.
- Black, glabrous: head broad, obscurely striated between the eyes, which are slightly prominent: rostrum somewhat elongate, glossy: thorax a little

attenuated in front, faintly punctured, with a larger impression behind: coleoptra acute, deep black, striate, the striæ obscurely punctate, the interstices a little convex.

Found in hedges near London.

Sp. 32. lævigatum. Atrum, læviusculum, coleoptris ovatis violaceis obsoletè striatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Ap. lævigatum. Kirby.-Steph. Catal. 186. No. 1907.

Lanceolate, very glabrous, smooth, black: head with four or five striæ between the eyes: rostrum rather long: antennæ rather long, shining, with the club rather small: thorax cylindric, with the back smooth, the sides punctate: coleoptra obovate, fine violet, slightly striated, the striæ delicately punctured: legs with a slight whitish pile.

Apparently very rare: I possess a pair found within the metropolitan district:—it has been taken also in Suffolk.

- Sp. 33. æneum. Atrum, glabrum, coleoptris ovatis acutis æneis viridescentecæruleisve, fronte canaliculatá. (Long. corp. 2 lin.)
- Cu. æneus. Fabricius.- Ap. æneum. Steph. Catal. 186. No. 1908.
- Black, very glabrous and rather shining: head very smooth behind, punctulated between the eyes, with a deep intermediate furrow: rostrum rather short, a little thickened, and very much punctulated, tumid on both sides near the insertion of the antennæ; the latter rather long, placed behind the middle of the rostrum: eyes rather prominent: thorax finely and thickly punctulate, somewhat margined in front, with an impressed line behind: coleoptera ovate, acute, shining brassy, striated, the striæ impunctate, with the interstices rather convex.
- Var. β. Steph. Catal. l. c.—With the rostrum shorter, the thorax with an impressed fovea behind, the elytra greenish-blue.

One of the largest and most abundant species of the genus, within the metropolitan district. "Botchardby."—T. C. Heysham, Esq. "Near Ely, on mallows."—Rev. L. Jenyns. "Cambridge." —C. C. Babington, Esq. "On Sketty-burrows, at times plentiful." —L. W. Dillwyn, Esq.

Sp. 34. Carduorum. Atrum, coleoptris ovatis obscuris viridescentibus cæruleisve, rostro basi utrinque gibbo. (Long. corp. 1<sup>2</sup>/<sub>3</sub> lin.)

Ap. Carduorum. Kirby.-Steph. Catal. 186. No. 1909.

Black, with a very obscure pile: head rugulose striate between the eyes, with a smooth fovea anteriorly: rostrum rather long, punctulate, with the apex shining, the base broad, with an acute tubercle on each side, on which the antennæ are placed, which are rather long and basal: eyes slightly prominent: thorax cylindric, slightly punctured, with a short impressed line behind: *coleoptra* oblong-*ovate*, *bluish* or greenish, striate, the striæ punctate, with the interstices very flat.

Less abundant than the last, but not uncommon in the vicinity of the metropolis. "Grimsdale."—*T. C. Heysham, Esq.* "Near Bottisham, occasionally."—*Rev. L. Jenyns.* "Cambridge."—*C. C. Babington, Esq.* "On the sand hills (near Swansea)."—*L. W. Dillwyn, Esq.* 

b. With the rostrum long, or moderate.

1. Antennæ basal. \* Thorax subcylindric.

- Sp. 35. rufirostre. Atrum cinereo-subvillosum, subtus piloso-albicans, pedibus rufo-testaceis, plantis nigris, coleoptris ovatis nigro-æneis. (Long. corp.  $1\frac{1}{2}$ — $1\frac{2}{3}$  lin.)
- Cu. rufirostre. Fabricius.—Ap. rufirostre. Steph. Catal. 186. No. 1910.— 3 Ap. Malvarum. Kirby.—Steph. Catal. l. c. No. 1911.
- Black, with a slight cinerescent pile, with the under side, especially on the sides, whitish: head finely punctulate: rostrum punctulate, shining, the base a little thickened: antennæ black, or piceous, short: eyes slightly prominent, with a whitish belt beneath: thorax somewhat globose, finely punctured, with a very obsolete, abbreviated impressed line behind: coleoptra ovate, rather glossy, black brass, striated, the striæ slightly punctured, the interstices rather flat: legs testaceous, with the coxæ and tarsi black. The female has the rostrum shorter, rufous at the apex, the antennæ testaceous, and the legs also entirely testaceous, with the two apical joints of the tarsi also black.

Very abundant on mallows in some places, especially near Hertford and Ripley: also found in Devonshire, Suffolk and Norfolk. "Cambridge."—C. C. Babington, Esq. "Ely and Bottisham."— Rev. L. Jenyns. "Frequent on mallows (near Swansea)."— L. W. Dillwyn, Esq.

Sp. 36. pallipes. Nigrum, pedibus testaceis, plantis nigris, fronte canaliculatâ, coleoptris oblongo-ovatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Ap. pallipes. Kirby .- Linn. Trans. ix. pl. 1. f. 7. Steph. Catal. 186. No. 1912.

Black, rather obscure, pilose: head broad, punctulate, with a channel between the eyes: rostrum moderate, glabrous, shining, a little dilated at the apex: antennæ rather long, the base dull rufous: eyes prominent: thorax somewhat globose, very thickly punctured, with a very obsolete line behind; coleoptra oblong-ovate, punctate-striate, the interstices rather flat: legs testaceous, with the tarsi black. Not common : found occasionally within the metropolitan district, and in Suffolk.

† Sp. 37. Griesbachii. Atrum, piloso-subincanus, femoribus omnibus tibiis anticis antennisque testaceis, capite lato, fronte tristriato. (Long. corp. 1½ lin.)
Ap. Griesbachii. Waterhouse MSS.

Black, slightly pilose: head broad, forehead with three impressed striæ: rostrum moderate, shining, filiform: antennæ testaceous, long, the basal joints incrassated: eyes slightly prominent: thorax subcylindric, rather coarsely punctured, with a short deep line behind: coleoptra subovate, punctate-sulcate, the interstices obscurely punctured: femora and anterior tibiæ testaceous: intermediate and posterior tibiæ and tarsi black, the former with a pale ring at the base.

Taken "in Hants, by Mr. Griesbach."-Mr. Waterhouse.

- Sp. 38. confluens. Atrum, angustum, piloso-subincanum, coleoptris oblongoovatis, fronte bisulco. (Long. corp.  $1\frac{1}{2}$  lin.)
- Ap. confluens. Kirby.—Linn. Trans. ix. pl. 1. f. 15. Steph. Catal. 186. No. 1913.
- Black, slender, with a fine hoary pile: head rather smooth, with two deep approximating sulci between the eyes, forming a roman V: rostrum moderate, shining: antennæ rather long: eyes prominent: thorax scarcely broader than the head, delicately punctured, with a faint impressed line behind: coleoptra oblong-ovate, a little shining, very finely punctate-striate.

Found in Suffolk and near London, but rare.

- Sp. 39. pusillum. Nigrum, griseo pubescens, thorace lateribus rotundato, antice attenuato, coleoptris obovalibus, punctato-sulcatis. (Long. corp. 1 lin.)
   Ap. pusillum. Germar.—Steph. Catal. 186. No. 1914.
- Black, with dull griscous pubescence: head small: rostrum long, filiform, obscure: antennæ rather long, basal: club stout: eyes slightly prominent: thorax broad at the base, the apex attenuated, and the sides rounded: elytra obovate, punctate-sulcate.

Occasionally taken near London, but not common.

- Sp. 40. pubescens. Atrum piloso incanum, thorace brevi posticè lineolà impresso, rostro mediocri. (Long. corp. 1 lin.)
- Ap. pubescens. Kirby .- Steph. Catal. 186. No. 1915.
- Black, rather shining, clothed with whitish pile: head a little shorter than the thorax, rather smooth between the eyes: rostrum moderate, filiform, slightly curved: antennæ moderate, basal: eyes large, prominent: thorax short, rounded, rather broad behind, punctulate, with an impressed line before the scutellum; coleoptra ovate, striated, the striæ slightly punctured, with the

interstices rather flat. Male with the rostrum shorter, stouter, and less curved.

Rare: I have taken it within the metropolitan district, at Ripley. "Southend."—Mr. Waterhouse.

Sp. 41. vicinum. Atrum, subpilosum, antennis totis nigris, fronte punctată, thorace postice lineă exavato, coleoptris subglobosis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Ap. vicinum. Kirby.-Linn. Trans. ix. pl. 1. f. 3. Steph. Catal. 186. No. 1916.

- Black, somewhat pilose and obscure: head rather short, punctate between the eyes: rostrum rather long, filiform, slightly bent, with the base a little thickened: antennæ black: eyes prominent: thorax short, punctured, with a very short and scarcely visible impressed line before the scutellum: coleoptra oblong-globose, deeply striate, the striæ punctate, with the interstices rather flat.
- Female? with the rostrum longer: thorax broader and elytra more gibbous, with the surface more publicent.

Rare: I possess one specimen from the Marshamian collection, and one that I caught in June, 1827, at Ripley.

\* \* With the thorax subglobose.

Sp. 42. Hookeri. Atrum, obscuriusculum, thorace globoso. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
Ap. Hookeri. Kirby.—Linn. Trans. ix. pl. 1. f. 16. Steph. Catal. 186. No. 1917.

Black, with a very delicate pubescence: head very short, and rather smooth between the eyes: rostrum moderate, a little thickened behind the antennæ, which are moderate: eyes rather depressed: thorax globose, very much punctulated, with a rather obsolete impressed line behind: coleoptra rather oblong, in certain lights obscurely tinted with greenish, punctate-striate, with the interstices flat.

Apparently very rare in England: it has been taken in Norfolk, and in the New Forest.

- 2. Antennæ near the middle of the rostrum. • Coleoptra subglobose.
- Sp. 43. Pisi. Atrum, piloso-subincanum, coleoptris globosis sulcatis, thorace canaliculato. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
- At. Pisi. Fabricius.—Ap. Pisi. Steph. Catal. 187. No. 1918.—Ap. striatum. Kirby.—Linn. Trans. ix. pl. 1. f. 10.
- Black, with an obscure whitish pile: rostrum moderate, rather shining, finely punctured: antennæ moderate: eyes slightly prominent: thorax punctulate, with an impressed dorsal line, narrower than the *coleoptra*, which are *globose*, deeply *sulcate*, the sulci punctured, with the interstices rather flat.

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Not common : found occasionally within the metropolitan district. "Cramond."—Rev. W. Little. "Southend."—Mr. Waterhouse. "Midgley-moor."—Mr. Gibson.

Sp. 44. atratulum. Atrum, opacum, thorace cylindrico, punctato, canaliculato, coleoptris obcuneatis, punctato-sulcatis, interstitiis convexis. (Long. corp.  $1\frac{1}{2}$ —  $1\frac{3}{4}$  lin.)

Ap. atratulum. Germar.-Steph. Catal. 187. No. 1919.

Black, opaque, obscurely pilose: head short, finely punctured: rostrum moderate, dull, the apex shining: antennæ rather long: thorax cylindric, thick, punctate, with an elongate impressed dorsal line: coleoptra very broad, obconic, punctate-sulcate, with the interstices convex: legs slender, rather long.

Not very abundant: I have occasionally met with specimens near Ripley, in June. "Southend."—Mr. Waterhouse.

- Sp. 45. immune. Atrum piloso-subincanum, coleoptris globoso-cuneiformibus sulcatis, capite striato. (Long. corp. 1-11/2 lin.)
   Ap. immune. Kirby.—Steph. Catal. 187. No. 1920.
- Black, with a fine obscure whitish pile: head striated between the eyes: rostrum moderate, finely punctured and shining: antennæ moderate: eyes slightly prominent: thorax somewhat globose, punctulated, the punctures somewhat united, with a larger one behind, opposite to the scutellum: coleoptra of a somewhat globose-wedge shape, very obtuse behind, punctate-sulcate, with the interstices moderately convex.

Taken on the broom and furze within the metropolitan district. "Southend."—Mr. Waterhouse.

Sp. 46. carbonarium. Atrum, nitidulum, thorace subcylindrico punctato-rugoso, posticè canaliculato, coleoptris subglobosis, striatis, interstitiis planis. (Long. corp. 1<sup>1</sup>/<sub>3</sub> lin.)

Black, obscure, slightly shining: head long and small, obscurely punctured between the eyes: rostrum rather long, punctured, thickened behind the antennæ: thorax subcylindric, rugose-punctate, with a larger dorsal impression behind: coleoptra subglobose, striate, the striæ slightly punctate, with the interstices flat.

Found in June near Hertford, and also in the vicinity of Ripley.

- Sp. 47. Sorbi. Atrum, glabrum, coleoptris globosis virescenti-cæruleis, rostro longissimo. (Long. corp. 2 lin.)
- At. Sorbi. Fabricius.- Ap. Sorbi. Steph. Catal. 187. No. 1922.

Ap. carbonarium. German.-Steph. Catal. 187. No. 1921.

Black, glabrous, and shining: head very short, rugulose—sometimes bistriated between the eyes: rostrum long, a little dilated at the apex, and tumid on each side at the insertion of the antennæ, which are moderate: thorax subglobose, punctulated, the punctures confluent, with a deep dorsal channel behind: coleoptra globose, greenish-blue, striated, the striæ subpunctate, with the interstices broad and flat. Rostrum shorter in the male, and stouter: elytra black, sometimes tinted with brassy.

Taken in the spring, but apparently not very common.

- Sp. 48. Ervi. Atrum, antennis testaceis, apice nigris, coleoptris subglobosis. (Long. corp.  $1\frac{1}{3}$  lin.)
- Ap. Ervi. Kirby.-Steph. Catal. 187. No. 1923.
- Black, with obscure whitish pile: head striated between the eyes: rostrum rather long, with the base obscure, the apex glossy: antennæ rather long, inserted behind the middle of the rostrum, pale testaceous, with the club black: eyes slightly prominent: thorax subcylindric, with an impressed line behind: coleoptra somewhat obovate, globose, slightly sulcate, the sulci punctured: tibiæ rather slender.

Rather scarce: I have taken specimens at Hertford and near Ripley, in July. It was found on Lathyrus pratensis in Suffolk, by Mr. Kirby. "Long-parish, Hants."—Mr. Waterhouse. "Swansea."—L. W. Dillwyn, Esq.

- Sp 49. sulcifrons. Atrum, glabrum, thorace vagè punctato, dorso foveolato, coleoptris ovato globosis, cæruleis, striatis, interstituis planis, fronte trisulcatâ. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. sulcifrons. Herbst.-Steph. Catal. 187. No. 1924.
- Black, glabrous: head with three deep sulci between the eyes: rostrum long, rather thickened towards the apex and behind the antennæ, which are rather long and stout: thorax subcylindric, longer than broad, with a deep fovea on the disc, which is thickly punctate: coleoptra bluish, ovate globose, striated, the striæ finely punctured, with the interstices broad and flat: legs long and slender.

 Sp. 50. punctigerum. Atrum, glabrum, coleoptris subglobosis cæruleis, rostro mediocri, basi crassiori, capite inter oculos trisulco. (Long. corp. 1<sup>2</sup>/<sub>3</sub> lin.)
 At. punctiger. Panzer.—Ap. punctigerum. Steph. Catal. 187. No. 1925.

Black, glabrous: head with about three somewhat sulcate strix: rostrum moderate, rather thickened and obscure behind the antennæ, the apex shining: antennæ moderate, rather behind the middle of the rostrum, with the club

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stout: thorax subcylindric, moderately punctate, with an obsolete dorsal channel: coleoptra blue-black, globose obovate, punctate-striate, with the interstices a little convex. Female with the rostrum longer.

Taken on the Vicia Sepium in the spring, near London and in other places, not very uncommonly. "Near Bottisham."—*Rev. L. Jenyns.* 

- Sp. 51. Spencii. Atrum, piloso-obscurum, thorace canaliculato utrinque foveato, coleoptris oblongis atro-cæruleis viridescentibusve, fronte striatá. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. Spencii. Kirby .- Linn. Trans. ix. pl. 1. f. 13.
- Black, with an obscure whitish pile: head with three shallow channels between the eyes: rostrum rather short, incrassate, and more pilose than the rest of the body: antennæ long, placed behind the middle of the rostrum: eyes large, oval, prominent: thorax short, narrowed anteriorly, somewhat globose, punctate, the punctures somewhat confluent, with a dorsal channel, terminating in an obscure fovea behind: coleoptra oblong-ovate, deep-bluish, striate, the striæ punctured, with the interstices flat.

Not uncommon; found in the north: I have taken a single example near Ripley. "Hants."—Mr. Waterhouse.

- Sp. 52. subcæruleum. Atrum, glabrum, nitidulum, fronte ruguloså, thorace cylindrico, punctato, coleoptris obovalibus, cæruleo atris, punctato-sulcatis, interstitiis planiusculus. (Long. corp. 1½ lin.)
- Ap. subcæruleum. Steph. Catal. 187. No. 1927.—Ap. Æthiops. Germar. Mag. ii. 213. note.
- Black, glabrous, shining: head punctured, rugose between the eyes, which are slightly prominent: rostrum rather long, slender, punctured, glossy at the apex: antennæ long, with the two basal joints rather stout: thorax cylindric, punctate, the punctures distinct: coleoptra oboval, deep blue, punctate-sulcate, with the interstices rather flat.

I possess a single specimen of this distinct species, which I found beneath moss on Jan. 1, 1820, near Ripley.

Sp. 53. unicolor. Atrum subpilosum, coleoptris oblongis, rostro mediocri subcrassiori, puncto gemino elevato. (Long. corp. 1½ lin.)

Ap. unicolor. Kirby.-Steph. Catal. 187. No. 1928.

Black, slightly pilose: head short, punctulate, with two approximating striæ between the eyes: rostrum moderate, rather thick, finely punctulate, more pilose than the rest of the body, with the apex glossy, the middle a little thickened, and swollen beneath, with a geminated elevation between the antennæ: eyes slightly incurved: thorax as broad as the head in front, transversely *depressed* and broader behind, thickly punctate, with a slightly excavated line before the scutellum: coleoptra oblong, with the apex obtusely subacuminated, sulcate-striate, the striæ punctate, with the interstices convex.

Rare: I have only a single example in my collection, which I obtained from that of Mr. Marsham.

\*\* Coleoptra ovate.

- Sp. 54. virens. Atrum, coleoptris oblongo-ovatis cæruleis viridescentibusve striatis, striå suturali profundiori, thorace læviusculo. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)
   Ap. virens. Kirby.-Steph. Catal. 187. No. 1929.
- Black, rather glabrous and a little shining: head scarcely punctate, rugulose between the eyes, and in the living insect slightly tinted with brassy: rostrum moderate, shining: antennæ moderate: eyes slightly prominent: thorax black, brassy during life, very obsoletely punctulated, with a larger puncture before the scutellum: coleoptru oblong-ovate, blue, or greenish, sulcate, the sulci punctured, with the interstices slightly convex, the sulcus next to the suture most deeply impressed.

Not very uncommon within the metropolitan district. "Woodbank."—T. C. Heysham, Esq.

 Sp. 55. Marchicum. Atrum, coleoptris oblongo-ovatis atro-cæruleis striatis, striå suturali profundiori, rostro brevi crassiusculo. (Long. corp. 11 lin.)
 Ap. Marchicum. Kirby.—Steph. Catal. 187. No. 1930.

Black, glabrous, shining: head with three obsolete sulci between the eyes: rostrum short, rather thick: antennæ long: eyes prominent: thorax subcylindric, finely punctulate, with a larger dorsal impression behind: coleoptra oblong-ovate, deep-blue or greenish, sulcate, the sulci punctate, with the sutural sulcus occasionally deeper in the middle.

Male with the rostrum shorter, but not stouter than in the female.

Also found not uncommonly, in hedges, within the metropolitan district.

- Sp. 56. Astragali. Æneum, nitidum, coleoptris oblongo-ovatis cyaneis aut viridibus, thorace canaliculato. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. Astragali. Kirby.—Linn. Trans. ix. pl. 1. f. 12.—Steph. Catal. 187. No. 1931.
- Brassy, or greenish-brass, glabrous, shining: head rugose between the eyes: rostrum moderate, black, shining: antennæ moderate, medial: eyes scarcely prominent: thorax distinctly punctured, with a longitudinal dorsal channel: coleoptra ovate, blue, violet, or bright green, punctate-striate, the interstices scarcely convex: tarsi black.

This beautiful insect is rare, and very local : it has been taken

in Yorkshire on the Astragalus glycyphyllus, and more recently by Mr. Kirby on the same plant in Suffolk.

Sp. 57. Loti. Nigrum piloso-subincanum, coleoptris obovatis, rostro longiori. (Long. corp. 1<sup>1</sup>/<sub>3</sub> lin.)

Ap. Loti. Kirby.-Steph. Catal. 187. No. 1932.

Black, slightly shining, with a slight hoary pile: head punctate, with two or three wrinkles between the eyes: rostrum rather long, curved, filiform, very glossy: antennæ moderate; eyes somewhat immersed: thorax somewhat globose, with confluent punctures, and a larger excavation in the middle behind: coleoptra obovate, punctate-striate, the interstices convex.

Found on the Lotus corniculatus, not very abundantly: I have taken specimens beneath moss, in January, near Ripley. "Taken in July, by Mr. Jeffreys, on Antirrhinum Linaria, in St. Helen'slane (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 58. civicum. Nigrum, griseo-pilosum, thorace transverso, punctulato, posticè canaliculato, coleoptris oblongo-ovalibus, punctato-subsulcatis. (Long. corp. 11 lin.)
- Ap. civicum. Germar.-Steph. Catal. 187. No. 1933.
- Black, with a delicate griseous pile : head broad, a little rugulose between the eyes : rostrum rather long and slender, punctate, glossy at the apex : antennæ rather long: eyes a little prominent : thorax broader than long, irregularly punctured, with an abbreviated channel in the middle behind : coleoptra oblong-oval, punctate-sulcate, the interstices slightly convex.

Occasionally met with in the vicinity of London in June. "Dorking."—Mr. Waterhouse.

Sp. 59. æratum. Atro-æneum, subpilosum, thorace subdepresso, punctato, posticè foveato, coleoptris oblongo-ovalibus, obscurè cyaneis, punctato-sulcatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

Ap. auratum. Steph. Catal. 187. No. 1934.

Brassy-black, slightly pilose: head obscurely punctured between the eyes: rostrum moderate, slender: antennæ moderate, black: thorax slightly depressed, punctured, with a fovea at the base: coleoptra oblong-oval, dull blue, punctate-sulcate.

My specimen of this insect was taken in the neighbourhood of London, I believe, at Coombe-wood.

Sp. 60. pavidum. Nigrum, griseo-pubescens, thorace subcylindrico, punctato, posticè canaliculato, coleoptris obovalibus, punctato-sulcatis, obscurè viridibus, antennis basi rufis. (Long. corp. 1½ lin.) Ap. pavidum. German.-Steph. Catal. 187, No. 1935.

Black, with a delicate giseous pile: head short, small, striate between the eyes, which are prominent: rostrum long, rounded: antennæ moderate, rufous at the base: thorax subcylindric, punctured, with a dorsal channel behind: coleoptra obscure dull greenish, or bluish, oboval, punctate-sulcate.

Apparently rare: I possess three specimens only, which I captured several years since in the neighbourhood of London.

Sp. 61. scutellare. Atrum, subangustum piloso-subincanum, coleoptris obovatis, sulcatis, scutello elongato. (Long. corp. 13 lin.)

Ap. scutellare. Kirby .- Steph. Catal. 187. No. 1936.

Slender, black, with an obscure hoary pile: head striated between the eyes: rostrum long, filiform, curved, slightly attenuated before the eyes, with the apex itself a little dilated: antennæ short, placed behind the middle, shining: eyes immersed: thorax rounded, a little narrowed anteriorly, confluently punctured, with a channel before the scutellum; the latter longer than usual in this genus: coleoptra oblong-ovate, punctate sulcate, the interstices slightly broader and flat.

Rare : my specimen of this insect I found several years since in a sand-pit near Woolwich.

 Sp. 62. obscurum. Nigrum, albido-villosulum, pedibus quatuor anterioribus rufis, coleoptris globoso-oblongis, obscurè nigro-æneis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
 Ap. obscurum. Kirby.—Steph. Catal. 187. No. 1937.

Black, with ashy-white pile: head deeply punctured between the eyes; the punctures confluent: rostrum rather long, thickened behind the antennæ, which are seated a little behind the middle, black, with the basal joint obscure rufous: thorax punctured, the punctures confluent and deep, with an abbreviated dorsal line behind: coleoptra globose oblong, very obscure brassy-black, striated, the striæ slightly punctured, with the interstices flat: four anterior legs dull rufous, with the joints black.

The two specimens of this insect mentioned by Mr. Kirby are the only examples that I have seen; of these one is in my cabinet.

Sp. 63. flavipes. Atrum, glabrum, pedibus flavis, plantis nigris, antennis basi rufis, coleoptris ovatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Ap. flavipes. Herbst.-Steph. Catal. 188. No. 1928.

Black, slightly glossy and somewhat glabrous: head rather long, punctured, striated between the eyes: rostrum short, glossy, the base and apex a little thickened: antennæ rather long, placed rather behind the middle, with the base testaccous: eyes slightly prominent: thorax slender, subcylindric, very much punctured, with a faint dorsal line behind: coleoptra globose-ovate, punctate-striate, the interstices rather flat: legs yellow, with black coxæ and tarsi.

The tibiæ are sometimes piceous; and the anterior coxæ are occasionally yellow.

Very abundant, especially in the spring, on the white, or Dutch clover, throughout the metropolitan district, the larva feeding on the heads. "Common in Cambridgeshire."—Rev. L. Jenyns. "Raehills."—Rev. W. Little. "Caernarvon."—C. C. Babington, Esq. "Southend."—Mr. Waterhouse. "On Crwmlyn-burrows." —L. W. Dillwyn, Esq.

#### 3. Antennæ medial. \* Coleoptra oval.

Black, glabrous, with the exception of the head, which is covered with whitish pile, and punctulate between the eyes: rostrum moderate, pale testaceous before the antennæ, which are rather long, medial, pale testaceous, with the club black: eyes prominent: thorax minutely punctured, with a channel behind: coleoptra oblong-ovate punctate-striate: legs, the anterior coxæ, and all the trochanters pale testaceous, with the tarsi black. The other sex has the rostrum entirely black, with the four anterior coxæ yellow.

Very abundant in certain situations within the metropolitan district, especially at Ripley. "Caernarvon."—C. C. Babington, Esq. "Wimbledon-park."—Mr. Waterhouse.

- Sp. 66. assimile. Atrum, glabrum, femoribus omnibus tibiisque anticis testaceis, coleoptris subellipticis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
   Ap. assimile. Kirby.—Steph. Catal. 188. No. 1941.
- Ap. assimile. Airby.-Steph. Catal. 188. No. 1941.
- † Sp. 64. Fagi. Atrum, glabrum, antennis basi femoribusque pallidis, coleoptris oblongis nigricantibus. (Long. corp. 13 lin.)
- Cu. Fagi. Linné.—Berkenhout (!). Ap. Fagi.—Steph. Catal. 188. No. 1939. note.
- Black, very glabrous: head punctured: rostrum long: antennæ long, pale at the base; eyes large, slightly prominent: thorax subcylindric, punctulated, with an obsolete channel behind: coleoptra rather oblong, pitchy-black, with a violet tint; punctate sulcate: femora, and sometimes the tibiæ, pale.
- Said by Berkenhout to inhabit England, but I have not hitherto seen an indigenous specimen, agreeing with the above description, and with Mr. Kirby's figure.

Sp. 65. nigritarse. Atrum, glabrum, rostro dimidiato pedibusque testaceis, antennis clavî tarsisque nigris, colcoptris oblongo-ovatis. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)

Ap. nigritarse. Kirby.—Linn. Trans. ix. 36. pl. 1. f. 6.—Steph. Catal. 188. No. 1940.

Rather slender, black, glabrous, somewhat obscure : head striated between the eyes : rostrum moderate; punctulated, the apex shining, the base rather thickened : antennæ long, medial, piceous at the base : eyes somewhat immersed : thorax narrow, subcylindric; very much punctulate, the punctures confluent, a slight dorsal channel behind : coleoptra very black, somewhat elliptic, slightly striated, the striæ obsoletely punctured, interstices rather flat, legs black, with all the femora and the anterior coxæ and tibiæ dull rufo-testaceous. Rostrum longer, and the thorax more distinctly sulcate behind in the other sex.

Abundant in clover-fields, at all times; selecting the Trifolium ochroleucum for its pabulum. "Bottisham, in red clover."—*Rev. L. Jenyns.* "Dorking."—*Mr. Waterhouse.* "Not uncommon (near Swansea)."—*L. W. Dillwyn, Esq.* 

Sp. 67. apricans. Atrum, glabrum, femoribus tibiisque anticis rufo-testaceis, thorace oblongo-cylindrico, coleoptris obovalibus, punctato-sulcatis, antennis basi rufis. (Long. corp.  $1\frac{1}{3}-1\frac{3}{4}$  lin.)

Ap. apricans. Herbst .- Ap. flavi-femoratum. Steph. Catal. 188. No. 1942.

Black, glabrous; head punctulate; wrinkled between the eyes: rather long, filiform, shining, punctured, a little thickened in the middle: antennæ moderate, medial, with the base testaceous: eyes slightly immersed: thorax punctulated, with an impressed dorsal line behind: coleoptra subglobose, or globose-ovate, somewhat gibbous, rather glossy, black, sometimes a little tinted with brassy, punctate-striate, the interstices slightly convex: legs black, two anterior coxæ, all the trochanters and femora and anterior tibiæ rufo-testaceous.

Extremely abundant during the year in meadows, especially where the Trifolium pratense grows. "Dalston, Cumberland."— T. C. Heysham, Esq. "Bottisham, in red clover."—Rev. L. Jenyns. "Raehills."—Rev. W. Little. "Bath, &c."—C. C. Babington, Esq. "Swansea, &c."—L. W. Dillwyn, Esq.

Sp. 68. lævicolle. Atrum, glabrum, fronte sulcatå, femoribus testaceis, thorace læviusculo, coleoptris globoso-ovatis gibbis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
Ap. lævicolle. Kirby.—Steph. Catal. 188. No. 1943.

Black, shining, glabrous: head scarcely punctured, with about three sulci between the eyes: rostrum rather moderate, a little thickened and somewhat incrassated in the middle, obsoletely rugulose-punctate: antennæ moderate, placed a little behind the middle of the rostrum: thorax cylindric, very delicately punctulate, with a slight impressed fovea before the scutellum: coleoptra subglobose, gibbous, striated, the striæ somewhat punctate: all the femora, with the trochanters, and two anterior coxæ, pale-testaceous: anterior tibiæ rufous, with the base paler, the four posterior pitchy black, with a pale-testaceous ring at the base: tarsi black.

Evidently a scarce species : I have never taken it, but am indebted to Mr. Waterhouse for my specimens. "St. Leonard's, near Windsor."—Mr. Waterhouse.

Sp. 69. æstivum. Antennis unicoloribus mediis, nigrum, nitidum, femoribus tibiisque anticis rufis, thorace cylindrico punctato, coleoptris ovalibus, punctato sulcatis. (Long. corp. 1-13 lin.)

Ap. æstivum. Germar.-Steph. Catal. 188. No. 1944.

Black, shining, glabrous: head obscurely punctured between the eyes: rostrum long, punctate: antennæ long, medial, black; the basal joint sometimes a little reddish beneath: thorax cylindric, punctate, with a fovea behind: coleoptra ovate, punctate-sulcate: legs black, with the anterior coxæ and tibiæ, all the femora and the tibiæ within, pale yellow-testaceous: joints black, &c.

Not uncommon in several places within the metropolitan district. "Dorking." — Mr. Waterhouse.

Sp. 70. rufierus. Nigrum, antennis unicoloribus, femoribus anticis medio rufis, thorace oblongo, cylindrico punctato, coleoptris oblongo-ovalibus, punctato sulcatis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)

Black, slightly shining: head finely punctured: rostrum moderate, filiform, thickened behind the antennæ, which are long, medial, and black: eyes moderately prominent: thorax oblong, cylindric, punctate, with a faint central channel: coleoptra oblong-ovate, punctate sulcate: legs black, the anterior femora rufous, and the other femora slightly tinted with the same.

Less abundant than the foregoing species within the metropolitan district.

- Sp. 71. Leachii. Atrum, nitidum, antennarum basi femoribusque omnibus fulvis, tibiis anticis internè testaceis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>8</sup>/<sub>4</sub> lin.)
- Ap. Leachii. Steph. Catal. p. 189. No. 1946.
- Black, shining: head broad, striated between the eyes: rostrum long, curved, smooth: antennæ rather long, reddish at the base, the club black: eyes prominent: thorax subcylindric, coarsely punctate, with a deeper puncture behind: coleoptra oblong-oval, sulcate, the sulci punctured: legs stout: femora entirely fulvous: anterior tibiæ pale rufo-testaceous within.

Somewhat allied to, but apparently rather smaller than Ap. Ononides, Gyllenhal,

Taken within the metropolitan district. "Windsor."—Mr. Waterhouse.

Ap. ruficrus. Germar.-Steph. Catal. 188. No. 1945.

- Sp. 72. Gyllenhalii. Atrum subangustum, coleoptris oblongiusculis, antennis piceis, rostro longiori. (Long. corp. 1<sup>2</sup>/<sub>3</sub> lin.)
- Ap. Gyllenhalii. Kirby .- Steph. Catal. 188. No. 1947.
- Rather narrow, black, with a fine cinerescent pile: head very narrow, scarcely broader than the rostrum, elongate, confluently punctured, with wrinkled striæ between the eyes, behind transversely elevated: rostrum rather long, filiform, a little curved and punctured: antennæ moderate, medial, pitchy-black, with the base reddish: eyes immersed; thorax rather short, nearly cylindric, deeply punctured, the punctures confluent, with an impressed line in the middle behind: coleoptra oblong-ovate, striated, the striæ punctate, with the interstices flat.
- Elytra sometimes deep bluish-black.

Not common; found occasionally in the neighbourhood of London.

- Sp. 73. varipes. Nigrum, nitidum, femoribus tibiarumque annulo rufis, thorace oblongo, subcylindrico, coleoptris oblongo-ovalibus, punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. varipes. Germar.-Steph. Catal. 188. No. 1948.
- Black, shining: head rugulose between the eyes: rostrum short, especially in the male, filiform, punctured, curved: antennæ rather short, with the basal joint rufescent, the rest black, with the club stout: eyes somewhat immersed: thorax oblong, cylindric, punctured, with a dorsal line behind: coleoptra oblong-oval, punctate-striate: legs yellow-testaceous, with the joints, lower half of the hinder tibiæ, and all the tarsi black.

Common in clover fields within the metropolitan district. "Bottisham, in red clover."—*Rev. L. Jenyns.* "Southend and Windsor." —*Mr. Waterhouse.* 

 † Sp. 74. difforme. Atrum, nitidum, antennis femoribus omnibus tibiisque anticis medio fulvis, tibiis quatuor posticis annulo fulvescente. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
 Ap. difforme. Germar.—Steph. Catal. 188. No. 1949.—Curtis, v. pl. 211.

Shining, blackish-green: head punctured between the eyes: rostrum long, stout: antennæ inserted rather beyond the middle, fulvous, with the base and apex black, second joint minute, third transverse: eyes prominent: thorax subquadrate, coarsely punctured, with a channel behind: coleoptra oblong-ovate, striate, the striæ slightly punctured: femora fulvous, with the base and apex black: anterior tibiæ the same; four posterior tibiæ and all the tarsi black, the former with a fulvescent ring towards the base: anterior tarsi (of the male?) with the basal joint long, produced internally at the apex, which is brown; posterior tibiæ at the apex and basal joint of tarsi also dilated.

Rare ; but widely distributed, having been found in Kent, Surrey, and in the north.

- Sp. 75. filirostre. Atrum, glabrum, coleoptris subglobosis, rostro pedibusque elongatis. (Long. corp. 1<sup>1</sup>/<sub>3</sub> lin.)
- Ap. filirostre. Kirby.-Steph. Catal. 188. No. 1950.
- Black, very glabrous, and scarcely glossy: head striated between the eyes: rostrum long, nearly filiform, shining, very delicately punctured, slightly attenuated before the antennæ, which are short, and inserted behind the middle: eyes slightly immersed: thorax somewhat cylindric, delicately punctured, with an obsolete impressed line before the scutellum: coleoptra globose-ovate, striated, the striæ somewhat punctate, with the interstices flat: legs elongate. The other sex has the rostrum shorter and the antennæ medial.

Of this rare species I have a single specimen only, which I captured at Little Blakenham, in Suffolk, in Sept. 1821.

\* Sp. 76. glabratum. Nigrum, glabrum, nitidulum, capite punctato-rugoso, thorace oblongo, cylindrico, punctato, posticè canaliculato, coleoptris oblongoobovalibus, punctato-sulcatis. (Long. corp. 1½ lin?)

Ap. glabratum. Germar.-Steph. Catal. 188. No. 1951.

Black, glabrous, rather shining: head punctate-rugose: rostrum long, thickened behind the antennæ and finely punctured: thorax oblong-cylindric, punctate, with a short dorsal line behind: coleoptra oblong-oboval, punctate-sulcate: legs black.

Found near Exeter, but apparently rare.

- Sp. 77. ebeninum. Aterrimum, nitidum, thorace lateribus subgibbosis, postice profunde canaliculato, coleoptris ovatis, punctato-sulcatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
   Ap. ebeninum. Kirby.—Linn. Trans. ix. pl. 1. f. 11.—Steph. Catal. 188. No.
- 1952.
- Deep-black, shining, very glabrous: head very delicately striated between the eyes, the striæ composed of punctures, with a transverse elevation behind: rostrum moderate, with the apex and middle slightly dilated, a little curved, and very minutely, but obscurely, punctulated throughout: antennæ rather short, medial: eyes somewhat immersed: thorax narrow, a little narrowed in front and behind, the lateral margins anteriorly gibbous, distinctly punctured, with a rather deep channel before the scutellum: coleoptra ovate, punctate-sulcate, the interstices very convex and scarcely broader than the sulci. The male has the rostrum shorter and more robust.

Not very abundant: I have taken the insect at Coombe-wood, and near Hertford. "Southend and Sheppy."-Mr. Waterhouse.

 † 78. Kirbii. Nigrum, griseo pubescens, fronte rugosâ, thorace cylindrico, profundè punctato, coleoptris oblongo-obovalibus, punctato-sulcatis, interstitiis planis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

Ap. Kirbii. Leach MSS.-Steph. Catal. 188. No. 1953.

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Black, with a griseous pubescence: head short, small, rugose between the eyes : rostrum long, punctured, with the base pilose : antennæ long, rather before the middle of the rostrum: eyes prominent: thorax cylindric, very deeply punctate, with a deeper fovea behind : coleoptra oblong-obovate, punctatesulcate, with the interstices flat : legs short, naked.

" Taken in the west of England, on furze."-Dr. Leach.

\* \* Coleoptra oboval.

- Sp. 79. Viciæ. Atrum, villoso-canescens, subtùs niveo-pubescens, antennis pedibusque testaceis, coleoptris ovatis. (Long corp.  $1\frac{1}{4}$  lin.) Ap. Viciæ. Kirby .- Steph. Catal. 188. No. 1954.
- Black, with a whitish pile above and snowy beneath : head faintly striated between the eyes: rostrum short, with a niveous pile, the apex glabrous and shining: antennæ long, medial, entirely pale testaceous: eyes slightly prominent: thorax rather short, somewhat globose, delicately punctured, with a short impressed line behind: coleoptra globose-ovate, punctate-sulcate, with the interstices rather flat : legs pale testaceous, with the four posterior tibiæ and all the tarsi dusky-red: coxæ black, the four anterior trochanters rufous.

Found on the Vicia Cracca, but not common.

- Sp. 80. Ononis. Atrum, piloso-subincanum, antennis totis nigris, fronte striatula, thorace canaliculato, coleoptris subglobosis. (Long. corp.  $1\frac{1}{4}$  lin.) Ap. Ononis. Kirby .- Steph. Catal. 189. No. 1955.
- Black, with a slight hoary pile, rather obscure: head somewhat long, slightly striated between the eyes: rostrum rather long, filiform: antennæ medial, rather long, black : eyes slightly prominent : thorax nearly cylindric, slender, with a dorsal channel: coleoptra oblong-globose, punctate-sulcate, with the interstices rather flat. Male with the rostrum shorter, a little stouter and more pilose.

At times abundant on the Ononis within the metropolitan district. "Plentiful on the flowers of Ononis arvensis (near Swansea)."---L. W. Dillwyn, Esq.

Sp. 81. Lathyri. Atrum, antennis totis testaceis, clavâ distincte articulatâ, coleoptris subglobosis. (Long. corp.  $1\frac{1}{2}$  lin.)

Ap. Lathyri. Kirby .- Steph. Catal. 189. No. 1956.

Black, with a somewhat scattered whitish pile: head with two striæ between the eyes: rostrum rather short, pilose, with the apex shining: antennæ long, submedial, entirely of a pale testaceous, with the club rather slender, with the joints somewhat distinct: eyes slightly prominent: thorax with longitudinal dorsal channel: coleoptra of an obovate, subglobose form, slightly sulcate, with

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the sulci punctured. Male with the rostrum scarcely pilose; the club of the antennæ longer and with its articulations more closely united: thorax with an impressed point behind, in lieu of a channel.

Found on Lathyrus pratensis, not uncommonly. "Not uncommon (near Swansea)."-L. W. Dillwyn, Esq.

Sp. 82. vorax. Atrum, villoso canescens, antennis basi testaceis, tibiis anticis femineis subflexuosis, coleoptris oblongis atro-cæruleis. (Long. corp.  $1\frac{1}{2}-1\frac{3}{4}$  lin.)

Ap. vorax. Herbst. - Steph. Catal. 189. No. 1957.

Black, entirely clothed with whitish decumbent pile: head rather long, with two striæ between the eyes: rostrum long, glossy before the antennæ, obscure at the base: antennæ moderate, subcylindrical, testaceous at the base: eyes slightly immersed, large: thorax delicately punctured, with a short impressed line behind: coleoptra oblong, deep blue, slightly sulcate, the sulci punctate. Rostrum of the female moderate, and the anterior femora somewhat flexuous.

Not uncommon throughout the metropolitan district. "Common near Bottisham."—Rev. L. Jenyns. "Cambridge."—C. C. Babington, Esq. "Southend, April."—Mr. Waterhouse.

## \*\*\* Coleoptra subglobese.

Sp. 83. punctifrons. Atrum, glabrum, coleoptris subglobosis caruleis rostro mediocri, capite latiusculo inter oculos punctulato. (Long. corp. 1<sup>2</sup>/<sub>3</sub> lin.)

- Ap. punctifrons. Kirby.-Linn. Trans. ix. pl. 1. f. 9.-Steph. Catal. 189. No. 1958.
- Black, very glabrous: head broad, shining and smooth behind, deeply punctured between the eyes; rostrum moderate, punctulate, and a little thickened: antennæ moderate, medial: eyes prominent: thorax distantly and deeply punctate, with a dorsal channel behind: coleoptra subglobose, blue, punctatesulcate, with the interstices slightly convex.

Taken within the metropolitan district, not rare. "Wood-Ditton in plenty."—Rev. L. Jenyns. "Southend."—Mr. Waterhouse. "Common (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 84. subsulcatum. Atrum, glabrum, coleoptris subglobosis cæruleis, rostro mediocri capite inter oculos ruguloso. (Long. corp. 1½ lin.)

Cu. subsulcatum. Marsham.- Ap. subsulcatum. Steph. Catal. 189. No. 1959.

Black, very glabrous, obscure: head rather long, wrinkled between the eyes: rostrum moderate, filiform, delicately punctured: antennæ moderate, medial, slender, the club rather long: eyes somewhat immersed; thorax slender, short, nearly cylindric, deeply punctured; with a very obsolete dorsal channel: coleoptra subglobose, blue, somewhat sulcate, the sulci posteriorly punctured, with the interstices rather flat.

Slightly variable :-- the thorax is sometimes more distinctly channelled, or the channel is entirely obliterated.

Frequents the Vicia Sepium, not only within the metropolitan district, but in other parts, but not very abundant. "Hants."— Mr. Waterhouse.

- Sp. 85. foveolatum. Atrum, glabrum, coleoptris subglobosis cæruleis, rostro mediocri, fronte impressâ striatâ, thorace canaliculato. (Long. corp. 1½ lin.)
   Ap. foveolatum. Kirby.—Steph. Catal. 189. No. 1960.
- Black, obscure, subglabrous: head with a deep fovea between the eyes, the fovea faintly striated: rostrum moderate, rather thick, punctured: antennæ moderate, medial, with the club rather thick: eyes slightly prominent: thorax slightly emarginate anteriorly, deeply punctured, with a dorsal channel behind: coleoptra blue, of an obovate subglobose form, faintly pilose, and punctate-sulcate, the interstices rather flat.

Rare; found occasionally within the neighbourhood of London, and in Suffolk.

- \* Sp. 86. intrusum. Nigrum albido-pubescens, fronte impressâ striatâ, rostro crassiore, subarcuato, coleoptris gibbosis cæruleis, subglabris, sulcato-punctatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Ap. intrusum. Gyllenhal, iv. 550.—Ap. foveolatum, var. β. Kirby. Linn. Trans. ix. 48.
- Black, with a whitish pile: head elongate, constricted behind, deeply impressed between the eyes, with three or four striæ: rostrum rather stout, a little bent: antennæ longer than the rostrum, black, with the base pitchy: eyes prominent: thoraxa little narrowed in front, but not coarctate, thickly but obsoletely punctate, with a slight dorsal furrow: coleoptra gibbous, blue, nearly glabrous, sulcate-punctate.

Found near London, and in Suffolk, but rare.

- Sp. 87. columbinum. Nigrum, subpubescens, fronte impressâ sulcatâ thorace subcylindrico profundè punctato, postice canaliculato coleoptris ovalibus, punctato sulcatis, cyaneis. (Long. corp. 1½ lin.)
- Ap. columbinum. Germar. Mag. ii. 185. pl. iv. f. 9.—Ap. foveolatum, var. γ. Kirby. Linn. Trans. ix. 48.
- Black, somewhat pubescent: head oblong, punctured, a little constricted behind, forehead depressed, with a deeper furrow: rostrum elongate, curved: eyes prominent: thorax somewhat cylindric, deeply punctate, with a posterior dorsal

channel: coleoptra oval, moderately broad, blue, or bluish-black, punctate-sulcate.

Rather different in form from the foregoing species.

Found at Ripley in June, 1827, not common.

Sp. 88. Meliloti. Atrum subangustatum, coleoptris obovatis viridescenti-cæruleis, antennis mediis, rostro longiori. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)

Ap. Meliloti. Kirby.-Steph. Catal. 189. No. 1961.

Black, rather slender, with a scattered pile: head punctulated, rugulose-striate between the eyes, and with a delicately impressed fovea: rostram long, filiform; very much curved, and shining: antennæ moderate, medial: eyes slightly prominent: thorax punctulate, with a dorsal channel behind: coleoptra obovate, greenish-blue, or black, punctate-sulcate, with the interstices rather flat.

Not common; the only locality where I have observed the species being in a sand-pit near Charlton-wood. "Windsor."—Mr. Wa-terhouse.

### GENUS CCCXLV.-OXYSTOMA, Dumeril.

Antennæ not geniculated, 11-jointed, inserted at the base and beneath the rostrum, the basal joint rather long and stout, the two following subglobose, the five next smaller, subnodose, the remainder forming a compact ovate subacute club. Rostrum elongate, slightly curved, deflexed: head broad: eyes large: thorax subglobose, conic, broadest at the base, densely pubescent: elytra rather elongate, convex, pubescent: legs long, unarmed: tibiæ shorter than the femora, attenuated at the base: tarsi short, rather broad, with the terminal joint deeply bilobed.

The species of this genus differs from the true Apiona, not only by having the rostrum more or less deflexed, elongate, with the antennæ seated at the base beneath, and slightly dissimilar in structure to those of Apion, but by having the body densely pubescent.

- Sp. 1. fuscirostris. Nigricans, villosulus, elytris fuscis, strigû obliquû baseos cinereû, pedibus rufis, plantis atris. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- At. fuscirostris. Fabricius.—Ap. melanopum. Kirby.—Linn. Trans. ix. pl. 1. f. 1.—Ox. fuscirostris. Steph. Catal. 189. No. 1962.

Dusky, with an ashy pile, whitish beneath: rostrum rather short, filiform, slender, smooth, shining, a little bent, and obscurely thickened behind the antennæ; the latter rufous, with the club dusky: eyes large, slightly prominent : thorax dusky, rather widened behind, the sides densely pilose, the pile whitish : coleoptra oblong, somewhat brassy, punctate-striate, with an oblong whitish striga from the base to the lateral margin: legs rufous, with the femora at the base and the tarsi black.

Not very common in the vicinity of the metropolis.

- Sp. 2. Ulicis. Niger, cinereo-villosulus, rostro longissimo atro, pedibus anterioribus ferrugineis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>—1<sup>1</sup>/<sub>2</sub> lin.)
- Cu. Ulicis. Forster.-Ox. Ulicis. Steph. Catal. 189. No. 1963.
- Black, clothed with decumbent ashy hairs: rostrum nearly as long as the body, slender, filiform, a little curved, black, shining: antennæ short, with the base rufous: occiput black, glabrous: eyes large, prominent: thorax subglabrous, rather broader behind, with a dorsal channel, slightly margined in front: coleoptra rather oblong, convex, punctate-striate: anterior legs ferruginous, with the base of the femora, and the four posterior legs black, with the tibiæ dull rufous.
- The four anterior legs are sometimes ferruginous; and occasionally all are black.

Very abundant on the common furze (Ulex Europæus) throughout the metropolitan district. "Not uncommon (near Swansea)."— L. W. Dillwyn, Esq. "Cambridge, abundantly."—Rev. L. Jenyns, and C. C. Babington, Esq. "Cramond."—Rev. W. Little.

- Sp. 3. Genistæ. Niger, albido villosus, elytris villoso-cinereis, vittå rectå albidå, pedibus rufis, plantis atris. (Long. corp. 1<sup>1</sup>/<sub>3</sub> lin.)
- Ap. Genistæ. Kirby .- Ox. Genistæ. Steph. Catal. 189. No. 1964.
- Black, clothed with decumbent whitish hairs: head slightly pilose: rostrum moderate, filiform, a little curved, shining, and thickened behind the antennæ, which are moderate, black, with the basal joint rufous: eyes large, prominent: thorax subglobose, anteriorly waved, deeply but distinctly porrected, with a dorsal line behind: coleoptra oblong, striated, yellowish-ash, with a broad, straight, whitish-ash streak on the disc of each elytron nearly reaching to the apex, and the lateral margin also whitish: legs rufous, with the coxæ, trochanters, and tarsi black.

Scarce near London; but it has been found abundantly in some localities.

## GENUS CCCXLVI.-RAMPHUS, Clairville.

Antennæ not geniculated, 11-jointed, inserted beneath the eyes in the sinciput, slender, the two basal joints, especially the second, thicker than the following, the five next nearly globose, the remainder closely united, and forming an oval acute club. Rostrum elongate, inflexed, closely applied to the breast,

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depressed: eyes large, rounded, united in the forehead: thorax short, with the sides rounded, the base and apex truncate: elytra obovate, truncate anteriorly, with the apex slightly rounded: legs moderate: femora unarmed, and considerably incrassated, the posterior formed for leaping.

This singular little genus contains one rather variable species only, which is perhaps the most minute one of the family: it may be readily known by its elongate, filiform, inflexed rostrum, having a pair of short straight antennæ at its base, and by the hinder femora being considerably incrassated, and the legs consequently formed for leaping.

Sp. 1. pulicarius. Niger, subnitidus, antennis basi testaceis, elytris striatis. (Long. corp.  $\frac{1}{2}$ — $\frac{3}{4}$  lin.)

Cu. pulicarius. Herbst.-Rh. pulicarius. Steph. Catal. 189. No. 1966.

- Black, slightly shining: head minute, finely punctured; eyes concolorous: thorax with a transverse impression near the anterior margin, and an obsolete dorsal furrow, very finely punctulate: elytra rather convex, shining, regularly punctate-striate, with the interstices flat and smooth: antennæ pale testaceous, with the club black.
- Var. Rh. flavicornis. Steph. Catal. l. c. No. 1965.—With the antennæ entirely pale testaceous, the club somewhat fuscescent.

Found occasionally at Coombe and Darenth Woods, on the birch and willow, in May and June. "Near Swansea."—L. W. Dillwyn, Esq.

## GENUS CCCXLVII.—DEPORAÜS, Leach.

Antennæ not geniculated, 11-jointed, the two basal joints short, robust, subglobose, the third joint elongate, slender, the five following shorter, obconic, the remainder forming an elongate, acuminated club. Rostrum deflexed, short, straight, dilated at the apex: head elongate, large, a little narrowed behind: eyes globose: thorax rather narrow in front, the sides dilated beyond the middle; the base and apex truncate: elytra elongate-subcylindric, each rounded at the apex and a little gaping, leaving the pygidium exposed: legs rather slender: femora slightly incrassated, the posterior in the male very robust: tibiæ unarmed.

The males of Deporaüs are readily known from the other straight horned Curculionidæ, by the very stout posterior femora, and both sexes by having the antennæ differently constructed from those of Rhynchites, the basal joints being stouter and more robust, the intermediate more slender, and the club more elongate and acute : the rostrum is short, considerably dilated, and somewhat depressed at the apex.

- Sp. 1. Betulæ. Ater, nitidus, tenuissimè pubescens, elytris profundè punctatostriatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
- At. Betulæ. Linné.-Wood, v. i. pl. 15.-De. Betulæ. Steph. Catal. 190. No. 1967.
- Shining black, with a very delicate dusky pubescence: head thickly punctate: eyes brown: thorax very thickly punctured, with an obsolete dorsal furrow: elytra above convex, a little depressed anteriorly, glossy, regularly and deeply punctate-striate, the interstices with a very obscure series of impressed punctures.

Abundant throughout the metropolitan woods, where the common birch abounds, upon the leaves of which tree it subsists, as well as upon the hazel and oak. "Davidson's-bank."—*T. C. Heysham*, *Esq.* "Bottisham."—*Rev. L. Jenyns.* "Raehills."—*Rev. W. Little.* "Epping."—*Mr. Doubleday.* 

## GENUS CCCXLVIII.-RHYNCHITES, Herbst.

Antennæ not geniculated, 11-jointed, with the basal joints rather long, subcylindric, the following shorter, somewhat obconic or rounded, the remainder stout, remote, and forming a subperfoliated oval club. Rostrum deflexed, elongate, sometimes filiform, more or less curved, or straight and slightly dilated at the apex: head elongate, not constricted behind, but inserted into the thorax by a robust neck: eyes lateral, sometimes approximating: thorax conic-cylindric, the lateral margins occasionally with a spine on each side: elytra slightly convex, with the back anteriorly depressed: legs robust, the anterior approximating: femora unarmed: tibiæ rounded, truncate at the apex, and unarmed.

This genus, which embraces some insects of remarkably lively colours, contains also a series that appears to require more than usual investigation into their specific differences, as it is evident much confusion occurs in regard to their synonomy, which I propose more particularly to point out hereafter: from the allied genera the present may be known by having the rostrum more or less dilated at the apex, the antennæ 11-jointed, the head elongate behind, but not produced into a neck, the thorax conic-cylindric, and the body somewhat depressed.

#### A. Rostrum short, broad, dilated at the apex.

a. Body subcylindric, glabrous.

Sp. 1. cylindricus. Ater, glaber, nitidus, rostro apice piceo, elytris irregularitèr profundèque punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)

Rh. cylindricus. Kirby MSS.-Steph. Catal. 190. No. 1968.

Black, glabrous, shining: rostrum with the apex piceous; head finely punc\_ tured: thorax somewhat rugose and coarsely punctured, with an abbreviated dorsal furrow behind: elytra irregularly but deeply punctate-striate: legs black, with a very short cinerascent pubescence: antennæ also black.

Not very common; found occasionally on the birch at Coombewood; it also inhabits other parts. "Raehills."-Rev. W. Little.

Sp. 2. lævicollis. Ater, glaber, nitidus, rostro apice piceo, elytris cyaneis profundè punctato-striatis, thorace læviusculo, polito. (Long. corp. 2 lin.)
Rh. lævicollis mihi.

Black, glabrous, shining: rostrum piceous at the apex: head very finely punctulate: thorax glossy, smooth, with very fine, somewhat distinct punctures, the lateral margins a little dilated behind the middle, and the base with a faint transverse impressed line: elytra blue, with a very delicate, short, ashy pile, deeply and regularly punctate-striate, the interstices slightly convex: legs and antennæ black.

Found near London, and at Darenth.

 Sp. 3. cyaneopennis. Ater, glaber, nitidus, rostro apice piceo, elytris cyaneis profundè crenato-striatis, thorace scabro, punctuloque. (Long. corp 2<sup>1</sup>/<sub>2</sub>-3 lin.)
 Rh. cyaneopennis mihi.

Black, glabrous, shining: rostrum rugose, piceous at the apex: head finely punctured, rather narrow behind: thorax rough, irregularly punctured, somewhat attenuated posteriorly: elytra blue, or greenish, deeply and rather coarsely crenate-striate, the interstices obsoletely punctate: legs and antennæ black.

Found within the metropolitan district, but rarely; apparently more abundant in the north. "Raehills, not common."—*Rev. W. Little.* "Midgley-moor."—*Mr. Gibson.* 

#### b. Body pubescent.

Rh. pubescens. Herbst.-Steph. Catal. 190. No. 1969.

*Violet*, shining ; densely clothed throughout with fine long fuscous hairs: rostrum black, with two sulci at the base, under the origin of the antennæ: head obscurely punctured: thorax cylindric, with the sides gibbous, the disc slightly

Sp. 4. pubescens. Violaceus, longiùs fusco pubescens, rostro atro, bisulcato. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4<sup>1</sup>/<sub>2</sub> lin.)

rugose-punctate, with a faint longitudinal furrow: elytra punctate-striate: legs pubescent.

Slightly variable in colour; being greenish or bluish-violet.

Not very uncommon in woods within the metropolitan district, on the oak and hazel. "Monk's-wood, Huntingdonshire."—C. C. Babington, Esq. "Epping."—Mr. Doubleday.

Sp. 5. ophthalmicus. Violaceus, breviùs fusco pubescens, rostro concolore brevissimo, basi trisulcato. (Long. corp. 1½-2 lin.)
Rh. ophthalmicus. Steph. Catal. 190. No. 1970.

Violet, shining, rather densely clothed with short fuscous hairs: rostrum very short, violet, the base with a sulcus on each side, and a deeper one in the middle: eyes prominent: head rather coarsely punctured: thorax also deeply punctured, with a somewhat larger fovea behind: elytra coarsely punctate-striate: legs violet, slightly pilose: antennæ black.

Also found within the metropolitan district, but apparently rare. "Raehills, not common."—Rev. W. Little.

B. Rostrum elongate. a. Body oblong, narrow, naked.

- Sp. 6. nanus. Cæruleo-virescens glaber, thorace profundè punctato, elytris punctato-striatis, interstitiis impunctatis. (Long. corp.  $1\frac{1}{4}-1\frac{3}{4}$  lin.)
- Att. nanus. Paykul.-Rh. angustatus. Leach MSS.-Steph. Catal. 190. No. 1971.
- Oblong-glabrous: head obscure bluish-green, shining: thorax cylindric, thickly and deeply punctured, of a glossy obscure bluish-green: elytra subcylindric, convex, very finely punctate-striate, the interstices impunctate: legs bluishblack, or greenish: antennæ and rostrum dusky.
- With a strong lens the surface appears to have a very short cinerescent pubesscence. The slender form of this species, exclusively of its other characters, evidently proves its identity with the Attelabus nanus of Paykull:--Gyllenhal suspects that it may be the Cu. Alliariæ of Linné, from its greater frequency in Sweden than the species next described---as Linné takes no notice of the pubescence.

Taken at Coombe-wood, and occasionally at Darenth on the birch:--also found near Bristol.

#### b. Body ovate, usually pubescent.

- 1. Elytra distinctly striated; body pubescent: (thorax unarmed in both sexes).
- Sp. 7. Alliariæ. Cyaneus nitidus, longiùs pubescens, thorace punctatissimo, elytris profundè punctato-striatis, interstitiis subtilissimè seriato-punctulatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>4</sub> lin.)
- Cu. Alliariæ. Linné?-Rh. Alliariæ. Steph. Catal. 190. No. 1972.

Blue, sometimes greenish, clothed with long, fuscescent, pubescence: head thickly punctured: thorax slightly convex, and closely and rather coarsely punctured: elytra deeply punctate-striate, the interstices each with a row of minute impressed points: body beneath blue, punctulated: femora the same: tibiæ rather fuscous, very pilose: tarsi dusky: antennæ dusky-black: rostrum as long as the head and thorax, a little bent and pitchy-black.

Not uncommon in whitethorn hedges, throughout the metropolitan district. "Wood Ditton."—Rev. L. Jenyns. "Epping."—Mr. Doubleday. "On hedge banks (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 8. interpunctatus. Cæruleus, nitidus, parciùs pubescens, thorace scabro punctatissimo lineâ dorsali sublævi, clytris punctato-striatis, interstitiis subtilissimè seriato punctatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
- Rh. interpunctatus. Wilkin? MSS. Steph. Catal. 190. No. 1973.
- Blue, or greenish, shining, slightly pubescent : head thickly punctured: thorax somewhat granulated, and very closely, but not coarsely punctured, with an obscure smooth abbreviated dorsal line: elytra rather deeply punctate-striate, the interstices with a series of minute impressions: legs and antennæ dusky-black.

Not uncommon in the vicinity of London.

- Sp. 9. minutus. Ovatus virescenti-caruleus, subnitidus, pubescens, thorace punctatissimo, elytris profundè punctato-striatis, interstitiis impunctatis. (Long. corp. 1-1<sup>1</sup>/<sub>2</sub> lin.)
- Cu. minutus. Herbst.-Rh. nanus. Steph. Catal. 190. No. 1974: exclusis syn.: Gyll. et Payk.
- Ovate, greenish-blue, slightly shining, and a little pubescent: head very thickly punctulate: thorax also very thickly and finely punctured, and somewhat obscure: elytra more shining, deeply punctate-striate, with the interstices narrow and totally impunctate: legs bluish: tibiæ slightly pubescent: antennæ and rostrum dusky-black.

This insect is decidedly not the Cu. æneovirens of Marsham, hereafter described.

Very abundant in hedges in the metropolitan district: also found near Bristol.

- Sp. 10. atrocæruleus. Ater, ovatus, subnitidus, tenue pubescens, thorace punctulato, elytris atrocæruleis profundè punctato-striatis, interstitiis impunctatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
- Rh. atrocæruleus. Steph. Catal. 190. No. 1975.
- Black, ovate, slightly shining : clothed with a short pubescence : thorax punctulate : elytra of a deep blue-black, slightly punctate-striate, with the interstices impunctate : legs bluish : antennæ and rostrum black.

This may possibly be a variety of the last-mentioned insect, but as it appears distinct, I have continued it as a species. All the foregoing species of this genus require a more minute investigation than is at present in my power to devote to them, and I have no doubt but that when the subject is earnestly taken up many new species will be shown to exist:—in my own cabinet are three unique insects, neither of which will agree with either of the foregoing definitions: one resembling Rh. Alliariæ with a short rostrum, of a bright violet colour (Rh. confinis *mihi*); a second also resembling the same insect, but broader, less pubescent, with a longer rostrum and a very thickly and finely punctured thorax (Rh. longirostris *mihi*):—a third very minute one (1 line in length) resembling Rh. minutus, with the elytra transversely rugose (Rh. rugipennis *mihi*).

Taken in the neighbourhood of London.

- Sp. 11. æquatus. Obscure æneus punctatissimus, fusco pubescens, elytris rubris profunde punctato-striatis, thorace canaliculato. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
- Cu. æquatus. Linné.-Don. iv. pl. 121. f. 1, 2.-Rh. æquatus. Steph. Catal. 190. No. 1976.
- Dull brassy; thickly punctured and clothed with a fuscous pubescence: head short: thorax oblong, subcylindric, with an obsolete dorsal furrow: elytra ample, deep, rather shining rufous, and coarsely punctate-striate, with the interstices rather smooth: legs elongate; femora brassy; tibiæ pitchy-brown; tarsi dusky-black.
- Variable in colour as well as in size : the elytra being sometimes pale testaceous, and the femora entirely and tibiæ above rufous :—the suture of the elytra is occasionally fuscescent.

Found abundantly on the flowers of the whitethorn and in hedges. "Wood-Ditton."—Rev. L. Jenyns. "Cambridge."—C. C. Babington, Esq. "Epping."—Mr. Doubleday.

- + Sp. 12. cæruleocephalus. Violaceus nitens, thorace elytrisque testaceis. (Long. corp. 3 lin.)
- At. cæruleocephalus. Fabricius.—Rh. cæruleocephalus. Steph. Catal. 191. No. 1977.
- Head pubescent, violaceous: thorax and elytra also pubescent, shining and testaceous, the former cylindric, the latter punctate-striate: body and legs violet: rostrum long and slender.

The only specimen I have hitherto seen of this beautiful species was captured in the vicinity of Windsor.

Sp. 13. eneovirens. Supra aneo-viridis, cinereo-villosus, subtùs ater, elytris punctis excavato-striatis. (Long. corp.  $1\frac{1}{2}-2$  lin.)

- Cu. xneovirens. Marsham.—Rh. minutus. Steph. Catal. 191. No. 1978: non Rh. minutus. Herbst.
- Above brassy-green, clothed with a soft cinerescent down: head short, rounded, finely punctured: rostrum slender, rugulose at the base: thorax closely and rather coarsely punctured: elytra deeply punctate-striate, the interstices convex, blue- or green- brassy, or of a coppery hue: legs black, with the femora brassy; beneath black.
- The head and thorax are sometimes entirely black.

Not very uncommon on oaks in the neighbourhood of Wanstead, but apparently less abundant in other parts of the metropolitan district. "Raehills."—Rev. W. Little.

Sp. 14. cupreus. Supra obscure æneus, tenue griseo pubescens, subtus obscurior, elytris subquadratis, profundè punctato-striatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
Cu. cupreus. Linné.—Rh. cupreus. Steph. Catal. 191. No. 1979.

Above obscure æneous, with a slight griseous pubescence, beneath of a dull brassy-black: head thickly punctured: rostrum rather stout, irregularly sulcate at the base: thorax brassy-black, or cupreous, thickly punctured: elytra ample, subquadrate, sometimes dull brass, at others bright rich copper, and glossy, deeply punctate-striate, the interstices transversely rugulose: legs brassy black; tarsi black.

Very rare: I have hitherto seen but the pair that are in my own collection, one of which I obtained from the Marshamian collection, the other I captured at Darenth. "Baron-wood."—T. C. Hey-sham, Esq. "Epping."—Mr. Doubleday.

- 2. Elytra punctate, scarcely striated, (thorax in one sex, with an acute porrect spine on each side.)
- Sp. 15. Betulæ. Supra viridi-sericeus, aut cæruleo-violaceus nitidus, glaber, corpore pedibus rostroque viridi-aureis, fronte parum impressâ. (Long. corp. 3½-4½ lin.)
- Cu. Betulæ. Linné.-Don. iii. pl. 74.-Rh. Betulæ. Steph. Catal. 191. No. 1980.
- Glabrous, above of a brilliant glossy silky-green or bright violet-blue, with all intermediate tints: beneath of a golden, or blue-green, sometimes blue: legs and rostrum the same; the latter somewhat wrinkled: head oblong, punctured with a fovea on the forehead: thorax very convex, shining, thickly but rather finely punctured, with an obsolete dorsal channel: elytra thickly and somewhat deeply punctured, the punctures irregularly dispersed in striæ, giving a wrinkled appearance.

Extremely variable in colour, every tint of blue and green occurring: the sides

of the thorax and of the elytra are frequently tinted with gold or rich copper: the thorax is sometimes green, and the elytra blue, and vice versa.

Occasionally abundant in some of the metropolitan woods, especially at Darenth and Coombe, in June, on the birch. "Baronwood."—*T. C. Heysham*, *Esq.* "In woods (near Swansea), not common."—*L. W. Dillwyn*, *Esq.* 

- Sp. 16. Populi. Supra viridi-æneus nitidus, glaber, rostro pedibus corporeque subtus cæruleo-violaceis, fronte profundiùs canaliculatâ. (Long. corp. 2-3½ lin.)
- Cu. Populi. Linné.-Rh. Populi. Steph. Catal. 191. No. 1981.
- Glabrous, above brassy-green, shining, body beneath, legs, and rostrum violetblue; the latter greenish at the base: head oblong, punctured, with a deep furrow between the eyes: thorax finely punctured, with an obscure dorsal channel: elytra brassy-green, rather deeply punctured, the punctures somewhat regularly disposed in striæ: tarsi and antennæ black. The upper surface is sometimes a little tinted with coppery.

Much less abundant, and more local than the preceding species: I have frequently taken it in an old aspen that formerly stood at the entrance of Coombe-wood. "Abundant on young aspen, Leewood, Surrey."—A. Cooper, Esq. "On aspen in a wood near Blenden in Kent."—Mr. Ingpen. "Epping."—Mr. Doubleday.

- Sp. 17. Bacchus. Oblongus, aureo-cupreus nitidus, longiùs pubescens, antennis tarsisque nigris, elytris rugoso-punctatis, obsoletè striatis. (Long. corp. 4–5 lin.)
- Cu. Bacchus. Linné.-Don. i. pl. 34. f. 1.-Rh. Bacchus. Steph. Catal. 191. No. 1982.
- Oblong, of a shining golden-copper, clothed with a long pubescence : head convex, rather deeply punctate: rostrum with impressed striolæ and punctures, with the apex black: thorax considerably narrowed in front, thickly and coarsely punctured: elytra rounded at the apex and gaping, entirely of a golden-copper or rich purple, with deep excavated punctures, and transverse, elevated wrinkles, obliterating, as it were, the striæ: legs elongate, femora clavate, bright golden copper: tibiæ fuscescent-copper: tarsi and antennæ black.
- This splendidly beautiful insect is not only variable in tint, the colours being sometimes bluish or greenish, but the bues change according to the position in which the insect is held, in respect to the light.

Very rare: I believe Kent is the only county in which specimens have occurred. "Near Birch-wood."—Mr. Weatherhead. "Taken

in numbers on the Prunus spinosus at Crayford in Kent, by myself."—Marsham MSS.

### GENUS CCCXLIX.—ATTELABUS, Linné.

Antennæ not geniculated, 11-jointed, short, inserted in the middle of the rostrum, the basal joint longest and stoutest; the seven following short, subobconic: the three remaining united, perfoliated, and forming a cylindric-oval club. *Rostrum* shorter than the head, deflexed, robust, with the apex considerably thickened: *head* oblong, subcylindric, not narrowed posteriorly, inserted in the thorax without a distinct neck: *scutellum* large: *elytra* subquadrate, above convex, the apex slightly gaping; tip of abdomen exposed : *legs* long: *femora* clavate, unarmed: *tibiæ* denticulated within, the apex with a double hook.

Exclusively of the 11-jointed antennæ, Attelabus differs from Apoderus by its oblong, subcylindric head, which is not inserted into the thorax by a constricted neck; the thorax is large, subquadrate, the rostrum considerably incrassated at the apex, and the body of a more globose form, &c.

- Sp. 1. curculionoides. Niger, glaber, thorace, elytris, abdomineque supra rufis, elytris subtilissimè punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-3 lin.)
- At. curculionoides. Linné.-Don. v. pl. 149. Steph. Catal. 191. No. 1983.
- Black, glabrous: head slightly rugose between the eyes: thorax glossy, extremely delicately punctured, light rufo-testaceous: elytra also rufo-testaceous, shining, with the lateral margins somewhat fuscescent, finely punctate-striate, with the interstices remotely punctured.
- The abdomen, some of the basal joints of the antennæ, and the anterior femora, are occasionally somewhat piceous or dull reddish.

Found abundantly on oak and hazel throughout the metropolitan district, and not uncommon in other parts. "Baron-wood."—T. C. Heysham, Esq. "Epping."—Mr. Doubleday.

# GENUS CCCL.-APODERUS, Olivier.

Antennæ not geniculated, 12-jointed, robust, inserted in the middle of the rostrum; the basal joint thickened, obconic: the second short, nodose; six following obconic, a little increasing in width; the remainder united and forming a cylindric-oval, quadriarticulate club, of which the terminal joint is minute and acuminated. Rostrum shorter than the head, robust, with the apex scarcely dilated: *head* oblong, somewhat obconic, narrowed posteriorly, and united by a slender neck to the *thorax*, which is much narrowed in front: *elytra* oblongquadrate, convex above, gaping at the apex: tip of abdomen exposed: *legs* long: *femora* clavate, unarmed: *tibiæ* with a single hook at the apex within.

Apoderus differs from the preceding genus by having the antennæ 12-jointed, the head obconic and inserted by a slender collar, or neck, into the thorax, which is somewhat triangular; the rostrum is short and scarcely dilated at the apex.

Sp. 1. Avellanæ. Niger, glaber, thorace, elytris femoribus tibiisque rubris, elytris crenato-striatis. (Long. corp. 3-3<sup>1</sup>/<sub>2</sub> lin.)

At. Avellanæ. Iinné.- Ap. Avellanæ. Steph. Catal. 191. No. 1984.

Black, glabrous: forehead with a slight impressed furrow: thorax shining rufous, with a deep dorsal channel: elytra slightly glossy, rufo-testaceous, moderately crenate-striate, with the interstices slightly rugose: legs elongate: femora clavate, rufous, with the base and apex black: tibiæ rufous in the middle, each extremity black: tarsi and antennæ black.

The thorax has sometimes an abbreviated black line in front.

Very common in all the woods throughout the metropolitan district. "Baron-wood."—T. C. Heysham, Esq. "Gamlingay-wood."—Rev. L. Jenyns. "Monk's-wood, Hunts."—C. C. Babing-ton, Esq. "Epping."—Mr. Doubleday. "Not common (near Swansea)."—L. W. Dillwyn, Esq.

## FAMILY XLIII.—BRUCHIDÆ, Leach.

Tarsi quadriarticulate: palpi distinct, filiform: labrum exserted: head inserted, deflexed, produced anteriorly into a depressed, generally broad and short, rostrum: antennæ 11-jointed, sometimes clavate, the club formed of somewhat remote joints; or nearly filiform, with the apex slightly thickened, or finely serrated or pectinated: elytra shorter than the abdomen.

Of this family there are evidently two groups, of which the first has the antennæ distinctly clavate, and the second more or less filiform, serrated or pectinated; the species of the first division

Black; elytra rufous, with crenate striæ.

Indicated by Turton as a native of Britain, but apparently without authority.

 <sup>†</sup>Sp. 2. Coryli. Niger, elytris rufis, crenato-striatis. (Long. corp. 3½ lin.)
 At. Coryli. Fabricius.—Turton (!).—Ap. Coryli. Steph. Catal. 192. No. 1985 note.

frequent decayed trees or flowers, and those of the second subsist upon seeds of the leguminous kinds, to which they are sometimes exceedingly destructive, especially the common pea, which is sometimes destroyed in vast quantities by the larvæ of Bruchus Pisi, hercafter described. The larvæ of others are supposed to be parasitic upon insects.

In Britain the following genera have been detected, which may be thus cursorily characterized :

Antennæ clavatæ.		
Rostrum elongatum, angustum :		351. RHINOMACER.
breve, latum.		
Clava antennarum angusta, subacuminata : .		352. ANTHRIBUS.
abrupte-incrassata, subcompressa.		
Oculi integres: corpus oblongum.		
Antennæ arts, 2-bus basalibus brevibus :	•	353. PLATYRHINUS.
	•	354. TROPIDERES.
integres : corpus brevitèr ovatum : .		356. BRACHYTARSUS.
emarginati : antennæ graciles :	•	355. Phloëbius.
Antennæ filiformes, serratæ aut pectinatæ:	•	357. BRUCHUS.

## GENUS CCCLI.-RHINOMACER, Fabricius.

Antennæ curved, long, inserted in the middle of the sides of the rostrum, 11jointed, the basal joint slightly robust and a little elongate; the second shorter, subnodose; the six following slightly elongate and obconic; the remainder forming a loose slender club. Rostrum longer than the head, the base narrowed, rounded, the apex dilated: head transverse: eyes large, prominent: thorax oblong, subcylindric: elytra rather soft, elongate, sublinear, moderately convex, the apex of each rounded: legs slender, unarmed: femora slightly incrassated: tibiæ rounded, anterior a little curved: tarsi rather long.

From the other genera of this family, Rhinomacer may be known by the greater length and tenuity of its rostrum, of which the apex is considerably dilated; the elongate, sublinear, soft, pubescent, elytra; transverse head; elongate tarsi, different structure of the antennæ, and general habit.

 + Sp. 1. Attelaboides. PLATE XXI. f. 3.—Æneo-niger, densè cinereo-aut flavescente villosus, antennis, pedibusque testaceis. (Long. corp. 3 lin.)
 At. Attelaboides. Fabricius.—Steph. Catal. 192. No. 1986. note. \*

\* I may here take the opportunity of remarking that amongst the numerous discoveries of species which have taken place during the last few months, the following new British genera of Coleoptera have been communicated to

MANDIBULATA. VOL. IV. 31st Oct. 1831.

Brassy-black, densely clothed with ashy or yellowish pubescence: head thickly punctured: thorax thickly and very finely punctulate: elytra very thickly and somewhat coarsely, but irregularly, punctate: legs and antennæ testaceous: the tarsi dusky at the apex.

The only indigenous example of this interesting species that has come beneath my observation—from which the accompanying figure was designed—was taken near "Inverness."—Mr. Waterhouse.

## GENUS CCCLII.—ANTHRIBUS, Fabricius.

Antennæ inserted beneath the sinus of the eyes; of the males longer than the body, with the two basal joints short; six following longer, somewhat obconic and nearly equal; the remainder broader, compressed, forming an elongateovate acuminated club; of the females very short, of similar proportions, but more distinctly clavate, with the terminal joint very short, acute. Rostrum short, broad, deflexed, with the apex deeply emarginate: eyes emarginate anteriorly: thorax ample, tuberculated, narrowed anteriorly, with the base subtruncate, the sides slightly rounded, and margined posteriorly: elytra oblong, subcylindric, convex, truncate anteriorly, rounded at the apex, which nearly covers the anus: legs stout, unarmed: tarsi elongate.

The males of this genus are remarkable for the great length of the antennæ, the club of which, in both sexes, is rather slender and acute: the rostrum is very short, the eyes prominent, notched anteriorly, the elytra subcylindric, &c. :--the only indigenous species frequents decaying trees, especially oaks, willows, and birch.

- Sp. 1. albinus. Oblongus, nigro-fuscus, fronte, rostro, elytrorum maculâ disci apiceque albo pilosis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-6 lin.)
- Cu. albinus. Linné.-Don. x. pl. 348. f. 3.-An. albinus. Steph. Catal. 192. No. 1987.
- Oblong, dusky-brown, or black: rostrum and forehead clothed with a snowy pile: antennæ with the eighth and base of the ninth joints snowy: thorax with three tubercles, finely rugose-punctate, the anterior margin slightly niveous: elytra deeply punctate-striate, with the apex irregularly clothed with snowy pile, with a fuscous spot on the apex itself; the disc anteriorly

me, viz. Dryops Dumerillii, Sphærites glabratus, Limnichus sericeus, Colydium elongatum, Rhyncolus chloropus; and amongst other rarities, Cicones Capini and Osphya (Nothus) femorata, have occurred in tolerable plenty. with a lobate snowy spot, and within with a series of black silken tufts: legs annulated with snowy and brown pile.

Rare: specimens have occasionally been found in the vicinity of Darenth-wood, and near Gravesend, and also in other parts of the country. "Kensington-gardens."—Marsham MSS. "Gussage, Dorset."—Mr. Ingpen.

## GENUS CCCLIII. - PLATYRHINUS, Clairville.

Antennæ rather short, inserted beneath the middle of the rostrum, the two basal joints short, stout; the two following longer, obconic; the four next somewhat rounded; the remainder large, compressed, somewhat remote and forming a triarticulate club. Rostrum perpendicular, broad, oblong-quadrate, slightly truncate: eyes lateral, rounded, prominent: thorax subquadrate, a little narrowed in front, with the sides dilated into a somewhat bidentate lobe beyond the middle, and an interrupted subtransverse elevated carina within the base: elytra oblong, linear, flat above, and covering the anus: legs short: tarsi slightly elongate.

Platyrhinus differs from Anthribus not only by the diversity in the structure of its antennæ, but in the form and width of the rostrum, the eyes being entire, the thorax of dissimilar form, &c.

- Sp. 1. latirostris. Oblongus, niger, rostro rugoso, fronte elytrorum apice abdomineque cinereo-pilosis. (Long. corp. 5-6<sup>1</sup>/<sub>2</sub> lin.)
- Cu. latirostris. Bonsdorf.—Don. x. pl. 348. f. 1.—Pl. latirostris. Steph. Catal. 192. No. 1988.
- Oblong, black: rostrum rugose, ashy-white, with the apex black: thorax unequal, deeply wrinkled and punctured: scutellum ashy: elytra black, with interrupted punctate striæ, the apex clothed with a dense ashy pile, in which are two black dots, and sometimes two or three fuscescent strigæ: abdomen white, with the sides black: legs black, variegated with ashy-pile.

Local; but occasionally found in plenty in the districts it inhabits: —it frequents the Sphæria Fraxinea, and is found upon the trunks of the ash, alder, birch, &c. "Occasionally found on ash-trees (near Swansea), not common."—L. W. Dillwyn, Esq. "Bath, in Sphærea Fraxinea, May, 1830."—C. C. Babington, Esq. "Near Bristol."—G. Waring, Esq. "Salisbury."—Mr. Ingpen. "Netley." —Rev. F. W. Hope.

# GENUS CCCLIV.-TROPIDERES, Schönherr.

Antennæ slender, rather long, placed in the middle of the sides of the rostrum : the two basal joints robust, slightly elongate; five following slender, elongate, obconic; the eighth short, subturbinate: the remainder forming a triarticulate, elongate, distinct, club. Rostrum perpendicular, broad, flat, with the apex more or less dilated, and subtruncate: eyes large, entire, somewhat depressed and sometimes approximating in front: thorax considerably narrowed in front, the sides somewhat oblique, the base slightly bisinuated, with an entire transverse carina a little within: elytra rather broader at the base than the thorax, the sides straight, moderately convex, with the apex rounded: body oblong.

Tropideres differs from Platyrhinus by having the two basal joints of the antennæ somewhat elongate and stout, the five succeeding ones very slender, and also elongate: the eyes less prominent: the rostrum of dissimilar form, and the bulk of the body comparatively small.

- Sp. 1. albirostris. Nigro-fuscus, rostro elytrisque posticè albis nigro variis, oculis approximatis. (Long. corp. 3 lin.)
- An. albirostris. Fabricius.-Tr. albirostris. Steph. Catal. 192. No. 1989.
- Dusky-black: rostrum elongate, with a white pile: eyes somewhat approximating on the forehead: antennæ black: thorax with an elevated nearly straight line at the base, moderately punctate, with four dorsal foveæ: elytra deeply punctate-striate, with a lobate whitish spot at the base, and a large snowy patch at the apex, which last is varied with black, and towards the suture a series of black velvety fascicles: legs variegated with whitish rings.

Very rare; it has been captured on paling near Norwich.

- Sp. 2. niveirostris. Nigro-fuscus, antennis ferrugineis, elytrorum apice anoque niveo-pilosis. (Long. corp. 2–21 lin.)
- Ma. niveirostris. Olivier .- Tr. niveirostris. Steph. Catal. 192. No. 1990.
- Dusky-black: antennæ ferruginous: rostrum clothed with a dense snowy pile, very short: thorax black, with a white dot opposite the scutellum, which is white: elytra moderately punctate-striate, with the alternate interstices tessellated with fascicles of whitish and black velvety pile, and the apex entirely immaculate white: legs obsoletely variegated with whitish: tibiæ and tarsi somewhat ferruginous.

Occasionally beaten out of the hedge in the lane leading to Coombe-wood from the Robinhood, in June:--also found in the wood itself, upon the hazel. "New Forest, June, 1831."-Rev. F. W. Hope.

## GENUS CCCLV.-PHLOËOBIUS, Schönherr.

Antennæ rather long, slender, inserted beneath the sinus of the eyes, the basal joint stout, short, the second minute, the six following elongate, slender, subcylindric, the eighth being shortest, the three terminal ones large, head compressed, forming an elongate obtuse club. Rostrum short, broad, deflexed, with the apex deeply notched: eyes lateral, prominent, deeply emarginate: thorax simple, narrow anteriorly, truncate behind, the base within and the sides posteriorly elevated: elytra elongate, subcylindric, convex, with the apex rounded, and nearly covering the anus: legs moderate, slender: tarsi elongate, slender.

The elongate, slender antennæ of Phloëobius, combined with its deeply emarginate, prominent eyes, slender legs and elongate slender tarsi, at once point out its distinction from Brachytarsus, with which genus it has lately been united for the first time, but evidently without regard to form or structure :—the only known indigenous species appears to be parasitic upon insects.

- Sp. 1. griseus •. PLATE XXI. f. 2. Fusco-griseus, antennarum basi, pedibusque ferrugineis, elytris striatis, striis subtilissimè punctatis. (Long. corp. 2–3 lin.)
- An. griseus. Fabricius.-Ph. griseus. Steph. Catal. 193. No. 1991.
- Griseous-brown; clothed with a griseous pile: elytra striate, the striæ with minute punctures, the interstices with pale griseous spots: legs anteriorly and antennæ, except the club, which is fuscous, ferruginous.

Rare: I have taken a specimen in London; and others have occurred in Suffolk and in Devonshire.

### GENUS CCCLVI.—BRACHYTARSUS, Schönherr.

Antennæ rather short and stout, inserted beneath the eyes; the two basal joints slightly incrassated, the six following very short, obconic, the remaining three large, forming an obtuse compressed club. Rostrum short, broad, deflexed, with the apex subtruncate: eyes large, rounded, prominent: thorax short,

<sup>•</sup> Whether this species be truly indigenous is doubtful; it does not appear to be known on the continent, and I have seen it in profusion alive in a box of New Holland insects, received direct from that country.

transverse, broadest behind, with the hinder angles acuminated, above convex, the sides rounded, with the anterior angles compressed: *elytra* oblong-quadrate, with the apex obtusely rounded, above very convex: *legs* short: *tarsi* short, stout: *body* short, ovate, stout.

The abbreviated, stout, tarsi of Brachytarsus, combined with its short, abruptly clavate antennæ, acuminated posterior angles of the thorax, of which the disc is very convex, exclusively of other characters and general habit, sufficiently distinguish the genus from its allies :---the species appear to be parasitic.

- Sp. 1. scabrosus. Niger, elytris punctato-striatis rufis, interstitiis alternis elevatioribus, fasciculis atro-holosericeis albidisque alternantibus tessellatis. (Long. corp. 1<sup>1</sup>/<sub>3</sub>-2<sup>1</sup>/<sub>4</sub> lin.)
- An. scabrosus. Fabricius.—Br. scabrosus. Steph. Catal. 193. No. 1992.
- Black, head opaque: forehead rugose-punctate: thorax varied with fuscous: elytra rufous, punctate-striate, the alternate interstices slightly elevated, tessellated with oblong silken black and ashy-white spots, the suture and outer margins fuscescent: antennæ and legs pitchy-black.

Rather local, but not uncommon in several places within the metropolitan district, where elms abound, especially in Copenhagenfields, and at Ripley. "Wood Ditton."—*Rev. L. Jenyns.* "Not common (near Swansea)."—*L. W. Dillwyn, Esq.* 

- Sp. 2. varius. Nigro-fuscus opacus, thorace cinereo-lineato, elytris maculis cinereis subquadratis tessellatis. (Long. corp. 1-2 lin.)
- An. varius. Fabricius.-Br. varius. Steph. Catal. 193. No. 1993.
- Dusky-black, opaque: forehead rugose-punctate, pubescent: thorax thickly rugose-punctate, with several lines and two spots on the disc of ashy-white: scutellum ashy-white: elytra punctate-striate, with the interstices flat and very finely rugose, the alternate ones varied with alternate spots of subguadrate black and ashy pile disposed in rows: legs pitchy-black, pubescent.

Very rare near London; I possess a pair captured on some firs near Ripley: it appears to be more frequent in the north.

## GENUS CCCLVII.-BRUCHUS, Geoffrey.

Antennæ curved, stout, filiform, a little thickening towards the apex, compressed, sometimes serrated, inserted in the sinus of the eye; the basal joint striate, the second and third small, the remainder gradually increasing in size. *Head* exserted, deflexed, slightly produced in front, a little narrowed behind: *palpi* unequal: *eyes* lunate, prominent: *thorax* transverse, subtrapeziform, with the anterior angles rounded, truncate behind, with a lobe in the middle, opposite to the *scutellum*, which is subquadrate: *elytra* oblong-quadrate, shorter than the abdomen, slightly convex: *pygidium* large, rounded, descending: *legs* short: *femora* sometimes dentate, posterior incrassate: *tibiæ* rounded; *tarsi* rather short.

The filiform, curved, and compressed antennæ, of which the inner edge is more or less distinctly serrated; the equal palpi, incrassate posterior femora, exserted head, &c. are the more manifest external characters of this genus, the species of which subsist in their larva state upon seeds \*, to which in some cases they are very destructive, especially in pea warehouses.

### A. Femora dentate.

- Sp. 1. Pisi. Niger, antennarum articulis quatuor basalibus, tibiis tarsisque anticis, tibiarumque intermediis apice rufis, thoracis lateribus unidentatis. (Long. corp. 2<sup>1</sup>/<sub>4</sub> lin.)
- Br. Pisi. Linné.-Wood, i. pl. 13.-Steph. Catal. 193. No. 1994.
- Black, with the four basal joints of the antennæ, the anterior tibiæ and tarsi, the apex of the intermediate tibiæ and their tarsi rufo-ferruginous: thorax with a griseous spot in the middle of the base, the lateral margins unidentate: elytra striate, with griseous spots, some of which are disposed in transverse foveæ: anus of the male whitish, with two dusky spots: posterior femora with an acute strong spine.

Found occasionally within the metropolitan district, but I suspect not a truly indigenous species: it sometimes abounds in depositories of peas to a very destructive extent.

Sp. 2. granarius. Niger, thorace elytrisque albo punctatis, antennarum basi pedibusque anticis rufo-testaceis, femoribus posticis unidentatis. (Long. corp.  $1\frac{3}{4}-2\frac{1}{4}$  lin.)

Br. granarius. Linné.-Steph. Catal. 193. No. 1995.-Br. Pisi. Samouelle, pl. 2. f. 17.

Black; antennæ at the base and anterior legs entirely rufo-testaceous: thorax with the lateral margins a little sinuated, the disc with ashy-white hairs, and two whiter spots, and towards the middle of the base a larger triangular one: elytra punctate-striate, with a griseous-white streak near the scutellum, and some scattered whitish spots on the disc: apex of abdomen ashy-white, with two oblong fuscous spots.

\* Very many species of this genus have been taken in Britain that have evidently been introduced with their food; such I have not thought fit to insert. Common within the metropolitan district, especially at Darenthwood, on the common furze. "Cummersdale."—T. C. Heysham, Esq. "Common everywhere in Cambridgeshire."—Rev. L. Jenyns. "Not uncommon (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 3. affinis. Ovatus niger, thorace elytrisque albido maculatis, antennarum basi, pedibusque anticis rufo-testaceis, femoribus basi tarsisque nigris. (Long. corp.  $1-1\frac{1}{4}$  lin.)

Ovate, black, head rounded: thorax with the lateral margins unarmed, oblique; disc rugose-punctate, with a few scattered whitish spots, of which the one opposite to the scutellum is most distinct: elytra punctate-striate, the interstices transversely wrinkled, with obsolete spots of whitish pubescence: anterior femora with the apex rufous, the base black: tibiæ of the same legs also rufous: tarsi all black: basal joints of the antennæ rufous.

Taken in the vicinity of London, chiefly at Darenth.

- Sp. 4. Loti. Ovatus niger, griseo pubescens, antennarum basi pedibusque anticis rufo-testaceis, femoribus posticis unidentatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)
  Br. Loti. Paykul.-Steph. Catal. 193. No. 1997.
- Ovate, black, delicately clothed throughout with a fine griseous pile: thorax with the lateral margins entire: elytra punctate-striate, the interstices uniformly clothed with griseous pile, with a dense streak of the same on the suture: apex of abdomen black, immaculate: anterior legs rufo-testaceous, the remainder black: the basal joints of the antennæ also rufo-testaceous.

Found near Hampstead on the Lotus corniculatus; also found in Somersetshire.

- Sp. 5. Lathyri. Ovatus, niger, tenuè grisco-pubescens, antennis basi pedibusque anticis rufo-testaceis. (Long. corp. 1 lin.)
- Br. Lathyri. Kirby MSS.-Steph. Catal. p. 193. No. 1998.
- Ovate, black, immaculate, clothed with a very short griseous pubescence: thorax with the lateral margins rounded: elytra punctate-striate, the interstices immaculate, obsoletely coriaceous: anterior legs and base of the antennæ rufotestaceous: tarsi fuscescent.

Found, but not commonly, near London; much more abundant in the neighbourhood of Bristol.

### B. Femora unarmed.

Sp. 6. seminarius. Oblongo-ovatus niger, pube grisea subvariegatus, antennarum basi, genubus tibiisque anterioribus rufo-testaceis. (Long. corp. 1½ lin.)

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Br. affinis. Steph. Catal. 193. No. 1996.

Br. seminarius. Linné.-Steph. Catal. 193. No. 1999.

Oblong-oval, black, clothed and somewhat variegated with a griseous pile: head oblong: thorax with the lateral margins entire, oblique; the disc clothed with a griseous pubescence, most dense opposite to the scutellum: elytra punctatestriate, the interstices clothed with a rather long pubescence: four anterior legs slender, rufo-testaceous, with the femora from the base to beyond the middle black: the tarsi dusky-ferruginous: the hinder longer and stouter, entirely black, with the femora unarmed: antennæ with the four basal joints rufo-testaceous.

Rare: it has been found near London and in other parts. "Epping."—Mr. Doubleday.

Sp. 7. Cisti. Ovatus niger, tenuè griseo-pubescens, antennis basi obscurè ferrugineis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
Br. Cisti. Fabricius.—Steph. Catal. 193. No. 2000.

Black, delicately clothed throughout with a fine griseous pile: thorax transverse, with the lateral margins oblique, entire, the disc rugose-punctate: elytra black, punctate-striate, sprinkled with a fine griseous pubescence, immaculate: abdomen at the apex, and body beneath black: legs entirely black: antennæ with the four basal joints dull ferruginous, their upper edge dusky.

Extremely abundant in some localities within the metropolitan district; especially at Coombe and Darenth Woods in June.

### FAMILY XLIV.—SALPINGIDÆ, Leach.

Tarsi heteromerous, the four anterior 5-jointed; the two posterior 4-jointed; head produced anteriorly into a rostrum, which is sometimes elongate, with the mouth at the apex; palpi obvious; cyes large, prominent; antennæ elongate, cylindric, subovate; or short, moniliform, thickened exteriorly, the apex forming an evident club.

The insects of this family—with the exception of the first genus, which is somewhat discrepant from the remainder—are usually of small size, and are found beneath the bark of decaying trees, upon which they subsist—those of the first genus are found upon flowers.

The indigenous species may be thus distributed into genera:

Antennæ filiformes, elongatæ:	•	•	•	358. Mycterus.
clavatæ, breves. <i>Rostrum</i> plus minus e breve, latum		: ·		359. SALPINGUS. 360. Sphæriestes.

#### GENUS CCCLVIII.-MYCTERUS, Clairville.

Antennæ filiform, inserted before the eyes on the rostrum, composed of rather short, obconic, slightly serrated articulations, of which the terminal one is acute and apparently articulated, and the second shortest. Rostrum elongate, slender: palpi with the terminal joint compressed, somewhat acute: body ovate, covered with a silken down: thorax trapeziform, broadest behind: elytra rigid: abdomen robust: legs rather long, furnished with minute spurs: tarsi with the penultimate joint bifid.

One species only of this genus is known, which is found on flowers, and may be readily known by its elongate rostrum, upon which are inserted rather elongate filiform antennæ, the articulations of which are obconic.

- Sp. 1. griseus. PLATE XXI. f. 4.—Niger, supra griseo-flavescens, infra griseoargenteo nitidus, rostro bistriato. (Long. corp. 3<sup>3</sup>/<sub>4</sub> - 4<sup>1</sup>/<sub>2</sub> lin.)
   My. griseus. Clairville.—Steph. Catal. 194. No. 2001.
- Black, antennæ and legs the same, clothed above with a griseous-yellow pile; and beneath with a shining griseous-silvery pubescence: rostrum with two impressed longitudinal approximating striæ.

Extremely rare in Britain; I possess a pair that were captured near Kingsbridge by the late Mr. Cranch: others are in the collection at the British Museum, taken at the same time, in June, 1815.

#### GENUS CCCLIX .- SALPINGUS, Illiger.

Antennæ rather short, clavate, the basal joint robust, globose, the two following of nearly equal length, obconic, the succeeding two rather stouter, nodose, the remainder forming an elongate five-jointed club, the three first joints of which are transverse semi-globose, and the terminal one subovate acute. Palpi filiform, with the terminal joint rather thickened and obtuse: labrum quadrate: head depressed, produced anteriorly into a rostrum, which is generally a little elongate, and contracted in the middle: thorax subcordate, narrowed behind, the lateral margins entire: elytra rigid: body oblong-ovate, glabrous, with the head and thorax considerably narrower than the elytra.

Exclusively of the general habit, Salpingus differs from the following genus by having the rostrum more elongate, somewhat slender and contracted in the middle, with the antennæ, which are seated before the prominent eyes, of slightly dissimilar structure to those of Sphæriestes; the palpi are also a little different in form, and the labrum is quadrate, the head depressed, &c.

Sp. 1. ruficollis. Pallidè rufo-flavus, nitidus, punctatus, oculis nigris, capitis basi elytrisque atro-cæruleis, elytris striato-punctatis, abdomine piceo. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.)

Cu. ruficollis. Linné.-Sa. ruficollis. Steph. Catal. 194. No. 2002.

Pale rufous-yellow, shining, punctate: eyes black: base of the head, and the elytra blue or metallic green, the latter punctate-striate: abdomen rufo-piceous: legs and base of the antennæ pale rufo-testaceous: terminal joints of the antennæ obscure fuscous.

Not common; found occasionally beneath bark, in various parts of the country: I have received specimens from the New Forest, Devonshire, Somersetshire, &c. "Not uncommon (near Swansea)." L. W. Dillwyn, Esq. "Pencarrow."—Dr. Leach.

- Sp. 2. bicolor. Pallidè rufo-flavus, nitidus, punctatus, oculis nigris, capitis basi elytrisque atro-cæruleis, elytris punctato-striatis, abdomine rufo. (Long. corp.  $1\frac{1}{4}$  lin.)
- Cu. bicolor. Marsham MSS .- Sa. bicolor. Steph. Catal. 194. No. 2004.
- Pale rufous-yellow, shining, punctured : eyes black : head at the base and elytra dark blue, the latter punctate-striate : abdomen rufous, legs and base of antennæ the same, club of the last fuscous.

Found within the metropolitan district, but not common.

- Sp. 3. viridipennis. Pallidè rufo-flavus, nitidus, punctatus, oculis nigris, elytris atro-cæruleis punctato-striatis, pedibus testaceis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
  Rh? viridipennis. Ziegler.—Sa. viridipennis. Steph. Catal. 194. No. 2003.
- Pale rufous-yellow, shining, punctate: eyes black: elytra deep blue or greenish punctate-striate: abdomen piceous: antennæ rufescent, with the terminal joints dusky: legs pale testaceous.

Also rather uncommon, but found in various parts of the country.

- Sp. 4. planirostris. Supra fusco-æneus, nitidus, subtus rufo-piceus, rostro brevi lato, pedibusque pallidè testaceis. (Long. corp.  $1-1\frac{1}{4}$  lin.)
- An. planirostris. Fabricius.-Sa. planirostris. Steph. Catal. 194. No. 2005.
- Brown-brass, shining; beneath rufo-piceous: rostrum short, broad, depressed, pale testaceous, legs and antennæ the same, with the terminal joints fuscous: elytra punctate-striate.

The most abundant species of the genus, taken not uncommonly in the neighbourhood of London. "Not uncommon (near Swansea), on the leaves of elm."—L. W. Dillwyn, Esq.

OBS.—I have recently seen an insect belonging to this genus which was captured near London, that is probably the Sa. æneus of Olivier, but have not the present means of describing it.

# GENUS CCCLX .- SPHÆRIESTES, Kirby.

Antennæ short, the basal joint rather stout, subglobose, the two following slightly elongate, the fourth, fifth, and sixth, rather stouter, shorter, obconic, the remainder forming a five-jointed club, of which the two basal joints are more or less nodose and small, the remainder distinctly incrassated, and the terminal one obovate and obtuse. Palpi filiform, the terminal joint scarcely incrassated and obtuse: labrum rounded in front: head slightly convex, produced anteriorly into a short, broad, depressed rostrum: thorax subcordate, narrowed behind, the lateral margins sometimes crenulated: elytra rigid: body elongate-ovate, glabrous: head and thorax narrower than the elytra.

Sphæriestes—a genus proposed by Mr. Kirby to embrace the species of this and the foregoing genus,—differs principally from Salpingus by having the rostrum shorter and broader, the head depressed; antennæ with the club less distinctly 5-jointed, with the terminal joint obtuse, the labrum rounded in front, &c.

#### A. With the sides of the thorax entire.

- Sp. 1. ater. Nigro subæncus glaber, antennarum basi tarsisque rufo-piceis, thorace breviori punctatissimo bifoveolato, capite rotundato. (Long. corp.  $1\frac{1}{2}$  lin.)
- Sp. ater. Paykull.-Sp. ater. Steph. Catal. 194. No. 2006.
- Black, with a slight brassy tinge, glabrous: head rounded, smooth, piceous; thorax subcordate, very coarsely and thickly punctured, with an ovate, rather large fovea on each side before the middle: elytra slightly convex, with an obscure transverse impression before the middle: the disc rather deeply punctate-striate, the interstices with a few smaller punctures, disposed in rows: tarsi and base of the antennæ rufo-piceous.

Apparently very rare: I have hitherto seen but two specimens, one of which was captured in Norfolk.

Sp. 2. immaculatus. Fusco-castaneus, aut ferrugineus, oculis nigris, antennis

pedibusque pallidis, thorace punctatissimo, postice utrinque impresso. (Long. corp.  $1\frac{1}{4}-1\frac{3}{4}$  lin.)

Sp. immaculatus. Steph. Catal. 195. No. 2008.

- Castaneous-brown, or ferruginous, glabrous, shining: head rounded: eyes black: thorax very thickly and coarsely punctate, with an obsolete transverse impression on each side at the base: elytra punctate-striate, with an impression on the disc towards the base: legs and antennæ pale, club of the latter a little dusky.
- In my Catalogue I inadvertently transposed this and the following species, and placed the section B. in the wrong place, indicating the present insect as a supposed variety of Sp. 4-pustulatus, instead of noting Sp. denticollis as the variety, a mistake that has been servilely followed by Mr. Curtis in his *original* Guide.

Extremely common on one fir tree in a plantation on Ockhamheath, in July, 1827; since found near "Norwood."—*Mr. Ingall*; and I believe in the neighbourhood of Chelsea.

B. With the sides of the thorax denticulated.

- Sp. 3. quadripustulatus. PLATE XXI. f. 5.—Atro-piceus, rostro, thorace pedibusque ferrugineis, elytris maculis duabus ferrugineis, abdomine nigro. (Long. corp. 14–14 lin.)
- Cu. quadripustulatus. Marsham.---Sp. 4-pustulatus. Steph. Catal. 194. No. 2007.
- Dark piceous, sometimes castaneous: head and thorax ferruginous, the latter thickly punctured, with the lateral margins finely crenulated in the middle: elytra black, striated, with two ferruginous spots, one placed at the base, the other towards the apex, a little behind the middle: abdomen black: antennæ dusky at the apex: legs ferruginous.

Abundant in whitethorn hedges at Hertford in June and July, and not uncommon at Ripley, and in Battersea-fields. "Near Swansea."—L. W. Dillwyn, Esq.

- Sp. 4. denticollis. Fuscus, capite, thorace antennis pedibusque testaceis, elytris basi pallescentibus, thorace punctatissimo. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>8</sup>/<sub>4</sub> lin.)
  Sa. denticollis. Gyllenhal.—Steph. Catal. 195. No. 2009.
- Fuscous, glabrous, shining: head and thorax luteous, the latter thickly punctured, with the lateral margins crenulated, and the base considerably narrowed, with two obsolete impressions behind the middle: elytra punctate-striate, fuscousbrown, with an oblique pale testaceous spot at the base within: antennæ and legs testaceous: eyes black.

Found in hedges within the metropolitan district, not very uncommon : probably a variety of the foregoing insect.

#### Subsection II.—LONGICORNES.

Head not rostrated anteriorly: antennæ filiform or setaceous, rarely clavate, generally simple and more or less elongate; sometimes very long: mandibles generally large, robust: palpi conspicuous: body more or less elongated, sometimes depressed: tarsi various, mostly tetramerous or obscurely pentamerous.

Of this interesting series of insects, there are evidently two distinct groups :—the first of which has the body considerably depressed, with the tarsi, at least in one sex of some of the species, heteromerous and entire, the legs short, the antennæ somewhat clavate :—the other—by far the most extensive—with the body more or less cylindric, elongate, the legs, and especially the antennæ long, the latter filiform, the tarsi tetramerous, with the three basal joints pilose, and the penultimate deeply bilobed :—all the species, homever, agree in habit; their larvæ are destitute of legs, or these parts are very small; the body is soft, whitish, robust anteriorly, with the head scaly and furnished with stout mandibles : they subsist beneath the bark of trees, or in the interior of their substance, piercing them sometimes to a considerable depth, so as to cause their destruction : some few attack the roots.

The following families appear to belong to this division, which may be distinguished by the subjoined external characters:

Corpus valdè depressum :			•	45. CUCUJIDÆ.
convexum, aut paulò depressum.				
Oculi emarginati.				
Labrum minimum, vel obsoletum :			•	46. PRIONIDÆ.
exsertum :	•			47. CERAMBYCIDÆ.
Oculi integres aut subemarginati :	•	•	•	48. LEPTURIDÆ.

## FAMILY XLV.-CUCUJIDÆ mihi.

Body very much depressed, elongate, or oblong: antennæ shorter or longer than the body, sometimes incrassate at the apex, or subfiliform, the extremity being slightly attenuated. Labrum exserted, coriaceous or membraneous: mandibles robust, trigonal, the external side sometimes produced, the apex acute, bidentate: maxillæ furnished with a single, or with two processes at the base: head porrect, exserted: thorax subquadrate, or subcordate-truncate, more or less remote from the abdomen: legs short: tarsi various, entire.

The insects of this family, which, as before noticed, may require

subdivision, may be very readily known by their very depressed, elongate body, large porrect head, subfiliform or abbreviated compressed antennæ, and by the integrity of the tarsi. They reside beneath the bark of trees; and the indigenous species may be thus divided into genera.

Antennæ extrorsum crassiores, compressæ: subfiliformes, corpore breviores; labium plerumque bifidum: longiores; labium emarginatum : 363. ULEIOTA.

## GENUS CCCLXI.-TROGOSITA, Fabricius.

Antennæ short, moniliform, thickened towards the apex; the four terminal joints largest, compressed, obtusely produced within, and the apical one obtuse. *Palpi* subequal and filiform, with the terminal joint subovate, truncate: *labrum* coriaceous, small, transverse-quadrate: *maxillæ* with a single basal process: *labium* subquadrate, entire: *body* elongate, greatly depressed: *head* large, anteriorly dentate: *thorax* subcordate, remote from the abdomen: *tarsi* obscurely pentamerous, the basal joint small.

Trogosita is distinguished from the true typical Cucujidæ by the brevity of the antennæ, which gradually increase in size to the tips; the integrity of the labium, which is nearly quadrate, and by the remoteness of the thorax from the abdomen; those parts being separated by a space as in the Scaritidæ.

- Sp. 1. mauritanica. Nigra, nitida, subtus rufo-picea, elytris striatis. (Long. corp.  $3\frac{1}{2}$ -5 lin.)
- Te. mauritanicus. Linné.-Tr. mauritanica. Steph. Catal. 195. No. 2010.
- Depressed, black, shining: head punctate: thorax thickly punctured: broader anteriorly than the head, with the angles acute: elytra faintly punctate-striate, the interstices with a double series of impressions: body beneath glossy rufopiceous, punctured: legs rufo-piceous: antennæ the same.

I have twice captured this insect beneath the bark of pines at Coombe-wood, and it has been elsewhere taken in similar situations; but as it has been more frequently observed in this country in flour, dry bread, or rice, its native origin has been recently questioned, although Tenebrio molitor, which is exclusively found in similar substances, is admitted into our Fauna without question; and the present insect occurs, according to Latreille, "dans toute la France;"—and also in Germany, Sweden, Portugal, &c. " In the rotten floor of a malt-house at Cambridge."—C. C. Babington, Esq.

## GENUS CCCLXII.-CUCUJUS, Fabricius.

Antennæ shorter than the body, subfiliform, the articulations short, subturbinated; the terminal joints sometimes a little thickened. Palpi subequal, with the terminal joints somewhat thickened, obconic, with the apex truncate; labrum membranous, rounded anteriorly, entire: labium bifid: maxillæ with a small external process: body oblong, or elongate, very much depressed: head large, porrect, exserted: thorax subquadrate: tarsi in one sex heteromerous, in the other obscurely pentamerous, the basal joint being minute.

There is considerable diversity in the habit and structure of the insects of this genus, at least with regard to the length and form of the antennæ and head, exclusively of the dissimilarity in the trophi and other essential organs : all the species reside beneath bark, or in decayed or decaying wood; most of them are rare in Britain : but like other xylophagous insects, are occasionally found in some plenty:—they may be known from the allied genera by the bifid labrum, and comparatively short antennæ, and from Uleiota also by the palpi being truncate.

- Sp. 2. dermestoides. Fusco-ferrugineus, punctulatus, pedibus rufo-testaceis, thorace foveolato, utrinque quadridentato. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>4</sub> lin.)
   Cu. dermestoides. Fabricius.—Steph. Catal. 195. No. 2012.
- Rusty-brown, punctured: head subtriangular: eyes large, black: antennæ rather stout; the seventh, ninth, and two following joints incrassated, the eighth being small: thorax with four impressed foveæ placed tetragonally: scutellum transverse: elytra smooth, testaceous, with the sides margined, the apex rounded: legs pale rufo-testaceous: posterior tarsi in one sex tetramerous.

Very rare, at least near London: I once found a specimen within the metropolitan district, and I have received others from the New Forest:—where several specimens were captured this year by the Revs. F. W. Hope and G. T. Rudd.

<sup>+</sup> Sp. 1. depressus. Niger, subnitidus, capite thoracis dorso elytrisque rufis, thorace utrinque denticulato, supra bisulcato. (Long. corp. 5 lin.)

Cu. depressus. Fabricius.-Leach (!)-Steph. Catal. 195. No. 2011. note.

Black, rather shining, with the head, disc of the thorax, and the elytra rufous, the thorax denticulated in the lateral margins and bisulcate above.

Inadvertently noticed in the Edinburgh Encyclopædia as a native of England, by Dr. Leach.

- Sp. 3. piceus. Rufo-castaneus, nitidus, immaculatus, subtilissimè punctulatus, thorace lateribus postice subdenticulato. (Long. corp. 1<sup>1</sup>/<sub>8</sub> lin.)
- Cu. piceus. Olivier, E. iv. pl. 1. f. 5?—Westwood, Zool. Jour. iv. 227. pl. sup. xlvii. f. 1.
- Rufo-castaneous, shining, immaculate, finely punctured: thorax with the base of the lateral margins slightly denticulated: elytra faintly striated.

Taken in Wiltshire, beneath the bark of a decayed elm.

- Sp. 4. ferrugineus. Rufo-testaceus nitidus, immaculatus, subtilissimè punctulatus, thorace subquadrato immarginato mutico, obsoletè bistriato, elytris substriatis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Cu. ferrugineus. Megerle.-Cu. testaceus. Steph. Catal. 195. No. 2013.-Gyll. ii. xii.
- Rufo-testaceous, shining, immaculate; finely punctured: head as broad as the thorax, the latter subquadrate, immarginate, with the hinder angles rather prominent, the disc on each side with a very delicate stria: elytra pale rufo-testaceous, each with three faint impunctate striæ: legs and antennæ pale rufo-testaceous; the latter with the basal and three terminal joints largest.

Found at Hertford; several specimens taken flying in a garden there in May, 1826.

- † Sp. 5. unifasciatus. Pallide fulvo testaceus, thorace subquadrato lateribus integris, elytris maculá obsoletá fuscá. (Long. corp.  $1\frac{1}{4}$  lin.)
- Cu. unifasciatus. Latreille. Hist. xi. 256?—Westwood, Zool. Jour. iv. pl. supp. xlvii. f. 2.
- Pale fulvo-testaceous: head as large as the thorax, emarginated anteriorly: thorax subquadrate, with a fine depressed line parallel with each lateral margin, which is entire: *clytra with* several rows of minute punctures, more distinct near the apex; there is also a deeper stria near the lateral and sutural margin of each, and in the centre an obscurely defined brown spot.
- Var.  $\beta$ . With a distinct broad brown fascia across the middle of the elytra.

Taken in Hainault-forest, under the bark of hornbeam, by Mr. Bydder. "Var.  $\beta$ . New Forest, June last."—*Rev. F. W. Hope.* 

- Sp. 6. monilicornis. Rufo-testaceus, nitidus, thorace obcordato, subtilissimê punctulato, elytris obsolete striatis, capite lato, antennis filiformibus, articulis ultimis tribus paulò crassioribus. (Long. corp. 1-14 lin.)
- Co. monilicornis. Marsham MSS.—Cu. monilicornis. Steph. Catal. 196. No. 2015.
- Rufo-testaceous, or pale castaneous, shining: head broad: eyes black: thorax obcordate, very finely and rather sparingly punctured; the disc flat: elytra

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obsoletely striated: legs and antennæ pale testaceous, the latter rather elongate, filiform, with the three terminal joints a little incrassated. Slightly variable in colour and in size.

Not common: taken in old wood near London. "In plenty in a granary at Cambridge."—C. C. Babington, Esq.

 Sp. 7. testaceus. PLATE XXI. f. 6.—Testaceus, nitidus, thorace subquadrato mutico subtilissimè punctulato, femoribus compressis, antennis filiformibus longitudine ferè corporis. (Long. corp. <sup>8</sup>/<sub>4</sub>-1 lin.)
 Cu. testaceus. Fabricius, E. S. i. b. 96.

Testaceous, shining: head rather broad: eyes dusky black: thorax very glossy, subquadrate, thickly but rather obsoletely punctured: elytra depressed, pale testaceous, faintly striated, immaculate: legs rather short, and pale testaceous: femora compressed: antennæ filiform, nearly as long as the body, with the three terminal joints rather elongate, but not stouter than the rest.

Taken near London; and in the vicinity of Norwich, by the late M. A. Griffin, Esq.

# GENUS CCCLXIII.-ULEIOTA, Latreille.

Antennæ longer than the body, filiform, pilose; the basal joint elongate; the second placed obliquely on the side of the first; the remaining joints elongate, cylindric. Palpi subequal, filiform, with the terminal joint sub-obconic, and rather acute: labrum rounded? labium slightly emarginate in front: maxillæ short, with the internal process armed with an acuminated hook: mandibles in the male furnished on the outer side with an elongate, strong, curved, hornlike process: body very much depressed: head short, broad: thorax transverse: legs short, robust: femora incrassated in the middle: tarsi tetramerous.

From Cucujus this genus is characterised by the length of the antennæ, the basal joint of which is very long and curved, and the

Found in America; and taken occasionally in warehouses in England; I have taken three or four examples in London, but amongst foreign wood.

Sp. 8. minimus. Ferrugineus, thorace subquadrato mutico, elytris lævissimis, pallidis. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)

Br. minimus. Fabricius, S. E. ii. 98.—Cu. minutus? Curtis Guide?

Ferruginous, with the thorax subquadrate, the sides entire: elytra pale, very smooth.

#### PRIONIDE.

second joint is eccentric, not being placed upon the apex of the first,—the remaining joints are also elongate,—the acuteness of the terminal joint of the palpi, and the slightly emarginated labium :— the species are found beneath bark, chiefly of the oak.

Sp. 1. flavipes. Nigro-picea, opaca, punctatissima, antennis pedibusque rufescentibus, thorace lateribus denticulato, angulo antico producto. (Long. corp. 3½ lin.)

Br. flavipes. Fabricius .-- Ul. flavipes. Steph. Catal. 195. No. 2014.

- Dusky or fuscous, obscure: with the antennæ, mouth, and legs rufescent: head with two longitudinal impressions on the front: thorax cordate-quadrate, rugulose, with the lateral margins denticulated, the anterior angles produced: elytra punctate-striate, with an elevated carina running parallel with the margins.
- The male has the outer side of the mandibles furnished with a strong hornlike process.

The only indigenous specimen I have seen of this singular insect, I found in a mutilated condition in June, 1830, in a window in my own parlour at the Hermitage : it had previously been taken.

FAMILY XLVI.-PRIONIDÆ, Leach.

Body elongate, convex: antennæ inserted near the base of the mandibles, moderate, setaceous, sometimes moniliform, or with the articulations cylindricconic, serated in the males. Labrum minute, or obsolete: mandibles stout, horny, sometimes large, porrect and dentate within, with the apex acute, curved: maxillæ stout, with a single or two small processes at the base: head exserted: eyes emarginated: thorax transverse: legs stout, anterior generally longer than the middle: tarsi testaceous, the three basal joints spongy beneath, the penultimate bilobed.

The Prionidæ are amongst the largest of the British coleoptera, and in common with the insects of this subsection their larvæ subsist in decaying trees :—two genera alone are indigenous \*, which may be thus distinguished by external characters :—

Thoracis latera mutica; antennæ breves:			SPONDYLIS.
dentata, aut spinosa: .	•	365.	PRIONUS.

\* The genus ACROCINUS of *Illiger* has been captured at large in Britain; but as that genus is exclusively Brazilian, or South American, I shall take no further notice, other than remarking, that the A. accentifer, *Olivier*, *Steph. Cat.* 412. No. 2016 \* note, was found on Tower-bill, London, about twenty-five years since: it had most unquestionably escaped from on board some South American vessel.

# GENUS CCCLXIV .-- SPONDYLIS, Fabricius.

Antennæ short, moniliform, compressed, the joints truncate at the apex, the terminal one conic, slightly acuminated. Palpi with the terminal joint some-what obconic: maxillæ very short, with two small lobes, the outer one sub-coriaceous, the inner smaller and membranaceous: body very convex: thorax suborbiculate, immarginate, the sides rounded, unarmed: legs short, stout: tibiæ crenulated without: tarsi with the penultimate joint distinctly bifd.

From Prionus the convex, unarmed, thorax of this genus, exclusively of its short moniliform antennæ, convex smooth elytra, bilobed maxillæ, externally crenulated tibiæ, will at once enable the student to distinguish it.

- † Sp. 1. buprestoides. Niger, immaculatus, vagè punctatus, elytro singulo lineis duabus elevatis, apicem non attingentibus. (Long. corp. 7 lin.)
- Spo. buprestoides. Fabricius, S. Eleut. ii. p. 376.-Panzer. F. G. xliv. f. 19.
- Black, immaculate, thickly and irregularly punctured: each elytron with two elevated lines, which do not reach to the apex.

I have seen but one indigenous specimen of this which was "taken in Windsor-forest, August, 1831."—Rev. F. W. Hope.

# GENUS CCCLXV. - PRIONUS, Geoffrey.

Antennæ longer than the head and thorax, setaceous, distinctly serrated in the males, the articulations triangular conic, the third joint longer than the rest, and the two apical ones united in the females. Palpi with the terminal joint obconic, truncate: maxillæ short, cylindric, pilose, with a minute lobe: body slightly convex: thorax with the lateral margins acutely spinose: legs elongate: femora and tibiæ compressed, the latter with their outer edge unarmed, with two spines at the apex: tarsi with the penultimate joint deeply bilobed.

The genus Prionus embraces one of the largest of the indigenous coleopterous insects, but in comparison to some of its gigantic exotic brethren its magnitude is not remarkable, some of the South American species being at least six inches in length:—the only British species may be at once recognized by its serrated antennæ, and by the sides of the thorax bearing each three elongate, acute spines, exclusively of other characters.

- Ce. coriarius. Linné.-Don. xiv. pl. 491.-Pr. coriarius. Steph. Catal. 196. No. 2016.

Pitchy-black; beneath somewhat castaneous: thorax with the lateral margins bearing three acute spines; the anterior and posterior margins bordered with ochraceous hairs: elytra rugose-punctate, with three very obsolete elevated lines on each, the apex obsoletely mucronated: breast rather deusely pubescent.

Extremely variable in size.

Not uncommon occasionally in the lane behind Coombe-wood leading from Kingston to Merton. "Cambridge."—C. C. Babington, Esq. "Broxbourne-wood."—H. Desvignes, Esq. "Sevenoaks."—A. H. Davis, Esq. "Netley."—Rev. F. W. Hope. "Norwich."—W. C. Hewitson, Esq.

### FAMILY XLVII.—CERAMBYCIDÆ, Kirby.

Body elongate, convex, sometimes slightly depressed: antennæ inserted on the inner margin of the eyes, generally setaceous, never serrated; frequently much longer than the body, 11- sometimes 12-jointed. Labrum exserted, transverse: maxillæ with two membraneous processes: palpi with the terminal joint largest: labium somewhat heart-shaped: head exserted, nutant, sometimes deeply inserted in the thorax: eyes lunate: thorax subcylindric or suborbicular, truncate anteriorly and posteriorly, the lateral margins frequently dentate: elytra rarely abbreviated: legs compressed: femora generally elongate: tibiæ slender, mostly unarmed: tarsi elongate, spongy beneath, the penultimate joint deeply bilobed.

The family of Cerambycidæ is preeminently distinguished amongst the coleopterous insects by the great length of the antennæ, in some of the species these organs exceeding the body more than five times its length: in habit the various groups are similar; all being found in their larva state in decaying trees, or under bark, but some few appear to prefer sound wood, which they perforate longitudinally: —the perfect insects, which vary extremely in size, are found in the trunks of trees or on flowers, especially of the umbelliferous kind, and in dead hedges. The indigenous genera may be thus distinguished by the subjoined, mostly external, characters:

Elytra haud abbreviata; sæpe spin Oculi integres, lunati.	igera	L.			
Thoracis lateribus spinosis aut tu	berc	ulatis			
Tibiis intermediis immunibus.					
Corpus convexum.					
Antennæ spinosæ:					370. STENOCORUS.
haud spinosæ:				•	366. HAMATICHERUS.
Corpus depressum : Tibiis intermediis unidentatis.	•		•	٠	367. CERAMBYX.

Corpus depressum (antennæ longissimæ): plus minus convexum.	•	369. ACANTHOCINUS.
Antennæ corpore longiores.		
Corpus elongatum-cylindricum :		368. MONOCHAMUS.
breve; elutra variegata :		371. POGONOCHERUS.
corpore breviores; corpus robustum:		372. LAMIA.
Thoracis lateribus integris.		•
Palpi arto, ulto, elongato, apice acuminato.		
Corpus oblongum, latum, dorso subconvexo: lineari-cylindricum.	•	373. Aplocnemia.
Femora vix clavata :		375. SAPERDA.
abrupte clavata :		379. OBRIUM.
Palpi arto. ulto. incrassato, subobtrigono.		
Corpus depressum, latum :		378. Callidium.
convexum, elongatum : .	•	377. CLYTUS.
<i>Oculi</i> divisi, quasi duplicati.		
Ant. art <sup>1</sup> . 2-do elongato :	•	376. TETROPS.
nodoso:		374. TETRAOPES.
Elytra dimidiatæ:	•	379. Molorchus.
subulatæ:	•	380. STENOPTERUS.

# GENUS CCCLXVI.-HAMATICHERUS, Megerle.

Palpi with the terminal joint elongate-obconic, maxillary rather longer than the labial. Antennæ longer than the body, the five basal joints very robust, the remainder becoming suddenly more and more attenuated to the apex, and slightly compressed; second joint very short; the rest, except the apical one, nodose at the apex: head rounded, nutant: eyes lunate: thorax rounded, unequal, rugose, the lateral margins each with a single spine: elytra elongate, convex, rugose: legs long: intermediate tibiæ simple.

 \$\$\frac{1}{2}\$ Sp. 1. Heros. Oblongus, posteriàls attenuatus, niger, elytris apice piceis subspinosis, thorace rugoso glabro, utrinque spinoso. (Long. corp. 1 unc. 6-8 lin.)
 Ce. Heros. Fabricius.—Ha. Heros. Steph. Catal. 196. No. 2017.

Oblong, attenuated posteriorly, *black*: head with a deep channel: thorax irregularly wrinkled transversely, with an acute spine on each side: *elytra attenuated* towards *the apex*, which is *piceous*, the inner angle with a minute spine, the disc rugulose, with three very obsolete longitudinal lines: legs and antennæ black, the latter with the tibiæ and tarsi clothed with an ashy pile.

A pair of this species are, I believe, in the collection at the British Museum, which are said to have been captured in the west of England. Mr. Ingpen has a specimen which he is informed was taken at Colney-hatch wood, near London.

- Oblong, glossy, *black*: head rugulose, punctate: thorax rugulose, the wrinkles somewhat regular and placed transversely, the lateral margins each with a short spine: *elytra* very rugose, especially anteriorly, *concolorous*, the apex a little acuminated, unarmed.

I have seen examples of this insect, which have been taken in the vicinity of the metropolis; but whether it be a truly indigenous species is questionable.

## GENUS CCCLXVII.—CERAMBYX, Auctorum.

Palpi with the terminal joint elongate-obconic; maxillary shorter than the labial. Antennæ longer than the body in the males, shorter in the females; basal joint very robust; second minute; remainder elongate, gradually decreasing in bulk to the apex, which is very slender and acute, the tip of each joint incrassate: head oblong, nutant: eyes deeply notched: thorax rounded, unequal, tuberculated, with a spine on each side: elytra elongate, depressed: legs moderate: tibiæ compressed, all simple.

This beautiful genus is well distinguished from the allied genera by its depressed body, and its brilliant metallic (generally green) hues; peculiarities which seem to obtain throughout the numerous exotic species contained therein:—the only indigenous species is remarkable for the fragrant odour that it disseminates during its living state, an odour which has been compared to Otto of Roses, and that is retained for some considerable period after death; it has thence obtained the name of *Musk Beetle*, though improperly, the scent not resembling that of the drug whence its appellation is derived.

- Sp. 1. Moschatus. Viridis, glaber, antennis cyaneis, elytris obsoletè elevatolineatis. (Long. corp. 1 unc. 1-6 lin.)
- Ce. Moschatus. Linné.-Don. iii. pl. 94. f. 2. Steph. Catal. 196. No. 2019.
- Shining green, glabrous: head a little punctured: thorax irregularly tuberculated, the lateral margins with a stout spine: elytra sublinear, thickly rugulose,

most coarsely at the base, and each with three very obsoletely elevated lines: legs and antennæ bluish.

Extremely variable in tint: sometimes bluish-green above, or bright grassy metallic green; occasionally of a rich coppery or golden green: the legs and antennæ are at times tinted with the same hue: and the thorax is occasionally rather coarsely wrinkled, and at other times extremely smooth and glossy.

Abundant on the trunks of willows in July, in many places throughout the metropolitan district, especially in Battersea fields; also found in Devonshire and other parts of the country. "Common near Ely."—Rev. L. Jenyns. "York, once."—W. C. Hewitson, Esq. "Near Penllergare and in Crwmlyn-bog, not common."— L. W. Dillwyn, Esq.

# GENUS CCCLXVIII.-MONOCHAMUS, Megerle.

Palpi with the terminal joint elongate-subfusiform; maxillary much longer than the labial. Antennæ longer than the body, especially in the males; basal joint slightly robust; second minute, nodose; remainder gradually decreasing in length and thickness to the apex, which is acute: head robust, inflexed: cyes elongate, lunate: thorax short, cylindric, with an acute spine on each side: elytra elongate, convex: legs elongate: tibiæ slightly curved, intermediate, with an obtuse denticulation in the middle of the external edge.

From Cerambyx the somewhat cylindric, convex, elongate body, greater slepderness and length of antennæ, dissimilarity of palpi, and distinctly unidentate intermediate tibiæ, with the curvature of the latter, sufficiently distinguish the present genus.

- Sp. 1. Sutor. Niger, supra pallido irroratus, elytris æqualibus undique punctatis, scutello maculá cordatá pallidá. (Long. corp. 10–14 lin.)
- Ce. Sutor. Linné.-Don. xiii. pl. 435. f. 1.-Mo. Sutor. Steph. Catal. 197. No. 2020.
- Black, irrorated with pale pubescence above: antennæ very long, black, and scabrous in the male; shorter, with the base of the joints annulated with cinereous in the female: thorax more or less variegated with short flavescent lines, the lateral margins with a stout, acute spine: scutellum densely clothed with a yellowish pile, with a central naked line: elytra coarsely rugose-punctate, with two or three obsolete elevated lines on each, and the disc more or less varied with flavescent pile, especially in the female.

Very rare: the only locality I am aware of being in the vicinity

of Colney-hatch, where six or eight specimens have been taken at different periods :- the insect is said to have occurred near Norwich.

- †Sp. 2. Sartor. Niger, scutello toto densè flavo-piloso, elytris fusco-subæneis, posticis obsoletissimè punctulatis, dorso impressis. (Long. corp. 1 unc. 4 lin.)
  La. Sartor. Fabricius.-Mo. Sartor. Steph. Catal. 197. No. 2021.-Curtis, v. pl. 219.
- Black : scutellum entirely clothed with flavescent pile : elytra attenuated slightly in the males, and immaculate, sublinear and variegated with pale pile in the females, the base coarsely rugose-punctate, the apex very obsoletely punctured, of a somewhat dusky-brassy hue: antennæ very long and black in the male, shorter and annulated with cinereous in the female.

Also very rare: I have hitherto seen but five examples, three of which were taken in the vicinity of London; one in Norfolk, and the fifth in Devonshire.

# GENUS CCCLXIX.-ACANTHOCINUS, Megerle.

Palpi short, slender, the terminal joint elongate, subfiliform, acute at the apex: maxillary longer than the labial. Antennæ more than three or four times as long as the body in the males, as long again in the females, slender; basal joint slightly robust, subclavate; second short; third rather longer than the fourth; the remainder subequal in the females, but gradually increasing to the end in the males, the terminal joint being longest, sometimes half an inch in length, and very slender: thoras transverse, tuberculated, with an obtuse spine on each side: elytra broad, depressed: legs moderate, robust: tibiæ compressed, intermediate with a tubercle in the middle of the outer edge.

The broad depressed body of this genus, with the transversely tuberculated thorax, the extremely long and slender antennæ of the

Varied with fuscous and cinereous: antennæ three times as long as the body, ferruginous, with the base black: intermediate tibiæ compressed, with a small tooth on their outer edge.

This beautiful species has been several times found in the vicinity of London, but it has most probably been imported from North America, where it is not uncommon.

Sp. 3. dentator. Fusco cinereoque varius, antennis longissimis, tibiis intermediis unidentatis. (Long. corp. 1 unc. 4 lin.)

La. dentator. Fabricius.-Haworth, Ent. Trans. v. i. pl. 1. fig. sup. (!)-Mo. dentator. Steph. Catal. 413. No. 2021.\* note.

males, and the exserted ovipositor of the females, readily point out its distinction from its allies, exclusively of the dissimilarity of the palpi, &c.

Sp. 1. Ædilis. Brunneus, densé griseo-pubescens, thorace punctis quatuor flavopilosis, elytris fasciis duabus fuscis. (Long. corp. 8-10 lin.-antennis & 3 unc. 6-10 lin.)

Ce. Ædilis. Linné.-Don. ii. pl. 72.-Ac. Ædilis. Steph. Catal. 197. No. 2022.

Brownish-ash, with a dense griseous pubescence: eyes black: thorax with four yellowish pilose tubercles placed transversely on the disc, and an obtuse tubercle on each side: elytra rather thickly punctured at the base, and with a few short fascicles of black hairs; before the middle is an obsolete fuscous fascia, and an oblique abbreviated irregular one behind:—antennæ in the males about five times the length of the body, in the females about twice, each joint cinereous at the base, and black at the apex: legs brown, with ashy down: tarsi fuscous: ovipositor of female black.

Rare: specimens have, however, been captured in very many and distant parts; in Scotland, Suffolk, Devonshire, &c., and in and about the metropolis. "A fine specimen of this insect is in the cabinet of the Cambridge Philosophical Society, which was taken in Scotland."—*Rev. L. Jenyns.* "Near Newcastle."—*W. C. Hewitson, Esq.* 

GENUS CCCLXX.-STENOCORUS, Fabricius.

- Palpi subfiliform, maxillary longest, with the terminal joint short, subconic, obtuse. Antennæ as long as the body, setaceous, pilose, the articulations, except the two basal and the apical one, bispinose at the apex within: head small, rounded: thorax tuberculated, sometimes spinous: elytra elongate, convex, spinose at the apex: legs slender: intermediate and posterior femora with a spine at the tip: tibiæ simple.
- Sp. 1. spinicornis. Cinerascens, punctis elevatis fuscis, elytris bidentatis, antennarum articulis bidentatis. (Long. corp. 10-11 lin.)
- St. spinicornis. Fabricius .- Steph. Catal. 413. No. 2021. \*\*\* note.
- Cinerascent, densely pilose, with elevated glabrous ferrugineo-fuscous points: thorax with a longitudinal carina and three tubercles on each side of the disc glabrous and shining: elytra with irregular glabrous elevations: antennæ and legs ferruginous, slightly pilose.

This fine insect has been taken at least a dozen times in the vicinity of London: I possess a pair that were found in Bermondsey about fifteen years since: all probably imported in American timber.

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### GENUS CCCLXXI.-POGONOCHERUS, Megerle.

Palpi with the terminal joint slender, acute at the apex; maxillary longer than the labial. Antennæ elongate, pilose, or glabrous, longer than the body in the male, the articulations decreasing in length from the third to the end, the basal joint very robust: head small, rounded, inflexed: thorax short, somewhat transverse, the lateral margins spinose: elytra more or less convex, the apex frequently spinose: the disc more or less variegated: body short: legs moderate: femora clavate: intermediate tibiæ unidentate without.

Exclusively of the small size of the insects of this pretty genus, they differ from the preceding and following by the union of their convex body with the subfiliform, acute palpi, elongate pilose antennæ, variegated, and sometimes spinose, elytra, abbreviated body, unidentate tibiæ, &c.:--they frequent dry wood, especially what are termed "dead hedges," in June and July.

#### A. Elytra dentate at the apex.

- Sp. 1. pilosus. Fusco-brunneus, pubescens, elytris anticè latè albido-pubescentibus, apice unidentatis, thoracis tuberculis dorsalibus acuminatis. (Long. corp.  $2\frac{1}{2}-4$  lin.)
- St. 4-maculatus. Fabricius.—Haworth. Ent. Trans. i. 83. (!)-Steph. Catal. 413. No. 2021.\*\*\*\* note.
- Glabrous; pale yellow-testaceous: the thorax with an acute spine on each side, and two black tubercles on the disc: elytra with two faint longitudinal elevated lines, arising from a glossy double yellow spot at the shoulders, and passing through a second in the middle of the disc.

"Taken in a field by a countryman in the county of Essex."—Haworth. l. c.; but doubtless imported, being a native of South America.

- + Sp. 3. litteratus. Cinereus, elytrorum basi punctis elevatis nigris, margine externo brunneo maculis duabus confluentibus atris, exteriore literaforme. (Long. corp. 11? lin.)
- Ce. litteratus. Donovan. xvi. pl. 546. (!)—Steph. Catal. 413. No. 2021. •• note.
- "Cinereous: base of the wing-cases with raised black dots; exterior margin brown, with two confluent spots, the posterior one branching into a letterform band."—Donovan, l. c.

"Taken near Manchester, by J. King, Esq."-Donovan, l. c.: evidently imported.

Ce. pilosus. Fabricius.-Po. pilosus. Steph. Catal. 197. No. 2026.

Fuscous-brown, pubescent: thorax with the dorsal tubercles acuminated, the lateral margins with two acute spines, elytra slightly varied, with a fuscouswhite pubescent fascia at the base, and some black marks near the suture: the apex with a single spine on the outer edge: antennæ pilose, obscurely annulated with cinereous.

Not very abundant near London; found in June in Darenth and Coombe woods, and in other places within the metropolitan district. "York, under bark."—W. C. Hewitson, Esq.

- Sp. 2. hispidus. Fusco-brunneus, pubescens, variegatus, elytris apice bidentatis, anticè latè albo-pubescentibus, posterius atro fasciculatis. (Long. corp. 2-3<sup>1</sup>/<sub>2</sub> lin.)
- Ce. hispidus. Linné.-Don. ii. pl. 64. f. 2, 3.-Po. hispidus. Steph. Catal. 197. No. 2025.
- Fuscous-brown, pubescent, variegated: thorax with two dorsal tubercles and a spine on each side: elytra with a broad ashy-white pubescent band at the base, a little clouded on the shoulder, the apex near the suture with some black fascicles of hair, with the apex itself bidentate, the outer tooth largest: legs varied with cinereous: antennæ with the base of each joint whitish-ash, the apex black.

Not uncommon in the woods within the metropolitan district; at Coombe-wood and Darenth I have frequently captured it, also at Ripley and Hertford. "Botchardby Mill, Neale House, &c."— T. C. Heysham, Esq. "York and Newcastle."—W. C. Hewitson, Esq. "Epping."—Mr. Doubleday. "Brigg."—H. Grantham, Esq.

B. Elytra not dentate at the apex. a. Antennæ pilose.

Sp. 3. fasciculatus. Fusco-brunneus, pubescens, variegatus, elytris apice obtusis, basi fasciâ lunatâ albidâ, posterius fasciculis elevatis atris. (Long. corp.  $3\frac{1}{2}$  lin.)

Ce. fasciculatus. Fabricius .- Po. fasciculatus. Steph. Catal. 197. No. 2024.

Fuscous-brown, pubescent, variegated: thorax with an obtuse glossy tubercle on each side of the disc, and a small spine on each of the lateral margins: elytra obtuse, the inner edge of the suture with a very minute acumination, the disc with a longitudinal row of four or five elevated black fascicles of hair, and outwardly towards the shoulders with an arcuated pubescent white fascia, scarcely reaching to the suture: legs black, with the base ferruginous: tibiæ fuscous, with the base and a ring in the middle ferruginous: joints of the antennæ pale ferruginous at the base, black at the apex.

Apparently very rare : I have seen only two indigenous examples, both of which, I believe, were captured near Norwich.

#### b. Antennæ slender ; not pilose.

- Sp. 4. nebulosus. Fusco-niger, cinereo-pubescens, elytris griseis punctis fasciisque nigris, apice attenuatis, antennis cinereo-nigroque annulatis. (Long. corp. 2<sup>3</sup>/<sub>4</sub>−4<sup>1</sup>/<sub>7</sub> lin.)
- Ce. nebulosus. Linné.-Don. xi. pl. 394.-Po. nebulosus. Steph. Catal. 197. No. 2023.
- Fuscous-black, with a short ashy-pubescence: thorax with a short spine on each side, the disc cinereous, spotted with black: elytra rather convex, with the apex a little attenuated, griscous, the base and apex rather thickly sprinkled with black dots, and sometimes the suture, having a rather distinct pale fascia a little before the middle, which is bordered on each side with a waved black band, most distinct behind: antennæ long, slender, glabrous, the articulations rusty-ash at the base, black at the apex.

Extremely variable in the clouding on the elytra, as well as in size.

Not uncommon, during the summer months, amongst dead branches in whitethorn hedges, and in woody places. "Monk's-wood, Huntingdonshire."—C. C. Babington, Esq. "Rose-castle."—T. C. Heysham, Esq. "York and Newcastle."—W. C. Hewitson, Esq. "Epping."—Mr. Doubleday. "Raehills."—Rev. W. Little.

### GENUS CCCLXXII.-LAMIA, Auctorum.

Palpi short, the terminal joint of the maxillary subfusiform, truncate; of the labial subovate, acuminate. Antennæ shorter than the body, robust, the basal joint very stout, elongate, attenuated at the base, second nodose, third elongate, the remainder gradually diminishing in length to the tip, the terminal joint being somewhat longer than the preceding: head large, nutant, exserted: thorax convex, with a very acute spine on each side: body very convex and robust: elytra rugose, convex, entire: legs stout: intermediate tibiæ compressed, with a stout ciliated tooth without; posterior with an obsolete tooth, and ciliated towards the apex.

With the exception of Prionus coriarius, the only indigenous species of the present genus is the most bulky and conspicuous of the family, and may be at once recognized by its abbreviated robust antennæ, acutely and stoutly spined thorax, convex rugged upper surface, and uniformly dingy black tint of body, and by its short, stout legs, of which the intermediate tibiæ have a strong denticulation on the middle of their outer edge, and the posterior are ciliated towards the apex.

Sp. 1. Textor. Nigra opaca, thorace ruguloso, elytris granulatis. (Long. corp. 6–15 lin.)

La. Textor. Fabricius .- Samouelle, pl. 2. f. 24.- Steph. Catal. 198. No. 2028.

Entirely of an opaque black: thorax with a stout acute spine on each side, the disc thickly rugulose: elytra convex, coarsely granulated, the granules a little glossy: legs and antennæ stout, the latter short.

This large and conspicuous insect has been met with abundantly in some of the western counties of England; it frequents old decaying willows: I have received several specimens from Hampshire, and from the vicinity of Bath. "Bristol."—G. Waring, Esq.

#### GENUS CCCLXXIII.--- APLOCNEMIA \* mihi.

Palpi slender, with the terminal joint subfusiform, of the maxillary subacute. Antennæ pilose within, as long, or longer than the body; the basal joint stout, the second minute, third longer than the fourth, the remainder gradually shortening to the apex, the terminal joint being shortest: head short: thorax transverse, its lateral margins unarmed: body slightly convex, much broader than high: elytra convex, punctured, variegated, rounded at the apex: legs short, stout: tibiæ simple.

The characters which are said to separate Monochamus from Lamia are still more evident between the present genus and Lamia, notwithstanding which, in a recent illustration of the latter genus referred to below, Aplocnemia is included therewith, and has not hitherto been divided therefrom, nor has any hint of its diversity been given, excepting in my Catalogue; but it is clear, that if the other subordinate genera of the Cerambycidæ are to be elevated to a distinct rank, the present has equally just claims;—from Lamia it not only differs by having the antennæ slender and elongate (dissimilar as to length in the sexes) the thorax unarmed at the sides, the intermediate tibiæ simple, the body determinately broader than high, and variegated, but the form and proportions of the palpi are slightly different.

Cer. nubilus. Olivier.-La. nubila. Curtis, iv. pl. 172. Steph. Catal. 198. No. 2027.

Varied with black and ferruginous: thorax ferruginous, with black streaks: elytra punctate, varied with brown shades, and a large ashy patch on the middle of the outer margin : antennæ and legs black, annulated with ferruginous.

\* anloos, simplex ; runpe, tibia.

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Sp. 1. nubila. Nigro ferrugineoque varia, elytris punctatis, maculá marginali cinereâ. (Long. corp. 4-6<sup>1</sup>/<sub>2</sub> lin.)

Rare, at least near London, I have once taken it at Coombe; but it has been captured in abundance in "Bewdley-forest."—Mr. *Raddon*. "Windsor."—Dr. Leach. "New Forest, June last."— *Rev. F. W. Hope*.

#### GENUS CCCLXXV.--SAPERDA, Fabricius.

Palpi terminated by a subfusiform joint, long and rather slender, subfiliform. Antennæ as long, or scarcely longer than the body, sometimes a little pilose, 12- or 11-jointed, the basal joint stout, not much elongate; the second minute, nodose; third elongate; remainder diminishing in length to the end: head deflexed vertically, flat in front, sometimes broader than the thorax, the latter cylindric, unarmed: body cylindric, depressed on the back: elytra long, linear, sometimes a little attenuated behind, the shoulders generally prominent: legs moderate: tibiæ simple.

This genus as it at present stands is decidedly an artificial one,

#### GENUS CCCLXXIV.-TETRAOPES, Dalman.

- Palpi short, with the terminal joints subfusiform, truncate. Antexnæ scarcely longer than the body, pilose, robust; the basal joint elongate; second abbreviated, subglobose; third and fourth of equal length; the remainder decreasing in length to the end: head narrower than the middle of the thorax: eyes each divided by the antennæ into two, one anterior to and beneath the antennæ, the other superior and behind: thorax tubercular: elytra convex, broad, entire, round: legs short: intermediate tibiæ somewhat emarginate towards the apex.
- Sp. 1. tornator. Nigro-cinerascens, capite, thorace elytrisque rubris nigro punctatis. (Long. corp.  $6\frac{1}{2}$  lin.)
- La. tornator. Fabricius.-Wilkin. (!)-Te. tornator. Steph. Catal. 413. No. 2036\*.
- Dusky-ash; head and thorax rufous, the latter with four black spots: elytra also rufous, with a small spot at the shoulders, and two large oblique ones on the back ashy-black: scutellum and legs black, base of the anterior and posterior femora rufous: antennæ fuscous.

This North American insect has been more than once taken in England, and is included in the list of the rare insects contained in Mr. Wilkin's late collection drawn out by Mr. Curtis, although it is omitted in his Guide, which he professes to have been framed from Mr. Wilkin's catalogue, while Clytus erythocephalus, Stenocorus 4-maculatus, and other exotic species which have been but once captured at large in this country, are enrolled in the list! embracing species both with 12- and 11-jointed antennæ, and differing from each other in several particulars : all may, however, be known from the Lamiæ and allied genera, by the form of the palpi, added to that of the body, of which the thorax is cylindric and unarmed, the elytra quadrate at the base, flat on the back, and in general linear, or but little attenuated, and all the tibiæ are simple. In the first species the antennæ are 12-jointed, the head narrowed, and the general habit of the insect is different from that of the genuine Saperdæ :—in S. carcharias also the antennæ and head are also dissimilar to those of the other species ; and a third discordant species appears to exist in S. oculata, in which again the antennæ, habit, and texture of the insect differ from the typical species.

A. Antennæ distinctly 12-jointed.

- Sp. 1. Cardui. Nigro-fusca, flavescenti villosa, thorace lineis tribus flavis, elytris atomis villosis flavescentibus, antennis longioribus griseo-nigroque annulatis. (Long. corp. 5–8 lin.)
- Sa. Cardui. Fabricius.—Steph. Catal. 199. No. 2036.—Ce. lineatocollis. Don. vi. pl. 209.
- Dusky-brown, clothed with yellowish down: head small, elongate, narrow, with a yellow longitudinal line on the crown: thorax obscurely rugose, with three longitudinal yellowish lines, the central one being continuous with that on the head: elytra rather coarsely punctate, irregularly sprinkled with minute yellowish down, the shoulders a little rounded, the apex gaping, and slightly acuminated: scutellum yellow: antennæ long, black, with the base of the joints griseous-ash.

Local: found abundantly in some parts of Norfolk, and in Huntingdonshire, in June; but I believe not found in the immediate neighbourhood of London. "Monk's-wood, Huntingdonshire, on Heraclium sphondylium."—C. C. Babington, Esq.

#### B. Antennæ 11-jointed.

 Sp. 2. carcharias. Nigro-fusca, suprà dense griseo-subtus flavescenti-pubescens, undique nigro punctato, elytris apice subacuminatis. (Long. corp. 10-14 lin.)
 Ce. carcharias. Linné.—Sa. carcharias. Steph. Catal. 198. No. 2029.

Dusky-black, densely clothed above with a griseous, and beneath with a yellowish pubescence, and spotted throughout with black : thorax coarsely rugosepunctate : elytra with the shoulders much elevated, rectangular, and slightly attenuated towards the apex, the black dots on the disc rather large, and in the middle of the disc a transverse ovate griseous patch : antennæ with the basal joint large, robust, the next small, both black, the remainder considerably narrower, slightly spinose at the apex, which is black, the base pale griseous-ash.

About six years since three examples of this fine species, which feeds upon the poplar, were captured in the forest of Dean, Gloucs. —but since that period numerous specimens have occurred in the vicinity of "Cambridge."—C. C. Babington, Esq. "Not very uncommon in the neighbourhood of Cambridge, occurring in August: one specimen also taken at Swaffham Prior."—Rev. L. Jenyns.

- + Sp. 3. Tremulæ. Nigra pube depressa ochraceo-virescente undique tecta, elytris punctis duobus nigris. (Long. corp. 5 lin.)
- Sa. Tremulæ. Fabricius?—Steph. Catal. 198. No. 2034.—Sa. Atkinsoni. Curtis, vi. pl. 275.
- "Black, completely clothed with short depressed ochraceous pubescence, with a dull greenish cast: palpi piceous: tips of mandibles and eyes black: antennæ subferruginous, except the three first joints: thorax punctured, with a central channel at the base: elytra broadest, and square at the base, each shoulder as if rubbed; there are also two slight black dots at the middle near to the suture, and two further apart, nearer to the apex."—Curtis, l. c.

The true Sa. Tremulæ has the thorax spotted, and four dots on each elytron.

Of this insect I believe a single example only has hitherto occurred in England; of its locality I am not aware.

- Sp. 4. scalaris. Nigra subnitida, elytris lineû suturali dentatî punctisque lateralibus flavo-pubescentibus. (Long. corp. 8–10 lin.)
- Ce. scalaris. Linné.—Donovan, xi. pl 393.—Sa. scalaris. Steph. Catal. 198. No. 2030.
- Black, pilose, slightly shining; beneath yellowish: head broad: thorax small, deeply constricted towards the base, the lateral margin densely clothed with flavescent pile, in which is a fuscescent spot, the disc glabrous: elytra with the shoulders very prominent and rectangular, the apex slightly narrowed and rounded, the suture with a dentate flavescent line, and five or six spots of the same colour within the margin, some of them united to the sutural line: antennæ black, with the articulations at the base cinerascent.

Found also upon the poplar; very rare in the neighbourhood of London, where, I believe, only the specimen mentioned by Donovan has been found: in the north of England, especially about Cockermouth, it is not very rare, as I have seen numerous specimens from this last locality. "Raehills, rare."—Rev. W. Little.

Sp. 5. populnea. Nigra, villosa, profundè rugoso punctata, thorace lineis, elytris punctis plurimis flavescenti pubescentibus. (Long. corp. 5–7 lin.)
 MANDIBULATA. VOL. IV. 30TH NOV. 1831. R

- Sa. populnea. Fabricius.-Steph. Catal. 198. No. 2035.-Ce. populnea. Martyn, pl. 24. f. 89.
- Black, villose, deeply rugose-punctate: head as broad as the thorax, the latter with three longitudinal flavescent lines, the central one narrowed, and sometimes nearly obsolete: scutellum yellowish: elytra gaping at the apex, irregularly clothed with flavescent pile, with four or five larger patches of the same on the disc, of which the central one is largest and placed transversely towards the suture; these spots vary in size, and are sometimes of a whitish hue: antennæ short, annulated with ashy and black.

Not uncommon at Darenth-wood in June, upon young willows and aspens; also upon the hazel. "Monk's-wood, Huntingdonshire."—C. C. Babington, Esq.

- Sp. 6. ferrea. PLATE XXII. f. 1. Nigra, villosa, thoracis lateribus sublineatis, elytris punctatis atrochalybeis. (Long. corp. 4-5<sup>1</sup>/<sub>2</sub> lin.)
- Ce. ferreus. Schrank Fauna Aust. p. 145. No. 272.-Sa. ferrea. Howitt's Seasons, p. 217.-Sa. nigripes. Fab. S. E. ii. 310.
- Black, with pale griseous down: head immaculate, broad: thorax with a faint whitish streak on each of the lateral margins, the disc punctured and slightly glabrous: *elytra* rather *coarsely punctured*, of a *deep steel blue*, sometimes greenish: scutellum pale griseous: legs black: antennæ faintly annulated with griseous-ash.

Found in the midland counties of Britain, and apparently rather widely dispersed, having occurred in Nottinghamshire, Lancashire, and Warwick. "Taken on the leaves of Tilia parvifolia in June, 1828, abundantly, and sparingly during the last summer (1829)."— Dr. Howitt. "Sherwood-forest."—Rev. C. Hey.

Sp. 7. cylindrica. Nigra, subtilitèr punctulata, thorace lineâ mediâ scutelloque albido-pubescentibus, pedibus anticis luteis. (Long. corp. 4-5 lin.)
Ce. cylindricus. Linné.-Sa. cylindrica. Steph. Catal. 198. No. 2032.

Cylindric, black : head very broad, immaculate, and with the thorax finely punc-

- Ce. linearis. Linné.-Turton. (!)-Sa. linearis. Steph. Catal. 198. No. 2033. note.
- Linear-elongate, narrow, black; with the palpi and legs entirely pale luteous: elytra with the disc coarsely punctate-striate.
- Turton indicates this as British, but I have not hitherto seen an indigenous specimen.

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tured, the latter with a faint whitish-pubescent central line: scutellum also whitish: elytra clothed with a delicate ashy down; each with an abbreviated elevated central line, and a second within the margin: anterior legs lateous, with the base of the femora black. Head in one sex pubescent, in the other glabrous and punctate in front.

Not uncommon in some places within the metropolitan district: I have frequently captured it in Maiden-lane, Copenhagen-fields, in June, in a hazel bush, on the inner pith of the twigs of which its larva subsists. "Cambridge, Monk's-wood, Hants."—C. C. Babington, Esq. " Cowpen, near Cambridge."—Rev. L. Jenyns.

- Sp. 9. oculata. Lineari-elongata, angusta, luteo-testacea, capite, antennis, elytris punctisque duabus thoracis nigris. (Long. corp. 8-10 lin.)
- Ce. oculatus. Linné.-Don. v. pl. 305.-Sa. oculata. Steph. Catal. 198. No. 2031.
- Linear-elongate, narrow: head and antennæ black: labrum and palpi, abdomen, legs, scutellum and thorax pale rufous-yellow, or testaceous, the latter with two remote black dots: elytra ashy-black, deeply and somewhat regularly punctured.

Also a local and rare species; found most abundantly in the Isle of Ely: I have two specimens which were captured by Dr. Leach, in Scotland. "Baron-wood."—T. C. Heysham, Esq. "Once taken at Swaffham Bulbeck on wing."—Rev. L. Jenyns.

# GENUS CCCLXXVI.-TETROPS, Kirby.

Palpi with the terminal joint conic-acute. Antennæ rather stout, shorter than the body, pilose, basal joint slightly robust, second a little elongate, third and fourth of equal length, remainder gradually decreasing in length; the eighth, ninth, and tenth being nearly equal, and the eleventh about as long as the seventh, and slightly acuminated: head short, deeply immersed in the thorax, which is small, deeply constricted within the base and apex, cylindric, unarmed: eyes four, superior bent: elytra linear, soft, with the apex subtruncate: legs short: femora simple: tarsi also simple.

One can scarcely conceive that at the present day this genus should continue to be united to Saperda without the slightest allusion to its discrepancies from the type of that genus; such, however, is the case in the most recent illustration of the latter genus; from which the present not only differs by its comparatively minute bulk—being the smallest European species of the family, but by having the eyes each decidedly broken into two separate and somewhat remote organs, the structure of the antennæ, especially the form of the second joint, the form of the thorax, and of the legs, as well as the texture of the elytra being totally distinct, exclusively of minor differences in the trophi.

- Sp. 1. præusta. Nigra, villosa, elytris testaceis apice nigris, pedibus testaceis, femoribus quatuor posterioribus nigris. (Long. corp.  $1\frac{3}{4} 2\frac{1}{2}$  lin.)
- Lep. præusta. Linné.-Martyn, Col. pl. 28. f. 12.-Te. præusta. Steph. Catal. 199. No. 2037.
- Black, villose: eyes brunneous: thorax finely punctured and clothed with fuscous down: elytra pale testaceous, clothed with a pale pubescence, and rather thickly but regularly punctate, the apex more or less stained with black: legs testaceous, with the four posterior femora black.

In some examples the elytra and legs are entirely pale.

Common in whitethorn hedges throughout the metropolitan district in June. "Taken on the wing at Swaffham Prior, hovering over the blossoms of the elder."—*Rev. L. Jenyns.* "Newcastle." *W. C. Hewitson, Esq.* "Gibside."—*G. Wailes, Esq.* 

GENUS CCCLXXVII.—CLYTUS, Fabricius.

Palpi short, subequal, with the terminal joint stout, obtrigonal. Antennæ filiform, shorter than the body, in the type subclavate, basal joint robust, curved, second subglobose, third long and slender, the remainder decreasing in length to the apex, the terminal joint subconic: head short, nutant: eyes lunate: thorax globose, or elongate-acute, suborbiculate, unarmed: elytra elongate, gaping, scarcely covering the apex of the abdomen in the females: legs moderate, anterior shortest, posterior longest: femora clavate, more slender in the females: body somewhat cylindric.

From all the preceding genera of this family Clytus differs by the form of the palpi, especially of the terminal joints; and from Callidium by the cylindric body and very globose thorax, as well as by less evident differences:—the species are generally prettily marked with arcuated transverse bands, while in Callidium they are generally destitute of such markings.

Sp. 1. mysticus. Lineari-elongatus, niger, elytris basi rufis, medio strigis tribus arcuatis apiceque late albido-pubescentibus. (Long. corp. 3-5<sup>1</sup>/<sub>2</sub> lin.)

- Le. mystica. Linné.-Don. iii. pl. 84. f. 2.-Cl. mysticus. Steph. Catal. 201. No. 2057.
- Linear-elongate, black, with a delicate cinereous pubescence: elytra rufous at the base, then black, with the apex broadly, and two or three flexuous, bent,

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approximating *striga*, densely clothed with ashy-*white* pubescence: on the sides of the breast are also some oblique lines of similar hue: legs elongate; tarsi piceous.

It varies in having the flexuous strigæ united into broad patches of pubescence, and in having the base of the elytra more or less rufous, and sometimes entirely black : this last variety is rare.

Abundant throughout the neighbourhood of London, in woods, hedges, and gardens, in the summer. "Bottisham."—C. Darwin, Esq. "York"—W. C. Hewitson, Esq.

Sp. 3. Arietis. Niger, obscurus, thorace anticè et posticè flavo marginato, elytris fasciis tribus, secundû antrorsùm arcuatâ, apice scutelloque flavis, antennis pedibusque ferrugineis. (Long. corp. 3-6 lin.)

Le. Arietis. Linné.-Don. i. pl. 27.-Cl. Arietis. Steph. Catal. 201. No. 2058.

- Black, obscure: thorax with the anterior and posterior margins slightly bordered with yellow: the last frequently interrupted in the middle: scutellum yellow: elytra with the apex and three narrow fasciæ also yellow, the basal fascia exterior and not reaching to the suture, the second curved anteriorly and united near the scutellum, the third continuous and broader: abdomen annulated with yellow and black: antennæ and legs ferruginous; the femora sometimes more or less piceous.
- The fasciæ vary a little, and in some instances, of which I possess a remarkable specimen, are almost totally obliterated.

The most abundant species of this genus throughout the metropolitan district, frequenting gardens, hedges, and woods. "Cummersdale, Newby-cross, &c."—T. C. Heysham, Esq. "Bottisham and Ely, not uncommon."—Rev. L. Jenyns. "York."—W. C. Hewitson, Esq. "Gibside, Meldon-park and Keswick."—G. Wailes, Esq.

- Sp. 4. arcuatus. Niger, obscurus, elytris punctis baseos, fasciis tribus retrorsum arcuatis disci, lineolâque obliquâ apicis flavis, antennis pedibusque ferrugineis. (Long. corp. 6–10 lin.)
- † Sp. 2. plebeius. Niger, obscurus, elytris maculâ humerali, liturâ arcuatâ scutellum attingente, fasciâ posteriore apiceque albido-pilosis. (Long. corp. 5 lin.)
- Cl. plebeius. Fabricius .-- Stewart (!)-Steph. Catal. 201. No. 2055. note.
- Black, obscure: elytra with a humeral spot, a curved fascia reaching to the scutellum, another posterior one, and the apex, as well as two dots on the sides of the breast, and the margins of the abdominal segments, clothed with whitish pile.

Stewart introduces this as a British species, but apparently without authority.

- Le. arcuata. Linné.—Don. iii. pl. 84. f. 1.—El. arcuatus. Steph. Catal. 201. No. 2053.
- Black, obscure; head with a transverse yellow fascia: thorax very globose, with a more or less distinct transverse flavescent fascia: elytra with four dots and a humeral stripe, three narrow recurved fasciæ on the disc, and an oblique line at the apex yellow: antennæ and legs ferruginous: femora clavate, and more or less saturated with black in the middle.

Rather local: I have taken several specimens at Hertford, and it has also been found abundantly at Chislehurst, and in Hainaultforest, and in Suffolk. "Baron-wood."—T. C. Heysham, Esq. "Near Newcastle, once taken."—W. C. Hewitson, Esq.

 ‡Sp. 6. quadripunctatus. Niger, pube depressâ supra flavescenti-subtus cinerco undique tectus, elytris singulo punctis quatuor nigris. (Long. corp. 5 lin.)
 Cl. 4-punctatus. Fabricius.—Curtis, v. pl. 199.—Steph. Catal. 201. No. 2059.

Black, densely covered above with a depressed yellowish pubescence, and beneath with cinereous: thorax immaculate: elytra each with four black spots, one placed on the shoulders, the others, nearly equi-distantly, parallel to the suture.

In the cabinet of Mr. Sparshall, found in a window at Norwich, in 1827.

- Sp. 7. Upsilon. Rufescente-ater, elytris fuscià ad basin arcuatà, maculà transversali medià apiceque rufo-albidis, antennis pedibusque rufo-piceis. (Long. corp. 6 lin.)
- Ce. Upsilon. Marsham MSS .- Cl. Upsilon. Steph. Catal. 201. No. 2056.
- Reddish-black: forehead with a longitudinal sulcus bordered by an elevated line on each side: thorax rugose, with the sides slightly tomentose: scutellum with the apex flavescent: elytra with a broad recurved fascia at the base; a second straight, broader one behind the middle, and the apex, reddish-white: margins of the abdominal segments, especially on the sides, and a large round spot at its base, yellowish-white: antennæ and legs rufo-piceous: the femora darkest.
- <sup>+</sup>Sp. 5. detritus. Niger, thorace fasciis duabus, elytrisque quinque subrectis flavis, antennis pedibusque rufo-ferrugineis. (Long. corp. 7 lin.)
- Le. detrita. Linné.—Ce. detritus. Turton. (!)—Cl. detritus. Steph. Catal. 201. No. 2054. note.
- Black: head with an obscure yellow transverse fascia: thorax with two distinct ones, and elytra with five nearly straight, the two first of which are remote and interrupted: antennæ and legs rufo-ferruginous.
- Turton indicates this as British, but I believe without authority.

Three specimens taken near Norwood about twenty years since: from the Marshamian collection.

## GENUS CCCLXXVIII.-CALLIDIUM, Fabricius.

Palpi short, subequal, with the terminal joint robust, obconic, truncate: maxillæ small. Antennæ generally shorter than the body, subfiliform, rarely elongate and pubescent; basal joint slightly robust; second subglobose; third slender, longest; fourth shorter than the fifth; the remainder decreasing in length from the fifth, the last being subconic : head short: eyes lunate : thorax transverse, suborbicular, depressed, unarmed, sometimes longer than broad: body sublinear, generally depressed : legs short: femora robust, clavate, especially in the males: tibiæ simple.

Callidium is evidently very closely allied to Clytus, the last species of which genus partakes almost as much of one genus as the other, and the terminal species of Callidium are again allied to Obrium—this genus may be distinguished in general by the broad depressed form, with the transverse, frequently tuberculated,

- \*Sp. 8. erythrocephalus. Thorace subspinoso, elytris bidentatis fuscis, strigis quatuor flavis.
- Cl. erythrocephalus. Fabricius.—Curtis. (!)—Steph. Catal. 413. No. 2059.\* note.

Head, thorax and antennæ dull ferruginous: thorax with several elevated acute dorsal tubercles: elytra black, with four straight yellow strigæ, the apex bidentate: legs ferruginous, with the femora clavate, compressed.

"Mr. Sparshall's cabinet contains a single specimen of this insect, taken alive a few years since in Epping-forest, by Mr. Doubleday."—*Curtis, fo.* 199:—but the insect being a native of Georgia, is not likely to be indigenous.

- Cl. fulminans. Fabricius.-Steph. Catal. 413. No. 2055.\* note.-Cer. fulminans. Sowerby, B. M. i. pl. 58.
- Antennæ short, cinereous: thorax cinereous, with three black spots, the intermediate largest: scutellum black, with the margin cinereous: body fuscous: elytra black, with angulated waved white fasciæ.

A specimen of this insect was caught " by a young lady upon some flowers in a garden at Kennington"—Sowerby, l. c.—but it is a North American species, and was evidently introduced, most probably in some of the timber used in the construction of the houses of that neighbourhood. thorax, short antennæ, and clavate femora; but various modifications of these parts take place:—the two species placed at the end are very discordant, and appear to form a genus intermediate between the present and Obrium.

A. With the thorax transverse; antennæ short or moderate.

- + Sp. 2. striatum. Elongatum, convexum, nigrum, opacum, subtilissimè punctulatum, elytris obsoletè multistriatis, antennis brevibus. (Long. corp. 8 lin.)
- Ce. striatus. Linné.-Ca. striatum. Steph. Catal. 200. No. 2047. note.-Curtis, vii. pl. 295.
- Elongate, convex, dull-black, finely and thickly punctured: forehead with a triangular impression: thorax unequal, with a broad shallow longitudinal furrow and two or more foveæ on each side: *elytra* transversely *rugose*, *each* with about six elevated longitudinal lines, of which the alternate ones are less raised: tarsi piceous: antennæ short.

This insect, which was once supposed to be Spondylis buprestoides, has been taken at "Kinnordy, in Scotland."—*Curtis, l. c.* —I have never seen it.

- Sp. 4. Bajulus. Fusco-piceum, thorace villoso nigro, tuberculis duobus dorsalibus glabris, antennis brevibus obscurè ferrugineis. (Long. corp. 4-10 lin?)
  Ce. Bajulus. Linné.-Martyn, C. pl. 24. f. 1-5. Cal. bajulus. Steph. Catal. 299. No. 2040.
- <sup>‡</sup>Sp. 1. rusticum. Elongatum, subdepressum, fusco-testaceum, opacum, elytris lineis duabus longitudinalibus elevatis. (Long. corp. 8–10 lin.)
- Ca. rusticus. Linné.—Berkenhout (!)—Steph. Catal. 200. No. 2046.
- Elongate, somewhat depressed, of a dull testaceous-brown: elytra paler, with two longitudinal ridges, and a third abbreviated one on the shoulders: thorax with three foveæ placed somewhat triangularly: antennæ short.

Introduced as British by Berkenhout: I have not seen a specimen.

- † Sp. 3. dilatatum. Latius, depressum, supra virescenti-æneum, thorace subtilissimè coriaceo, elytris rudè reticulato-rugosis posticè latioribus. (Long. corp. 5 lin.)
- Cal. dilatatum. Paykul.—Steph. Catal. 200. No. 2045. note.—Cer. variabile. Turton. (!)
- Broad, depressed, above greenish-brass or coppery: elytra æneous, coarsely reticulate-rugose, and broadest posteriorly: thorax glabrous, rounded, finely coriaceous: antennæ and legs brown.

Indicated as British by Turton.

Pitchy-brown, pubescent: thorax villose black, with two glabrous dorsal tubercles: elytra finely shagreened, with some whitish hairs, and a somewhat compact patch of the same in the middle, forming a more or less distinct waved fascia: antennæ short, dull pitchy-ferruginous.

The elytra are sometimes entirely of a pale testaceous.

Frequent in the vicinity of old posts and rails in the metropolitan district; very injurious to the fir rafters of houses, as I have myself experienced. "Frostenden-hall, Suffolk."—W. C. Hewitson, Esq. "Epping."—Mr. Doubleday.

- Sp. 5. sanguineum. Latius, depressum, nigrum, thorace elytris abdomineque apice sanguineis. (Long. corp.  $3-5\frac{1}{2}$  lin.)
- Ce. sanguineus. Linné.—Don. xvi. pl. 553. f. 1.—Cal. sanguineum. Steph. Catal. 200. No. 2041.
- Broad, depressed, *black*: head channelled between the eyes, with some sanguineous hairs on the forehead: *thorax* with the lateral margins angulated, the disc clothed with a longish depressed shining *sanguineous* pubescence, having a somewhat naked dorsal line: *elytra* pale, entirely and densely clothed with a depressed *sanguineous* down: sides and apex of the abdomen also clothed with sanguineous down: femora thick, clavate, black: tibiæ and tarsi piceous: antennæ pitchy-black.

I possess a fine series of this insect, which was taken in the neighbourhood of Exeter :- the insect has been captured in North Wales, and also in London.

- Sp. 6. violaceum. Latius, depressum, supra violaceum, confertim rugoso-punctatum, thorace postice angustiore. (Long. corp. 4-9 lin.)
- Ce. violaceus. Linné.—Kirby, Linn. Trans. v. 257. pl. 12. Cal. violaceum. Steph. Catal. 200. No. 2042.
- Broad, depressed, violaceous or purple, sometimes greenish or brassy, slightly pilose: head small, with a faint frontal channel: thorax slightly pubescent, narrowed behind, thickly rugulose-punctate: elytra shining, thickly and coarsely punctured, with the apex rounded: abdomen pitchy-black: legs long, stout, bluish: femora in one sex considerably clavate and the posterior elongate.

Rare: but occasionally found in great abundance within the metropolitan district: it has been taken near Coombe-wood, and Roehampton, in Surrey, and on Epping-forest, as well as in Norfolk, and near Manchester. "Lowestoft, Suffolk."—W. C. Hewitson, Esq. "Epping."—Mr. Doubleday.

- Sp. 7. variabile. Lineari-elongatum, rufo-ferrugineum, aut testaceum, tenué pubescens, antennis longitudine corporis, thorace obsoleté tuberculato, elytris subtilitèr punctulatis, sapè violaceis. (Long. corp. 4-8 lin.)
- Ce. variabilis. Linné.-Cal. variabile. Steph. Catal. 200. No. 2043.-Ce. fennicus. Martyn, C. pl. 25. f. 16.
- Linear-clongate, rufo-ferrugineous or testaceous, slightly pubescent: thorax obsoletely tuberculated, generally immaculate, sometimes spotted with black: vertex occasionally black: elytra violet, very finely punctured, the lateral margin in rare cases ferruginous: breast and base of the abdomen sometimes black, as is also the club of the femora: antennæ as long as the body, rufoferruginous, with the tips of some of the lower joints occasionally dusky.
- Extremely variable, both in colour and size: some examples are black, with the mouth, antennæ, tip of the abdomen, base of the femora, tibiæ, and tarsi, ferruginous, with the elytra violet: others have these last luteous, with the apex alone violet, and the legs piceous: and in some instances the entire surface is pale rufo-testaceous: these are probably immature, and form the Cal. testa-ceum of my *Catalogue*, No. 2044.

Also rare: I have twice taken specimens near London; once in my own garden, in July last, flying in the evening. "Epping."— Mr. Doubleday. "Weston."—Rev. A. H. Matthews.

 Sp. 9. russicum. PLATE XXII. f. 2. — Lineari-elongatum, nigrum, thorace rotundato tuberculato, elytris flavo-testaceis maculâ mediâ apiceque nigris. (Long. corp. 4<sup>1</sup>/<sub>2</sub> lin.)

Ca. russicum. Fabricius.-Steph. Catal. 200. No. 2050.

Linear-elongate, black, slightly pubescent: thorax rounded, with the disc punctate and tubercular: elytra rather thickly punctured, with the base pale yellowtestaceous, the apex black, with a faint violet tinge, and on the disc a rounded patch of a similar hue: legs rather slender, black: tarsi pale rufo-testaceous: antennæ short, deep black: labrum dull luteous.

Of this beautiful species, which appears to agree with the short Fabrician description of Ca. russicum,—though by its violaceous

- † Sp. 8. luridum. Brevius, subdepressum, thorace nigro nitido subcanaliculato, elytris opacis (sæpè testaceis) elevato lineatis. (Long. corp. 5 lin.)
- Cal. luridum. Fabricius.-Turton (!).-Steph. Catal. 200. No. 2048. note.
- Variable: short, depressed, finely punctured: thorax shining black, a little channelled in the middle, with a more or less obsolete irregular rufescent lateral line: elytra opaque with an elevated line, frequently of a livid testaceous, or fuscous, sometimes black: legs piceous: femora sometimes rufo-ferruginous, and occasionally the tibiæ and tarsi.

Introduced by Turton.

hue it approximates to C. luridum—I have only seen the specimen which I possess, and which was captured in the north of Devon, in July, 1828.

- Sp. 11. Alni. Brevius, nigrum, elytrorum basi, antennis tibiisque ferrugineis, elytris fasciis duabus arcuatis albis. (Long. corp. 2-4 lin.)
- Lep. Alni. Linné.-Martyn, C. pl. 28. f. 14.-Cal. Alni. Steph. Catal. 200. No. 2051.
- Short, slightly depressed, black, a little pubescent and shining: mouth piceous: thorax closely punctured: elytra rufous and punctate at the base, black and very obscurely punctured at the apex, each elytron with a white lunule a little behind the red base, and a second, broader and straighter one towards the apex: femora piceous, with the club black: tible, tarsi, and antennæ ferruginous.
- In some instances the elytra are black at the base, and the rufous colour is more or less diffused in different individuals.

Very common in some places within the metropolitan district, especially at Coombe-wood in certain seasons, frequenting the dry wood of hurdles and faggots formed into stacks. "Gibside."—G. Wailes, Esq. "Rose Castle."—T. C. Heysham, Esq. "Epping." —Mr. Doubleday.

B. With the thorax and antennæ elongate, the latter densely pilose within.

- Sp. 12. luteum. Rufo-testaceum, tomentosum; oculis nigris, elytris punctatissimis, antennis corpore parum longioribus, villosis. (Long. corp. 6 lin.)
- Ce. luteus. Marsham MSS.--Cal. luteum. Steph. Catal. 201. No. 2052.-Cal. pilicorne. Fabricius, S. E. i. b. 327 ?
- Rufo-testaceous, tomentose: eyes black: thorax elongate, villose: slightly tuberculate, and faintly wrinkled, especially towards the apex: elytra thickly punctured, pale rufo-testaceous: legs concolorous, with the femora clavate: antennæ rather longer than the body, with the inner edge very tomentose.

My specimen of this singular insect I obtained from the Marshamian Cabinet: of its locality I am not aware; but I have seen a

- † Sp. 10. undatum. Longius, nigrum, pallido-pilosum, elytris fasciis duabus undatis margineque laterali albido-flavis. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)
- C. undatus. Linné.-Turton (!)-Cal. undatum. Steph. Catal. 200. No. 2049. note.
- Black, with pale hairs: elytra with two undulated fasciæ and the lateral margin whitish-yellow: thorax slightly tuberculated: antennæ short.
- Also introduced by Turton.

second which was captured flying in the Isle of Dogs: it may not be strictly indigenous.

 Sp. 13. fasciatum. Elongatum, fusco-brunneum, antennis pedibusque pallidioribus, elytris fascià medio obsoletà. (Long. corp. 709 lin.)
 Cer. fasciatus. Wilkins' Catalogue.

Elongate, fuscous-brown, finely punctate throughout: head with a short furrow on the front: thorax elongate, with the sides dilated: *elytra with a faint* pale *fascia* a little behind the middle: legs and antennæ pale rufo-fuscous or brown.

I possess several specimens of this remarkable species, which were taken twenty years since in Norwich; whether it be truly indigenous I feel doubtful.

# GENUS CCCLXXIX.-OBRIUM, Megerle.

Palpi unequal, terminal joint elongate, of the maxillary subfusiform-truncate, of the labial ovate-truncate. Antennæ pilose, slender, first joint robust, second subglobose, third and fourth slender, of nearly equal length, fifth elongate, sixth and following shorter, and of nearly equal length with each other: head broad, trigonal: eyes lunate: thorax longer than broad, with the sides produced in the middle: body elongate, subcylindric: elytra rounded at the apex: femora abruptly clavate: tibiæ slender, simple.

The pretty little genus Obrium, which perhaps is still capable of division, evidently forms the transition from Callidium to Molorchus, having the elongate slender body and antennæ of that genus, with their peculiar clavated femora, but differing, amongst other particulars, in having the elytra nearly as long as the abdomen : from Callidium it differs by the form of the terminal joint of the palpi, and by the structure of the antennæ, of which the fifth joint is longest.

- Sp. 1. minutum. Rufo-fuscum, antennis testaceis longitudine corporis, oculis nigris. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
- Sa. minuta. Fabricius.—Ce. minutus. Donovan, xvi. pl. 553. f. 2.—Ob. minutum. Steph. Catal. 199. No. 2035.
- Rufous-brown, with the eyes black: antennæ as long as the body, testaceous: legs pale rufous-brown, with the femora clavate: elytra with an angular elevation in the middle: thorax elongate, with the lateral margins dilated: abdomen beneath shining black.

In the female the antennæ are slender, and the thorax less elongate.

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Very local, but at times found rather abundantly: I have taken it at Ripley from under the bark of elms, and in Leigh-street, crawling about the house:—it has been frequently taken, and that in considerable numbers, in old shoes, apparently feeding upon the leather, a fact mentioned in the Introduction to Entomology, and confirmed by Mr. Waterhouse, who took numerous specimens in that article near Old Brompton, as, I believe, Mr. Sparshall once did near Dulwich:—it has been taken in flour, having probably eaten its way from the wooden casks in which the latter material was contained. "Near Cambridge."—Rev. L. Jenyns. "Very abundant on the trellis-work of a garden-seat at Bristol."—G. Waring, Esq. "Epping."—Mr. Doubleday.

- † Sp. 2. cantharinum. Rufo-ferrugineum, subpubescens, antennis pedibusque subconcoloribus, aut piceo-nigris. (Long. corp. 3-5½ lin.)
- Ca. cantharinus. Linné.—Ob. cantharinum. Curtis, ii. pl. 91. 3 9. Steph. Catal. 199. No. 2039.
- "Male ochraceo-ferrugineous, shining, pilose, head and thorax somewhat more brilliant than the elytra, which are irregularly punctured: eyes black: legs brown, inclining to ferruginous: antennæ brown, deepest towards their base. Female twice or thrice the size of the male: head and thorax punctured: antennæ and legs black: two terminal joints of the tarsi rufous."—Curtis, l.c.

Three specimens of this pretty species have been taken in Essex, two of them on an apple-tree, near Epping, by Mr. Doubleday, and a third by my late friend, Mr. Blunt. The insect has also occurred near "Brighton."—Mr. Raddon.

# GENUS CCCLXXX.-MOLORCHUS, Fabricius.

Palpi subfiliform, equal, the terminal joint stout, ovoid, truncate. Antennæ long, second joint minute, subglobose, the remainder long, cylindric, with the apex a little thickened, terminal acute : head smooth, nutant: eyes lunate: thorax elongate, tubercular, with the lateral margins produced in the middle : elytra very short, gaping at the apex, which is rounded : body elongate, narrow: wings exposed, covering the abdomen when at rest: femora elongate, very much clavate: tibiæ slender, simple: tarsi short.

The insects of this singular genus are readily known by their long antennæ and very much abbreviated elytra, these latter organs not covering above a fourth of the base of the abdomen, and having the wings almost entirely exposed; the femora are very slender at Sp. 2. minor. Niger, pubescens, elytris testaceis, lineolâ obliquâ albâ, antennis piceo-ferrugineis, corpore longioribus. (Long. corp. 3-5 lin.)

Ne. minor. Linné.--Mo. minor. Curtis, i. pl. 11.-Steph. Catal. 202. No. 2061. Black, pubescent, shining: elytra testaceous, with an oblique white line towards the extremity: margins of the abdominal segments on each side with a white pubescent line: legs testaceous brown: femora thickly and abruptly clavate: antennæ rusty-piceous, much longer than the body in the male; as long as the body in the female.

Rare: it has been taken near Windsor, and I have found specimens at Hertford.

- Sp. 3. Umbellatarum. Niger, pubescens, elytris brunneo-testaceis immaculatis, antennis corpore longioribus fuscis. (Long. corp. 3-4<sup>1</sup>/<sub>2</sub> lin.)
- Ne. Umbellatarum. Linné.-Martyn, C. pl. 23. f. 2. Mo. Umbellatarum.-Steph. Catal. 202. No. 2062.
- + Sp. 1. major. Niger, pubescens, elytris ferrugineis immaculatis, ore, antennarum basi pedibusque rufo-ferrugineis, antennis corpore brevioribus. (Long. corp. 8½ lin.)
- Ne. major. Linné.-Turton (!). Mo. major.-Steph. Catal. 202. No. 2030. note.

Black: with the elytra very short, ferruginous, immaculate; the mouth, base of the antennæ and legs rufo-ferruginous, the tips of the hinder femora black.

Another of the numerous species improperly indicated by Turton as indigenous.

GENUS CCCLXXXI.-STENOPTERUS, Illiger.

- Palpi with the terminal joint short, obconic, truncate. Antennæ shorter than the body, second joint minute, transverse, fifth longest, the remainder decreasing to the apex, the last joint being acute: head broad: eyes lunate: thorax subglobose, testaceous: body elongate, attenuated, depressed: elytra nearly as long as the abdomen, subulated: legs dissimilar, anterior and intermediate short, with the femora abruptly clavate: tibiæ simple, posterior elongate: femora gradually clavate: tibiæ simple, slightly bent: tarsi short.
- \$\$ Sp. 1. rufus. Niger, subpubescens, elytris antennisque rufis, pectoris abdominisque lateribus flavo maculatis. (Long. corp. 3-5<sup>1</sup>/<sub>2</sub> lin.)
- Ne. rufa. Linné .- Turton (!).-St. rufus. Steph. Catal. 202. No. 2063. note.
- Black, slightly pubescent: elytra and antennæ rufous: the sides of the breast and of the abdomen with silky yellowish-white spots: femora clavate. Also improperly indicated by Turton as British.

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Black, pubescent: elytra testaceous-brown, immaculate: legs testaceous-brown, with the femora slightly and rather gradually clavate: antennæ rather longer than the body in the males, shorter in the females: in both sexes duskybrown.

Occasionally very abundant in the hedges in the vicinity of Darenth-wood in June; I have also twice captured it at Coombewood.

# FAMILY XLVIII.-LEPTURIDÆ, Leach.

Body elongate, mostly attenuated posteriorly, more or less convex. Antennæ inserted on the inner margins of the eyes, but somewhat remote therefrom, not as it were arising from the eyes themselves, setaceous, rarely as long, never longer than the body, 11-jointed. Labrum exserted, transverse: maxillæ with the external process elongate: labium elongate, coarctate in the middle, the apex deeply notched : head nutant, exserted : eyes slightly emarginate within : thorax conic-truncate, or trapeziform, sometimes with a spine on the lateral margins: elytra generally elongate-subtrigonal : legs rather long and slender.

The Lepturidæ, in common with the insects of the preceding family, subsist in their larva state upon decaying trees, and in their perfect form frequent the trunks of trees or flowers, especially the umbelliferæ:—their larvæ resemble those of the Cerambycidæ: the British species may be thus divided into genera:

Thorax utrinque spinosus : unituberculatus :	•	•	•	•	381. <b>Вна</b> діим. 382. Тохотиз.
muticus. Coleoptra posteriùs angustiora : vix angustio		•	•	•	383. Leptura. 384. Раснута.

### GENUS CCCLXXXII.-RHAGIUM, Fabricius.

Palpi with the terminal joint thickened, short, obconic, truncate: *labium* with divaricating, slender laciniæ. Antennæ shorter than the body, the basal joint stout; second small, subnodose; third longer than the fourth, which is shorter than the third; fifth longer than the third, the remaining joints of nearly equal length, about as long as the fourth: *head* large, with a tumour behind the eyes, the latter rounded: thorax constricted within the base and apex, the lateral margin with an acute spine: elytra broad, with the shoulders considerably elevated: legs moderate: femora rather stout.

Exclusively of the acute spine which arms each lateral margin of the thorax, this genus is readily known from the other genera of their family by the shorter antennæ and legs, broader depressed body, and by the subsecuriform terminal joints of the palpi.

A. Antennæ incrassated in the middle.

Sp. 1. Indagator. Nigrum obsoletiüs punctatum, cinereo pubescens, elytris subtestaceis, fasciis duabus liturisque reticulatis nigris. (Long. corp. 8–9 lin.)
Rh. Indagator. Fabricius.—Steph. Catal. 202. No. 2064.

Black, obsoletely punctate, clothed with an ashy pubescence: head with a small black callus behind the eyes: thorax with the anterior margin dull ferruginous: elytra ashy-testaceous, with three elevated longitudinal lines, the disc reticulated with black marks, and having two or three more or less distinct oblique black fascia: femora and tibiæ dull ashy-testaceous: tarsi black.

Rare in England, but apparently abundant in Scotland. "Taken in Scotland by Mr. Rawlins."—Dr. Leach. "In Salop."—Rev. F. W. Hope. "Raehills, common."—Rev. W. Little.

#### B. Antennæ setaceous.

- Sp. 2. inquisitor. Nigrum, crebrè punctatum, cinereo-pubescens, elytris fasciis duabus testaceis approximatis, interjectà maculà nigrà glabrà. (Long. corp. 7-11 lin.)
- Le. inquisitor. Linné.-Rh. inquisitor. Steph. Catal. 203. No. 2065.
- Black, thickly and rather coarsely punctate, and clothed with a yellowish down: head with a large blackish callus behind the eyes: elytra with two elevated longitudinal lines, the disc with two approximating irregular transverse testaceous fasciae, between which a glabrous black spot is placed on the lateral margin: legs black.

Extremely variable in size, and slightly in the colours and marking.

Abundant in woods throughout the metropolitan district, and in other parts of the country. "Gibside, Meldon-park, Keswick."— G. Wailes, Esq. "Dalston, Baron-wood," &c.—T. C. Heysham, Esq. "Askham-bog, near York."—W. C. Hewitson, Esq. "Epping."—Mr. Doubleday. "Common (near Swansea), and once abundantly on willows in Crwmlyn-bog,—in winter under the bark of decaying ash-trees."—L. W. Dillwyn, Esq.

Sp. 3. bifasciatum. Nigrum, nitidum, elytris fuscis externe rufescentibus, fasciis obliquis abbreviatis flavo-testaceis. (Long. corp. 7–11. lin.)

- Rh. bifasciatum. Fabricius.—Donovan, iii. pl. 94. f. 1.—Steph. Catal. 203. No. 2066.
- Black, shining: head with a deep front groove: thorax rounded, black, with a slight dorsal channel, the lateral margin with a stout, acute spine: *elytra*

fuscous, with three elevated longitudinal lines, exteriorly rufescent, with two oblique abbreviated testaceous-yellow fasciæ: base of the femora and the antennæ rufous.

Extremely variable; the dark colour sometimes of a brassy tinge: the elytra are occasionally yellow, with the base and three longitudinal interrupted lines black; at others with the base bluish, with a lunate marginal ferruginous patch edged with black, and an oblong black streak on the suture towards the apex: again they are black at the base and apex, with a large lunate yellow patch on each elytron on the back:—the antennæ are sometimes fuscous or black: in some instances the lunules are obliterated.

Much less abundant than the foregoing, but not uncommon throughout the metropolitan district, on the stumps of decaying fir-trees. "Gibside, Meldon-park, Keswick."—G. Wailes, Esq. "Abundant in the decayed stumps of the Scotch fir, near Carlisle."— T. C. Heysham, Esq. "York and Frostenden, Suffolk."—W. C. Hewitson, Esq. "Cambridge."—C. C. Babington, Esq. "Epping."—Mr. Doubleday. "Bromley."—Mr. Ingpen. "Occasionally (near Swansea)."—L. W. Dillwyn, Esq. "Raehills, plentiful." —Rev. W. Little.

# GENUS CCCLXXXIII.-Toxotus, Megerle.

Palpi with the terminal joint slightly enlarged, obconic, truncate. Antennæ nearly as long as the body, slender, the basal joint slightly robust and curved, second minute, third elongate, fourth about half the length of the third, fifth and following of nearly equal length, longer than the fourth, the terminal being rather longest: head elongate, inflexed; mouth prominent: eyes subglobose: thorax oblong, narrowed anteriorly, with a somewhat acuminated tubercle on each lateral margin: elytra broad at the base, the shoulders elevated and rounded, towards the apex more or less attenuated: legs elongate, simple.

Toxotus resembles Leptura in the form of its body, length of legs and antennæ, &c.; but differs therefrom by the magnitude of the terminal joints of the palpi, which are hatchet-shaped; the sides of the thorax have each a tubercle in the middle, or short spine:—the species are very variable, and the sexes appear to be dissimilar to each other.

- Sp. 2. meridianus. Niger, supra cinereo-subtus argenteo-pubescens, abdominis apice testaceo aut piceo, elytris subattenuatis testaceis aut nigris, pectore nitente. (Long. corp. 7–13 lin.)
- Ce. meridianus. Linné.-Douovan, xiii. pl. 435. f. 6.-To. meridianus. Steph. Catal. 202. No. 2068.
- Black, clothed above with an ashy, and beneath with a silvery down: thorax unequal, with a longitudinal central furrow: elytra slightly attenuated behind with three obsolete elevated lines, sometimes rufo-testaceous, at others black; or black with a dull testaceous base, or the lateral margin alone testaceous: abdomen black, with the apex more or less testaceous, or pitchy-black : legs sometimes testaceous, with the joints black; or entirely black, with all intermediate proportions of the latter hue: antennæ more or less testaceous at the base, black or fuscous at the apex.

Not remarkably abundant, but far from uncommon during the summer, throughout the metropolitan district, frequenting the trunks of the ash particularly, and occasionally found upon flowers, or on the oak. "Castle-Eden-Dene, Wilton-le-Wear."—G. Wailes, Esq. "Bottisham."—Rev. L. Jenyns. "Hornsey-wood," &c.— Mr. Ingpen. "Epping."—Mr. Doubleday. "About Sketty, and once near the Boatside."—L. W. Dillwyn, Esq. "Weston-on-the-green."—Rev. A. H. Matthews.

Sp. 3. chrysogaster. Niger, supra cinereo-infra aureo-tomentosus, abdomine toto rufo-testaceo, elytris valde attenuatis rufo-testaceis, immaculatis aut suturá apiceque late nigro-fuscis. (Long. corp. 5-9 lin.)

Sten. chrysogaster. Olivier .- To. chrysogaster. Steph. Catal. 203. No. 2069.

Black, clothed above with ashy, and beneath with golden pubescence: thorax unequal, with a slender longitudinal furrow: elytra very much attenuated, with three very obsolete elevated lines, rufo-testaceous, immaculate, or with the suture and a considerable portion of the apex, in rare instances above twothirds of the surface, fuscous-black: *abdomen* entirely *rufo-testaceous*: legs generally testaceous, with the joints black.

Much more abundant than the foregoing insect, frequenting um-

Ce. Cursor. Linné.—Turton (!)—To. Cursor. Steph. Catal. 203. No. 2067. note.

- Pubescent: thorax with an acute spine on each side: elytra with two or three elevated lines, the disc thickly rugulose, the apex acuminated. Male black, with the mouth and base of the antennæ varied with ferruginous: female larger, black, with the mouth, antennæ, body, and legs varied with ferruginous, the elytra rufous, with the suture and a stripe black.
- Introduced by Turton into the British list.

belliferous flowers in, and near, woods, throughout the summer, and also thick hedges, especially those abounding with dogwood. "Bottisham, &c. common."—Rev. L. Jenyns. "Epping."—Mr. Doubleday. "Not common (near Swansea)."—L. W. Dillwyn, Esq. "Weston-on-the-green."—Rev. A. H. Matthews.

# GENUS CCCLXXXIV.-LEPTURA, Auctorum.

Palpi with the terminal joint elongate, slender, sub-obconic, with the apex truncate. Antennæ more or less clongate, slender, nearly as long as the body; basal joint robust; second minute, subglobose; third and fifth of nearly equal length; fourth shorter; sixth longer than the fourth; the remainder gradually diminishing in length to the apex: head nutant, exserted: eyes slightly emarginated interiorly: thorax subtrapeziform, unarmed, smooth, or nearly so: coleoptra generally elongate-subtrigonal, gradually narrowing from the base to the apex; the latter frequently emarginated: legs elongate, slender, mostly unarmed, that is without spines on the outer edge of the tibiæ.

From Toxotus, the present genus may be at once recognized by the elongation of the terminal joints of the palpi, which are moreover slender and truncate at the apex: but like the insects of the genus just mentioned, the body is generally very much attenuated posteriorly, by which the greater number of the species differ from Pachyta; the elytra are also very frequently truncate, or excised, at the apex:—the sexes are rarely dissimilar.

- A. With the elytra more or less cut out at the apex.
- Sp. 1. elongata. Nigra, griseo-pubescens, elytris flavis fasciis quatuor nigris anteriore sæpe punctatů, secundů interruptů, antennis flavo annulatis. (Long. corp. 5-7<sup>1</sup>/<sub>2</sub> lin.)

Le. elongata. De Geer.-Donovan, iii. pl. 84. f. 4.-Steph. Catal. 207. No. 2070.

- Black, with a short griseous down: thorax elongate, with an obsolete tubercle in the middle of each lateral margin, the hinder angles very acute: elytra yellow, with four black fascix, the first composed of three or four round spots, the second interrupted towards the suture, the third broader and emarginated posteriorly, the fourth at the apex: four anterior legs yellow, with the apex of the tibiæ and the tarsi black; posterior black, with the apex of the femora and of the tibiæ yellow: antennæ with the two basal joints black, the rest with the base yellow: the apex black. Male with the elytra attenuated, the posterior tibiæ bidentate within, and the antennæ nearly black: female with the hinder tibiæ simple, and the base of the abdomen yellow.
- Extremely variable: in some instances the anterior fascia is obliterated; in others

it forms a wide angulated patch; the two posterior ones are occasionally united into a broad band having two minute yellow spots; and in some cases the posterior legs are entirely black.

Very abundant in the south of England, and apparently common throughout the country, frequenting umbelliferæ. "Gibside, Keswick."—G. Wailes, Esq. "Appears to be uncommon in Cambridgeshire."—Rev. L. Jenyns. "Monk's-wood, Claveston-wood, near Bath."—C. C. Babington, Esq. "Common, near York, &c." —W. C. Hewitson, Esq. "Newbiggen-wood, Cummersdale, &c." —T. C. Heysham, Esq. "Common (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 2. attenuata. Nigra, elytris attenuatis luteis fascis quatuor nigris, pedibus testaceis, femoribus tibiisque posticis apice nigris. (Long. corp. 6½ lin.)
 Le. attenuata. Linné.—Steph. Catal. 204. No. 2071.

Black, slender, with a slight pale pubescence: thorax elongate, the sides a little dilated in the middle: *elytra* luteous, considerably *attenuated*, with four broad black bands: abdomen rufescent in the middle: *legs testaceous*, with the apex of the hinder femora, and of the hinder tibiæ, black: antennæ with the apical joints somewhat ferruginous.

Very rare: several specimens have been captured at different periods near Salisbury, but I have never heard of any being found at Darenth, or within the metropolitan district.

- Sp. 3. revestita. Rufo-ferruginea, subpubescens, antennis, oculis, pectore, scutello elytrisque nigris: fccm., antennarum basi elytrisque ferrugineis. (Long. corp. 5-6 lin.)
- Le. revestita. Linné.—Steph. Catal. 204. No. 2072.—Le. villica. Martyn, C. pl. 27. f. 1.

Rufo-ferruginous, slightly pubescent: thorax with the hinder angles acute, the

†Sp. 4. rubrotestacea. Elongata nigra, griseo pubescens, tibiis tarsisque testaceis: mas., elytris pallidè testaceis immaculatis: fœm., thorace supra elytrisque rubris immaculatis. (Long. corp. 6 lin.)

Le. rubrotestacea. Illiger .- Turton (!)-Steph. Catal. 204. No. 207.

Elongate, black, with griseous pile, the tibiæ and tarsi testaceous: male with the elytra pale immaculate testaceous: female with the thorax above and the elytra red, immaculate.

Said by Turton to be indigenous.

disc convex: antennæ, eyes, breast, scutellum, and elytra black, the latter finely punctured: apex of the tibiæ and tarsi dusky. Female larger, with the base of the antennæ and the elytra rufo-ferruginous; apex of tibiæ and tarsi the same.

I possess specimens of this rare species, which were captured in Coombe-wood, and others found in the vicinity of Windsor. "Gamlingay, once taken."—*Rev. L. Jenyns.* "Near Colney-hatch-wood."—*Mr. Ingpen.* "Windsor."—*Dr. Leach.* 

Sp. 5. aurulenta. Saturate nigra, thorace antice posticeque fascià flavo-aureà, elytris flavo-testaceis fasciis quatuor atris, primà subferrugineà, pedibus testaceis, femoribus basi nigris, antennis luteis aut nigris. (Long. corp. 5–11 lin.)

Le. aurulenta. Fabricius.-Steph. Catal. 204. No. 2074.

Deep velvety-black: thorax with a narrow band of golden-yellow down in front and behind: elytra broad testaceous-yellow, clothed with short golden down, with four transverse fasciæ, of which the first is angulated, somewhat ferruginous, but black at the suture, the other three deep black: margins of the abdominal segments clothed with golden pubescence: legs testaceous, with the base of the femora black: antennæ rufo-testaceous. Male more attenuated behind, with the antennæ and hinder tarsi black.

Not taken, I believe, within the metropolitan district; it has frequently occurred on the southern coast of Devonshire, between Barnstaple and Bideford; from the last place I possess a remarkably small specimen given to me by Captain Blomer. "Taken at Briton-ferry by Mr. Millard, and once near Wych-tree-bridge."— L. W. Dillwyn, Esq.

Sp. 6. quadrifasciata. Nigra, griseo pubescens, elytris flavo-testaceis fasciis quatuor dentatis atris, antennis toto nigris. (Long. corp. 6-8<sup>1</sup>/<sub>2</sub> lin.)

Le. 4-fasciata. Linné.—Martyn, C. pl. 27. f. 9.—Steph. Catal. 204. No. 2075. Deep black, with a slight griseous pubescence: thorax with the hinder angles acute: elytra bright testaceous-yellow, with four dentate black fasciæ, the first, and sometimes the second, occasionally interrupted: legs and antennæ entirely black.

Abundant in some of the metropolitan woods, especially at Darenth, where I have captured a considerable number; it also occurs in Norfolk, and in Hainault-forest. "Gibside."—G. Wailes, Esq. "Near Newcastle."—W. C. Hewitson, Esq. "Baron-wood."— T. C. Heysham, Esq. "Colney-hatch."—Mr. Ingpen. "Near

- Sketty, and at Pontneddfechan, not common."—L. W. Dillwyn, Esq. "Raehills, common."—Rev. W. Little.
- Sp. 7. apicalis. Nigra, atro-pubescens, elytris flavo-testaceis fasciis quatuor sinuatis nigris, antennis apice luteo-testaceis. (Long. corp. 7–9 lin.)
- Le. apicalis. Haworth MSS .- Steph. Catal. 204. No. 2076.- Curtis, viii. pl. 362.
- Black, clothed with dark pubescence: thorax with the posterior angles acute: elytra bright testaceous-yellow, with four rather broad sinuated black fasciæ: legs black: antennæ the same, with the three or four terminal joints luteous.
- Also variable in regard to the interruption of the two anterior black fasciæ on the elytra :—it may be a variety, but is decidedly not the female, of the foregoing insect, of which I possess several pairs of varieties ;—and it is absurd to imagine it to be a hybrid between the two last described insects, because the antennæ are partly coloured ; all other characters being unlike those of L. aurulenta, the legs black, &c., and this last insect not being found where L. apicalis is comparatively plentiful, viz. at Darenth-wood.

The principal locality of this insect is Darenth-wood, where I have taken more than a dozen specimens : it also occurs in the New-forest and Southend, and near Windsor. "Colney-hatch-wood." -Mr. Ingpen.

Sp. 8. virens. PLATE XXII. f. 3. Nigra, pube flavo-virescente nitida, subtus densiore, undique vestita, antennis luteo annulatis. (Long. corp. 9 lin.)
 Le. virens. Linné.—Steph. Catal. 204. No. 2077.

Black, densely clothed throughout with a shining yellowish green pubescence, especially beneath: thorax convex, with the hinder angles obtuse: elytra narrowed behind, immaculate: antennæ pubescent, with the two basal joints black, the remainder luteous at the base, with the apex black.

Very rare : specimens have been taken in Scotland, and I possess a pair from the forest of Dean.

- Sp. 9. scutellata. Latior, nigra, parum pubescens, confertim profundiùs punctata, scutello flavo pubescente. (Long. corp. 7-10 lin.)
   La contributa Virlaining Stark Cort. 24, 2020
- Le. scutellata. Fabricius.-Steph. Catal. 204. No. 2078.
- Broad, black, slightly pubescent; thickly and deeply punctate: thorax rounded, somewhat granulated: scutellum densely clothed with yellow pile: elytra broad, very slightly attenuated at the apex, and somewhat faintly punctate towards the tip: legs and antennæ entirely black.

Rare near London; but it has been once found abundantly in an old beech-tree in Hainault-forest: and in still greater profusion in the New-forest, in June and July. "Epping."-Mr. Doubleday.

Sp. 10. tomentosa. Brevior, nigra, cinereo-pubescens, elytris pallide testaceis apice nigris, pedibus brevioribus validis. (Long. corp. 5-6 lin.)
Le. tomentosa.—Fabricius.—Steph. Catal. 204. No. 2079.

Black, thickly, but rather finely, punctured, clothed with ashy pubescence, longest and somewhat yellowish on the thorax, which is convex and has the hinder angles obtuse: *elytra* slightly attenuated in the male, broader in the female, *testaceous*, with a black patch at the apex: legs short, stout, and, with the antennæ, entirely black.

This has been taken abundantly in the New Forest in the vicinity of Lyndhurst, and also in Devonshire, near Kingsbridge :---it has been found near Haslar. "Taken once near Penllergare."--L. W. Dillwyn, Esq.

Sp. 11. sanguinolenta. Elongata, nigra, convexior, griseo-pubescens, elytris lividis rubrisve. (Long. corp. 5-6 lin.)

Le. sanguinolenta. Linné.-Donovan, xvi. pl. 557.-Steph. Catal. 204. No. 2080.

Elongate, black, a little convex, thickly, and distinctly punctured, clothed with a griseous pile: thorax rather convex, the hinder angles obtuse: elytra in the male slightly attenuated, livid, with the apex black; in the female broader, red, immaculate: legs rather elongate, slender, black.

Found near Norwich and in Suffolk: and it has also been taken in London; but it appears to be more abundant "near Bickham, Devonshire."—Dr. Leach.

Sp. 12. melanura. Angusta, nigra, griseo-pubescens, thorace oblongo, elytris lividis aut rufis, sutural apiceque nigris. (Long. corp. 3-5 lin.)

Ce. melanura. Linné.-Martyn, C. pl. 27. f. 7.-Steph. Catal. 205. No. 2081.

Narrow, black, clothed with griseous pile, and finely but thickly punctate: thorax oblong, the hinder angles acute: elytra in the male livid, with the suture slightly and the apex black: in the females rufous, with the suture broadly and the apex black: antennæ and legs black, the latter rather long and slender.

Very abundant in flowers and in hedges in June throughout the metropolitan district. "Near Swansea, not common."—L. W. Dillwyn, Esq. "Gibside, Castle-Eden-dene, &c."—G. Wailes, Esq. "Bottisham."—Rev. L. Jenyns. "Newcastle."—W. C. Hewitson, Esq. "Monk's-wood."—C. C. Babington, Esq. "Epping."—Mr. Doubleday.

Sp. 13. nigra. Angusta, nigra, subnitida, tenue pubescens, abdomine rufo, thorace obsoletè punctato. (Long. corp. 4-5 lin.)
Le. nigra. Linné.-Martyn, C. pl. 27. f. 3.-Steph. Catal. 205. No. 2082.

Slender, black, slightly shining, and a little pubescent: head broad: thorax conic, the hinder angles acute, the disc obsoletely punctured: elytra finely punctate: abdomen rufous, the base sometimes black, and the apex rarely so: legs and antennæ elongate, black.

I have found this insect in profusion at Coombe-wood in certain years, and I took a considerable number in June, 1827, at Ripley; it also occurs at Darenth, and in Norfolk, Suffolk, Devonshire, &c. "In 1810 was comparatively plentiful in gardens near Swansea, but is generally rare."—L. W. Dillwyn, Esq. "Chevening, Kent, on the ox-eye."—Mr. Ingpen. "New Forest."—Rev. A. H. Matthews.

B. Elytra with the apex entire, or subtruncate.

Sp. 14. sexguttata. Lineari-elongata, nigra, cinereo-pubescens, etytris singulo maculis tribus luteis longitudinalitèr digestis. (Long. corp. 5-5½ lin.)
 Le sexguttata. Fabricius.—Steph. Catal. 205. No. 2083.

- Linear-elongate, black, thickly punctured, clothed with a delicate ashy-pubescence: thorax somewhat convex, with the hinder angles obtuse: elytra each with three luteous spots placed longitudinally: legs and antennæ black : claws ferruginous.
- It varies in having the spots on the elytra confluent:—the two posterior ones being united by a second line, and forming a lunule resembling, with the simple spot, a note of ?.

Of this apparently rare insect, I have at different periods captured about half a dozen specimens in June, at Darenth-wood, every one by mere accident, in casually sweeping along the grass by the sides of the cart roads in the wood.

Sp. 15. abdominalis. Lineari-elongata, nigra, cinereo-pubescens, abdominis apice, femorumque basi rufis. (Long. corp. 4-5 lin.)
Le. abdominalis. Steph. Catal. 203. No. 2084.

Linear-elongate, black, with an ashy pubescence, finely punctured: thorax short, convex, with the hinder angles acute: elytra rather broad: abdomen with the apical segments rufous: legs black, with the base of the femora rufous: antennæ totally black.

It varies in having the legs entirely black.

This insect somewhat resembles the Le. femorata of Fabricius, but that is de-

scribed as having the body black, and the anterior tibiæ luteous; characters I have never observed in any of the numerous specimens that I have captured.

I captured this insect at Darenth-wood at least twenty years ago, and have since found other examples there, and obtained some from the neighbourhood of Brockenhurst in the New Forest.

Sp. 16. lævis. Lineari-elongata angusta nigra, pallido pubescens, elytris lividis, suturâ apiceque nigris, pedibus testaceis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4<sup>1</sup>/<sub>4</sub> lin.)
Le. lævis. Fabricius.—Steph. Catal. 205. No. 2085.

Linear-elongate, narrow, *black*, clothed with a short pale pubescence: thorax oblong, the hinder angles short, pilose, disc convex, punctured : *elytra livid*, a little narrowed towards the apex, finely but rather thickly punctate, the suture and *apex slightly dusky*, or black : *legs* elongate, rufo-*testaceous*, with the apex of the posterior femora sometimes a little dusky.

Extremely abundant in hedges, &c., on flowers during the summer. "Castle-Eden-dene, Meldon-park, &c."—G. Wailes, Esq. "Monk's-wood."—C. C. Babington, Esq. "Near York and Newcastle."—W. C. Hewitson, Esq. "Raehills, common."—Rev. W. Little.

Sp. 17. ruficornis. Sublinearis nigra, griseo-pubescens, antennis pedibusque testaceo-nigroque variegatis. (Long. corp. 3-4 lin.)
Le. ruficornis. Fabricius.—Steph. Catal. 205. No. 2086.

Somewhat linear; black, clothed with a griseous pubescence, and thickly punctured: mouth varied with testaceous: thorax with the hinder angles acuminated: elytra immaculate, more thickly punctured than the thorax: legs elongate; the anterior pair rufous, with the apex of the femora exteriorly black: the second pair rufous, with the joints black; the posterior black, with the femora rufous at the base; tarsi of all black: antennæ with the two basal joints entirely rufous, the remainder rufous at the base, with the tips black.

The most abundant species of the genus in the metropolitan district, frequenting flowers in hedges and woods. "Bottisham, &c."—Rev. L. Jenyns. "Claverton-wood, Monk's-wood, &c."— C. C. Babington, Esq. "York and Newcastle."—W. C. Hewitson, Esq. "Armathwaite."—T. C. Heysham, Esq. "Near Swansea, not common."—L. W. Dillwyn, Esq. "New Forest."—Rev. A. H. Matthews.

Sp. 18. pallipes. Sublinearis, nigricans, subgriseo-pubescens, ore antennis pedibusque pallide rufo-testaceis. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.) Le. pallipes. Steph. Catal. 205. No. 2087.

Sublinear, dusky, clothed with short grisescent pubescence, and thickly punctured: mouth, legs, and antennæ pale rufo-testaceous, the latter rather long and slender.

My specimen was taken by the late Rev. J. Lyon, near Dover: and the insect has probably been captured in Norfolk.

- Sp. 19. præusta. Sublinearis, nigra, pube aurea nitidå tectå, capite elytrorumque apice nudis, antennarum basi pedibusque testaceis. (Long. corp. 3-3<sup>1</sup>/<sub>2</sub> lin.)
  Le. præusta. Fabricius. - Steph. Catul. 205. No. 2088.
- Sublinear, black, thickly clothed with a short shining golden pubescence, excepting the head and the apex of the elytra, which are glabrous and black : mouth testaceous: body black beneath with golden pubescence: legs testaceous, with the tarsi fuscous: antennæ fuscous, with the basal joint testaceous.

My specimens of this insect were taken in the New Forest in July, 1820, I believe near Brockenhurst, where others have been since not unfrequently taken.

# GENUS CCCLXXXV.-PACHYTA, Megerle.

Palpi long, slender, filiform, the terminal joint elongate, truncate. Antennæ slender, pilose at the base, the basal joint robust; second short; third and fourth of equal length, elongate; fifth longer than the fourth; sixth and remainder gradually decreasing in length: head small: eyes rounded: thorax short, globose, with the hinder angles short: elytra elongate, scarcely attenuated towards the apex, the latter entire: legs rather short: femora slightly incrassate: tibiæ slender, simple: tarsi moderate.

Pachyta is perhaps almost too closely allied to Leptura to form a distinct genus, nevertheless the habit of the species appears to point out its pretensions to be divided therefrom, and they may be distinguished by the brevity of the body united to the breadth and

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<sup>+</sup> Sp. 20. atta. Corpore toto nigro, abdomine serico albo nitente. (Long. corp. 4? lin.)

Le. atra. Fabricius.-Turton (!)-Steph. Catal. 205. No. 2089. note.

With the body entirely black, the abdomen clothed with white shining pubescence.

Said by Turton to be indigenous.

almost parallelism of the elytra, exclusively of the slight difference in the proportion of the joints of the antennæ, &c.

- Sp. 1. livida. Nigra, profundiàs punctata, cinereo-pubescens, elytris testaceis, immaculatis, tibiis anticis ferrugineis. (Long. corp. 34-4 lin.)
- Le. livida. Fabricius.-Martyn, Col. pl. 28. f. 13.-Pa. livida. Steph. Catal. 205. No. 2090.
- Black, rather deeply punctured, and slightly clothed with cinereous pubescence: elytra testaceous, immaculate, rounded at the apex: anterior tibiæ and tarsi pale ferruginous.

Very abundant at Hertford and Darenth, and near Ripley, in flowery banks in June. "Frostenden-hall, Suffolk."—W. C. Hewitson, Esq. "Not uncommon (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 2. collaris. Nigra, fusco-pubescens, elytris nigro-cærulescentibus, thorace suhgloboso supra abdomineque toto rubris. (Long. corp. 4-5 lin.)
- Le. collaris. Linné.-Martyn, C. pl. 27. f. 5.-Pa. collaris. Steph. Catal. 206. No. 2091.
- Black, with fuscous pubescence: thorax rounded, and rufous above: abdomen also rufous : elytra deep dusky blue : legs elongate.

Rare: it has been taken in Shooter's-hill-wood and near Bexley: also in Devonshire and in Herefordshire. "New Forest."—*Rev. A. H. Matthews.* 

- †Sp. 3. virginea. Nigra, supra glabra, elytris latis cœruleo-violaceis, abdomine luteo rufescente. (Long. corp. 6 lin.)
- Le. virginea. Linné.--Turton (!)-Pa. virginea. Steph. Catal. 206. No. 2092. note.
- Black, above glabrous: thorax with a deep dorsal channel: elytra blue-violet, deeply rugose-punctate: abdomen testaceous or luteous-red.
- Noted by Turton as indigenous, but without authority.
- + Sp. 5. sexmaculata. Nigra, pubescens, confertissime punctulata, elytris flavotestaceis, limbo fasciisque tribus undatis nigris. (Long. corp. 5-6 lin.)
- Le. sexmaculata. Linné.-Turton (!)-Pa. 6-maculata. Steph. Catal. 206. No. 2094. note.
- Black, pubescent, thickly punctured, elytra testaceous-yellow, with the margin and three waved fasciæ black.
- Noted by Turton as British.

- Sp. 4. octomaculata. Nigra, griseo-pubescens, coleoptris testaceis, maculis octo nigris. (Long. corp. 5-6 lin.)
- Le. octomaculata. Fabricius.-Le. 6-maculata. Don. x. pl. 353. f. 2.-Pa. 8maculata. Steph. Catal. 206. No. 2093.
- Black, clothed with a griseous pubescence, most densely on the thorax : coleoptra testaceous with eight black spots, four upon each elytron, placed two obliquely at the base, the outer one largest, the next large, marginal, and about the middle, and the fourth at the apex itself: the two basal spots are frequently united, and sometimes the outer one is divided into two or three black streaks: legs and antennæ black.

Not uncommon on flowers in Colney-hatch-wood in June, but rather scarce in other parts within the metropolitan district. "Gibside "—G. Wailes, Esq. "Baron-wood."—T. C. Heysham, Esq. "Near Swansea, not common."—L. W. Dillwyn, Esq.

#### SECTION V.

Tarsi tetramerous, or trimerous: head not produced anteriorly into a rostrum: antennæ filiform, or slightly incrassated at the apex, sometimes moniliform; in the trimera clavate: articulations generally 11: labium subquadrate, and rather thickened: body oblong, with the thorax usually narrow, or subovate or orbiculate: posterior femora frequently much incrassated.

This section, which requires subdivisions as hereunder, contains the most splendid of the indigenous coleoptra: the larvæ are chiefly external feeders, and are considerably diversified: those of the typical groups are, however, furnished with short legs; the latter are phytophagous, but those of the trimerous division are all, or

Donovan mentions that he found a specimen of this insect in Drury's English Cabinet, but as several of the insects in that collection have not been authenticated, I have included them among the doubtful natives, until they be proved indigenous.

<sup>†</sup> Sp. 6. Lamed. Nigra, subnitida, griseo-pubescens, antennis brevioribus, elytris totis rugoso-punctatis lividis, vittâ humerali obliquâ maculâque apicali nigris. (Long. corp. 8 lin.)

Ce. Lamed. Linné.—Le. Lamed. Don. xi. pl. 395. f. 2. (!)-Pa.? Lamed. Steph. Catal. 206. No. 2095. note.

Black, slightly glossy, clothed with a griseous pubescence : antennæ rather short: elytra entirely rugose-punctate, livid, with an oblique black vitta at the shoulder, and a spot of the same colour near the apex.

nearly so, aphidivorous:—some few subsist upon fungi, and others (as those of the Halticæ) are extremely injurious to the agriculturist by destroying the seminal leaves of the plants immediately they appear above the surface, sometimes devastating whole acres by their numbers.

### Subsection I.-EUPODA, Latreille.

Body generally elongate: antennæ not longer than the head and thorax, subfiliform, the terminal joints sometimes a little incrassated: labium mostly entire: mandibles entire at the apex or bifd: maxillæ with the outer lobe thickened and entire: eyes simple, sometimes a little emarginate: head deeply inserted in the thorax, the latter mostly cylindric, or subquadrate, narrower than the elytra, which are elongate, sometimes depressed: legs moderate: femora, especially the posterior, more or less clavate, and elongate, sometimes dentate: tibiæ simple, with spurs at the apex: tarsi tetramerous, rather short, the penultimate joint bilobed, the lobes elongate.

The indigenous species of this subsection compose

# FAMILY XLIX.-CRIOCERIDÆ, Leach.

Which may be distinguished by the above characters, and contains the following British genera:

Antennæ articulis ferè omnibus elongatis.				
Elytra haud mucronata :		•		386. DONACIA.
mucronata :	•	•		387. MACROPALËA.
articulis brevibus.				
Palpi maxillares filiformes :	•	•		389. CRIOCERIS.
extrorsum crassiores.				
Thorax glaber, haud tuberculatus :		•	•	388. Orsodachna.
utrinque tuberculatus :	•	•	•	390. ZEUGOPHORA.
-				

### GENUS CCCLXXXVI.-DONACIA, Fabricius.

Antennæ approximating, with nearly all the articulations elongate; much longer than broad, subcylindric, or conic-cylindric, with the basal joint longer and stouter, and obconic, the second abbreviated. Palpi four, filiform: mandibles bifid at the apex: maxillæ membranaceous, bilobed: labium with the superior margin entire: head porrect, united to the thorax by a distinct neck: eyes prominent, semiglobose, entire: elytra subtrigonal, narrowed behind, and often truncate at the apex: femora elongate-clavate, especially the posterior, which are frequently dentate: tarsi short: body generally adorned with brilliant metallic colours. In addition to the dissimilarity in the form of the tarsi and structure of the antennæ, the Donaciæ are distinguished from the insects of the following genus by the brilliant metallic hues which adorn the body, and by the apex of the elytra not being mucronated or having a spine :---they are nearly all subject to considerable variety in colouring, some of the species partaking of every tint, while others are more constant in the appearance; they reside in marshy places; their larvæ subsisting upon aquatic plants.

A. The posterior femora with two or three teeth towards the apex.

Depressed, above violaceous, or greenish, with a brassy tinge, beneath clothed with a silvery silken pubescence: head black: thorax with an abbreviated longitudinal canal, the disc on each side within the anterior angle, with an elevated rounded tubercle, and a somewhat deep curved fovea, and towards the base with an obsolete transverse impression; in other respects smooth, or very finely coriaceous; the sides a little greenish: elytra deeply punctate-striate, with the interstices smooth, the margins and apex slightly tinted with greenish: legs dull testaceous, with the femora and tibiæ above fuscous: the femora clavate, and the posterior very much elongated and bent, with the base very slender, of the male with three teeth towards the apex, the middle one largest, and of the female with one tooth, corresponding with the middle one of the male: antennæ black, with the basal joints ferruginous within.

Occasionally abundant on the banks of the Thames about Brentford and Kew, and in other parts of the metropolitan district. "Prestwick Car."—G. Wailes, Esq. "Upperby."—T. C. Heysham, Esq. "On the waterlily, Windsor."—Mr. G. Waterhouse.

- Sp. 2. cincta. Convexior, supra viridi-ænea, violaceo micans, subtus argenteosericea, elytris crenato-striatis, interstitiis thoracisque dorso transversim rugosis, femoribus crassis fusco-violaceis, posticis minus elongatis maris dentibus, duobus acutis, fæminæ dente unico. (Long. corp. 3<sup>1</sup>/<sub>4</sub>-4 lin.)
- Do. cincta. Germar.-Steph. Catal. 206. No. 2096.-Le. aquatica. Martyn, C. pl. 28. f. 16, 17.
- Rather convex, above brassy-green, tinted with violet; beneath clothed with a silvery-silken pubescence: head fuscous: thorax with an abbreviated longitudinal furrow, an oblong tubercle within each anterior angle and the disc

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Sp. 1. crassipes. Depresso-plana, supra violacea, subtus argenteo-sericea, thoracis disco canaliculato lævi, elytris profundè punctato-striatis, interstitiis lævibus, femoribus posticis longissimis arcuatis, in maculis tridentatis in fæminis, unidentatis. (Long. corp. 4-5 lin.)

Do. crassipes. Fabricius;-Steph. Catal. 207. No. 2097.

transversely rugose and punctate: elytra rather deeply crenate-striate, with the interstices thickly rugose-punctate: legs moderately elongate: femora thick and violaceous, with the base alone testaceous: posterior slightly curved, and of the male with two equal acute teeth at the apex placed transversely, and of the female with a single rather obsolete one: tibiæ and tarsi dusky testaceous: antennæ with the basal joints ferruginous.

Not very abundant within the metropolitan district, but frequent near Windsor, and it has been once taken plentifully in a marsh near Ealing. "Meldon-park."—G. Wailes, Esq. "Duddingston-loch." —Rev. W. Little. "Wimbledon-common and Windsor-forest." —Mr. G. Waterhouse. "Weston."—Rev. A. H. Matthews.

 Sp. 3. dentata. Subdepressa, ænea, capite punctato, thorace lato, punctato-rugoso, lineű abbreviatű posticű, elytris depressis ad suturam levitèr impressis, apice subangustatis, oblique truncatis, subappendiculatis. (Long. corp. 3½-4½ lin.)
 Do. dentata. Kunzé.—Steph. Catal. 207. No. 2098.

Somewhat depressed; brassy, with a shining pubescence beneath: head punctate: thorax broad, punctate-rugose, with an abbreviated impressed line behind: elytra depressed, slightly impressed towards the suture: the apex somewhat narrowed, obliquely truncate, with a slight appendage at the outer angle, punctate-striated, the interstices rugose, especially towards the apex: legs rufo-testaceous, with the posterior femora incrassated and bidentate, the dentations shortest in the females: posterior tibiæ in the males, with four or five small dentations towards the apex within.

Found in marshy places near Hanwell in Middlesex, and in other parts of the metropolitan district, as in the neighbourhood of Hertford, &c. "Common in the fens of Cambs."—Rev. L. Jenyns. "Salisbury."—Mr. Ingpen. "Epping."—Mr. Doubleday. "On the water-lily, Windsor." Mr. G. Waterkouse.

Sp. 4. angustata. Subdepressa ænea, capite punctato, thorace quadrato, punctatorugoso, lineå mediâ abbreviatâ, elytris convexiusculis ad suturâm quadri-impressis, postice angustatis, apice sinuato-truncatis, subappendiculatis. (Long. corp. 4-4½ lin.)

Do. angustata. Kunzé.-Steph. Catal. 207. No. 2099.

Slightly depressed, narrow, brassy or cupreous: head punctate: thorax quadrate, punctate-rugose, with an abbreviated dorsal line in the middle of the disc, and a rounded tubercle on each side towards the anterior angle: elytra slightly convex, with four depressions towards the suture, narrowed posteriorly, with the apex sinuate truncate, and a little appendiculated; the disc punctatestriate, the striæ moderately impressed: legs slender, rufo-testaceous: the femora and tibiæ above fuscescent, the former slightly bidentate. Much less abundant than either of the foregoing; found on the banks of the Thames, near Brentford and Fulham. "With the preceding, and at Wandsworth-common."—Mr. G. Waterhouse.

- Sp. 5. melanocephala. Supra ænea aut virescente cuprea, capite nigro, femoribus rufo-piceis subbidentatis, elytris rudè punctato-striatis, apice subtruncato. (Long. corp. 5 lin.)
- Le. melanocephala. Marsham.-Do. melanocephala. Steph. Catal. 207. No. 2100.
- Above æneous, beneath blackish-brass, with an ashy-fulvous pubescence: head black, punctate: thorax with a deep dorsal channel, abbreviated at each end: elytra golden brass, roughly punctate-striate, with the apex slightly truncate, the termination rounded in the middle, the apex of the suture with an elon-gate cupreous patch: femora rufous, with the apex and tibiæ pitchy-black, the former rather obsoletely bidentate: antennæ fuscous.
- The specimens of this insect, which are totally distinct from either of the foregoing, which I obtained from the Marshamian collection, have the posterior femora slightly bidentate, and are not simple as described by Marsham: in other respects his description accords.

Not common: I have obtained specimens from Bristol. "In the most round the Palace at Fulham."—Mr. G. Waterhouse.

B. Posterior femora moderate, with a single tooth. a. Legs nearly concolorous with the body.

- Sp. 6. Lemnæ. Subdepressa, fusco-ænea, thorace rugoso-punctato, elytris lacunosis, margine laterali vittâque baseos abbreviatâ purpureis, femoribus posticis obsoletè dentatis. (Long. corp. 4-5 lin.)
- Do. Lemnæ. Fabricius.-Steph. Catal. 207. No. 2101.
- Somewhat depressed, fuscous-brass, beneath with an ashy pubescence: head opaque, with a deep frontal groove: thorax subquadrate, thickly rugosepunctate, with an obsolete dorsal channel: *elytra* slightly shining, with four irregular depressions on the back, the disc punctate-striate, generally with an *abbreviated purple vitta at the base*, and an elongate one on the lateral margin; but one or the other, and sometimes both, of these are occasionally wanting: legs rather short, greenish-black, the posterior femora towards the apex with a more or less distinct tooth: antennæ black, with the basal joint brassy.

Not uncommon in marshes throughout the metropolitan district in May and June. "Burwell-fen, Cambridgeshire."—*Rev. L. Jenyns.* "Epping."—*Mr. Doubleday.* "Duddingston-loch."— *Rev. W. Little.* 

Sp. 7. dentipes. Subdepressa, thorace æneo, crebre rugoso-punctato, elytris viridibus vittå latå mediå coccineo-cupreå, pedibus æneis. (Long. corp. 4–5 lin.) Do. dentipes. Fabricius.-Steph. Catal. 207. No. 2102.

Slightly depressed : head opaque, finely punctured : thorax subquadrate, shining, brassy, sometimes cupreous, with a short dorsal groove, and thickly wrinkled transversely: elytra with a depression before the middle, near the suture; the base thickly punctated and the rest of the disc punctate-striate, of a rich glossy silken-green, with a broad scarlet-coppery longitudinal stripe, and the impressed fovea before the middle of a golden hue : body beneath clothed with a yellowish pubescence : legs brassy, the posterior femora with a single tooth towards the apex, longest in the male : antennæ black, with the basal joint brassy.

Rather scarce: I have taken it in Battersea and Copenhagenfields, in ponds. "Meldon-park."—G. Wailes, Esq. "Burwellfen."—Rev. L. Jenyns. "Harrowby."—T. C. Heysham, Esq. "Covehithe, Suffolk."—W. C. Hewitson, Esq. "Salisbury."—Mr. Ingpen. "Epping."—Mr. Doubleday. "Cambridge."—Mr. G. Waterhouse.

- Sp. 8. Sagittariæ. Supra viridi-sericea, subtus aureo-pubescens, thorace subquadrato rugoso-punctato, elytris lacunosis subtilitèr punctato-striatis, basi parum vagè punctatis. (Long. corp. 4<sup>1</sup>/<sub>2</sub>-5<sup>1</sup>/<sub>3</sub> lin.)
- Do. Sagittariæ. Fabricius.-Steph. Catal. 207. No. 2103.
- Slightly depressed: above silken-green, beneath clothed with a yellowish-golden pubescence: thorax quadrate, with an abbreviated dorsal furrow, the disc thickly rugose-punctate, with the angles somewhat prominent, the anterior tubercle obsolete: elytra unequal, with several depressions on the disc, the latter punctate-striate, with the base thickly and irregularly punctured, towards the apex attenuated and the latter truncate: legs greenish-brass clothed with a golden down: antennæ black.

More abundant than the last, but not very common; occurring throughout the metropolitan district. "Prestwick Car."-G. Wailes, Esq. "River Foss, York."-W. C. Hewitson, Esq. "Bottisham." -Rev. L. Jenyns. "Epping."-Mr. Doubleday.

- Sp. 9. brevicornis. Supra obscure ænea, subtus aureo-villosus, antennis brevibus, thorace subquadrato, rugoso-punctato, elytris lacunosis basi regularit\u00e9r punctato-striatis, apice truncatis. (Long. corp. 4-5 lin.)
   Da brevicornia. Kauz\u00e9a. Steep. Catel. 007. No. 0104.
- Do. brevicornis. Kunzé.-Steph. Catal. 207. No. 2104.
- Above dull brassy, beneath clothed with a golden down: antennæ short, black: head also black: thorax subquadrate, rugose-punctate, with a slightly impressed longitudinal furrow, the anterior angles deflexed: elytra depressed, with four slight depressions, regularly punctate-striate from the base, the striæ MANDIBULATA. VOL. IV. 1ST DEC. 1831. T

with smaller punctures towards the *apex*, which is *truncate* : legs clongate, posterior femora with a stout, acute tooth towards the apex.

Rare: obtained from the vicinity of Bristol.

- Sp. 10. obscura. Supra fusco-ænea, opaca, subtus aureo-villosa, thorace subquadrato, rugoso-punctato lineå anticå impresså, elytris lacunosis basi crebrè vagè punctatis, apice truncatis, femoribus posticis validè dentatis. (Long. corp. 5 lin.)
- Do. obscura. Gyllenhal.-Steph. Catal. 207. No. 2105.
- Slightly depressed, above fuscous-brass, opaque, beneath clothed with a golden down: head obsoletely punctulate: thorax subquadrate, rugose-punctate, with a faint short longitudinal line at the front of the disc, the latter depressed: elytra with four rather deep foreæ, with the base within irregularly punctured, the rest of the disc regularly punctate-striate; the apex truncate: legs rather long: posterior femora with an acute, stout tooth within towards the apex: antennæ black, with the basal joint æneous.

Also rare; taken within the metropolitan district and in Somersetshire. "Water-lily, Windsor."-Mr. G. Waterhouse.

Sp.311. thalassina. Viridi-aurea, subopaca, subtus aureo-villosa, thorace convexiusculo profundè punctato, posticè angustato, elytris regularitèr punctatostriatis, apice declive truncatis, femoribus posticis acute dentatis. (Long. corp. 4½ lin.)

Do. thalassina. Germar.-Steph. Catal. 208. No. 2106.

Slightly depressed, above golden green, or cupreous, opaque, beneath clothed with a golden down: thorax rather convex, deeply punctate, narrowed behind, the disc with an abbreviated dorsal line, the anterior angles prominent: elytra rather convex, with obsolete depressions, deeply punctate-striate towards the base, and faintly towards the apex, the latter somewhat obliquely truncate: legs elongate: posterior femora with an acute tooth at the apex.

My specimen of this species I obtained from Mr. Millard of Bristol, in the vicinity of which city it was probably captured.

- Sp. 12. impressa. Supra fusco-ænea, nitida, subtus aureo-villosa, thorace subquadrato, depressiusculo, punctatissimo, elytris convexiusculis, punctatostriatis, dorso quadrifoveolatis, femoribus posticis obsoletè dentatis. (Long. corp. 4 lin.)
- Do. impressa. Gyllenhal.-Steph. Catal. 208. No. 2107.
- Somewhat depressed; above shining fuscous-brass or reddish copper, beneath clothed with a golden down: thorax subquadrate, slightly depressed, and very much punctured, with the anterior angles deflexed, and a faint dorsal furrow: elytra slightly convex, with four impressions on the disc, and regularly punctate-striate, the interstices transversely rugose, and the apex obliquely sub-

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truncate: legs elongate, dusky: femora shining, punctured, the posterior with an obsolete tooth towards the apex.

Variable in colour; being sometimes greenish, or shining coppery, or duskybrass.

Rare; found occasionally within the metropolitan district, and in Suffolk and the New Forest. "On rushes, Kensington-gardens." —Mr. G. Waterhouse.

- Sp. 13. Proteus. Supra metallica, subtus aureo-villosa, thorace quadrato, punctato, rugoso, elytris ovatis nitidulis, punctato-striatis, dorso depressiusculis, impressis, apice rotundatis, antennis pedibusque validis, breviusculis. (Long. corp.  $3\frac{3}{4}-4\frac{1}{2}$  lin.)
- Do. Proteus. Kunzé.-Steph. Catal. 208. No. 2108.-Do. Nymphææ. Samouelle, pl. 2. f. 27. var.
- Above of a *metallic* hue, beneath clothed with a golden pile: thorax quadrate, punctate, rugose, with the *lateral margins tumid* anteriorly, the anterior angles prominent: *elytra ovate*, shining, punctate-striate, the back a little *depressed* and impressed, the *apex* of each rounded: antennæ and legs rather stout and short.
- Extremely variable in tint, every possible shade of colour varying from intense black to blue-black, blue, greenish-blue, green, greenish-brass, brassy, brassycopper, copper, purplish-copper, bright red-copper, with all possible intermediate tints: the legs and antennæ generally partaking of the colours of the body, though the apex of the femora is generally black.

Very abundant on aquatic plants throughout the metropolitan district and other parts of England. "Meldon-park, Prestwick Car, &c."-G. Wailes, Esq. "Gamlingay."—Rev. L. Jenyns. "Durdar."—T. C. Heysham, Esq. "York, Darlington, &c."— W. C. Hewitson, Esq. "Epping."—Mr. Doubleday. "Whim, Peebleshire."—Rev. W. Little. "Weston."—Rev. A. H. Matthews.

- Sp. 14. micans. Supra metallica, subtus villosa, thorace elongata, punctulato, sericeo, elytris oblongis, convexis, punctato-striatis, dorso subimpressis, apice declivi rotundatis, antennis pedibusque gracilibus, elongatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4<sup>1</sup>/<sub>2</sub> lin.)
- Do. micans. Ahrens.-Steph. Catal. 208. No. 2109.
- Above metallic, beneath with cinereous or golden pile: thorax elongate, cylindric, punctulated, sericeous, with the anterior angles prominent: elytra oblong, convex, punctate-striate, glossy, the back a little depressed, the apex of each rounded: antenna and legs rather slender, elongate.
- Almost as variable in colour as the preceding species; from which it chiefly differs in the form of its thorax and more convex elytra, longer legs, &c.

Also very abundant throughout the south of England. " Ely." Rev. L. Jenyns. " Epping."—Mr. Doubleday.

#### b. With the legs pale.

- Sp. 15. rustica. Nigro-fusca aut virescenti-ænea, antennis ano pedibusque rufis, elytris crenato-striatis, apice rotundatis. (Long. corp. 3-4 lin.)
   Do. rustica. Schüppel.-Steph. Catal. 208. No. 2110.
- Male fuscous-black: female greenish-brass; both sexes with the antennæ rufous: mouth also rufous: thorax rather broad, finely punctulated, the anterior angle rounded, the disc with a dorsal furrow, and a fovea on each side: elytra punctate-striate, with the interstices transversely rugose: apex of abdomen and legs rufous; posterior femora with an acute tooth, stoutest and longest in the male.

Not very common, but found in various parts of England, in the neighbourhood of London, Whittlesea-mere, Devonshire, near Bristol, &c. "Battersea-fields."—*Mr. Ingpen.* "Cambridge."—*Mr. G. Waterhouse.* "Weston."—*Rev. A. H. Matthews.* 

- Sp. 16. nigra. Antennis ano pedibusque rufis, capite atro-æneo, thorace cærule-scente subcordato, elytris atro-æneis, punctato-striatis, interstitiis transversim rugosis, femoribus posticis obtusè dentatis. (Long. corp. 5–6 lin.)
  Do. nigra. Fabricius.—Steph. Catal. 208. No. 2111.
- Head brassy-black: thorax subcordate, bronzed blue, with the anterior angles slightly prominent; the disc with a dorsal channel, becoming obsolete in front, and terminating in a fovea behind: elytra rather deeply punctatestriated, the interstices a little raised and rather deeply wrinkled transversely, the apex of each rounded, brassy-black, or a little tinted with bluish on the lateral margins: legs rather long, rufous: antennæ also rufous, as well as the apex of the abdomen, and the margins of each segment.

Also moderately common: found occasionally in the marshes about Woolwich and Battersea, Fulham, &c. "Southend."—*Rev. F. W. Hope.* "Near Cambridge."—*C. Darwin, Esq.* "Epping." —*Mr. Doubleday.* "Whittlesea."—*Rev. A. H. Matthews.* 

#### B. With the posterior femora simple.

- Sp. 17. Menyanthidis. Elongata, supra viridi-ænea nitida, subtus argenteosericea, antennis extrorsum pedibusque rufo-ferrugineis, elytris crenato-striatis, interstitiis transversim rugosis. (Long. corp. 5-6½ lin.)
- Do. Menyanthidis. Fabricius.—Steph. Catal. 208. No. 2112.—Le. simplex. Martyn, C. pl. 28. f. 25.
- Elongate, slightly depressed; above of a shining brassy-green, beneath clothed with a silvery down: head finely punctured, with a deep frontal channel: thorax with a deep impression on the middle of each side, an obsolete dorsal

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furrow, with two foveolæ on each side, the disc nearly smooth, but rather finely wrinkled within the base and apex: *elytra crenate-striate*, with the *interstices* transversely *wrinkled*, the apex obtusely rounded: legs elongate, rufo-piceous: *femora* slightly incrassated, the *posterior long and bent*, with the base slender: antennæ fuscous at the base, rufo-ferruginous at the apex.

Rather scarce : found in Norfolk, and on the borders of Whittlesea-mere, and occasionally within the metropolitan district. "Croydon Canal."---Mr. Ingall.

Sp. 18. simplex. Subconvexa, supra virescenti-ænea, subtus cinereo-sericea, pedibus fusco-ferrugineis, thorace punctatissimo, elytris crenato-striatis, dorso rubro-cupreis, interstitiis transversim rugosis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4<sup>1</sup>/<sub>2</sub> lin.)
 De simpler Echeiring Steep Catel 200 No. 6113

Do. simplex. Fabricius.-Steph. Catal. 209. No. 2113.

Rather short, subconvex, above greenish-brass, beneath clothed with an ashysilken pubescence: head fuscescent; with a somewhat interrupted frontal channel: thorax with an impression in the middle of the lateral margins, the anterior tubercle obsolete, and a deep channel on the disc, which last is convex and very thickly punctured: elytra crenate-striate, the interstices transversely wrinkled, the back of a bright red-copper: legs dull ferruginous: femora thickened and æneous at the apex: antennæ pitchy-black.

Common within the metropolitan district in June, and also found near Bristol. "Anglesea-abbey, Cambridgeshire."—Rev. L. Jenyns. "Salisbury."—Mr. Ingpen. "Whim, Peebleshire."—Rev. W. Little. "Fulham and Battersea-fields."—Mr. G. Waterhouse. "Whittlesea."—Rev. A. H. Matthews.

Sp. 19. linearis. Elongata, subdepressa, supra obscure virescenti-ænea, subtus argenteo-sericea, antennis pedibusque ferrugineo-variegatis, thorace quadrato, punctatissimo, elytrorum interstituis subtilissimè strigosis. (Long. corp. 4–5 lin.)

Do. linearis. Hoppe.-Steph. Catal. 209. No. 2114.

Elongate, somewhat depressed, above of an obscure greenish-brass, or purplishcopper, beneath clothed with a shining pile: head finely punctured, with a short frontal channel: thorax subquadrate, somewhat depressed, with an obsolete dorsal furrow, and very thickly punctulated, with an oblong tubercle at each anterior angle placed obliquely: elytra rather deeply punctate-striate, the interstices very finely strigose transversely; attenuated towards the apex, the latter truncate; on the back are four more or less obsolete depressions, placed quadrangularly: legs slender: femora æneous, with the base testaceous, tibiæ curved, dull testaceous: antennæ black, with the base of each joint more or less ferruginous.

Very abundant in every swampy place upon flags, and other

aquatic plants, in June. "Bottisham."—Rev. L. Jenyns. "Cardewmire."—T. C. Heysham, Esq. "York, &c."—W. C. Hewitson, Esq. "Duddingston-loch."—Rev. W. Little. "Weston."—Rev. A. H. Matthews.

Sp. 20: Typhæ. Sublinearis, supra viridi-ænea, subtus argenteo-sericea, antennis pedibusque testaceo variegatis, thorace subdepresso punctatissimo, elytris apice emarginatis, interstitiis striarum strigosis. (Long. corp. 4-5 lin.)
Do. Typhæ. Brahm.-Steph. Catal. 209. No. 2115.

Sublinear; above brassy-green, beneath with a silken silvery pile: head fuscescent, punctulated: thorax slightly depressed, thickly rugulose-punctate, with a very obsolete dorsal furrow, and very obscurely punctured: elytra a little attenuated towards the apex, the latter slightly emarginate; above moderately convex, with four obsolete depressions on the disc, the last regularly punctate-striate, with the interstices finely strigose: sometimes brassy-green, at others the suture is bordered on either side by an abbreviated golden-red vitta, and the disc is variegated with blue: femora dull æneous, with the base ferruginous: tibiæ curved, dull ferruginous: antennæ fuscous, with the base of the articulations testaceous.

Less abundant than the foregoing, and apparently local. I have taken it on the banks of the Croydon Canal, near Greenwich. "Wandsworth-common."—Mr. G. Waterhouse.

Sp. 21. Hydrochæridis. Obscure fusco-ænea, opaca, tenue cinereo-pubescens, thorace quadrato, vix punctulato, elytris subtiliter punctato-striatis, interstitus subtilissimè coriaceis. (Long. corp. 42-5 lin.)

Do. Hydrochæridis. Fabricius.-Steph. Catal. 209. No. 2116.

Rather broad, depressed; dull fuscous brassy, opaque, slightly clothed throughout with a dense ashy public ence: thorax subquadrate, very obscurely punctulate, with a very obsolete abbreviated dorsal furrow, the anterior angles with a large, rounded tubercle: elytra depressed on the back anteriorly, moderately punctate-striate, with the interstices finely coriaceous and clothed throughout with a delicate ashy pile: legs rather long: femora with the base testaceous, the apex exteriorly æneous: tibiæ and tarsi dusky-testaceous: antennæ black, with some of the apical joints ferruginous at the base.

Not common, at least within the metropolitan district; it occurs in Norfolk and also near Bristol. "Croydon Canal."—Mr. Ingall. "Prestwick Car."—G. Wailes, Esq. "Brick Ponds near York."— W. C. Hewitson, Esq. "Woolwich Marshes."—Mr. G. Waterhouse.

# GENUS CCCLXXXVII.-MACROPLËA, Hoffmann.

Antennæ elongate, basal joint robust, ovate; two following short, subglobose; fourth elongate obconic; two following rather longer; the remainder gradually longer and more slender, especially the apical one, which is slightly acute. Palpi short, stout, terminal joint subovate: head rather small: eyes prominent, globose: thorax elongate-subquadrate, the lateral margins sinuated, the angles acute: elytra elongate-ovate, with a spine or mucro at the apex: legs slender, posterior the longest: tibiæ simple, the hinder pair more or less flexuous: tarsi long, basal joints short, terminal very long.

This singular genus is not only distinguished from Donacia by being destitute of metallic colours, but by having the second and third joints of the antennæ very short, the elytra mucronated, or spinose, at the apex, the legs long and slender, with the hinder tibiæ more or less flexuous, and the tarsi with the basal joints short and the terminal one very long, the penultimate minute:—they frequent aquatic plants: and it is probable that one species alone hos hitherto been detected in Britain.

- Sp. 1. Zosteræ. Nigra, ore, thorace elytrisque flavo-testaceis, elytris convexis, angulo apicis externo spinuloso, interno rotundato, pedibus flavis, tarsis fuscoannulatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-4 lin.)
- Do. Zosteræ. Fabricius.-Ma. Zosteræ. Steph. Catul. 209. No. 2117.-Ma. Equiseti. Curtis, vii. pl. 318.
- Black: mouth, thorax, and elytra testaceous-yellow: thorax slightly rufescent, generally with two elongate black spots, one on each side of an irregular dorsal channel: elytra convex, punctate-striate, the striæ disposed in pairs, and the punctures of the anterior ones generally black,—though in some cases all are of that hue,—the apex is produced externally into an acute spine, and the inner margin is rounded: legs yellow: femora and tibiæ immaculate: tarsi annulated with fuscous: posterior tibiæ distinctly flexuous.

Taken near Hull by Mr. Spence, on the Zostera marina, and subsequently rather plentifully in Norfolk, by the Rev. T. Skrimshire and others; it has also occurred near Windsor and Cambridge.

Do. Equiseti. Fabricius .- Ma. Equiseti. Steph. Catal. 209. No. 2118.

Black ; mouth, thorax, and elytra testaceous-yellow : thorax of a brighter hue,

<sup>†</sup> Sp. 2. Equiseti. Nigra, ore, thorace, elytrisque flavo-testaceis, elytris depressiusculis, angulo apicis externo spinoso, interno obtusato, pedibus flavis, femorum, tibiarum, ungularumque apicibus tarsisque nigrescentibus. (Long. corp. 4–44 lin.)

with two black streaks on the disc: *elytra* rather *depressed*, punctate-striate, the striæ disposed in pairs, and all the punctures usually black: the apex produced externally into an acute spine, and internally into an obtuse, very slightly prominent one: *legs yellow*, with the *apex of the femora*, and of the *tibiæ*, and the *claws black: tarsi* entirely pitchy-fuscous: posterior tibiæ slightly flexuous.

In the collection at the British Museum are a pair of insects bearing the above name, which were found near Windsor, but as many years have elapsed since I saw them, I will not be positive that their nomenclature is correct, as in a recent illustration of the genus, the specimens in question have evidently been confounded with the preceding species, large and dark varieties of which have been described and figured as distinct.

### GENUS CCCLXXXVIII.-ORSODACHNA, Latreille.

Antennæ short, simple, inserted before the eyes, with all the joints obconic, the terminal ones distinctly and gradually thickened. Palpi elongate: maxillary with the terminal joint incrassate, obliquely truncate: labial with the terminal joint subconic: mandibles slightly emarginate at the apex: head exserted, not inserted into the thorax by a distinct neck: eyes globose: thorax narrowed behind: body oblong: legs rather long, and simple: tarsi short.

From the preceding insects of this family the present genus differs by having the antennæ short, with the terminal articulations rather incrassated and transverse; the palpi elongate, with the apical joint incrassate; the head sessile, &c., by many of which characters it differs from Crioceris.

- Sp. 1. chlorotica. Antennis, capite thoraceque pallido-rufis, nitidis, elytris pedibusque testaceis aut rufescenti-pallido-flavis; thorace glabro, punctis impressis, distantibus. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-4 lin.)
- Or. chlorotica. Latreille.-Steph. Catal. 209. No. 2119.
- Above glabrous, irregularly punctate, beneath with a silken pubescence: antenna, head, and thorax pale rufous and shining, the latter with distant punctures: elytra and legs testaceous, or pale-reddish-yellow.
- The breast, abdomen and vertex are sometimes more or less fuscous or black : the margins of the elytra are occasionally deep pitchy-black, having the disc pale.

Rare: it has been taken in the neighbourhood of Matlock, Derbyshire, plentifully, but in other places it does not appear to occur, except sparingly. " Epping."--Mr. Doubleday.

- Sp. 2. nigriceps. Nigra, antennis pedibus, thorace et abdomine interdum, pallido-rufis, elytris testaceis, aut rufescenti pallido-flavis, thorace pubescente, punctis impressis numerosissimis, fere contiguis, lineola dorsali lævi, femoribus posticis maculá fuscá. (Long. corp. 3-3<sup>1</sup>/<sub>2</sub> lin.)
- Or. nigriceps. Latreille.-Steph. Catal. 209. No. 2120.
- Black: antennæ, legs, thorax, and sometimes the abdomen, pale rufous: elytra testaceous or pale-reddish-yellow: thorax pubescent, thickly covered with nearly contiguous punctures, except a smooth dorsal line: posterior femora with a fuscous spot.

Much more local than the preceding, at least within the metropolitan district. I have a specimen captured out of a sallow at Darenth, in June, where other specimens have occurred.

- Sp. 3. humeralis. Violaceo-cærulea, thoracis maculis duabus posticis, elytrorum humeris, geniculisque rubris; aut immaculata, antennarum femorumque basi rufis. (Long. corp. 3–33 lin.)
- Or. humeralis. Latreille.-Steph. Catal. 209. No. 2121.
- *Violet-blue*; the thorax with two dull rufous spots behind, and the elytra with the shoulders of the same hue, as are also the joints of the legs.
- Var.  $\beta$ ?—Entirely of a shining violaceous blue, immaculate: the base of the femora and of the antenn $\alpha$ , and sometimes the terminal joints of the latter, and the knees rufo-testaceous.
- In the immature? state this last variety has the breast and vertex alone violaceous black, and a spot of the same in the middle of the thorax, the rest of the body being pale.

Found at Norwood on the whitethorn; it has also been taken in the New Forest.

# GENUS CCCLXXXIX.-CRIOCERIS, Geoffroy.

- Antennæ moderate, inserted before the eyes, submoniliform, with the articulations short, the second and fourth being smallest; the terminal largest and conic; and the basal one subglobose. Palpi filiform, the terminal joint of the
- + Sp. 4. cantharoides. Violacea, capite thorace pedibusque rufis, antennarum basi rufescentibus.
- Or. cantharoides. Fabricius. (!)—Or. cantharoides. Steph. Catal. 209. No. 2122.
- Violet, shining; head, thorax, and legs rufous: antennæ reddish at the base.
- Described by Fabricius from a specimen said to be in the collection of Mr. Dandridge, and in the British Museum.

maxillary elongate-ovate: mandibles bidentate at the apex: maxillæ bifid: labium entire: head exserted, nutant, with a distinct collar: eyes prominent, emarginate within: thorax immarginate, attenuated posteriorly, and much narrower than the elytra, which are elongate-ovate, entire, subquadrate when united: legs short, robust: femora incrassated: tibiæ simple.

The pretty genus Crioceris may be recognized from the other genera of the family by the filiform palpi, of which the terminal joint is elongate-ovate, the second and fourth abbreviated joints of the antennæ, which are of moderate length, the thorax not being tuberculate on its sides, and much narrower than the elytra.

- Sp. 1. merdigera. Nigra, thorace elytrisque rufis immaculatis, elytris subtilissimè punctato-striatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4 lin.)
- Ch. merdigera. Linné.-Cr. merdigera.-Samouelle, pl. 2. f. 14.-Steph. Catal. 210. No. 2123.
- Black: thorax and elytra rufous, immaculate, the latter delicately punctatestriate.
- The larva of this insect clothes itself with its excrement, similarly to that of the Cassidæ.

Rare: found in gardens, in June, within the metropolitan district, chiefly on the white lily; upon which plant it has recently been stated to have been imported into this country, though upon mere theory. "Camberwell."—Rev. Professor Henslow. "In a garden at Peckham."—Mr. Merrick. "On Crwmlyn-burrows."—L. W. Dillwyn, Esq.

- Ch. 12-punctata. Linné.—Martyn, C. pl. 16. f. 36.—Cr. 12-punctata. Steph. Catal. 210. No. 2124.
- Red, with the elytra paler, the latter each with six black spots, one on the shoulder, the second rather behind towards the margin, the third near the suture in a broad depression, the fourth larger, placed transversely in the middle of the disc, which is punctate-striate, the fifth small, behind the middle towards the suture, the sixth larger and transverse within the apex : the antennæ, breast, joints of the legs and tarsi are also black : thorax very convex.
- Variable as to the size of the spots, which have sometimes a disposition to coalesce.

Very rare in this country : I possess a very fine series of varieties which were captured in June near " Bath."—Dr. Leach.

A. Body short; thorax with the lateral margins sometimes deeply cut out behind.

Sp. 2. duodecimpunctata. Rubra, elytris dilutioribus, singulo punctis sex nigris, antennis, pectore, genubus tarsisque nigris. (Long. corp. 23–3 lin.)

Sp. 3. puncticollis. Cærulea nitida, thorace parum convexo, crebrè et profundè rugoso punctato, posticè obsoletè impresso. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

Cr. puncticollis. Spence MSS.-Steph. Catal. 210. No. 2125.-Curtis, vii. pl. 323.

Shining blue or greenish: antennæ and tarsi black: thorax slightly convex, thickly and deeply rugose-punctate, with an obsolete impression behind, and two impressed lines on the back in front; the lateral margins gibbous anteriorly, with a deep fovea in the middle: elytra delicately punctate-striate.

Not common near London; but I have occasionally taken numerous specimens varying in colour, in a marshy place near Hertford. "Brigg, Lincs."—H. Grantham, Esq. "Neighbourhood of Swansea, not common."—L. W. Dillwyn, Esq. "Weston."— Rev. A. H. Matthews.

- Sp. 4. cyanella. Cærulea nitida, antennis tarsisque nigris, thorace convexo nitido parcè punctato, posticè transversim profundè impresso. (Long. corp.  $1\frac{1}{4}-1\frac{3}{4}$  lin.)
- Ch. cyanella. Linné.-Martyn, C. pl. 15. f. 25.-Cr. cyanella. Steph. Catal. 210. No. 2126.
- Shining blue, or greenish, with the antennæ and tarsi black: thorax with the lateral margins gibbous, the disc very convex, shining, and rather sparingly and minutely punctured, with a deep transverse impression posteriorly: elytra equally and rather deeply punctate-striate: body beneath and legs pilose.

Very abundant in the neighbourhood of willows throughout the metropolitan district. "Newcastle, Meldon-park," &c.—G. Wailes, Esq. "Epping."—Mr. Doubleday. "Common (near Swansea)." —L. W. Dillwyn, Esq. "Raehills."—Rev. W. Little. "Weston."—Rev. A. H. Matthews.

Sp. 5. obscura. Supra nigra, opaca, subtus nigro-cærulea, nitida, antennis tibiis tarsisque atris, thorace subconvexo subtilissimè punctato. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
 Cr. obscura. Steph. Catal. 210. No. 2127.

Above black, opaque; beneath shining black-blue: antennæ, tibiæ and tarsi black: thorax slightly convex, very faintly, but rather distantly punctate: elytra regularly and moderately punctate-striate.

Found occasionally within the vicinity of the metropolis, and also near Bristol, and in Norfolk. "Windsor."—Mr. Waterhouse.

#### B. Body oblong.

Sp. 6. melanopa. Cærulea, aut viridis, nitida, thorace pedibusque rufis, antennis tarsisque nigris. (Long. corp. 2<sup>1</sup>/<sub>4</sub>-2<sup>3</sup>/<sub>4</sub> lin.)

- Ch. melanopa. Linné.-Martyn, C. pl. 17. f. 53.-Cr. melanopa. Steph. Catal. 210. No. 2128.
- Blue or green, shining: head dusky-blue: thorax rufous, very convex, and finely punctulate, with a transverse impressed striga behind: elytra elongate, regularly punctate-striate: femora and tibiæ rufous; the extreme tip of the latter and the tarsi black: antennæ also black.

Not very abundant within the metropolitan district, though far from uncommon, frequenting marshy places. "Meldon-park."— G. Wailes, Esq. "Cardew-mire."—T. C. Heysham, Esq. "Layton."—Mr. Ingpen. "Raehills."—Rev. W. Little. "Weston." —Rev. A. H. Matthews.

- Sp. 7. Asparagi. Nigro-cærulea, thorace rubro, punctis duobus nigris, elytris flavis, cruce communi punctisque quatuor nigro-cæruleis. (Long. corp. 2–3 lin.)
- Ch. Asparagi. Linné Don. i. pl. 28. Cr. Asparagi. Steph. Catal. 210. No. 2129.
- Blue-black, or greenish: thorax slightly convex, rufous, shining, finely punctured, with two small blue-black spots and streaks, sometimes united, at others almost obliterated: elytra yellow-testaceous, with the suture and a short branch on each side, forming a cross, blue-black; towards the base of each elytron a rounded spot of similar hue and towards the apex a second; these are sometimes confluent with the cross: legs shining blue-black, occasionally with a ferruginous ring round the base of the tibiæ.

Extremely abundant about June in certain places upon the Asparagus, to which it appears to give an exclusive preference, occurring not only within the metropolitan district, but in widely distant parts, as in Devonshire, the New Forest, Brighton, &c. "Woodside."—*T. C. Heysham*, *Esq.* "Epping."—*Mr. Double-day.* "Weston."—*Rev. A. H. Matthews.* 

### GENUS CCCXC .--- ZEUGOPHORA, Kunzé.

Antennæ inserted before the eyes, thickening to the apex, the basal joint large, reniform; second elongate, attenuated at the base; three following of nearly equal length and form; five next shorter, stouter, sub-ovate, with the apex truncate, terminal large, elliptic. Palpi short, stout, the terminal joint conic, obtuse: mandibles rounded at the apex: labium subquadrate: head exserted, very broad in front: eyes globose, prominent: thorax convex, subquadrate, the lateral margins produced into an obtuse tooth in the middle, the base narrower than the elytra, which are rounded at the apex: legs rather short: femora clavate, the posterior round: tibiæ simple. The tuberculate, or subspinose, thorax of this genus, exclusively of the diversity in the structure of the antennæ, trophi, &c. and the general habit of the insects, point out their distinction from Crioceris.

Sp. 1. subspinosa. Nigra, capite, thorace, antennarum basi pedibusque flavotestaceis, thorace profundè punctato; elytris confertissimè vagè punctatis. (Long. corp. 1 d lin.)

Le. subspinosa. Panzer.-Ze. subspinosa. Steph. Catal. 210. No. 2130.

Black: head, thorax, base of the antennæ and the legs testaceous-yellow: thorax moderately convex, deeply punctate, immaculate: elytra punctate, obscure black: legs pubescent: apex of antennæ black: mandibles piceous at the tip.

Not very common, but found occasionally rather plentifully in Coombe-wood on the hazel and sallow in June. "Epping."—Mr. Doubleday. "Hornsey-wood."—Mr. Ingpen. "In woods (near Swansea), not common."—L. W. Dillwyn, Esq. "Weston."— Rev. A. H. Matthews.

- Sp. 2. flavicollis. PLATE XXII. f. 4.—Nigra, ore, thorace, antennarum basi, elytrorum angulo humerali pedibusque flavo-testaceis. (Long. corp. 2 lin.)
   Au. flavicollis. Marsham.—Ze. flavicollis. Steph. Catal. 211. No. 2131.
- Black: head yellow with the crown and eyes black: mandibles black: thorax pale yellow, rather sparingly punctate: elytra shining, deeply punctured, with the angle of the shoulders beneath yellow: legs yellow: three basal joints of the antennæ yellow, the remainder black.

Rare, at least within the metropolitan district: it has occurred in the woods about Bexley, in June. "Kimpton."—Rev. G. T. Rudd. "Near Manchester."—Rev. A. H. Matthews.

### Subsection II.-CYCLICA, Latreille.

Body oval or ovoid, rarely elongate, sometimes globular. Antennæ filiform, or gradually thickening to the apex: palpi incrassated in the middle: labium thick, square, or oval, entire or slightly notched: mandibles various, mostly toothed at the apex: maxillæ with the outer lobe narrow, somewhat cylindric and palpiform, of a dark hue: eyes simple: head sometimes concealed beneath the thorax, which last is occasionally as broad at the base as the elytra, which are in some instances shorter than the body: legs moderate: femora frequently all subequal, occasionally the posterior are greatly incrassated: *tarsi* tetramerous, the three basal joints spongy below, the penultimate bilobed.

The larvæ of the insects of this subsection, so far as known, have six legs and a soft body, and feed like the perfect insect upon the leaves of vegetables, to which they are affixed by a gelatinous substance: the insects are generally of small size, of brilliant colours and glabrous, and may be readily divided into the following families:

Antennæ basi approximatæ,	exsertæ :		•		50.	GALERUCIDÆ.
	ad basin	thorace	occultatæ	:	52.	CASSIDIADÆ.
remotæ:	•	•	•	•	51.	CHRYSOMELIDÆ.

# FAMILY L.-GALERUCIDÆ.

Antennæ inserted near the mouth between the eyes, mostly approximating at the base, filiform or a little thickened at the apex, the joints somewhat obconic or subcylindric. Palpi with the apical joint mostly conic and acute at the apex: maxillæ with the lobes subequal, the outer sublinear, the inner subquadrate: body ovate, or quadrate-ovate: legs all subequal, or the posterior femora considerably incrassated and formed for leaping.

The typical Galerucidæ are generally of plain and simple colours, but amongst the conterminous species are some of resplendent lively metallic hues: the former affect damp and marshy situations, while the latter are found chiefly amongst herbage in fields and gardens, to which they are sometimes very destructive. The British species appear to be easily divisible into the following genera:

Pedes onnes subæquales, postici non saltatorii. Antennæ artº. 2-do 3-tioque æqualibus 4-to brevioribus		
Labrum anticè emarginatum :		392. Adimonia.
integrum, sublobatum :		395. CALOMICRUS.
arto. 2-do 3-tio dimidio aut ultra breviore. corpore breviores.		
articulis subobconicis, brevibus:		393. GALERUCA.
elongatis, subcylindricis : .		391. AUCHENIA.
corporis longitudine, articulis elongatis :	•	394. LUPERUS.

\* In many of the tetramerous insects a minute fifth joint, placed within the lobes of the third, may be detected, by means of a high power, especially in Timarcha and others of the Chrysomelidæ.

Pedes postici saltatorii; femoribus incrassatis. Tidiis posticis haud externe dentatis aut spinosis.		
Tarsi postici breves, in apice tibiæ inserti :		
Corpus oblongo-ovatum.		
Thorax coleoptrorum angustior:		396. HALTICA.
latitudo.		399. MANTUBA.
hemisphæricum.		
Antennæ articulis simplicibus :		402. Sphæroderma.
inæqualibus:		403. MNIOPHILA.
Tarsi postici elongati, in apice tibiæ inserti :	•	397. THYAMIS.
ab apice tibiæ remoti :	•	398. MACROCNEMA.
Tibiis posticis externè dentatis, aut spinosis.		
dentatis, caput prominulum :	•	401. Odontocnema.
spinosis, caput intra thoracem retractum	:	400. DIBOLIA.

# GENUS CCCXCI.-AUCHENIA, Marsham.

Antennæ in both sexes shorter than the body, longest in the male, filiform, the basal joint slightly robust, the second about half the length of the third, which is elongate subcylindric, the remainder similar, and of nearly equal length. Palpi short, the terminal joint subconic: head short, broad: eyes large, prominent: thorax transverse, with the hinder angles obtuse: scutellum large: elytra considerably broader at the base than the thorax, the apex obtusely rounded with an angle within: body oblong: legs moderate: femora alike, posterior not incrassated: tibiæ simple: tarsi short.

If the structure of the antennæ is to be our guide in the formation of genera, as stated by Mr. Curtis, in his remarks on the genus Mycetophagus, the present genus from that point alone ought to be divided from Adimonia, as may be seen by a comparison of the descriptions, exclusively of the form of thorax, elytra, &c. :--the last being rounded at the apex, and having an angle within on the sutural margin; the only indigenous species moreover affects marshy districts.

- Sp. 1. quadrimaculate. PLATE XXII. f. 5. Q.—Glabra-nigra, ore, antennis pedibus thoraceque flavo-testaceis, elytris subtilissimè punctulatis flavis, maculis duabus nigris remotissimis. (Long. corp. 3-4½ lin.)
- Ch. 4-maculata. Linné.—Au. 4-maculata. Steph. Catal. 211. No. 2132.— Adi. 4-maculata.—Curtis, viii. pl. 366. 5 var.
- Oblong, glabrous: head anteriorly yellow, posteriorly black: thorax testaceousyellow, shining, with a fovea on the back in front, and another larger one behind: elytra very finely punctured, slightly glossy, testaceous-yellow, each with two black spots, one placed towards the suture at the base and rounded, the other larger, transverse, and situated near the apex: legs and antennæ also pale testaceous.
- The spots on the elytra vary considerably in size, and the apical one is sometimes divided.

Not very common; found in marshy places in various parts of the country: near London it has been taken at the end of June, and it has occurred near Bristol at the same period. "On scutellaria galericulata about the borders of Crwmlyn-bog and elsewhere, not at all uncommon."—L. W. Dillwyn, Esq. "Monk's-wood."—C. C. Babington, Esq. "Battersea-fields."—Mr. Raddon. "Plaistow-marshes and banks of the Paddington-canal."—A. Cooper, Esq.

# GENUS CCCXCII.-ADIMONIA, Schrank.

Antennæ rather short in both sexes, about half the length of the body in the males, filiform, basal joint longest, a little incrassated; second and third joint short, of nearly equal length; fourth almost as long as the first; the remainder shorter than the fourth, elongate-obconic, with the terminal joint acute. Palpi short, the apical joint conical: labrum emarginate anteriorly: head small, rounded: eyes slightly prominent: thorax transverse, broader behind than before, the hinder angles prominent: scutellum small: elytra rather broader at the base than that of the thorax, considerably dilated behind the middle, the apex with the inner angle acute: legs rather long: femora alike, pasterior not thickened: tibiæ simple: tarsi short.

In Adimonia the second and third joints of the antennæ are abbreviated and of equal length, whereas in Auchenia the second joint alone is shortened; the antennæ are also stouter in the first genus; the thorax is of dissimilar form, and the elytra broader, especially behind, with the apex not rounded on its inner margin.

- Sp. 1. Alni. PLATE XXII. f. 6. Cæruleo-violacea, nitida, elytris rufescentiviolaceis, confertissimè vagè punctulatis antennis, tibiis tarsisque nigris. (Long. corp. 3–4 lin.)
- Ch. Alni. Linné.-Adi. Alni. Steph. Catal. 211. No. 2133.
- Violet-blue, shining: head thickly rogose-punctate, with a deep frontal impression: thorax finely punctured: elytra reddish-violet, thickly and irregularly punctured: body beneath blue-black, shining, slightly punctured: femora violet-blue: antennæ, tibiæ, and tarsi dull black.

The colour above is sometimes bluish, and a little tinted with green.

Very rare in this country: it has been once taken in the vicinity of London, but I have formerly obtained several specimens from near Exeter, where they were captured in June.

Sp. 2. halensis. Flava, capite elytrisque aurato-viridibus, antennis tarsisque fuscescentibus. (Long. corp. 2-3½ lin.) Ch. halensis. Linné.-Martyn, C. pl. 15. f. 20.-Ad. halensis. Steph. Catal. 211. No. 2134.

Head green; forehead testaceous: eyes black: thorax yellow, unequal, with two impressed dots: elytra light grassy green, with a gold tinge, very thickly punctured: legs testaceous: tarsi fuscescent: antennæ also fuscescent.

The elytra are variable in colour; being bright golden-green, blue-green, or nearly bright-blue.

Very abundant within the metropolitan district, at times, especially in the autumnal months; I have taken it in profusion on the borders of a wood near Hertford, at the end of September, and occasionally about July and August. "On Rosa spinossissima, sea-shore, Marsden, in profusion."—G. Wailes, Esq. "Bath, Monk's-wood, and Dawlish, Devonshire."—C. C. Babington, Esq. "Swansea."—L. W. Dillwyn, Esq.

# GENUS CCCXCIII.-GALERUCA, Geoffroy.

Antennæ shorter than the body, filiform, the joints short, somewhat obconic, the basal one longest, subclavate, second about half the length of the third, which last is nearly equal to the fourth, the remainder subequal, or slightly decreasing in length to the apex, the terminal joint being longest. Palpi short, the apical joint obconic: head small, deeply inserted in the thorax, narrowed towards the mouth: eyes slightly prominent: thorax transverse, broad at the base, generally unequal and impressed: elytra ample, ovate or elliptical: legs short: femora alike, rather stout, the posterior not incrassated: tibiæ simple, ciliated: tarsi broad, rather short.

Galeruca, in common with Auchenia, has the second joint of the antennæ only about half the length of the third, but in Galeruca the articulations are abbreviated and somewhat obconic : the palpi are of dissimilar proportions, and the structure of the thorax is also unlike, the surface being in general deeply foveated and unequal; the species are usually of plain colours, and reside in damp, marshy situations : they vary slightly in the form of their body, and may, consequently, be divided into sections.

#### A. With the body ovate.

MANDIBULATA, VOL. IV. 31st DEC. 1831.

Sp. 1. Tanaceti. Nigra, immaculata, supra confertissime profundè rugosopunctata, elytris obsoletè elevato-lineatis. (Long. corp. 4-5<sup>1</sup>/<sub>2</sub> lin.)

Ch. Tanaceti. Linné.-Ga. Tanaceti. Samouelle, pl. 2. f. 13.-Steph. Catal. 211. No. 2135.

Black, immaculate, slightly shining, thickly and deeply punctured : head with an obsolete frontal channel: thorax unequal, with the lateral margins sinuated : elytra ample, with large irregularly placed punctures, each elytron with about five obsolete elevated longitudinal lines, of which the sutural one is most obsolete, and the others are inserted in pairs near the apex.

Immature specimens have the thorax and elytra dull griseous.

Not common within the metropolitan district: I have frequently taken it in gardens at Hertford feeding on the common raspberry. "Marsden."-G. Wailes, Esq. "Baron-wood."-T. C. Heysham, Esq. "Epping."-Mr. Doubleday. "On Crwmlyn and Sketty Burrows, not uncommon."-L. W. Dillwyn, Esq. "Cambridge, Monk's-wood, and Bath."-C. C. Babington, Esq. "Raehills."-Rev. W. Little. "Weston."-Rev. A. H. Matthews.

Sp. 2. rustica. Nigra, supra confertissime profunde rugoso-punctata, thorace elytrisque griseis, his lineis elevatis evidentioribus. (Long. corp. 4-6 lin.)
Ga. rustica. Fabricius.-Steph. Catal. 211. No. 2136.

Black; above thickly and deeply rugose-punctate: thorax griseous, with the lateral margins sinuated: elytra also griseous, opaque, deeply and thickly punctured, with five distinct elevated glossy longitudinal lines, placed as in the foregoing species: legs and antennæ black.

Taken in June and July on the borders of Whittlesea-mere.

- Sp. 3. Capreæ. Suboblongo-ovata, nigra, supra glabra, grisea, punctatissima, capite maculisque thoracis nigris. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)
- Ch. Capreze. Linné.-Martyn, C. pl. 17. f. 45.-Ga. Capreze. Steph. Catal. 212. No. 2137.
- Somewhat oblong, ovate, above glabrous: head and eyes black, the former thickly punctured, with the forehead unequal and channelled: thorax dull griseous, with three black spots placed triangularly, the disc ruggedly punctured: elytra dull-testaceous, immaculate, shining, thickly and deeply punctured: abdomen black: four anterior femora black, tibiæ and tarsi griseous, the two hinder black with the joints griseous: antennæ with the basal joints griseous tipped with black, the remainder of the latter colour.

Very abundant throughout the neighbourhood of London, on willows, sallows, &c. during the summer. "Gibside."—G. Wailes, Esq. "Frostenden, Suffolk."—W. C. Hewitson, Esq. "Sevenoaks."—Mr. Ingpen. "In Crwmlyn-bog, and about Penllergare, common."—L. W. Dillwyn, Esq. "Raehills."—Rev. W. Little.

Sp. 4. saturata. Convexa, ovata, nigra, supra glabra, griseo-atra, punctulata, capite thoraceque medio, antennis femoribusque nigris. (Long. corp.  $2\frac{1}{2}$  lin.)

Ga. saturata. Steph. Catal. 212. No. 2140.

Ovate, convex, black, above dusky griseous: head and centre of the thorax black, the latter irregularly foveolated: elytra immaculate: all the femora and antennæ black, the last slightly tinted with griseous at the base: tibiæ and tarsi dull griseous.

Probably a suffused variety of the last described insect.

Taken near London in June.

- Sp. 5. Viburni. Convexa, flavescenti-grisea, holosericeo-pubescens, maculá verticis, lineis tribus thoracis calloque humerali elytrorum nigris. (Long. corp. 3 lin.)
- Ga. Viburni. Paykul.- Steph. Catal. 212. No. 2138.-Curtis, viii. pl. 371.
- Ovate, convex, of a yellowish-griseous, with a silken down, very finely coriaceous: head with a large rounded black spot: thorax with an abbreviated longitudinal furrow behind with a black ground, and the lateral margins also broadly black : elytra with a slightly elevated line within the margin, and the shoulders produced into a black shining elevated callous: abdomen and legs dull testaceous: tibiæ fuscescent without: antennæ black, with the base of the joints dull testaceous.

Not very common near London: I have met with it occasionally at Darenth-wood, and in other parts of Kent: it has also been found in Dorsetshire. "Newcastle, abundant."—G. Wailes, Esq. "York."—W. C. Hewitson, Esq. "Dry-woods, in Gower, and about Penllergare, not uncommon."—L. W. Dillwyn, Esq.

- Sp. 6. Cratægi. Supra glabra, rufa, subtus nigra, ano pedibusque rufis, antennis brevioribus, rufescentibus, apice fuscis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>4</sub> lin.)
- Ch. Cratægi. Forster.-Martyn, C. pl. 14. f. 4.-Ga. Cratægi. Steph. Catal. 212. No. 2139.
- Ovate, above glabrous, obscure rufous, thickly and deeply punctured: eyes black : elytra mostly with two abbreviated black lines, one at the middle of the base towards the suture, and abbreviated, the other attenuated at each end within the middle of the outer margin : scutellum, breast, and abdomen black : tip of the latter rufous : legs pale rufous : sometimes dusky or black : antennæ rufous at the base, black at the apex.

Very common in May and June on the flowers of the whitethorn. "York and Lowestoft."—W. C. Hewitson, Esq. "Epping."— Mr. Doubleday. "Near Swansea, not common."—L. W. Dillwyn, Esq. "New Forest."—Rev. A. H. Matthews.

#### B. With the body elongate-ovate.

Sp. 7. Nymphææ. Subdepressa, nigra, thorace flavo, maculis tribus nigris, ore

elytrorum margine laterali pedibusque flavis, femoribus basi nigris. (Long. corp. 2-3 lin.)

- Ch. Nymphææ. Linné.-Martyn, C. pl. 17. f. 46.-Ga. Nymphææ. Steph. Catal. 212. No. 2141.
- Oblong-ovate, somewhat depressed, black : head testaceous, with the crown black ; the forehead with a delicate fascia between the antennæ: thorax testaceousyellow, very unequal, with two foveæ placed longitudinally, and a larger one on each side; in the middle of the back is an oblong black spot, and a rounded one on each side : elytra thickly and unequally punctate, dull-black, with the lateral margins and apex flavescent : abdomen flavescent at the apex: legs yellow, with the base of the femora black : antennæ black, with several of the basal joints testaceous at the base.

Taken upon various aquatic plants in May and June. "Prestwick Car."—G. Wailes, Esq. "In Crwmlyn and Sketty Bogs, not common."—L. W. Dillwyn, Esq. "Raehills."—Rev. W. Little.

- Sp. 8. Sagittariæ. Subconvexa, nigra, thorace flavo, maculis tribus nigris, ore elytrorum suturâ margine pedibusque flavescentibus, fémoribus basi fuscis. (Long. corp. 2–2½ lin.)
- Ga. Sagittariæ. Gyllenhal.-Steph. Catal. 212. No. 2142.
- Oblong-ovate, black: head flavescent in front, dusky behind, finely punctured: forehead with a deep channel: thorax yellow or griseo-flavescent, with three black spots, sometimes nearly obliterated, and foveolated as in the foregoing species: elytra fuscous, pubescent, with the lateral margins and apex, and sometimes the suture flavescent: legs flavescent, with the base of the femora, and the joints and tarsi fuscescent: antennæ with the basal joints pale at the base, their apex and the remaining joints black: mouth yellowish.

Rare: found on the Arrow head (Sagittaria sagittifolia) and other aquatic plants in May, within the metropolitan district; and also near Bristol.

- Sp. 9. Calmariensis. Supra testacea, profundè punctata, verticè, lineolâ thoracis, scutello, elytris vittâ longitudinali, corporeque subtus nigris, ano pedibusque testaceis. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)
- Ch. Calmariensis. Linné.-Steph. Catal. 212. No. 2143.
- Oblong-ovate, above testaceous, deeply punctured: head testaceous in front, black behind: thorax with an abbreviated, dilated longitudinal black line, in a dorsal furrow: elytra testaceous, with a more or less abbreviated longitudinal black dash, arising at the base and broadest towards the apex: abdomen black, with the apex testaceous: legs pale: antennæ fuscous, with the basal joints testaceous.

Abundant in many places within the metropolitan district, upon aquatic plants, during the end of May and the beginning of June. "Common (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 10. Lythri. Supra testacea. profundè punctata, verticè, lineolà thoracis, scutelloque nigris, subtus nigra ano pedibusque testaceis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
  Ga. Lythri. Gyllenhal Steph. Catal. 212. No. 2144.
- Oblong-ovate: above testaceous, deeply punctulated, the punctures somewhat ocellated: head anteriorly testaceous, posteriorly with a lunular black streak: thorax with a deep dorsal channel in which is a black line, and a deeper rounded fovea on each side: scutellum black: elytra entirely testaceous, with the humeral callous a little clouded: thorax beneath pule testaceous: breast and abdomen black, apex of the latter and the legs testaceous: antennæ testaceous at the base, the apex black.

Also far from uncommon in June, within the metropolitan district, upon aquatic plants (especially on Lythrum salicaria, according to Gyllenhal). "Not uncommon (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 11. lineola. Supra flavo testacea, punctata, sericeo-pubescens, vertice lineolâ thoracis scutelloque nigris, subtus nigra ano pedibusque flavo-testaceis. (Long. corp. 1½-2½ lin.)

Oblong-ovate: above testaceous-yellow, punctured, with a silken pubescence; forehead with a rather deep furrow: vertex with a large semicircular black spot: thorax with a longitudinal dorsal impression, sparingly and obsoletely punctured, with a wedge-formed black patch in the middle of the back: scutellum black: elytra with the disc testaceous, the lateral margins and the suture rather pale, the humeral callous dusky or black: body beneath black, with the apex of the abdomen pale: legs entirely testaceous-yellow: antennæ black, with several of the basal joints testaceous.

Also common on aquatic plants, near London, Bristol, Exeter, &c. and I believe in other parts. "Not uncommon on willows in Crwmlyn-bog, and about Penllergare."—L. W. Dillwyn, Esq.

Sp. 12. xanthomelæna. Subdepressa, supra griseo-flavescens, creberrime punctulato, thorace maculis tribus, elytris vittå intrà marginali lineoláque baseos nigris. (Long corp. 3 lin.)

Ch. xanthomelæna. Schrank.-Ga. xanthomelæna. Steph. Catal. 212. No. 2146.

Oblong-ovate, somewhat depressed; above griseous-yellow, thickly punctured: forehead with a deep furrow: vertex with a triangular opaque black spot, and above the base of the antennæ another geminated shining one : thorax unequal,

Ga. lineola. Fabricius.-Steph. Catal. 212. No. 2145.

with three black spots, the lateral ones rounded: elytra slightly pubescent, each with a black streak within the margin, arising at the humeral callous and not reaching the base, and a second slender abbreviated one towards the middle: legs stout, griseous-yellow: femora with a dusky spot externally, and the tibiæ internally with a black streak; the posterior ones armed: antennæ black above, testaceous beneath.

Rare, at least near London: found on the elm in June.

- Sp. 13. tenella. Convexa, subtus nigra, ano pedibusque pallidis, elytris simplicit\u00e9r punctatis testaceis, margine thoraceque tot\u00f5 l\u00e8t\u00e5 flavis. (Long. corp. 1\u00e2-2\u00e4 lin.)
- Ch. tenella. Linné.—Martyn, C. pl. 16. f. 24.—Ga. tenella. Steph. Catal. 212. No. 2147.
- Oblong-ovate, convex: head testaceous-yellow, with the forehead channelled and the vertex broadly black: thorax with a dorsal furrow and a rounded fovea on each side at the base, yellow or flavescent, sometimes with an obscure blackish line in the dorsal furrow: scutellum pitchy: elytra thickly and simply punctate, the disc testaceous, or rufescent, a little shining, the lateral margin and suture yellow, the humeral callous occasionally fuscous: body beneath black, with the apex and legs pale testaceous: antennæ testaceous at the base, the apex black.

Not uncommon in marshy places in July, frequenting willows, alders, &c. "Cardew-mire."—*T. C. Heysham, Esq.* "Common (near Swansea)."—*L. W. Dillwyn, Esq.* "Raehills."—*Rev. W. Little.* 

## GENUS CCCXCIV.-LUPERUS, Geoffroy.

Antennæ very slender, much longer than the body in the male, as long in the female, filiform, pubescent; the basal joint robust; second half as long as the third, which is slender; fourth and remainder cylindric, very long: terminal subfusiform, acute. Palpi short, apical joint conic, acute: labrum with a small lobe in the centre: head subtriangular, as broad as the thorax: eyes prominent: thorax transverse, rather broadest in front; the posterior angles acute: scutellum minute: elytra elongate, dilated behind: legs rather long: femora alike, posterior not formed for leaping: tibiæ slender, posterior not bent: tarsi rather long.

The pretty genus Luperus may be at once recognized from the preceding, by having the second joint of the antennæ about half the length of the third only, and the latter considerably attenuated at the base, the remaining joints long, very much elongate: the form of the head, thorax, and elytra are also dissimilar.

Sp. 1. rufipes. Niger, nitidus, glaber, antennarum basi pedibusque flavis, femoribus basi nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-3<sup>1</sup>/<sub>2</sub> lin.)
Cr. rufipes. Fabricius.—La. rufipes. Steph. Catal. 213. No. 2150.

Body entirely of a shining *black*, glabrous; with the base of the antennæ and the *legs rufous*-yellow, the femora black at the base.

Abundant near Ripley on willows and hedges, and not uncommon in other parts of the metropolitan district in June and July. "On the birch, not common, near Windsor."—Mr. G. Waterhouse. "Midgley-moor."—Mr. Gibson. "On willows, hazel, &c. near Swansea, common."—L. W. Dillwyn, Esq. "Raehills."—Rev. W. Little.

Sp. 2. flavipes. Niger, nitidus, glaber, thorace toto, antennarum basi pedibusque flavis, femoribus basi nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
Ch. flavipes. Linné.-Lu. flavipes. Steph. Catal. 213. No. 2149.

Shining-black, glabrous: thorax entirely, above and beneath, bright shining *yellow*, obscurely punctate: elytra thickly, but finely and obsoletely punctured: breast and abdomen black: *legs* rather *long*, *yellow*, with the femora, especially the posterior, dusky at the base: antennæ black, with three or four of the basal joints yellow.

Less common than the preceding; found occasionally in June on the hazel at Coombe-wood. "Meldon-park, &c."—G. Wailes, Esq. "Midgley-moor."—Mr. Gibson. "Birchfield-wood, near Sundridge, Kent."—Mr. Ingpen. "On oaks, &c. common (near Swansea)."—L. W. Dillwyn, Esq. "Cambridge."—C. C. Babington, Esq. "Raehills, common."—Rev. W. Little.

### GENUS CCCXCV. - CALOMICRUS, Dillwyn.

Antennæ slender, as long or longer than the body, filiform; basal joint slightly robust, as long as the fourth; second and third stout, of equal length, the two united shorter than the fourth, which is elongate, and of similar length to the remainder. Palpi short, terminal joint acute: labrum entire, slightly lobed: head small, narrower than the thorax: forehead prominent: eyes scarcely prominent: thorax transverse, the sides rounded: elytra elongate, slightly attenuated at the apex : *legs* long, slender : *femora* alike, *posterior* not thickened : *tibiæ* slender, simple, posterior slightly curved : *tarsi* rather long.

The characters which appear to separate this genus from Luperus, consist not only in the structure of the antennæ, of which the second and third joints are both short and of uniform length, but the trophi are slightly dissimilar, the head narrower than the thorax, the latter with the sides rounded, the elytra slightly attenuated at the apex : the legs more slender, with the posterior tibiæ slightly bent, &c. ; the indigenous species frequents heathy places.

- Sp. 1. circumfusus. Niger, thorace antice flavo, elytris flavis, margine exteriore suturâque nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Cr. circumfusa. Marsham.-N. G. circumfusa. Steph. Catal. 212. No. 2148. -Lu. Brassicæ. Curtis, viii. pl. 370.
- Black, shining, punctate, glabrous: thorax anteriorly yellow, posteriorly black, the latter colour bilobed in the middle: elytra yellow, with the suture and the anterior margin broadly black: abdomen black beneath: legs black, with the tibiæ rufescent: antennæ black, rufescent at the base.
- Panzer erroneously figures this insect as the Ga. Brassicæ of Fabricius, and transcribes the Fabrician description of that insect: it is therefore evident that he was not the first to detect this species; I have therefore adhered to the name given in my Catalogue, after Marsham, who ascertained that it was not a Fabrician species.

Not very common within the metropolitan district, but apparently abundant near Bristol; I have taken a few examples near Ripley and at Hertford, on the furze: it also occurs in Norfolk, the New Forest, &c. during the summer. "Prestwick Car."—G. Wailes, Esq. "Neighbourhood of Swansea."—L. W. Dillwyn, Esq.

# GENUS CCCXCVI.-HALTICA, Illiger.

Antennæ 11-jointed, much shorter than the body, slender; the basal joint longest, slightly robust and bent; the second joint elongate, a little shorter than the third, or subglobose and about half as long as the third, which is elongate; the remainder gradually decreasing in length, but slightly increasing in thickness to the apex, the apical joint being longest, and generally acute: head transverse, not concealed beneath the front of the thorax: eyes moderate, slightly prominent: thorax transverse, the hinder angles obtuse, sometimes with a deep transverse furrow behind near the base: *elytra* elongate, more or less distinctly punctate, or the punctures occasionally disposed in striæ: *body* mostly oblong-ovate: anterior and intermediate *femora* simple; posterior very much incrassated, and formed for leaping: *tibiæ* slender, not dentate, nor ciliated externally; posterior with a simple spine: *tarsi* short, posterior inserted into the apex of the tibiæ.

There is evidently too much diversity of structure amongst the saltatorial Galerucidæ to warrant their being united into one genus, a fact which Latreille in his more recent works appears to acknowledge by adopting certain of Illiger's divisions as subgenera, and which subgenera are held by him of equal value with those of the Harpalidæ, &c. In my Catalogue-of which the portion containing these insects was drawn up at least ten years since-I merely contented myself with throwing the species which I then possessed into groups, founded upon those of Illiger and the MS. ones of Kirby, but upon a more mature consideration of the subject, I feel called upon to create some of those subdivisions, and a few other anomalous groups, into genera, although perhaps I have yet stopped short, as there are still some anomalies remaining :- the true Halticæ may be known by their elongate antennæ, combined with their elongate-ovate form of body, short posterior tarsi inserted in the apex of the tibiæ, which are neither dentate nor spinous on their outer edge, and the posterior one is furnished at the apex with a simple spine.

- Sp. 1. antennata. Elongata, depressa, obscure ænea, thorace quadrato elytris obtusissimis, antennarum articulo quarto, in masculo dilatato maximo. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$  lin.)
- Ha. antennata. Olivier.-Steph. Catal. 213. No. 2151.
- Elongate, depressed, obscure æneous or coppery: thorax quadrate, elytra punctured, very obtuse: legs and antennæ fuscescent; the latter in the male with the fourth joint dilated and very large: simple in the female.

I once met with this singular insect in extreme abundance on a plant of Reseda, in a garden at Hertford; but it appears to be generally a rare species. "Near Crwmlyn-burrows, not common." -L. W. Dillwyn, Esq. "Swaffham Bulbeck."-Rev. L. Jenyns.

A. Antennæ with the fourth or fifth joint greatly incrassated in the males.
 a. Body oblong.

b. Body ovate ; elytra rounded at the apex.

- Sp. 2. Brassicæ. Ovata, convexa, saturate nigra, crebrè subtilitèr punctato, elytro singulo lineolis duabus, antennarumque basi flavo-testaceis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Ha. Brassicæ. Olivier.-Steph. Catal. 213. No. 2152.
- Ovate, convex, deep-black, thickly and delicately punctate: thorax very convex: elytra also very convex, each with two longitudinal, somewhat trigonal testaceous yellow streaks, placed one towards the base, the other near the apex, the last a little bent: femora black, shining: tibiæ and tarsi pitchy-fuscous: antennæ testaceous at the base, fuscous at the apex, the fifth joint in the male enlarged, and in the female elongate.

Rare near London: I have taken it at Hertford, and once near Ripley. "Cummersdale."—T. C. Heysham, Esq.

B. Antennæ simple in both sexes.

- a. Thorax without a transverse impression behind.
  - \* Elytra punctulate; not striated.
- Sp. 3. Nemorum. Oblonga, subdepressa, nigra, crebrè punctata, clytris vittâ longitudinali integrâ sulphureâ, antennarum basi tibiis tarsisque testaceis. (Long. corp. 1−1¼ lin.)
- Ch. Nemorum. Linné.—Don. xvi. pl. 569. f. 1.—Ha. Nemorum. Steph. Catal. 213. No. 2153.
- Oblong-ovate, somewhat depressed, black, thickly punctured: forehead with a longitudinal carinula between the antennæ, above which is a duplex fovea: thorax more deeply punctured than the head: *elytra* moderately convex, greenish-black, with a broad entire longitudinal sulphureous streak, a little bent at the apex, which it does not touch: femora black: anterior knees, as well as all the tibiæ and tarsi, testaceous: base of the antennæ the same.

Very abundant, not only within the metropolitan district, but in other parts of the country, especially in newly sown turnip-fields, to which it is very destructive—thence (in common with other similar depredators), but improperly, called *turnip-fly*. "Newcastle, &c. &c."—G. Wailes, Esq. "York and Oxfordshire."—W. C. Hewitson, Esq. "Cramond, abundant."—Rev. W. Little. "Holmegate, &c."—T. C. Heysham, Esq. "Swansea, abundant."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

Sp. 4. flexuosa. Oblongo-ovata, subdepressa, nigra, crebrè punctata, elytris vittà longitudinali angustà sinuatà, luteo-testaceà, antennarum basi testaceo. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)

Ha. flexuosa. Ent. Hefte.-Steph. Catal. 214. No. 2154.

- Oblong-ovate, slightly depressed, black, thickly punctured: elytra with a narrow sinuated pale luteo-testaceous longitudinal streak, reaching from the base to the apex: legs black, with the joints piceous: antennæ testaceous at the base: the apex dusky-black.
- Variable in regard to the form of the pale streak on the elytra, which is, however, always narrow, and not interrupted in the middle of its outer edge: the legs are sometimes pale.

Less abundant than the last, but nevertheless very common in the vicinity of London, frequenting grassy places, fields, &c. "York and Oxford."—W. C. Hewitson, Esq.

- Sp. 5. sinuata. Oblongo-ovato, subdepressa, nigra, crebrè punctatâ elytris vittâ longitudinali latâ emarginato-sinuatâ luteo-testaceâ, antennarum basi testaceis. (Long. corp. 1 lin.)
- Ha. sinuata. Steph. Catal. 214. No. 2155.
- Oblong-ovate, slightly depressed, black, thickly punctate: elytra with a broad luteo-testaceous streak arising at the base and reaching to the apex, with a black semicircular lobe in the middle of its exterior edge: legs entirely black: antennæ with the five basal joints testaceous, the rest black.

Also not common near London. "Swansea, common."—L. W. Dillwyn, Esq.

- Sp. 6. vittata. Oblonga, atra, elytris pallide testaceis, margine omni fasciáque mediú atris. (Long. corp. 1<sup>3</sup>/<sub>8</sub> lin.)
- Ha. vittata. Steph. Catal. 214. No. 2156.
- Oblong, black, depressed, shining, punctured: elytra pale testaceous, with the entire margin and a fascia in the middle black: legs black: antennæ with the base pale.

Found near London, and in Norfolk, but apparently scarce.

- Sp. 7. Lepidii. Elongata, depressiuscula, subtilitèr punctulata viridi-ænea, antennis pedibusque nigris, thorace anticè angustiori, elytris obtusis. (Long. corp. 1−1<sup>3</sup>/<sub>8</sub> lin.)
- Ha. Lepidii. Ent. Hefte.-Steph. Catal. 214. No. 2157.
- Elongate, somewhat depressed, finely punctured, greenish-brass: thorax a little narrowed anteriorly, above rather convex and prettily punctured: elytra with the apex obtusely rounded, greenish-blue, more deeply punctured than the thorax: body beneath bluish: legs black: femora a little bluish: antennæ entirely black.

Not very uncommon in woods and hedges within the metropolitan district.

- Sp. 8. lens. Oblongo-ovata, subdepressa, cærulea, aut violacea, subtilissimè punctulata, antennis pedibusque nigris, thorace anticè angustiori, elytris obtusis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Ch. lens. Thunberg .- Ha. lens. Steph. Catal. 214. No. 2158.
- Oblong-ovate, slightly depressed, finely punctured, blue or violet: thorax a little narrowed anteriorly: elytra rather more deeply and thickly punctured than the thorax: antennæ and legs black: body beneath also black.
- Probably a variety of the preceding, from which it chiefly differs in colour.

Taken near London in June.

- Sp. 9. obscurella. Oblongo-ovata, depressa, punctulata, obscure ænea, antennis basi rufis pedibusque nigris, elytris apice obtusis. (Long. corp. 1-11 lin.)
  Ha. obscurella. Illiger.—Steph. Catal. 214. No. 2159.
- Oblong-ovate, slightly depressed, punctulate: dull brassy, with the elytra obtuse at the apex: legs and antennæ black, the latter rufous at the base.

Found in the neighbourhood of London, and near Bristol.

- Sp. 10. punctulata. Oblongo-ovata, depressa, atra, nitida, punctata, elytris apice obtusis, antennis pedibusque nigris. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Ch. punctulata. Marsham.-Ha. punctulata. Steph. Catal. 214. No. 2160.
- Oblong-ovate, *depressed*, shining *black*, punctured; the elytra obtuse at the apex: *antennæ entirely* and legs *black*.

Not uncommon in hedges in June within the metropolitan district; found also near Bristol.

Sp. 11. melæna. Oblonga, depressa, punctata, atra vel cyaneo-nigra, punctulata, thorace subquadrato. (Long. corp. 1 lin.)

Ha. melæna. Illiger .- Steph. Catal. 214. No. 2161.

Oblong, depressed, punctured; *black* or blue-black: *thorax subquadrate*: antennæ and legs black.

Not very common: found near London, and in Norfolk.

- Sp. 12. nigroænea. Oblonga, nigro-ænea, punctulatissima, antennis pedibusque atris. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Ch. nigroænea. Marsham.-Ha. nigroænea. Steph. Catal. 214. No. 2162.
- Oblong, black-brass, very thickly punctured: elytra obtuse at the apex: antennæ and legs black.

Found within the metropolitan district: I took several specimens at Ripley, in June, 1827. "On Polygonum aviculare (near Swansea), not common."—L. W. Dillwyn, Esq.

- Sp. 13. quadriguttata. Oblonga, atra, elytris lineâ flavâ medio interruptâ, antennis pedibusque nigris. (Long. corp. 1 lin.)
   Ha anadriguttata. Stark Cord. 214. No. 2162
- Ha. quadriguttata. Steph. Catal. 214. No. 2163.
- Oblong, black, finely punctured: elytra each with a yellow central interrupted streak, forming, as it were, two spots on each: antennæ and legs black.

The vitta on the elytra is sometimes scarcely interrupted.

Marsham's name, quadripustulata, having been applied to this insect subsequently to Panzer's similar application to another species, it became necessary to change the former in my Catalogue; but Marsham's name has recently been reinstated, contrary to all rules but that of inconsistency.

A rare species; found near London, and in Norfolk. "New Walk, York."—W. C. Hewitson, Esq. "Near Swansea, not common."—L. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews.

- Sp. 14. Cyparissiæ. Suboblonga, testacea, lævis, fronte tuberculis binis interocularibus, elytris pallidis, subtilissimè punctulatis, abdomine piceo. (Long. corp. 1½ lin.)
- Ha. Cyparissiæ. Ent. Hefte.-Steph. Catal. 214. No. 2165.
- Somewhat oblong, testaceous, smooth: the forehead with two tubercles between the eyes: elytra pale, very finely punctured: abdomen piceous: legs and antennæ testaceous: the hinder tibiæ dusky-brown.

This likewise appears to be a scarce insect : it has been taken in Devonshire, and in Norfolk.

- Sp. 15. Euphorbiæ. Ovata, nigra nitida, supra æneo vel cærulescenti-micans, antennarum basi pedibusque pallidis, thorace sublævi, elytris subtilitèr impressis. (Long. corp. 1 lin.)
- Cr. Euphorbiæ. Fabricius.-Ha. Euphorbiæ. Steph. Catal. 214. No. 2166.
- Ovate, black, shining; above with a brassy or bluish gloss: head and thorax very minutely punctured, the latter very glossy: elytra also finely punctured, less shining than the thorax: legs testaceous-yellow, with the posterior femora more or less dusky at the apex: antennæ black, with the base testaceous-yellow.

Extremely abundant in marshy places within the metropolitan district, especially in Battersea-fields. "New Walk, York."— W. C. Hewitson, Esq. "Near Swansea, not uncommon."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

Sp. 16. atrocærulea. Atra, confertissimè punctulata, supra atrocærulea, antennarum basi pedibusque pallidis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
Ha. atrocærulea. Steph. Catal. 214. No. 2167.

Deep black; rather shining, and very thickly punctured: head and thorax deepblack blue, more glossy than the elytra, which are less punctured: legs entirely pale testaceous: antennæ black, with the base pale.

Not very abundant; found near Hertford and near Bristol; also in the vicinity of Norwich.

Sp. 17. cærulea. Ovata, supra cærulea, nitida, antennarum basi pedibusque pallide testaceis, femoribus posticis apice fuscis, elytris crebre, subtilitèr punctulatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)

Ha. cærulea. Ent. Hefte.-Steph. Catal. 214. No. 2168.

Ovate, black; above shining blue: head scarcely punctured: thorax rather widened posteriorly, very glossy, and scarcely punctured: elytra less glossy, rather obsoletely and irregularly punctured, with the interstices slightly wrinkled: legs pale testaceous, with the apex of the posterior femora fuscous: antennæ black, with the four or five basal joints pale testaceous.

Rather uncommon; found occasionally within the metropolitan district, and also near Bristol.

Sp. 18. Pseudacori. Ovata, nigra, supra atro-cærulea lævis nitida, antennis basi rufescentibus. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)

Ch. Pseudacori. Marsham.-Ha. Pseudacori. Steph. Catal. 215. No. 2169.

Ovate, black; above deep-blue, smooth and shining: head and thorax minutely and thickly punctured throughout: legs black: antennæ rufescent towards the base, with the apex deep black.

Less common than several of the immediately preceding species; found on the Iris Pseudacorus, in June. "Dalmeny."—Rev. W. Little. "Prestwick Car."—G. Wailes, Esq. "Swansea, common." L. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews.

- Sp. 19. fuscicornis. Nigra, capite, thorace pedibus antennarumque basi rufis, elytris cæruleo-virentibus, subtilitèr vagè punctulatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Ch. fuscicornis. Linné.-Ha. fuscicornis. Steph. Catal. 215. No. 2170.-Ch. rufipes. Donovan, xi. pl. 365. f. 3.
- Ovate, black: head, thorax and legs entirely rufous: elytra greenish-blue, but variable in tint, finely and irregularly punctulated: antennæ black, with a few of the basal joints rufous.
- In this species the second joint of the antennæ is distinctly shorter than the third.

Very abundant in hedges in the neighbourhood of the metropolis. "Armathwaite."—T. C. Heysham, Esq. "Swansea, common."— L. W. Dillwyn, Esq.

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- \*\* Elytra punctate-striated.
- Sp. 20. erata. Atra, supra nigro-ænea, elytris obsoletè striatis, antennis basi pedibusque rufis. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
- Ch. ærata. Marsham.-Ha. ærata. Steph. Catal. 217. No. 2210.
- Ovate, beneath black; above brassy-black: head and thorax finely punctured: elytra obsoletely striated, the striæ subpunctate: legs rufous: antennæ black, with the base rufous.
- The antennæ in this and the three following species are short, the articulations being abbreviated, thereby approaching to the genus Mantura.

Not common near London: I have taken it at Dover. "Raehills."-Rev. W. Little. "Weston."-Rev. A. H. Matthews.

- Sp. 21. striatula. Nigra, elytris obsolete punctato-striatis, antennis totis pedibusque rufis. (Long. corp. ½ lin.)
- Ch. striatula. Marsham.-Ha. striatula. Steph. Catal. 217. No. 2211.
- Ovate, black; slightly shining: head and thorax finely punctured: elytra obsoletely punctate-striate: the legs and antennæ entirely rufous.

Far from rare in the vicinity of the metropolis in June. "Weston." —Rev. A. H. Matthews.

- Sp. 22. Rubi. Nigra, nitida; antennis pedibusque rufis, elytris profundè regularitèr punctato-striatis. (Long. corp. <sup>1</sup>/<sub>2</sub>-<sup>3</sup>/<sub>4</sub> lin.)
  Ha. Rubi. Fabricius.-Steph. Catal. 217. No. 2212.
- Ha. Rubl. Fabricius.—Steph. Catal. 211. 100. 2212.
- Ovate, convex, black, shining: thorax thickly and very finely punctured: elytra deeply and regularly punctate-striate, with the interstices smooth: legs and antennæ entirely rufous: the posterior femora sometimes slightly piceous.

Also abundant within the metropolitan district. "Swansea, not common."—L. W. Dillwyn, Esq.

- Sp. 23. brunnicornis. Atro-picea, nitida, pedibus rufis, antennis piceo-brunneis, elytris subpunctato-striatis. (Long. corp. 3 lin.)
  Ha. brunnicornis. Steph. Catal. 217. No. 2213.
- Pitchy-black, shining: thorax rather thickly and finely punctured: elytra somewhat deeply punctate-striate, the interstices smooth: legs entirely dull rufous: antennæ pitchy-brown.

Found in June near London, at Ripley.

Sp. 24. fuscipes. Convexa, nigra, capite thorace antennarumque basi rufis, elytris cæruleo-virentibus punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
Ha. fuscipes. Panzer.-Steph. Catal. 217. No. 2214.

- Ovate, convex, black, shining: head and thorax rufous, the latter very glossy, with a faint oblique fovea on each side at the base: elytra greenish-blue, but variable in hue, rather irregularly punctate-striate: legs and antennæ black, the base of the latter rufous.
- The antennæ in this and the following species are not very dissimilar in structure to those of Ha. fuscicornis.

Very common in hedges from April to July near London. "Occasionally near Swansea."—L. W. Dillwyn, Esq. "Weston."— Rev. A. H. Matthews.

Sp. 25. tripudians. Enco-picea, capite, thorace, tibiis antennarumque basi rufis, elytris viridi-cæruleis, punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>3</sub>−1<sup>1</sup>/<sub>2</sub> lin.)
Ha. tripudians. Kirby MSS.-Steph. Catal. 217. No. 2215.

Ovate, convex, pitchy-brass, shining: head, thorax, tibiæ, and base of the antennæ, rufous: elytra punctate-striate, of a greenish-blue: femora pitchy.

Taken near London; in Suffolk and about Bristol.

\* \* \* Elytra smooth impunctate.

†Sp. 26. Kirbii. Flava, lævigata, elytris femoribusque posticis cyaneo-viridibus. (Long. corp. 2½ lin.)

Ha. Kirbii. Steph. Catal. 218. No. 2227.

- Larger than Ha. oleracea: very smooth and totally without punctures; yellow, with the elytra and hinder femora blue-green.
- I have much pleasure in dedicating this large and remarkably beautiful species after my friend the Rev. W. Kirby, his MS. name H. cyanoptera being preoccupied, for a dissimilar insect, by Illiger. Whether the insect belongs to this genus, I have not the present means of determining: it is now upwards of ten years since I saw it, but I suspect that it is a true Haltica.

Taken near Livermere, in Suffolk, I believe during a flood.

b. Thorax posteriorly with a transverse impression.

\* Elytra punctate-striate.

Sp. 27. ferruginea. Oblonga, ferruginea, glabra, immaculata, elytris irregularitèr punctato-striatis, oculis nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>4</sub> lin.)

Ha. ferruginea. Schrank.-Steph. Catal. 218. No. 2228.

Oblong, ferruginous, glabrous, immaculate: eyes black: thorax with a transverse posterior impression abbreviated at each extremity: elytra striate, the striæ composed of minute irregularly disposed punctures: legs and antennæ rather pale.

The second joint of the antennæ is considerably abbreviated in this, and the subsequent species of the genus.

Very abundant within the metropolitan district. "Common near Swansea."—L. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews. "New Walk, York."—W. C. Hewitson, Esq. "Raehills."—Rev. W. Little.

Sp. 28. flava. Oblongo-ovata, rufo-testacea, nitida, immaculata, oculis nigris, elytris regulariter punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
 Mord. flava. Linné.—Ha. flava. Steph. Catal. 218. No. 2229.

Oblong-ovate, rufo-testaceous, shining, immaculate: eyes black: thorax with a deep abbreviated transverse impression behind: elytra regularly and rather deeply punctate-striate: legs and antennæ pale testaceous.

Less abundant than the last; not very common near London : found near Bristol. "Swansea, not common."—L. W. Dillwyn, Esq.

Sp. 29. similis. Oblongo-ovata, pallide rufo-testacea, subnitida, immaculata, oculis nigris, elytris subregularitèr punctato-striatis. (Long. corp. 1-1<sup>1</sup>/<sub>2</sub> lin.)
 Ha. similis. Kirby MSS.—Steph. Catal. 218. No. 2230.

Less than the preceding: oblong-ovate, pale rufo-testaceous, immaculate: eyes black: thorax very globose and more glossy than the elytra, which are some-what irregularly punctate-striate.

Probably an immature state of the foregoing species.

Found in Norfolk, Suffolk, and near London. "Swansea."— L. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews. "Meldon-park."—G. Wailes, Esq.

- Sp. 30. affinis. Oblongo-ovata, minus convexa, nigra, thorace, elytris, antennis, tibiis tarsisque pallidè testaceis, suturâ elytrorum nigricante. (Long. corp.  $1\frac{1}{4}-1\frac{1}{3}$  lin.)
- Ha. affinis. Ent. Hefte.-Steph. Catal. 218. No. 2231.-Ch. atricilla. Don. v. xvi. pl. 566.
- Oblong-ovate, slightly convex, black: thorax and elytra pale testaceous, the former finely and very obsoletely punctulate, the latter regularly and rather deeply punctate-striate, the suture, especially in the middle, dusky or blackish: femora piceous, posterior black: tibiæ and tarsi testaceous: antennæ pale testaceous.

Not very common; taken occasionally within the metropolitan district, and in Norfolk, and near Bristol. "Holme-gate."—T. C. Heysham, Esq.

Sp. 31. Salicariæ. Ovata, convexa, pallidè testacea, elytris dilutioribus, pectore abdomineque piceis, oculis nigris, antennis apice fuscescentibus. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)

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Ga. Salicariæ. Paykul.-Ha. Salicariæ. Steph. Catal. 218. No. 2232.

Ovate, convex, pale-testaceous: head rufescent: eyes black: thorax very convex, shining, faintly but thickly punctured: elytra rather pale, very convex, rather deeply punctate-striate; the suture sometimes fuscescent: breast and abdomen piceous: legs entirely pale: antennæ fuscescent, with the base pale testaceous.

Not common: found near London and Bristol; also in Norfolk.

- Sp. 32. Modeeri. Brevitèr ovata, convexa, ænea, nitidissima, antennarum basi, elytrorum apice pedibusque lutescentibus. (Long. corp.  $\frac{3}{4}$ -1 lin.)
- Ch. Modeeri. Linné. Don. xvi. pl. 569. f. 2.—Ha. Modeeri. Steph. Catal. 218. No. 2233.
- Short, ovate, convex, very glossy, brassy: head with a longitudinal carina between the antennæ: thorax very convex anteriorly, with a transverse depression posteriorly, and on each side a deep fovea, the disc finely punctulate: elytra regularly and rather deeply punctate: tibiæ æneous, with the apex more or less lutescent or yellow: legs stout, pale testaceous; with the apex and the hinder femora rufo-piceous: antennæ black with the base testaceous.

Abundant in grassy places in Battersea-fields in June; and found in Somersetshire. "Common, particularly on Crwmlyn and Sketty Burrows."—L. W. Dillwyn, Esq. "Cardew-mire."—T. C. Heysham, Esq. "New Walk, York."—W. C. Hewitson, Esq.

- Sp. 33. rufipes. Ovata, capite, thorace, antennis pedibusque totis rufis, elytris cæruleo-virescentibus, minus profundè punctato-striatis, pectore abdomineque nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.)
- Ch. rufipes. Linné Ha. rufipes. Steph. Catal. 218. No. 2234. Ch. ruficornis. Don. xi. pl. 365. f. 2.
- Ovate: head rufous, with a longitudinal frontal carina, and two small tubercles: thorax also entirely rufous, shining, with a transverse impression posteriorly, and a deep fovea on each end thereof: scutellum and clytra blue or greenish, the latter deeply punctate-striate, the strike rather irregular towards the apex: breast and abdomen black: legs and antennæ entirely rufous.

Rather local, but very abundant at Darenth-wood, in June, and in the vicinity of Dover. "Epping."—Mr. Doubleday. "Weston." — Rev. A. H. Matthews. "New Walk, York."—W. C. Hewitson, Esq. "Meldon-park."—G. Wailes, Esq.

- † Sp. 34. femorata. Ovata, capite, thorace, tibiis tarsisque rufis, elytris cæruleis profundè punctato-striatis, ore, femoribus, pectore abdomineque nigris. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
- Ha. femorata. Gyllenhal.-Steph. Catal. 218. No. 2235.

Orate, with the head, which has a faint longitudinal carina between the eyes and two slightly visible tubercles, thorax, tibix, and tarsi entirely rufous: elytra dark blue, and deeply punctate-striate, the strixe composed of larger and fewer punctures than in the preceding species, and disposed irregularly towards the apex: mouth, femora, breast, and abdomen black.

Taken in Suffolk, and near "Windsor."-Mr. G. Waterhouse.

- Sp. 35. nitidula. Oblongo-ovata, subtilitèr punctulata, thorace capiteque viridiaureis, elytris cæruleis, striis subtilioribus intricatis, antennarum basi pedibusque anterioribus rufis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Ch. nitidula. Linné.-Don. viii. pl. 273.-Ha. nitidula. Steph. Catal. 219. No. 2235.
- Oblong-ovate, very delicately punctate: head golden-green, with the vertex extremely glossy: thorax also golden-green, very shining and thickly but finely punctured: *elytra* blue, shining, delicately punctate-*striate*, the *striw* somewhat irregular, especially towards the suture: *legs* pale *testaceous*-yellow, with the *hinder femora* broad, *black*, shining, and with a brassy-hue: *antennw* pale *testaceous*, with the *apex black*.

Rather scarce; found on willows near London, and in the neighbourhood of Bristol.

- Sp. 36. Helxines. Ovata, thorace profundè punctato, æneo, aut aureo-viridi, elytris æneis aut cyaneis regularitèr profundè punctato-striatis, antennis pedibusque flavo-testaceis, femoribus posticis sæpe infuscatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Ch. Helxines. Linné.-Ha. Helxines. Steph. Catal. 218. No. 2236.
- Ovate, deeply punctured: head brassy-green, rather finely punctured, with the forehead opaque: thorax deeply punctured, golden-green, or brassy, or brassy-copper, shining: elytra moderately convex, regularly and deeply punctate-striate, with the interstices smooth; the colours bright-green, or golden-green, or brassy, or deep copper, sometimes concolorous with the thorax, at others different therefrom: legs testaceous-yellow, with the posterior femora sometimes clouded; rarely black or fuscous, with a brassy tinge: antennæ also testaceous.

Much more abundant than the immediately preceding and the following species, in the vicinity of the metropolis, where it occurs on poplars and willows during the summer. "Willows (about Swansea) very common."—L. W. Dillwyn, Esq. "Bottisham."— Rev. L. Jenyns.

- Sp. 37. fulvicornis. Ovata, thorace subprofundè punctata, corpore tóto supra intensè rubro-cupreo, elytris profundè et regularitèr punctato-striatis, antennis pedibusque fulvis. (Long. corp. 2 lin.)
- Ch. fulvicornis. Fabricius .- Ha. fulvicornis. Steph. Catal. 218. No. 2237.
- Ovate, with the thorax rather deeply punctate: the body above entirely of a deep and brilliant *red-copper*: elytra very deeply and regularly punctate-striate, with the sides sometimes greenish: *legs entirely* and antennæ *bright fulvous*: the posterior femora occasionally a little fuscescent.

Found within the metropolitan district on willows, not uncommonly.

Sp. 38. cyanea. Ovata, thorace virescenti-cæruleo, elytris violaceis punctatostriatis, antennis pedibusque striatis, femoribus posticis nigris. (Long. corp.  $|\frac{1}{4}-2 \text{ lin.}$ )

Ch. cyanea. Marsham.--Ha. cyanea. Steph. Catal. 219. No. 2239.

Ovate, and rather glossy: head and thorax greenish-blue, with minute impressed punctures: elytra deep blue or violaceous, rather deeply and regularly punctate-striate: body black beneath: legs testaceous, with the hinder femora black: antennæ testaceous.

Very rare, apparently; my specimens I obtained from the Marshamian cabinet.

Sp. 39. gaudens. Cyanea, antennis pedibusque flavis. (Long. corp. 2 lin.) Ha. gaudens. Kirby MSS.—Steph. Catal. 219. No. 2240.

Ovate-cyaneous, with the antennæ and legs entirely yellow : elytra punctate-striate. Probably a variety of the preceding species.

Also very rare: taken in Suffolk.

- \* \* Elytra sprinkled with impressed dots, not disposed in striæ.
- Sp. 40. Oleracea. Oblongo-ovata, convexa, cæruleo-virescens, antennis nigris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Ch. Oleracea. Linné.-Ha. Oleracea. Steph. Catal. 219. No. 2242.
- Oblong-ovate, convex : *blue-green* : head sparingly punctured, with the forehead unequal, and having a faint longitudinal carina : thorax with the sides slightly margined, the disc moderately convex, obsoletely punctured, the posterior impression nearly extending to the margins, and terminating in an obsolete fovea at each extremity: *elytra green or bluish*, sometimes *dusky*, or *faintly brassy*, *thickly* and very finely *punctured* : legs bluish, posterior femora rather long, with a furrow beneath: tarsi fuscous: antennæ black.

Abundant near London, devouring the cotyledons of plants, and on

hazels, during the summer. "Common, particularly in woods about Swansea."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

Sp. 41. indigacea. Oblongo-ovata, nigro-cyanea, supra atro-purpurea, elytris subtilissimè punctatis, antennis atris. (Long. corp. 3 lin.)
Ha. indigacea. Illiger?—Steph. Catal. 219. No. 2243.

Oblong, *blue-black*, above deep-purple and shining: thorax with the posterior channel abbreviated: *elytra* very *finely punctulated*, and less shining than the thorax : antennæ black.

Less frequent than the last; found near London, and in Devonshire.

Ga. Erucæ. Fabricius.-Ha. Erucæ. Steph. Catal. 219. No. 2244.

Oblong-ovate, above glabrous, glossy blue; the elytra obsoletely punctured: body beneath greenish blue: legs violaceous: antennæ black.

Not so abundant as the last species but one, but nevertheless not uncommon in the vicinity of London, and in the New Forest. "Sometimes plentiful near Swansea."—L. W. Dillwyn, Esq.

# GENUS CCCXCVII.-THYAMIS mihi.

Antennæ shorter than the body, slender; the basal joint stoutest and curved; second and third joints abbreviated, of equal length; three following, elongate, slender; the remainder stouter, shorter, and pubescent: head small, triangular, not concealed beneath the anterior margin of the thorax: eyes prominent: thorax short, subtransverse, and slightly cylindric, smooth, without a transverse impression: elytra convex, ample, slightly dilated behind, and often rather shorter than the abdomen, generally punctate, or nearly smooth: body more or less elongate; anterior and intermediate femora slender; posterior greatly incrassated: tibiæ simple, not dentate; posterior longest, slightly curved, the apex obliquely truncate, and terminating in a simple spine: the tarsi, of which the basal joint is very long, inserted at the apex.

Exclusively of the dissimilarity in the proportion of the joints of the antennæ, Thyamis differs from the preceding and following genera, by having the thorax comparatively slender, the elytra very convex, the posterior tarsi with the basal joint very long and slender, and inserted at the apex of the tibiæ, which are obliquely truncate:—the species are generally of pale hue, and are very

Sp. 42. Erucæ. Oblonga, ovata, cærulea, nitida, antennis solis nigris. (Long. corp. 2<sup>1</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>2</sub> lin.)

closely allied; but at the same time externally variable, and consequently difficult to determine.

Sp. 1. quadripustulata. Ovata, nigra, lævis, elytris punctatis, maculis duabus antennarum basi pedibusque testaceis, femoribus posticis nigris. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)

Ha. 4-pustulata. Illiger.-Steph. Catal. 215. No. 2171.

Ovate, black : head finely punctured: thorax slightly glossy and punctured: elytra black, with two large testaceous spots, one towards the base, the other near the apex; the disc obscurely punctured: legs rufo-testaceous, with the posterior femora black : antennæ fuscous, with the base testaceous.

Apparently very rare; I have once taken it, and possess other specimens that were captured in Suffolk : it is found on the Cynoglossum officinalis, in June.

- Sp. 2. Verbasci. Ovata, convexa, griseo-pallida, nitida, elytris subtilissimè punctulatis, subtus nigro-picea, femoribus posticis obscure ferrugineis, supernè infuscatis. (Long. corp. 2 lin.)
- Ch. Verbasci. Marsham.-Ha. Verbasci. Steph. Catal. 215. No. 2172.
- Ovate, convex; above entirely pale griseous, shining: head with the vertex smooth; the forehead punctate, and with a faint carina: thorax very glossy: *elytra* very finely punctured, considerably dilated behind the middle, *pale*, *immaculate*: body pitchy-black, or rufescent beneath: legs pale, the posterior femora dull ferruginous, with the upper surface and apex fuscescent.

Not common near London, but in Suffolk and Norfolk it appears to be more abundant; I once found a Verbascum near Barham, swarming with specimens, in September, 1821.

- Sp. 3. Thapsi. Ovata, convexa, fusca, thorace elytrisque pallidis, his suturâ nigrâ, antennis nigris. (Long. corp. 2 lin.)
- Ch. Thapsi. Marsham.-Ha. Thapsi. Steph. Catal. 215. No. 2173.
- Ovate, convex, fuscous: thorax pale, griseous: elytra also pale, impunctate, with the suture black: breast, abdomen, and posterior femora pitchy-black: tibiæ and tarsi fuscescent: antennæ entirely dusky-black.

Rare; found chiefly in Norfolk and Suffolk on the Verbascum Thapsus. "Swansea, not common." -L. W. Dillwyn, Esq.

- Sp. 4. tabida. Oblongo-ovata, micans, convexa, flavo-pallida, ore, oculis antennarumque apice nigricantibus, elytris latioribus, subtilissimè punctulatis.
   (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)
- Cr. tabida. Fabricius .- Ha. tabida. Steph. Catal. 215. No. 2174.

Oblong-ovate, moderately convex, pale yellowish, with the mouth, eyes and apex of the antennæ dusky or blackish: elytra rather broad, pale yellowish, immaculate, thickly but very finely punctulated : legs entirely pale testaceous.

Very common within the metropolitan district; also found near Bristol and in Norfolk, during the summer. "Cramond."—Rev. W. Little. "On Senecio Jacobæa (near Swansea), common."— L. W. Dillwyn, Esq. "Southend."—Rev. F. W. Hope.

- Sp. 5. flavicornis. Oblongo-ovata, flavo-testacea, oculis nigris, antennis totis, pedibusque pallidis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
  Ha. flavicornis. Kirby MSS.—Steph. Catal. 215. No. 2175.
- Entirely of a pale testaceous-yellow, faintly punctured: elytra slightly convex, immaculate: legs and antennæ pale: eyes black.

Less common than the foregoing: taken near London, and in Suffolk.

- Sp. 6. atricilla. Oblongo-ovata, nigro-picea, thorace subtestaceo elytris tibiisque griseo-testaceis, suturâ nigricante. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)
   Ch. atricilla. Linné.-Ha. atricilla. Steph. Catal. 215. No. 2176.
- Oblong-ovate, convex, *pitchy-black*, thickly punctate: *head and thorax* with a *brassy* tinge, the latter compressed anteriorly: *elytra* griseo-*testaceous*, very convex, more deeply punctured than the thorax, the *suture* more or less *dusky* or black: anterior *legs* and posterior tibiæ and tarsi *pale* testaceous: *posterior femora pitchy*-black: antennæ with the base pale, the apex black.

Not uncommon in June throughout the metropolitan district. "New Walk, York."—W. C. Hewitson, Esq. "Swansea, common."—L. W. Dillwyn, Esq.

- Sp. 7. piciceps. Suboblongo-ovata, pallide testacea, capite suturâ femoribusque posticis atro-piceis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
  Ha. piciceps. Steph. Catal. 215. No. 2177.
- Somewhat oblong-ovate, pale testaceous, thickly punctured: thorax slightly rufescent: head pitchy black: elytra testaceous, with the suture rather broadly black: posterior femora pitchy-black; rest of the legs and the base of the antennæ testaceous-yellow, apex of the latter black.

Taken near London, but not common.

Sp. 8. femoralis. Oblongo-ovata, subtilitèr punctulata, capite, thorace elytrorumque suturá ferrugineis, elytris pallidis, ore, oculis, antennis extrorsàm, pectore, abdomine, femorumque posticorum apice nigris. (Long. corp.  $\frac{9}{4}$ -1 lin.)

Ch. femoralis. Marsham.-Ha. femoralis. Steph. Catal. 215. No. 2178.

Oblong-ovate, slightly convex, finely punctulated: head, thoráx, and suture of the elytra dull ferruginous: the elytra pale, rather obsoletely punctured: four anterior legs and base of the antennæ also pale; apex of the latter, mouth, eyes, breast, abdomen, and tip of the hinder femora black.

Abundant in June and July within the metropolitan district. "New Walk, York."—W. C. Hewitson, Esg. "Swansea, rather common."—L. W. Dillwyn, Esg. "Bottisham."—Rev. L. Jenyns.

Sp. 9. confinis. Ovata, nigra, thorace sublævi, rufo-ferrugineo, elytris testaceis, suturâ nigricante, antennarum basi tibiisque pallidis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
Ha. confinis. Kirby MSS.—Steph. Catal. 215. No. 2179.

Ovate, convex, black : thorax rather glossy and smooth, rufo-ferruginous : elytra testaceous, finely and rather thickly punctured, with the suture entirely fuscous-black : antennæ at the base and tibiæ pale.

Equally common with the last within the metropolitan district, in the summer: also found near Bristol. "Raehills."—Rev. W.*Little.* 

- Sp. 10. atriceps. Ovata, convexa, capite fusco, thorace, elytris antennisque lividis, pedibus testaceis, abdomine nigricante. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
   Ha. atriceps. Steph. Catal. 215. No. 2180.
- Ovate, convex: head fuscous: thorax faintly punctured, of a livid yellow: elytra pale, very finely punctured, with the suture concolorous: legs testaceous: antennæ livid.

Not uncommon near London in June. "New Walk, York." -W. C. Hewitson, Esq. "Swansea, not uncommon."-L. W. Dillwyn, Esq.

- Sp. 11. Intescens. Ovata, subconvexa, flavo-testacea, subtilissimè punctulata, ore, oculis, antennarum femorumque posticorum apice, elytrorum suturâ, pectore abdomineque nigris. (Long. corp.  $\frac{3}{4}$  lin.)
- Ha. lutescens. Gyllenhal.-Steph. Catal. 215. No. 2181.
- Ovate, slightly convex, testaceous-yellow, very delicately punctulate: head with two small tubercles on the front: thorax flavescent, or pale testaceous, slightly shining: elytra a little acuminated at the apex, with an abbreviated narrow black streak on the suture, neither touching the base near the apex: mouth,

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eyes, breast and abdomen black; tip of posterior femora and of the antennæ black.

Much less abundant than the two preceding species within the metropolitan district: it occurs near Bristol. "Dorking."—Mr. G. Waterhouse. "Common (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 12. ochroleuca. Ovata, subconvexa, pallida, subtilissimè punctulata, ore, oculis femorumque posticorum apice nigris, pectore brunneo, fronte carinatá. (Long. corp. 1 lin.)

Ch. ochroleuca. Marsham.-Ha. ochroleuca. Steph. Catal. 215. No. 2182.

Ovate, slightly convex and punctulated, *pale*: head and thorax flavescent, the latter smooth: *elytra* finely but thickly punctured, very *pale*, with the *suture* concolorous: mouth, *eyes*, and apex of the posterior femora black; the rest of the legs pale flavescent: breast brown: abdomen pale: antennæ flavescent at the base, black at the apex: forehead with a distinct carina.

Extremely abundant in several parts of the country in fields, especially where turnips are grown, in June and July. "Swansea, common."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns.

- Sp. 13. suturalis. Ovata, subconvexa, nigra nitida, thorace æneo micante, elytris lividis margine suturâque nigris, femoribus posticis rufis, apicibus nigris. (Long. corp. 1 lin.)
- Ch. suturalis. Marsham.-Ha. suturalis. Steph. Catal. 215. No. 2183.
- Ovate, slightly convex, punctulated, shining *black*: thorax with a brassy gloss, finely and rather obsoletely punctured: *elytra* of a *livid testaceous*, with *the outer margin broadly black, and* a slender line of the same on *the suture*: four *anterior legs pale*: *posterior femora rufous*, with the *apex black*: tible and tarsi rufescent: base of the antenne the same.

Also a common species within the metropolitan district in June. "Raehills."—*Rev. W. Little.* "Among grass, and on the sandhills (near Swansea), not common."—*L. W. Dillwyn, Esq.* 

- Sp. 14. Nasturtii. Ovata, minus convexa, nigro-picea, nitida, antennarum basi, tibiis tarsisque ferrugineis, elytris latioribus confertissimè punctatis, testaceis, suturâ margineque nigro-fuscis. (Long. corp. 1 lin.)
- Cr. Nasturtii. Fabricius.-Ha. Nasturtii. Steph. Catal. 216. No. 2184.
- Ovate, moderately convex, *pitchy-black*, shining: head slightly brassy, with a carina on the forehead: *thorax* small, obsoletely punctured, *glossy* black: *elytra* rather broad, more or less deeply *testaceous*, with the *outer margin and*

the suture more or less broadly dusky-black, the disc thickly and distinctly punctured: four anterior femora pitchy-black, with the tibiæ and tarsi testaceous: posterior femora shining black: the tibiæ fuscous: tarsi and base of the antennæ testaceous.

Found in the vicinity of London in hedges and grassy places.

Sp. 15. thoracica. Ovata, nigra, nitida, antennarum basi, tibiis tarsisque pallidis, elytris obsoletissimè punctulatis, testaceis, suturâ nigrâ. (Long. corp. 1 lin.)

Ha. thoracica. Kirby MSS.-Steph. Catal. 216. No. 2185.

Ovate, slightly convex, deep *black*, shining: thorax distinctly punctate: *elytra* rather broad, *testaceous*, very obsoletely and distantly punctured, pale testaceous, with the outer margin and suture deep *black*: femora black: tibiæ, tarsi, and base of the antennæ pale.

Also common throughout the vicinity of the metropolis, and in Norfolk, Suffolk, &c.

- Sp. 16. fuscicollis. Ovata, fusca, nitida, antennarum basi, pedibusque testaceis, femoribus posticis atris, elytris obsoletissimè punctulatis, luteo-testaceis, sutura medio nigro. (Long. corp. 1 lin.)
- Ha. fuscicollis. Kirby MSS .- Steph. Catal. 216. No. 2186.
- Ovate, fuscous, shining: thorax finely punctate, fusco-æneous: elytra broad, very obsoletely punctured, pale luteo-testaceous, with the suture black in the middle, the colour sometimes extending to the apex: legs testaceous, with the posterior femora black: antennæ pale at the base, the apex fuscous.

Not uncommon throughout the metropolitan district; found also in Suffolk, and near Bristol.

Sp. 17. Ballotæ. Ovata, paulo convexa, testacea, subtilissimè punctulatú, capite nigro, pedibus testaceis, thorace rufo-testaceo. (Long. corp. 1 lin.)

Ch. Ballotæ. Marsham.--Ha. Ballotæ. Steph. Catal. 216. No. 2187.

Ovate, slightly convex, very finely punctured, testaceous: head black: thorax rufo-testaceous: elytra pale testaceous, very delicately punctured, the suture slightly rufescent: legs testaceous: antennæ long: femora with the base testaceous.

Not very abundant near London: it occurs in Suffolk and Norfolk. "Swansea, not uncommon."-L. W. Dillwyn, Esq.

- Sp. 18. pratensis. Ovata, convexa, nigra, suprà subtilitèr, crebrè punctulata, antennarum basi, thorace elytris pedibusque pallidis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)
   Ha. pratensis. Panzer.-Steph. Catal. 216. No. 2188.
- Ovate, convex, black, above very finely and thickly punctulate : head black or tes-

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taceous, slightly carinated in front: thorax pale testaceous, thickly and rather obsoletely punctured, the anterior margin sometimes black: *elytra* finely and *distantly punctured*, entirely *pale*, rounded at the shoulders and apex: *legs* and antennæ at the base *pale*: tip of the posterior femora sometimes dusky.

Found near London and Bristol in June.

- Sp. 19. pallens. Ovata, convexa, pallida, subtilissimè punctulata, oculis nigris, abdominis basi fuscá. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
   Ha. pallens. Kirby MSS.—Steph. Catal. 216. No. 2189.
- Ovate, convex, above entirely of a very pale testaceous, with the eyes black, the apex of the antennæ fuscescent: the elytra rather distantly and obsoletely punctured: middle of the breast and base of the abdomen fuscous: legs pale testaceous.

Taken within the metropolitan district in June. "Raehills."— Rev. W. Little.

- Sp. 20. abdominalis. Ovata, convexa, subtilissimè punctulata, pallida flava, oculis pectore abdomineque nigris. (Long. corp. § lin.)
- Ha. abdominalis. Megerle.-Steph. Catal. 216. No. 2190.
- Ovate, convex, very finely punctured; pale yellow: head and thorax slightly rufescent: elytra pale, immaculate: eyes, breast, and abdomen black: legs pale, with the hinder femora slightly dusky: antennæ pale at the base, the apex fuscescent.

Apparently rather scarce; I have taken it at Ripley in July.

Sp. 21. pusilla. Ovata, nigro-picea, convexa, thorace rufo-piceo, elytris pallide testaceis, immaculatis, antennarum basi pedibusque testaceis, femoribus posticis apice nigris. (Long. corp.  $\frac{3}{4}$  lin.)

Ovate, convex, pitchy-black: head with a carina between the eyes: thorax rufopiceous, the lateral and posterior margins fuscescent: elytra very convex, pale testaceous, slightly shining, immaculate, faintly punctured: legs testaceous, with the posterior femora more or less fuscous, or black, at the tip: antennæ fuscous, with the base pale.

More abundant than the last; found in various parts of the metropolitan district; also in Suffolk, and near Bristol.

Sp. 22. collaris. Ovata, convexa, ferrugineo-picea, antennis pedibusque pallidis, oculis nigris, pectore abdomineque nigro-fuscis. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
 Ha. collaris. Steph. Catal. 216. No. 2192.

Ovate, convex, finely, and rather deeply, punctate: rusty piceous: thorax glossy, more deeply punctured than the elytra, which are pale reddish-testaceous,

Ha. pusilla. Gyllenhal.- Steph. Catal. 216. No. 2191.

immaculate: eyes black: breast and abdomen dusky-black: antennæ entirely and legs pale testaceous.

Taken near Ripley, and other parts of the metropolitan district.

Sp. 23. lurida. Ovata, convexa, nigro-picea, antennarum basi pedibusque lividotestaceis, elytris brunneis, confertissimè, profundè punctatis, apice singulatim rotundatis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)

Ha. lurida. Gyllenhal.-Steph. Catal. 216. No. 2193.

Ovate-convex, *pitchy-black*: head and thorax thickly punctured: *elytra brown*, or dull ferruginous, thickly and rather *deeply punctured* throughout, the apex of each rounded: *legs livid*-testaceous, with the *posterior femora* more or less *fuscescent at the apex*; antennæ with the base livid-testaceous, the tip fuscescent.

Frequent in grassy places within the metropolitan district in June; also in Devonshire, and near Bristol. "Cramond."—*Rev.* W. Little. "Swansea, not uncommon."—L. W. Dillwyn, Esq.

Sp. 24. castanea. Ovata, convexa, castanea, confertim punctata, antennis pedibusque testaceis. (Long. corp. 1 lin.)

Ha. castanea. Megerle.-Steph. Catal. 216. No. 2194.

Ovate, convex, castaneous-brown, shining, rather thickly punctulated: eyes black: antennæ entirely, and legs testaceous-yellow, the apex of the hinder femora fuscescent.

Found near London and Bristol.

Sp. 25. brunnea. Ovata, convexa, castanea, ore femorumque posticum apice nigris, antennarum basi pedibusque ferrugineis. (Long. corp. 1 lin.)

Ha. brunnea. Duftschmid.-Steph. Catal. 216. No. 2195.

Ovate, convex, chestnut-brown, punctured: mouth black: thorax finely punctured: elytra more distinctly and rather more deeply punctured: base of the antennæ and the legs ferruginous, the apex of the former fuscescent: the hinder femora black at the tip.

Also taken within the metropolitan district.

- Sp. 26. lævis. Ovata, pallide testacea lævis, antennarum basi pedibusque pallidioribus. (Long. corp. 1 lin.)
- Ha. lævis. Duftschmid.-Steph. Catal. 216. No. 2196.
- Ovate, convex, pale *testaceous*-yellow, and *smooth*: head and *thorax* rather *obscure*, the latter very finely and obsoletely punctured: elytra the same, very convex: *legs pale* testaceous-yellow, with the *hinder femora darker*: base of the antennæ pale, tip slightly fuscescent.

Inhabits the vicinity of London; and also found in Norfolk.

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Sp. 27. fuscescens. Ovata, lurida, subtus obscurior, confertim punctulata, pedibus anticis antennarumque basi pallidioribus. (Long. corp. 1 lin.)

Ha. fuscescens. Kirby MSS.-Steph. Catal. 216. No. 2197.

Ovate, convex, lurid-testaceous, shining, beneath more obscure; thickly punctulate: thorax sometimes reddish: elytra fuscescent: four anterior legs and posterior tibiæ and tarsi, with the base of the antennæ, pale lurid-testaceous: hinder femora and apex of the antennæ more or less dusky.

Found in various parts of the metropolitan district. "Raehills." — Rev. W. Little. "Swansea, occasionally."—L. W. Dillwyn, Esq.

- Sp. 28. nigricans. Atro-picea, thorace subnitido, elytris subtilissime punctulatis apice concolore, antennis pedibusque pallidis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)
   H2. nigricans. Kirby MSS.—Steph. Catal. 216. No. 2198.
- Deep dusky-piceous, slightly shining: thorax finely punctured, rather glossy: elytra finely and rather thickly punctured, the punctures largest on the back; the disc and apex entirely of a deep pitchy-black: legs and antennæ entirely pale testaceous.

Found, in June, near London and in Suffolk, and near Bristol. "Raehills."—*Rev. W. Little.* "On the Ballota nigra (near Swansea), not uncommon."—*L. W. Dillwyn, Esq.* 

Sp 29. læta. Atro-picea, subnitida, thorace rufescente, elytris confertissimè punctatis apice piceo, antennis, tibiis, tarsisque rufis, femoribus posticis piceis. (Long. corp. 1 lin.)

Ha. læta. Kirby MSS.-Steph. Catal. 216. No. 2199.

Deep piceous, slightly shining: thorax somewhat rufescent, glossy: elytra thickly and rather coarsely punctured, the apex piceous: antennæ, tibiæ, and tarsi rufous: posterior femora piceous.

Less common than the last: it occurs near London and in Suffolk. "Weston."-Rev. A. H. Matthews.

Sp. 30. dorsalis. Oblonga, atra, thorace transverso suborbiculato limboque coleoptrorum testaceis. (Long. corp. 1-1½ lin.)

Cr. dorsalis. Fabricius.-Ha. dorsalis. Steph. Catal. 214. No. 2164.

Oblong, head black: thorax transverse, suborbiculate, impunctate: elytra black, punctured, with the entire margin broadly testaceous: legs black: antennæ piceous, with the base dull testaceous.

Also rare; taken in sandy places near Bexley, and at Darenth. "Southend."-Rev. F. W. Hope.

- Sp. 31. Anchusæ. Ovata, convexa, atra, subnitida, antennarum basi, tibiis tarsisque pallidis, elytris confertissimè punctatis, apice singulatim rotundatis, abdomine brevioribus. (Long. corp. 1 lin.)
- Ga. Anchusæ. Paykul.-Ha. Anchusæ. Steph. Catal. 216. No. 2200.
- Ovate, convex, black, somewhat glossy: head and thorax finely punctured: elytra scarcely so long as the abdomen, thickly and rather deeply punctured, the apex of each rounded and gaping: femora black, with the apex of the anterior pale testaceous: tibiæ and tarsi also pale testaceous: antennæ black, with the basal joint fuscescent, the four or five following pale.

Rather uncommon near London : I have received specimens from the neighbourhood of Bristol.

- Sp. 32. parvula. Ovata, nigra, supra piceo-ænea, subtilissimè punctulata, antennarum basi pedibusque griseo-pallidis, femoribus posticis fusco-piceis. (Long. corp.  $\frac{1}{2} - \frac{3}{4}$  lin.)
- Ha. parvula. Ent. Hefte.-Steph. Catal. 216. No 2201.
- Ovate, black, above brassy piceous-black, or pale piceous; very faintly and most obscurely punctured, slightly glossy: elytra rather more distinctly punctured, moderately convex: legs pale-griseous, or dull testaceous, with the hinder femora sometimes fuscescent: base of the antennæ also pale; the apex fuscescent.

Apparently rare: my specimens were taken near London.

- Sp. 33. Pulex. Oblongo-ovata, atra, nitens, subtilissime at irregulariter, punctata, antennis tibiisque rufis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Ch. Pulex. Marsham.-Ha. Pulex. Steph. Catal. 216. No. 2202.
- Somewhat oblong-ovate, black, shining, very finely but irregularly punctulate : antennæ and tibiæ rufous : femora black.

Found in grassy places, in June, near London. "Near Swansea, among grass, not uncommon."-L. W. Dillwyn, Esq.

- Sp. 34. hilaris. Suboblongo-ovata, atra, nitida, glabra, elytris subtilissime punctatis apice obtusis, antennis pedibusque pallidis. (Long. corp. 1 lin.)
  Ha. hilaris (nec pilaris). Kirby MSS.—Steph. Catal. 216. No. 2203.
- Somewhat oblong-ovate, very black, shining and glabrous: thorax moderately convex and very faintly punctulate: elytra obtuse at the apex, very glossy, finely punctured throughout, the apex concolorous: antennæ and legs entirely pale testaceous.

Rare, at least near London: it has been taken in Suffolk and Norfolk. "Raehills."-Rev. W. Little.

Sp. 35. Holsatica. Ovata, convexa, atra, nitida, crebrè punctulata, elytris maculà posticà rotundatà rubrà, antennarum basi tibiisque anterioribus rufis. (Long. corp. 1 lin.)

Ch. Holsatica. Linné.-Ha. Holsatica. Steph. Catal. 216. No. 2204.

Ovate, convex, black, shining, thickly punctured: thorax very convex and glossy, finely punctured: elytra also very convex, more deeply punctate than the thorax, each with a round rufous spot near the apex, varying in size and rarely extending to the apex itself: femora black, the anterior sometimes testaceous at the apex: anterior tibiæ and tarsi rufous: posterior fusco-piceous: antennæ black, with the base rufous.

Occasionally found in marshy places near London. "Neighbourhood of Swansea, by Mr. Jeffreys."—L. W. Dillwyn, Esq. "Taken on Pedicularis lacustis."—Marsham MSS. "Newcastle." —G. Wailes, Esq. "Raehills."—Rev. W. Little.

# GENUS CCCXCVIII.-MACROCNEMA, Megerle.

Antennæ 10-jointed, shorter than the body, slender; the basal joint elongate; second and third slender, of nearly equal length, subclavate; fourth similar in form but longer; the remainder stouter, gradually shortening to the apex and pilose: head very small, transverse, subtriangular, not concealed beneath the anterior margin of the thorax: eyes small, slightly prominent: thorax transverse, subconic, much narrowed anteriorly, the base bisinuated: elytra elongate, attenuated at the apex, generally punctate-striate: body elongate, attenuated at each extremity: anterior and intermediate femora slender; posterior very much incrassated: tibiæ simple, not dentate; posterior curved, with the apex obliquely truncate exteriorly; the tarsi, which are elongate, inserted at the superior margin of the truncation, and consequently remote from the apex of the tibiæ, which is spurless.

Macrocnema is distinguished from all the other saltatorial genera of this family, by having the true second joint of the antennæ obliterated, as noticed by Mr. Haliday, in the Zoological Journal; the apparent second joint being unusually long; the body is in general somewhat fusiform in shape; and the posterior tibiæ are conspicuous by having the apex very obliquely truncate, with the tarsi-which are elongate-inserted at the upper edge of the truncation.

A. Elytra punctate-striate.

Sp. 1. Dulcamaræ. Obovata, posteriùs attenuata, atro-cærulea, nitida, antennis

basi rufis, pedibus nigris, elytris subtilitèr punctato-striatis, interstitiis obsoletè punctulatis. (Long. corp.  $1\frac{9}{4}$  lin.)

Ha. Dulcamaræ. Ent. Hefte. ii. 49. pl. 2. f. 5.

Broad, obovate, convex, attenuated posteriorly, deep black-blue, shining: head rather greenish on the crown, with a semicircular impression on the front: thorax rather thickly punctured on the margins and sparingly so on the disc: elytra broad, slightly depressed, delicately and regularly punctate-striate, the interstices obsoletely punctured: legs black: posterior femora blue and very shining: antennæ rufous at the base, the apex fuscous.

I possess a single specimen of this insect, which was captured near London.

Sp. 2. chalcomera. Brevis, ovata, supra cyanea, subtus ænea, antennarum basi tibiisque fuscis, thorace sparsè punctato, elytris striato-punctatis, interstitiis punctulatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)

Ha chalcomera. Illiger.-Ha. chalcomera. Steph. Catal. 217. No. 2216.

Short, ovate, convex, above blue, beneath brassy: thorax sparingly punctate: elytra punctate-striate, with the interstices punctured: base of the antennæ and the tibiæ fuscous: femora brassy: abdomen coarsely punctured beneath.

Taken near London by myself; I believe at Ripley: it appears to be rare.

- Sp. 3. Hyoscyami. Obovata, posteriùs attenuata, supra femoribusque posticis viridi-æneis, antennarum basi pedibusque fulvo-testaceis, thorace punctulato, elytris striato-punctatis, interstitiis subpunctulatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Ch. Hyoscyami. Linné.—Martyn, C. pl. 14. f. 15?—Ha. Hyoscyami. Steph. Catal. 217. No. 2217.
- Obovate, convex, attenuated posteriorly; above greenish-brass; beneath brassblack: thorax finely and rather thickly punctured: elytra regularly punctate-striate, the interstices distinctly though finely punctured: four anterior legs and hinder tibiæ and tarsi pale testaceous, posterior femora large, stout, brassy-black, shining: antennæ black, with the base testaceous.

Also apparently rare; and as one or other of the following species have been usually confounded with the present, the subjoined localities may be incorrect. "Between Sketty and the Mumbles, not uncommon."—L. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews. "New Walk, York."—W. C. Hewitson, Esq.

Sp. 4. Napi. Ovata, posteriùs minus attenuata, supra femoribusque posticis nigro-cæruleis, antennis infernè pedibusque testaceis, elytris striato-punctatis, interstitiis vix punctulatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>3</sup>/<sub>4</sub> lin.) Ha. Napi. Gyllenhal.-Steph. Catal, 219. No. 2218.

Ovate, convex, slightly attenuated posteriorly: above blue-black, beneath black, with a bluish or brassy tinge: thorax obsoletely, but thickly punctured: elytra regularly punctate-striate, with the interstices very obsoletely punctured, the punctures scarcely visible: legs pale testaceous; with the posterior femora very stout, and blue-black: antennæ fuscous, with the base beneath testaceous.

Found within the metropolitan district in the summer, not uncommonly. "Swansea, common."—L. W. Dillwyn, Esq. "Raehills."—Rev. W. Little.

Sp. 5. Rapæ. Oblongo-ovata, atro-cyanea, antennarum basi pedibusque testaceis, femoribus posticis nigris basi rufescentibus, elytris punctato-striatis, interstitiis lævigatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)

Ha. Rapæ. Illiger .- Steph. Catal. 217. No. 2219.

- Oblong-ovate, convex, deep-blue; beneath of a darker hue: thorax rather finely punctured: elytra regularly punctate-striate, the interstices smooth: four anterior legs, and the tibiæ and tarsi of the posterior testaceous; posterior femora black with the base rufescent, or rufous with the apex black: antennæ fuscous, with the base testaceous.
- The dissimilarity in the colour of the insect and of its hinder femora, exclusively of the diversity of its form, and the deficiency of punctures in the interstices of the striæ on the elytra, sufficiently point out the distinction of this insect from the preceding, with which Gyllenhal considers it synonymous.

Occasionally found near the metropolis.

Sp. 6. chrysocephala. Obovata, posteriùs attenuata, thorace, elytris femoribusque posticis nigro cæruleis, fronte antennarum basi pedibusque testaceis; elytris punctato-striatis, interstitiis rugulosis. (Long. corp. 1½-2 lin.)

Ch. chrysocephala. Linné.-Ha. chrysocephala. Steph. Catal. 217. No. 2220.

Obovate, convex, attenuated posteriorly: head rufo-testaceous, with the crown more or less of a blue-black: thorax blue-black, very convex, finely and thickly punctured: elytra of the same colour, regularly punctate-striate, with the interstices obsoletely rugulose: body beneath pitchy-black, with the apex sometimes rufo-piceous: four anterior legs and the posterior tibiæ and tarsi rufo-testaceous; posterior femora black, with a blue gloss: antennæ fuscous, with the base testaceous.

Not uncommon within the metropolitan district in June. "Sandhills, near St. Helen's, Glamorganshire."—L. W. Dillwyn, Esq.

Sp. 7. rufilabris. Oblongo-ovata, nigro-ænea, subtus femoribusque posticis nigris, ore antennis pedibusque fulvo-testaceis, elytris punctato-striatis, interstitiis obsoleté punctatis. (Long. corp.  $1\frac{1}{4}$  lin.)

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Ha. rufilabris. Ent. Hefte.-Steph. Catal. 217. No. 2221.

Oblong-ovate, convex, brassy-black, beneath black: thorax finely punctured: elytra punctate-striate, the interstices obsoletely punctate: mouth, antennæ, and four anterior legs, with the posterior tibiæ and tarsi fulvo-testaceous: posterior femora black, extreme tip of the latter testaceous.

Not very abundant within the metropolitan district, where it occurs in June.

 Sp. 8. brunnipes. Obovata, capite, thoraceque punctato aneis, elytris punctatostriatis atro-caruleis, antennarum basi pedibusque brunneis, femoribus posticis aneis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)

Ha. brunnipes. Megerle.-Steph. Catal. 217. No. 2222.

Obovate, convex: head and thorax punctate, brassy: elytra punctate-striate, deep-blue: four anterior legs, and posterior tibiæ and tarsi brown; posterior femora brassy: base of the antennæ pale brown: apex black.

I have taken this species, but I believe near Dover: whether it has been taken within the metropolitan district, as noted in my Catalogue, I am not aware. "Bottisham."—*Rev. L. Jenyns.* 

- Sp. 9. nigricollis. Oblongo-ovata, capite rufescente, thoracenigro-ænea, elytris pallidis, punctato-striatis, abdomine nigro, pedibus rufis, femoribus posticis apice nigris. (Long. corp. 1½-1¼ lin.)
- Ch. nigricollis. Marsham.-Ha. nigricollis. Steph. Catal. 217. No. 2223.
- Oblong-ovate, convex, head rufescent: thorax brassy-black, shining: elytra pale luteo-testaceous, punctate-striate: abdomen black: legs rufous, with the apex of the posterior femora black: antennæ black, with the base rufous.

Rare: found near London, and in Suffolk, in June.

Oblong-ovate, convex, pale testaceous: thorax very glossy deep black or piceous: elytra very pale testaceous, punctate-striate, the interstices obsoletely punctured: legs anteriorly and abdomen pale: antennæ pale, with the apex fuscescent.

This may possibly be an immature state of the preceding.

Also found near London, but not common.

- † Sp. 11. marcida. Ovata, testacea, thorace punctulata, elytris punctato-striatis, tibiis posticis cochleariformibus denticulo margine postici medii. (Long. corp. 1½ lin.)
- Ha. marcida. Illiger, Mag. vi. p. 175.

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Sp. 10. sordida. Oblongo-ovata, pallide testacea, thorace nitidissimo atro, elytris punctato-striatis, abdomine, pedibusque totis pallidis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>—1<sup>3</sup>/<sub>2</sub> lin.)
 Ha. sordida. Kirby MSS.—Steph. Catal. 217. No. 2224.

Ovate, convex, entirely testaceous: thorax punctured, with a metallic gloss: elytra punctate-striate: legs pale: posterior femora rather dusky, with a metallic tinge at the apex: the hinder tibia: broad at the apex, with a fine tooth in the middle of the posterior margin.

Rare: found near "Southend in April last."-Mr. Waterhouse.

Sp. 12. picicornis. Ovata, piceo-ænea, antennarum basi, tibiis tarsisque rufotestaceis, femoribus æneo-piceis anteriorum apice testaceo. (Long. corp.  $1\frac{1}{4}-1\frac{3}{4}$ lin.)

Ha. picicornis. Kirby MSS.-Steph. Catal. 217. No. 2225.

Ovate, convex; pitchy-brass, shining: head and thorax thickly punctured: elytra rather faintly punctate-striate, the interstices thickly and somewhat regularly punctured: four anterior femora brassy piceous at the base, the apex testaceous, posterior entirely æneo-piceous: all the tibiæ and tarsi rufo-testaceous; base of antennæ the same; apex piceous.

Not very uncommon in gardens, within the metropolitan district, in June and July; also found near Southend, and in Suffolk.

- Sp. 13. apicalis. Ovata, convexa, nigro-ænea, nitida, elytris apice piceo, antennis pedibusque pallido-flavis, femoribus posticis atris. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
   Ha. apicalis. Steph. Catal. 219. No. 2241.
- Ovate, more convex than usual in this genus: deep shining brassy-black : elytra finely punctate-striate, the apex piceous; antennæ totally and legs pale yellow-testaceous, with the hinder femora black.

Found near London in June.

- Sp. 14. exoleta. Ovata, testacea, capite atro, aut piceo, elytris punctato-striatis, suturâ abdomine femoribusque posticis apice nigris. (Long. corp. 1-1½ lin.)
   Ch. exoleta. Linné?-Ha, exoleta, Steph. Catal. 217. No. 2226.
- Ovate, testaceous: head black or piceous: thorax very convex and shining: elytra punctate-striate, the suture more or less black or dusky, especially in the middle: abdomen black: legs testaceous: posterior femora large, with the lower margin obtusely angulated, the apex more or less black or dusky: antennæ pale, with the tip dusky.

Extremely abundant in grassy places within the metropolitan district. "Bottisham."—Rev. L. Jenyns. "Weston."—Rev. A. H. Matthews.

- Sp. 15. pallida. Ovata, tota testacea, capite rufescenti, elytris punctato-striatis, femoribus posticis apice obscuris. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
- Ha. pallida. Ziegler?-Ha. exoleta, var. 3.-Illiger, Mag. vi. 176.
- Ovate, entirely testaceous, with the head rufescent: eyes black: thorax convex, shining: elytra punctate-striate, pale, with the suture concolorous: abdomen

fuscescent at the base: legs pale, with the apex of the posterior femora brownish.

Found near London and " Southend."-Mr. Waterhouse.

Sp. 16. picina. Picea nitida, antennis pedibusque fulvis, thorace subtilissimè punctato, elytris striatis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)

Ch. picina. Marsham.-Ha. picina. Steph. Catal. 220. No. 2253.

Shining piceous, with a brassy tinge : thorax very finely and thickly punctured, with a depression at the base opposite the scutellum, and some larger punctures towards the posterior angles : elytra regularly and rather deeply punctatestriate : antennæ and mouth fulvous : legs the same, with the posterior femora piccous.

Found in Suffolk and near London. "New Walk, York."— W. C. Hewitson, Esq. "Weston."—Rev. A. H. Matthews.

### GENUS CCCXCIX.-MANTURA mihi.

Antennæ short, rather stout, 11-jointed; basal joint elongate, very robust, subreniform; second short, subglobose; three following slender; the fifth being longest; the remainder shorter and slender pilose; the terminal joint being somewhat acuminated: head triangular: eyes prominent: thorax short, transverse, narrowed anteriorly, the base bisinuated, as broad as that of the elytra, and bearing on each side an impressed line, placed more or less obliquely: body convex, subcylindric, a little dilated towards the middle, with the apex obtuse: legs slender, posterior with the femora moderately incrassated; their tibiæ simple, truncate at the apex, and armed with a single minute spur: tarsi short, stout, inserted at the apex of the tibiæ.

This genus differs from its allies by having the antennæ short, with the basal joint very robust, and the thorax remarkably wide, giving to the body the habit of a Cryptophagus or Typhæa; the body is somewhat short, cylindric, oblong-ovate, convex; the posterior tarsi short, inserted in the apex of the tibiæ, which are simple:—the species generally affect dry situations.

Ch. rustica. Linné ?-- Ha. rustica. Steph. Catal. 216. No. 2205.

Black, shining, convex, subcylindric: thorax smooth, very obsoletely punctured, with a short impressed line on each side at the base: elytra rather faintly punctate-striate, the apex piceo-testaceous: legs testaceous, with the posterior femora dusky: antennæ piceous.

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Sp. 1. rustica. Atra, thorace lavi, antennis pedibus elytrorumque apicibus testaceis. (Long. corp.  $1\frac{1}{4}$  lin.)

Rare near London; found at Hertford. " Epping."—Mr. Doubleday.

Sp. 2. semiænea. Elongato-ovata, valdè convexa, subcylindrica, thorace virescenti-ænea, elytris regularitèr punctato-striatis, obscurè cæruleis, apice pedibusque ferrugineis. (Long. corp. 1-1½ lin.)

Ch. semiænea. Fabricius.-Ha. semiænea. Steph. Catal. 216. No. 2206.

Elongate-ovate, very convex, subcylindric: mouth piceous: thorax greenishbrass, faintly punctured, with an oblique impressed line at the base on each side: elytra dull blue, with the apex more or less ferruginous—sometimes nearly all ferruginous, with the suture and a portion of the base alone blue regularly punctate-striate, the interstices smooth: legs testaccous, with the posterior femora large and greenish-black: antennæ black, with the base dull ferruginous.

Not very uncommon in the vicinity of Ripley; also found occasionally in other parts of the metropolitan district, and in Norfolk and near Bristol. "In Crwmlyn-burrows, not common."—L. W. Dillwyn, Esq.

- Sp. 3. Mannerheimii. Oblongo-ovalis, convexa, cœruleo-virens, tibiis testaceis, thorace subtilissimè punctulato, elytris externè striato-punctatis, dorso confertim vagè punctato. (Long. corp.  $1-1\frac{1}{4}$  lin.)
- Ha. Mannerheimii. Gyllenhal.-Steph. Catal. 220. No. 2256.
- Oblong-oval, convex, greenish-blue: mouth black: thorax very faintly but thickly punctured, with an obsolete fovea on each side at the base: elytra shining blue, punctate-striate on the lateral margin and on the apex, the back irregularly punctate: femora blue-black: tibiæ and tarsi dull testaceous: antennæ black, with the basal joint somewhat testaceous.

Rare; found near London and in Suffolk.

- Sp. 4. obtusata. Oblongo-ovata, convexa, nigra cærulea, antennarum basi, tibiis tarsisque ferrugineis, elytris regularitèr punctato-striatis. (Long. corp. 1 lin.)
   Ha. obtusata. Gyllenhal.—Steph. Catal. 217. No. 2209.
- Oblong-ovate, convex, dark-blue, slightly glossy: head with a distinct transverse striga between the antennæ: thorax very thickly and finely punctured, with a very short oblique impressed line at the base on each side: elytra entirely of a deep-blue, regularly and rather deeply punctate-striate, the interstices smooth: legs with the tibiæ and tarsi ferruginous, the four anterior femora pitchy-black, and the posterior very glossy deep-blue: antennæ with the three or four basal joints ferruginous, the rest black.

Apparently rare near London; it occurs in Norfolk and near Bristol. Sp. 5. Chrysanthemi. Oblongo-ovata, valdė convexa, fusco-anea, elytris regularitėr punctato-striatis, apice pedibusque testaceo-ferrugineis. (Long. corp. $\frac{3}{4}$ -1 lin.)

Ha. Chrysanthemi. Ent. Hefte.-Steph. Catal. 217. No. 2207.

Oblong-ovate, very convex, fuscous-brass, slightly shining: head with a very obsolete transverse impression between the antennæ: thorax very thickly and finely punctulate, with a short impressed line on each side at the base: elytra slightly but indeterminately brassy-testaceous at the apex, the disc regularly and somewhat deeply punctate-striate, with the interstices smooth: legs ferruginous, with the posterior femora darker and glossed with brassy: antennæ testaceous, with the apex dusky.

Occasionally met with in the vicinity of London in June, but apparently more abundant near Bristol. "Raehills."—*Rev. W. Little.* 

Sp. 6. ænea. Oblongo-ovata, convexa, supra ænea, elytris punctato-striatis, antennis pedibusque testaceo-ferrugineis. (Long. corp. 1 lin.)
Ch. ænea. Marsham MSS.—Ha. ænea. Steph. Catal. 217. No. 2208.

Oblong-ovate, convex, brassy above: head and thorax deeply punctured, the latter with two very faint impressed lines, one on each side: elytra moderately punctate-striate, the interstices obsoletely punctate: antennæ and legs entirely ferruginous, with the hinder femora slightly brassy.

From the Marshamian cabinet.

## GENUS CCCC .-- DIBOLIA, Latreille.

Antennæ short, 11-jointed: basal joint robust; second rather short, stout; third and fourth more slender, of equal length; fifth also slender, subclavate and rather longer; sixth and following gradually increasing in breadth, with the terminal joint ovate: head small, flat in front, concealed beneath the anterior margin of the thorax, the latter short, transverse, truncate anteriorly, the sides deflexed, the base bisinuated: elytra rather broad, obsoletely punctate-striate: legs rather short, stout: posterior femora very much incrassated, their tibiæ curved at the base, with the spex thickened, armed with a bifid spur; their external edge spinulose: tarsi all short: four anterior tibiæ simple.

Dibolia is at once distinguished from the other saltatorial insects of this family, by the concealed head, exclusively of the dissimilarity in the structure of the antennæ and of the tibiæ, the latter of which are spinulose on the external edge, and have the apex armed with a bifid appendage.

- Sp. 1. Cynoglossi. Oblongo-ovata, virescente-ænea, antennarum basi pedibusque, anticis obscure rufo-testaceis, femoribus posticis viridi-æneis, tibiis fuscis basi appendiculo tarsisque pallidioribus. (Long. corp. 1½ lin.)
   Ha. Cynoglossi. Ent. Hefte.—Steph. Catal. 220. No. 2259.
- Oblong-ovate, convex, greenish-brass: thorax punctured, the punctures very fine and somewhat remote: elytra thickly punctured, the punctures disposed in striæ: four anterior legs dull rufo-testaceous: posterior femora greenishbrass; the hinder tibiæ fuscescent, with the base and the appendages, as well

as the tarsi paler : antennæ fuscescent, with the base rufescent.

Rare: I possess a single example captured in the neighbourhood of Bristol.

Sp. 2. occultans. Oblongo-ovata, nigra, supra cærulescenti-micans, thorace crebrè punctato, elytris confertissimè punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

- Ha. occultans. Ent. Hefte. ii. 23. pl. 2. f. 4.—Ha. exaltans. Kirby MSS?— Steph. Catal. 220. No. 2258.
- Oblong-ovate, black, above with a bluish or brassy gloss: thorax thickly punctured: elytra very closely and thickly punctate-striate: legs black, with the tarsi piceous: posterior femora large, bluish: antennæ dusky-black, with the base ferruginous.

Also rare: I have once taken a specimen in the neighbourhood of London, but forget the exact locality.

GENUS CCCCI. - CHÆTOCNEMA\* mihi.

Antennæ short, 11-jointed: basal joint robust, curved; second also robust and short; three following rather slender, equal in length, but longer than the second; the remainder gradually increasing in stoutness, the last being largest, ovate, subacuminate: head prominent, triangular: thorax short, transverse, the lateral margins rounded, the base obsoletely bisinuated: elytra broad, striated: legs stout, short: anterior tibiæ simple: intermediate and posterior with a short acute tooth on the middle of the outer margin, furnished posteriorly with a fringe of hairs or setæ: posterior femora very stout: tarsi all short.

Chætocnema has the antennæ short and stout, the body very convex, sometimes slightly globose; the legs robust, especially the

\* Xairn, seta; nunun, til ia.

posterior femora; the hinder tibiæ furnished towards the apex with a short, acute tooth, the lower or outer edge of which is furnished with a fringe of hairs, and the apex is armed with a simple acute spine: the tarsi are all short.

- Sp. 1. aridella. Oblongo-ovata, obscure ænea, antennarum basi tibiis tarsisque testaceis, thorace brevissimo transverso, capiteque profundiùs punctatis, elytro-rum striis regularibus. (Long. corp. 3-1 lin.)
   Ha. aridella. Ent. Hefte.—Steph. Catal. 220. No. 2251.
- Oblong-ovate, convex, dull-brassy: head rather deeply punctured: thorax the same, very short, transverse: elytra striated, the strike punctate, and for the
- most part placed regularly, and rather deep: body beneath brassy-black: legs testaceous, with the apex of the tibiæ somewhat fuscous, and the femora blackish-brass: antennæ with the base testaceous.

Far from rare in the vicinity of the metropolis in June, and I have received it from Bristol.

- Sp. 2. Sahlbergii. Oblongo-ovata, cœruleo-virescens, antennis basi ferrugineis, nigro maculatis : thorace longiore capiteque profundiùs punctatis, elytrorum striis plerisque regularibus. (Long. corp. 1 lin.)
   Ha Sahlbergii. Call. Inc. Succ. in 660
- Ha. Sahlbergii. Gyll. Ins. Suec. iv. 662.
- Oblong-ovate, convex, greenish-blue: head and thorax deeply punctured, the latter a little longer than in the preceding species, transverse, shining, glabrous: elytra very convex, rather deeply striate, the striæ composed of rather deep punctures, in general rather regularly placed, but sometimes a little dispersed towards the suture: tibiæ and tarsi ferruginous : femora brassy: antennæ ferruginous at the base, the lower joints more or less tipped with black, the apex of the latter colour.

Found at Ripley, in June.

- Sp. 3. aridula. Ovalis, obscure-ænea, antennis basi ferrugineis, supra nigromaculatis, capite thoraceque subtilissimè punctulatis, elytrorum striis interioribus intricatis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)
- Ha. æneofusca. Mus. Marsham.-Steph. Catal. 220. No. 2252.-Ha. aridula. Gyllenhal, Ins. Suec. iv. 663.
- Oval, dull brassy: head convex: thorax a little longer than in Ha. aridella, thickly but very finely punctulated: elytra striated, the striæ composed of punctures, of which those on the back are very irregularly disposed, the lateral ones being rugulose: legs stout, with the femora brassy: the tibiæ and tarsi ferruginous, the former rather dusky at the base: antennæ bläck, with the

three basal joints ferruginous, the basal one with a black line above, and the second with a black dot.

Apparently rather scarce: I have taken the insect near London in the summer.

Sp. 4. concinna. Ovalis, parum convexa, nigra, supra viridi-ænea, antennarum basi tibiisque ferrugineis, elytris profundè punctato-striatis interstitiis lævibus. (Long. corp. <sup>3</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>4</sub> lin.)

Ch. concinna. Marsham.-Ha. concinna. Steph. Catal. 220. No. 2254.

Oval, slightly convex; black beneath, greenish-brass above: thorax thickly and rather deeply punctate, with a very obsolete fovea on each side at the base: elytra shining, regularly and deeply punctate-striate, with the interstices flat, and smooth: femora black, posterior brassy: tibiæ and tarsi dull ferruginous: antennæ ferruginous at the base, the apex dusky-black.

Extremely abundant in hedges during the spring and summer months, within the metropolitan district. "Common (near Swansea)."—L. W. Dillwyn, Esq. "Bottisham."—Rev. L. Jenyns. "New Walk, York."—W. C. Hervitson, Esq. "Cummersdale."— T. C. Heysham, Esq. "Raehills."—Rev. W. Little.

- Sp. 5. picipes. Ovalis, subconvexa, tota nigra aut subviolacea, antennarum basi tibiisque piceis, elytris aut punctato-striatis, interstitiis subpunctatis. (Long. corp. 1 lin.)
- Ch. picipes. Kirby MSS.-Ha. picipes. Steph. Catal. 220. No. 2255.
- Oval, slightly convex, black above and beneath, sometimes with a violaceous tinge: thorax very finely punctured: elytra rather moderately punctate-striate, the interstices obscurely punctured: tibiæ and tarsi piceous: antennæ the same at the base, with the apex dusky.

Not common: found near London in June, and in Suffolk. "Bottisham."-Rev. L. Jenyns.

- Sp. 6. saltitans. Nigro-picea, antennarum basi, pedibus anterioribus tibiisque posticis rufo-testaceis. (Long. corp. 1 lin.)
- Ha. saltitans. Kirby MSS.-Steph. Catal. 220. No. 2257.
- Oval, pitchy-black; with the antennæ at the base, the four anterior legs and posterior tibiæ rufo-testaceous.

Taken in Suffolk.

### GENUS CCCCII.-SPHÆRODERMA \* mihi.

Antennæ rather slender, 11-jointed, the basal joint a little incrassated; second subglobose; third and fourth obconic, of equal length, and shorter than the fifth; sixth and following slightly incrassated pilose, all nearly equal in length, the terminal one being longest and a little acuminated: head small, triangular, deeply inserted into the thorax; the latter very short, transverse, its anterior margin slightly concealing the head: body somewhat hemispheric, glabrous, and shining: elytra dilated at the base, more or less gibbous: legs rather slender: posterior femora considerably incrassated: tibiæ simple, curved at the base, thickened at the apex, which has a simple spine: tarsi robust, with the basal joint broad.

The very convex, orbicular, or hemispheric form of their polished body in these insects, united to the slender, simple-jointed antennæ, unarmed tibiæ, and short, dilated tarsi, exclusively of other differences, sufficiently distinguish them from their allies :—the three last species are, however, rather discrepant.

A. Thorax without an impressed transverse line behind.

a. Elytra punctate ; not striated.

Sp. 1. testacea. Suborbiculata, gibba, rufo-testacea, nitida, subtilissimè obsoletè punctulata, oculis solis nigris, thorace antice emarginato, postice sinuato. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-1<sup>1</sup>/<sub>2</sub> lin.)

Ch. testacea. Fabricius .- Ha. testacea. Steph. Catal. 219. No. 2245.

Suborbiculate, gibbous, rufo-testaceous, shining, glabrous; very delicately and obsoletely punctured: eyes large, black: thorax broadly but not very deeply emarginated in front, the base sinuated, the disc very glossy and most obsoletely punctured: elytra rather more distinctly punctured than the thorax: legs pale testaceous, with the femora shining: tibiæ curved: antennæ also pale testaceous.

Very abundant on thistles in the neighbourhood of London, and in other parts. "Common on thistles (near Swansea)."—L. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews. "Cramond."— Rev. W. Little. "New Walk, York."—W. C. Hewitson, Esq.

Sp. 2. Cardui. Subovata, convexa, rufo-testacea, nitida, oculis solis nigris, thorace minus convexo, elytrisque evidentiùs punctatis. (Long. corp.  $1\frac{3}{4}-2\frac{1}{4}$ lin.)

Ha. Cardui. Kirby MSS.-Steph. Catal. 219. No. 2247.

Subovate, moderately convex, rufo-testaceous, shining and glabrous: eyes alone black: thorax less convex than in the foregoing insect, and more distinctly punctate: elytra also more evidently punctured, the punctures somewhat disposed in striæ: legs and antennæ pale testaceous.

Found on thistles within the metropolitan district, not uncommonly.—" Swansea, not uncommon."—L. W. Dillwyn, Esq.

Sp. 3. Centaureæ. Suborbiculata, gibba, pallide rufo-testacea, nitida, undique subprofundè punctata, oculis nigris, antennis pedibusque pallidis. (Long. corp. 11-2 lin.)

Ha. Centauree. Kirby MSS .- Steph. Catal. 219. No. 2246.

Suborbiculate, gibbous: pale *rufo-luteous*, shining, rather *deeply punctured* throughout: eyes black: antennæ and legs pale.

More deeply punctured than either of the other species.

As common as the last, with which it is often found, and of which it may be a mere variety. "Bottisham."—*Rev. L. Jenyns.* "Weston."—*Rev. A. H. Matthews.* 

b. With the elytra punctate-striate.

- Sp. 4. orbiculata. Subhemisphærica, corpore supra femoribusque posticis viridiæneis aut violaceis, antennarum basi pedibusque rufis, elytris striato-punctatis. (Long. corp. 1−1<sup>1</sup>/<sub>2</sub> lin.)
- Ch. orbiculata. Marsham.-Ha. orbiculata. Steph. Catal. 219. No. 2248.
- Subhemispheric, or ovate-hemispheric: head and thorax very thickly punctured greenish-brass or violet: elytra of the same hue, punctate-striate: body beneath brassy-black: legs rufo-ferruginous: posterior femora greenish-brass or violet: antennæ rufous.

Not uncommon in grassy places about Coombe and Darenth Woods; also at Ripley and Hertford in June. "Not uncommon near Swansea, particularly in the woods at Briton Ferry."—L. W. Dillwyn, Esq. "Raehills."—Rev. W. Little. "Weston."—Rev. A. H. Matthews.

- Sp. 5. globosa. Subhemisphærica, atra, nitida ; antennis pedibusque rufo-precis, femoribus posticis atris; elytris striato-punctatis. (Long corp. 1<sup>1</sup>/<sub>2</sub> lin.)
  Al. globosa. Panzer.-Ha. globosa. Steph. Catal. 219. No. 2249.
- Subhemispherica, black, shining: head and thorax finely punctured: elytra delicately punctate-striate: legs pitchy-red, with the posterior femora black: antennæ also pitchy-red, but paler than the legs.

Rare: I have taken specimens near London.

B. Thorax with a transverse impression behind.

- Sp. 6. Mercurialis. Ovali-hemisphærica, nigra nitida, supra nigro-cærulescens, subtilissime punctulata, antennis basi rufescentibus, elytris punctulatis, thorace posticè strigå abbreviatå impresså. (Long. corp. 3/4-11/4 lin.)
- Ha. Mercurialis. Hellwig.-Steph. Catal. 219. No. 2250.
- Oval-hemispheric, black beneath, shining; above deep-blue, very finely punctulated: thorax with an abbreviated impressed striga behind, terminating on each side in a rather deep fovea: elytra finely, but obsoletely punctulate: legs black; hinder femora moderately thick and bluish: antennæ duskyblack, with the base rufo-piceous.

Not uncommon in the sandy hedges about Darenth-wood, and near Hertford: also found in the vicinity of Bristol. "Not uncommon (near Swansea)."—L. W. Dillwyn, Esq.

### GENUS CCCCIII.---MNIOPHILA \* mihi.

Antennæ moderate, 11-jointed, distinctly thickening towards the apex; the basal joint elongate, curved, and subclavate; second subglobose; four following minute subnodose; seventh larger, obconic truncate; eighth minute; three following forming an elongate club, the terminal joint being largest and ovate, the other two obconic. Head small, deeply inserted in the thorax, the latter somewhat semicircular: elytra broad, convex, obtuse behind: anterior legs slender, posterior femora moderately incrassated, tibiæ simple: tarsi short.

This pretty little genus is well distinguished from the other saltatorial Galerucidæ by the singularity of its antennæ, of which the eighth joint is minute, as in many of the fungivorous insects, as Leiodes, &c.; the posterior femora are also proportionately more slender, and the insect jumps but feebly.

Sp. 1. Muscorum. Ovato-globosa, æneo-atra, antennis pedibusque rufis, elytris substriato-punctatis. (Long. corp.  $\frac{1}{2} - \frac{3}{4}$  lin.)

Ha. Muscorum. Ent. Hefte. ii. 48. pl. 2. f. 12.

Ovate-globose, of a shining brassy-black : elytra punctate, the punctures somewhat disposed in striæ and not very deep : antennæ and legs entirely rufous.

Not very common: I possess a specimen captured by Mr. Ingpen.

Mrior, muscus; φιλος, amicus.

## FAMILY LI.-CHRYSOMELIDÆ, Leach.

Antennæ remote at the base, inserted before the eyes, moniliform, gradually thickening to the apex, sometimes a little serrated. Palpi maxillary, filiform, or thickened exteriorly, the terminal joint frequently truncate: maxillæ with the lobes subequal, subcylindric, the outer one rather broadest: body subhemispheric, or ovate, sometimes elongate ovate or oblong: legs all subequal: femora moderate: tibiæ generally simple, sometimes with a dentation on the outer margin: tarsi occasionally considerably dilated, the penultimate joint bilobed.

The beautiful insects of this family are no less conspicuous for their brilliancy and splendour of colouring, than for the extensive varieties to which almost every species is subject, in regard to its tint; scarcely two examples of any of the species occurring of precisely similar hues: it therefore becomes unnecessary to mention the innumerable variations under each species, it being sufficient in this place to point out the fact: in some of the species almost every tint of colour may be found: they are generally of small size and glabrous, and very shining, their predominant colours green, blue, or gold; they subsist, in their first and in their final stages, upon the leaves of plants : their larvæ are oval, with six legs, the body a little elongate, and annulated, terminating in a point behind, and furnished with a fleshy wart, which acts as a seventh leg; the head is scaly. Many of the species live in society, others are solitary. The wart at the apex of the body forms a point of attachment for the larvæ when they change to pupæ, most of which adhere to leaves, but some few are found beneath the earth: some of the larvæ secrete a very fœtid odour.

The species that are found in Britain may be disposed in the following genera, thus cursorily described :

Caput nutans, exsertum.					
Elytra libera. Alati.					
Thorax transversus.					
Palpi filiformes, apice plerumque obtuso, aut acuto :				404.	PHÆDON.
apice distincte truncato :					MELASOMA.
subsecuriformes :		•			CHRYSOMELA.
Thorax quadratus : corpus ele	ongatum :			408.	HELODES.
Elytra connata. Apteri :	• •		•	406.	TIMARCHA.
Caput verticale, thorace fere penitus intrusum.					
Antennæ breves, serratæ :	• •	•		409.	CLYTHRA,
corporis ferè longitudine, simplices.					
Antennæ filiformes,	art. cylindrico	o-obconi	cis:	410.	CRYPTOCEPHALUS.
	is latioribus.				
Palpi apice subcrass	siores :			411.	EUMOLPUS.
filiformes :		•	•	412.	COLASPIS.

## GENUS CCCCIV.-PHÆDON, Megerle.

Antennæ moderate, slender at the base, distinctly thickened at the apex; the basal joint large, compressed; the second shorter than the third, sometimes subglobose; the third slender; the three following short; the remainder distinctly increased, with the terminal joint largest and subovate, acuminate. Palpi maxillary filiform, the terminal joint obtuse or subconic: mandibles quadridentate at the apex: labrum transverse: head small, a little narrowed anteriorly: thorax transverse, the lateral margins simple: body sometimes subhemispheric, at others suboblong ovate: elytra punctate-striate or simply punctate: legs rather short: tibiæ simple: tarsi slender.

The insects of this genus are generally of very small size; but they differ considerably in form and habit; they are removed from the genuine Chrysomelæ by their filiform maxillary palpi, of which the terminal joint is either short and obtuse, or somewhat conicacute; the genus, as it at present stands, contains three or four very distinct types of form, but I have not ventured to remove the discordant species.

#### A. With the antennæ short, subclavate.

- Sp. 1. Armoraciæ. Breviter ovata, cæruleo-virescens, nitida, creberrimè punctulata subtus nigra, elytris basi plicatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
   Ch. Armoraciæ. Linné.—Steph. Catal. 220. No. 2260.
- Short, ovate, slightly convex: above of a shining bluish-green, very thickly
- punctured: head with a slight frontal groove: mouth piceous: thorax short, rather obsoletely punctured: elytra more distinctly punctate than the thorax, the punctures slightly disposed in lines towards the base; the shoulders prominent and wrinkled: body black beneath; legs black: tarsi piceous: antennæ rufo-ferruginous beneath at the base, black at the apex.

Found beneath the bark of willows, and at the roots of grass in marshy places, especially in Battersea-fields. "Meldon-park, Newcastle, &c."—G. Wailes, Esq. "Weston."—Rev. A. H. Matthews. "Common in Crwmlyn-bog."—L. W. Dillwyn, Esq.

- Sp. 2. clavicornis. Ovata, supra viridi-ænea punctulatissima, subtus atra, antennis basi tarsisque pallide-rufis. (Long. corp. 2 lin.)
- Ch. clavicornis. Kirby MSS.-Steph. Catal. 220. No. 2261.

Ovate, somewhat rounded, above green-brass, very thickly and closely punctulated; beneath black, very glossy: head with a longitudinal fovea: thorax very short: elytra irregularly punctate, the shoulders gibbous: body black beneath: legs greenish-black: tarsi pale rufous, with the apical joint fuscous: antennæ pale rufous, with the four terminal joints black; the basal joints very slender. Less common than the last; found in similar situations. "In Crwmlyn-bog, not uncommon."-L. W. Dillwyn, Esq.

B. With the antennæ thickened towards the end, elongate.

a. Elytra striated. 1. Body hemispheric.

 Sp. 3. Betulæ. Breviter-ovata, violacea nitidissima, subtus nigra, elytris subtilissimè punctato-striatis, humeris gibbis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
 Ch. Betulæ. Linné.—Steph. Catal. 220. No. 2262.

Short, ovate, very glossy violet, or brilliant blue, occasionally greenish: head and thorax thickly covered with minute punctures, placed without order, and nearly contiguous: elytra distinctly, but not very deeply punctate-striate, the interstices impunctate : body beneath, legs, and antennæ entirely black.

Abundant in Battersea-fields, and in other places within the metropolitan district. "Weston."—Rev. A. H. Matthews. "Meldon-park, Newcastle, &c."—G. Wailes, Esq. "Raehills."—Rev. W. Little. "Not uncommon, near Swansea."—L. W. Dillwyn, Esq. "New Walk, York."—W. C. Hewitson, Esq. "Cardewmire."—T. C. Heysham, Esq. "Epping."—Mr. Doubleday.

Sp. 4. Cochleariæ. Breviter, subovata, cærulea, nitida, subtus obscurior, elytris subtilissime punctato-striatis, humeris gibbis, ano testaceo. (Long. corp. 1½ lin.)
Ch. Cochleariæ. Fabricius.—Steph. Catal. 220. No. 2263.

Short, subovate, shining blue or greenish above, dull blue beneath : thorax finely and thickly punctulate, without a lateral impression : elytra very convex, finely punctate-striate, with the interstices obsoletely punctulate, in the middle of the base an impressed fovea, and exterior to it an elevated callous : body beneath with the margin of the apex testaceous : antennæ and legs black, the latter with a bluish-gloss.

Less abundant than the last, but found throughout the metropolitan district. "Cambridge."—*Rev. L. Jenyns.* "Not uncommon (near Swansea)."—*L. W. Dillwyn, Esq.* "New Walk, York and Newcastle."—*W. C. Hewitson, Esq.* 

- Sp. 5. gomphoceros. Ovata, subtus nigra, supra atro-cærulea, thorace obsolete punctato, elytris punctato-striatis, interstitiis subpunctatis, antennis apice incrassatis. (Long. corp. 13 lin.)
- Ch. gomphoceros. Leach MSS.-Steph. Catal. 221. No. 2264.
- Ovate, black; above deep shining blue: thorax obsoletely punctate, somewhat obscure: elytra glossy, punctate-striate, with the interstices a little punctured, the base with a small callous, anterior to which is an elongate forea: legs and antennæ black, the latter distinctly thickened at the apex.

Found near Bristol in June. "Taken in abundance by Mr. Jeffreys, under rubbish left by a flood on the banks of the Neath River."—L. W. Dillwyn, Esq.

Sp. 6. concinna. Breviter ovata nigra nitida supra versicolora, thorace creberrime subtilissimè punctato, elytris punctato-striatis, interstitiis punctatis, humeris gibbis, plicatis. (Long. corp. 1½ lin.)

Ch. concinna. Steph. Catal. 221. No. 2265.

Short, ovate, shining black : colour above extremely variable, sometimes light blue, at others æneous, coppery, golden or greenish-purple, sometimes green; the elytra occasionally concolorous, at others not: thorax convex, very thickly and finely punctured : elytra rather deeply punctate-striate, the interstices distinctly punctured; the base with a callous, and a fovea within : body entirely black beneath : legs and base of antennæ with a metallic gloss.

Apparently local, not being found within the metropolitan district, but taken near "Southend, in profusion."—Rev. F. W.Hope.

Sp. 7. tumidula. Breviter ovala, nigro-ænea, nitida, thoracis lateribus tumidulis, elytris punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)

Ch. tumidula. Kirby MSS.-Steph. Catal. 221. No. 2266.

Short-ovate, brassy-black, punctulated beneath: head punctulated, with a transverse smooth impressed line: thorax very smooth, with the middle somewhat flattened, the sides somewhat tumid or rather incrassated: elytra punctatestriate, the punctures very minute: legs brassy-black: antennæ pitchy-black, with the basal joint rufo-piceous.

Abundant in hedges in the vicinity of London, during the early summer months. "Meldon-park, Newcastle, &c."—G. Wailes, Esq. "Weston."—Rev. A. H. Matthews. "Cramond."—Rev. W. Little. "Swansea."—L. W. Dillwyn, Esq.

#### 2. With the body oblong.

Sp. 8. aucta. Oblongo-ovata, convexa, supra carulea vel caruleo-virescens, elytrorum margine rufo. (Long. corp.  $1\frac{1}{2}$  lin.)

Ch. aucta. Fabricius.-Don. xi. pl. 373. f. 2.-Steph. Catal. 221. No. 2267.

Oblong-ovate, convex, above blue or blue-green, head deeply punctured: thorax also thickly and deeply punctured, especially on the lateral margins: *clytra* more shining, regularly punctate-*striate*, with the interstices smooth, *the lateral margins* more or less broadly rufo-*testaceous*, except at the suture: body beneath black, or greenish: legs bluish-black: antennæ black.

Abundant on flowers in the neighbourhood of London, especially

in damp and sandy places. "Bath."—C. C. Babington, Esq. "Weston."—Rev. A. H. Matthews. "Not uncommon on the sand-hills, near Swansea."—L. W. Dillwyn, Esq.

- Sp. 9. marginella. Oblongo-ovata, supra cœrulea vel cœruleo-virescens thoracis elytrorumque lateribus latè luteis. (Long. corp. 1½-2 lin.)
- Ch. marginella. Linné.-Martyn, Col. pl. 15. f. 26.-N. G. marginella. Steph. Catal. 225. No. 2307.
- Oblong-ovate, above blue or greenish: head thickly and rather deeply punctured: thorax somewhat quadrate, thickly punctate throughout, with the disc blue, the lateral margins above and beneath broadly lateous: elytra moderately convex, regularly punctate-striate, with the interstices smooth, the lateral margins broadly lateous: body beneath blue-black, finely punctured; the breast rather coarsely so: legs rather long, blue-black: antennæ black.

Abundant in the flowers of the Ranunculus in marshy places within the metropolitan district. "Common in Cambridgeshire, under the bark of trees."—Rev. L. Jenyns. "Bath, Monk's-wood, &c." —C. C. Babington, Esq. "York, Oxford, &c."—W. C. Hewitson, Esq. "Prestwick Car, Meldon-park, &c."—G. Wailes, Esq. "Raehills, frequent."—Rev. W. Little. "Weston."—Rev. A. H. Matthews. "Common (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 10. Vitellinæ. Oblongo-ovata, supra viridi-ænea, aut cærulea aut nigra, nitida, elytris tenue punctato-striatis, basi plicatis, ani margine rufescente. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Ch. Vitellinæ. Linné.-Martyn, C. pl. 14. f. 1 and 8.-Steph. Catal. 221. No. 2268.
- Oblong-ovate, above brassy-green, blue or black, sometimes violaceous, shining: thorax moderately convex, with the disc finely, and the lateral margins rather coarsely, punctured: elytra faintly punctate-striate, the striæ rather irregularly placed towards the sides: body beneath brassy, with the apex more or less margined with reddish: legs æneous: antennæ black, with the base slightly ferruginous.

Extremely abundant on willows throughout the metropolitan district in June and July. "Bottisham."—Rev. L. Jenyns. "Bath." —C. C. Babington, Esq. "Cramond."—Rev. W. Little. "Very common (near Swansea)."—L. W. Dillwyn, Esq. "Weston."— Rev. A. H. Matthews. "Cardew-mire."—T. C. Heysham, Esq. "Newcastle, &c."—G. Wailes, Esq. "New Walk, York."— W. C. Hewitson, Esq.

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Sp. 11. unicolor. Subelongato-ovata, nigro-cærulea nitidiuscula punctulatissima, elytris subtilissime punctato-striatis. (Long. corp. 2-21 lin.)
Ch. unicolor. Marsham.-Steph. Catal. 221. No. 2269.

Somewhat *elongate*-ovate, above of a slightly glossy *blue-black*, very thickly and finely punctured throughout, with the punctures disposed in striæ on the elytra: *body beneath* and legs *entirely black* with a faint bluish gloss: *antennæ* also *black*.

Not so common as the last near London; found also near Bristol. "New Walk, York."—W. C. Hewitson, Esq. "Weston." —Rev. A. H. Matthews.

2. Elytra punctate. 1. With the body ovate-hemisphæric.

- Sp. 12. Polygoni. Oblongo-ovata, carulea aut virescens, nitida, confertissimè punctata, thorace ano pedihusque rufis. (Long. corp.  $1\frac{3}{4}-2\frac{1}{2}$  lin.)
- Ch. Polygoni. Linné.-Don. iii. pl. 96. f. 1.-Steph. Catal. 221. No. 2270.
- Oblong-ovate, finely punctured: head deep *blue* or greenish: *thorax* convex, entirely *rufous* and shining: elytra very convex, blue, violet or greenish, rather more deeply punctured than the thorax: breast, abdomen, and middle of the thorax beneath blue: *apex of abdomen and legs rufous*: tarsi piceous. above: antennæ black, with the base usually ferruginous.

Abundant in fields where the Polygonum avicularia and docks abound. "Raehills, plentiful."—Rev. W. Little. "Cambridge, Bath, and Monk's-wood."—C. C. Babington, Esq. "Newcastle, &c."—G. Wailes, Esq. "York."—W. C. Hervitson, Esq. "Baronwood."—T. C. Heysham, Esq. "Weston."—Rev. A. H. Matthews. "Common (near Swansea)."—L. W. Dillwyn, Esq. "Epping." —Mr. Doubleday.

- Sp. 13. Raphani. Oblongo-ovata, supra viridi-ænea, aut cærulescens, nitida, confertissimè punctata, subtus cærulea, fronte sulcatâ. (Long. corp.  $1\frac{3}{4}-2\frac{3}{4}$  lin.)
- Ch. Raphani. Fabricius.-Steph. Catal. 221. No. 2271.-Ch. Hypochæridis. Don. ii. pl. 573. f. 3.
- Oblong-ovate; above golden- or bluish-green, shining, very thickly punctate; head rather large, with a deep groove on the forehead: mouth piceous: thorax slightly emarginate anteriorly, the disc moderately convex and shining, faintly punctured: elytra more deeply punctured than the thorax, the punctures irregularly placed: body beneath greenish-blue, scarcely punctured: antennæ and legs brassy: the tarsi piceous.

Less abundant, but not uncommon, near London, than the fore-

going species :--found occasionally in Battersea-fields. " Cambridge."-C. C. Babington, Esq. " Near York, very abundant." --W. C. Hewitson, Esq. " Cramond."-Rev. W. Little. " Near Liverpool."-Rev. A. H. Matthews. " Common on docks in Crwmlyn-bog."-L. W. Dillwyn, Esq.

Sp. 14. fastuosa. Ovata, convexa, tota viridi-aurea, cæruleo-micans, elytrorum suturů vittâque mediâ abbreviatû saturate cæruleis, antennis basi ferrugineis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)

Ch. fastuosa. Linné.-Don. vi. pl. 194. Steph. Catal. 217. No. 2272.

Ovate, convex; head rounded, splendid golden-green, slightly punctured on the sides; the forehead smooth, with a faint channel: thorax also bright golden-green, the disc obsoletely, and the margins rather distinctly punctured: elytra convex, also of a very brilliant golden-green, punctured, the punctures somewhat disposed in lines on the sides and towards the suture; the suture itself, and an abbreviated stripe in the middle of each elytron, of a bright violet-blue: body beneath and legs of a brassy-green: antenna: fuscous, with the base ferruginous.

Sometimes extremely abundant in whitethorn hedges within the metropolitan district, especially at Darenth-wood, in June; and also in Richmond-park. "Common on the Devil's-ditch, in the blossoms of flowers."—*Rev. L. Jenyns.* "Granchester, Cambs.; Sawtry-fen and Monk's-wood, Hants."—*C. C. Babington, Esq.* "Cardew-mire."—*T. C. Heysham, Esq.* "Cramond."—*Rev. W. Little.* 

GENUS CCCCV.—CHRYSOMELA Auctorum.

Antennæ gradually thickening to the apex; the basal joint very robust; second short, occasionally subglobose; third a little elongate and slender; fourth and following shorter; the five last distinctly incrassated, generally somewhat elongate, but sometimes subtransverse; the apical joint largest. Palpi maxillary, exserted, longer than the maxillæ, with the terminal joint thickened, truncate, subsecuriform: mandibles bidentate at the apex: labium transverse-quadrate: head small, rounded: thorax transverse, the lateral margins sometimes thickened: body robust, convex, suborbicular, or ovate, sometimes slightly oblong: elytra moveable, either punctate-striate, or covered with impressed points, somewhat disposed in striæ on the sides: legs moderate, simple: tibiæ either simple on their outer margin, or furnished with a small tooth towards their apex: tarsi sometimes very much dilated, especially in the males.

The insects of this elegant genus are unquestionably amongst

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the most splendid of the indigenous Coleoptera; they are of moderate size, and of a short convex form, with the terminal joint of the maxillary palpi truncate, and more or less securiform : the antennæ gradually thicken to the apex, and a few of the terminal joints are sometimes transverse, the terminal one itself being in general longest and ovate-obtuse : the species of the first subsection differ considerably from the others; they are usually of pale hue, with occasionally black spots or clouds : the tibiæ have a distinct tooth, fringed beneath with hairs, on their exterior edge towards the apex.

### A. With the elytra punctate-striate.

a. The margins of the thorax not thickened.

† Sp. 1. Adonidis. Oblongo-ovata, nigra, thoracis margine flavo, puncto nigro, elytris flavis, suturâ vittéque nigris. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)

Ch. Adonidis. Fabricius.-Curtis, iii. pl. 111.-Steph. Catal. 222. No. 2273.

Oblong-ovate: mouth, clypeus, eyes, legs, and under-side black: thorax minutely punctured, black, with the lateral margins ochraceous, and each having a small round spot: elytra flavescent, irregularly punctate-striate, with a narrow stripe down the suture, abbreviated at the base, and a broad streak towards the posterior margin black.

In the British Museum; said to have been taken in Lincolnshire.

- Sp. 2. pallida. Oblongo-ovata, convexa, flavo-testacea, oculis nigris, elytris profundè punctato-striatis. (Long. corp. 3 lin.)
- Ch. pallida. Linné.-Wood, i. pl. 11.-Steph. Catal. 222. No. 2274.
- Oblong-ovate, convex, entirely of a *testaceous-yellow*, with the *eyes black*: thorax shining, irregularly and coarsely punctate: *elytra deeply* punctate-*striate*, the striæ placed somewhat irregularly towards the apex: body piceous in the middle beneath: legs and antennæ pale testaceous.

Rather local in the vicinity of London, but taken occasionally in Coombe-wood in June. "Scarborough."—W. Bean, Esq. "Midg-ley-moor."—Mr. Gibson.

Sp. 3. decempunctata. Oblongo-ovata, nigra, ore pedibusque concoloribus, elytris subtilitir punctato-striatis, interstitiis confertissimè punctulatis, antennarum basi anoque testaceis; thorace elytrisque rufo-testaceis plus minus nigro maculatis. (Long. corp. 3–3½ lin.)

Ch. decempunctata. Linné.-Steph. Catal. 222. No. 2275.

Oblong-ovate, black, with the mouth and legs of the same colour: head frequently with two ferruginous dots between the eyes: thorax coarsely punctured

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on the sides, *rufous* or testaceous, generally with the middle of the base broadly black: *elytra rufous*, *delicately punctate*-striate, with the *interstices* thickly *punctured*, the *disc* more or less *spotted with black*, rarely immaculate, the spots sometimes confluent, and not exceeding five on each elytron: antennæ black, with the base testaceous: apex of the abdomen also testaceous.

As above indicated, this species is extremely variable as to the absence or confluence of the spots on the elytra; in rare instances the latter are nearly black, from the coalescence of the spots.

Abundant in several of the woods in the vicinity of London, especially at Darenth and Coombe in June. "Monk's-wood."— C. C. Babington, Esq. "Buttercrombe-moor, York."—W. C. Hewitson, Esq. "Raehills."—Rev. W. Little. "Epping."—Mr. Doubleday.

- Sp. 4. rufipes. Oblongo-ovata, nigra, ore, pedibus, thorace elytrisque rufis, his nigro maculatis, elytris tenuè punctato-striatis, interstitiis obsoletiùs punctulatis. (Long. corp. 3–3<sup>3</sup>/<sub>4</sub> lin.)
- Ch. rufipes. De Geer.-Steph. Catal. 222. No. 2276.-Ch. 10-notata. Don. xi. pl. 373. f. 1.
- Oblong-ovate, black, with the mouth and legs rufous: thorax and elytra also rufous, the former slightly punctate on its lateral margins, and with two irregular black spots on its hinder margin, united by a black line; the latter delicately punctate-striate, with the interstices rather obsoletely punctulate, the disc of each with five distinct black spots, of which one or more of those placed towards the apex are sometimes obliterated: body beneath black, with the tip of the abdomen testaceous: antennæ testaceous, with the terminal joints fuscous.

Less abundant than the foregoing species, but nevertheless common within the metropolitan district. "Armathwaite."—T. C. Heysham, Esq. "Epping."—Mr. Doubleday.

- Sp. 5. sexpunctata. Oblongo-ovata, convexa, nigra, thorace rufo, punctis duobus disco atris, elytris rufis punctis tribus, uno suturali, nigris, femoribus piceis, tibiis tarsisque pallidis. (Long. corp. 3 lin.)
- Ch. sexpunctata. Fabricius.-Steph. Catal. 222. No. 2277.
- Oblong-ovate, convex, black: mouth a little varied with rufous: thorax rufous, minutely punctured, with two distinct round black spots on the disc, one towards each lateral margin: elytra rufous, delicately punctate-striate, with the interstices faintly punctured, each with three black spots on the disc, one placed in the middle of the base, a second in the centre of the disc, and the third minute, and situated in the middle of the suture, and united to that of the opposite elytron: on the shoulder is also a very minute black trace: femora piceous: tibix and tarsi pale: antennæ rufous, with the apex fuscescent.

My specimen of this insect agrees admirably with the Fabrician description and with Panzer's figure; the ? in my Catalogue, ignorantly copied by Mr. Curtis, relates to its locality, not to its nomenclature, which any person may readily perceive.

Taken in Kent, between Gravesend and Rochester, but I am not certain of the exact locality.

- Sp. 6. Litura. Brevitèr ovata, convexa, rufo-testacea, elytrorum suturâ vittâque abbreviatâ nigris, abdominis antennarumque apice fuscis. (Long. corp.  $1\frac{1}{2}$ — $2\frac{1}{2}$  lin.)
- Ch. Litura. Fabricius.-Martyn, Col. pl. 16. f. 37.-Steph. Catal. 222. No. 2278.
- Short, ovate, convex, rufo-testaceous: head with two fuscous spots behind, frequently united by a streak of similar hue: thorax immaculate, very convex, finely punctured: elytra punctate-striate, the interstices behind thickly punctured; the suture and an abbreviated streak on the disc of each elytron fuscous or black, sometimes immaculate, with the suture concolorous: legs pale-testaceous: antennæ also testaceous, with the apex black.
- In rare instances the base of the antennæ and the tarsi are testaceous, with the rest of the insect totally deep black; and all intermediate shades of colour between this and the immaculate variety occur.

Extremely abundant on broom in the vicinity of the metropolis, especially at Coombe and Darenth Woods. "Raehills, plentiful." —Rev. W. Little. "Meldon-park."—G. Wailes, Esq. "York."— W. C. Hewitson, Esq. "Common (near Swansea)."—L. W. Dillwyn, Esq. "Gamlingay, Cambridgeshire."—C. C. Babington, Esq.

+ Sp. 7. festa. Subovata, nigro-ænea, elytris lineis tribus longitudinalibus flavis, exteriore medio intus unidentato. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
Ch. festa. Kirby MSS.-Steph. Catal. 222. No. 2279.

Subovate, brassy-black : head rugose-punctate : mouth piceous : thorax irregularly punctate, somewhat smooth on the disc, the punctures coarse and thick on the sides, which are obscurely incrassated : *elytra* punctate-striate, with the *lateral margin*, *base*, and two somewhat waved *longitudinal stripes*, uniting at the apex, reddish-yellow, the lateral stripe with a triangular tooth in the middle pointing inwards and forwards; the flavescent stripes occupy the alternate interstices of the striw, and the suture to the base is *meous*.

I have seen but one specimen of this beautiful species, which was "taken near Darlington, Yorkshire, by Mr. Backhouse."—*Kirby MSS*.

b. Thorax with its lateral margins incrassated.

1. Body oblong.

Sp. 8. marginata. Oblongo-ovata, supra fusco-ænea, elytrorum margine exteriori flavescente, alis rufescentibus. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-3 lin.)
Ch. marginata. Linné.—Steph. Catal. 222. No. 2280.

- Oblong-ovate, above fuscous-brass: head sparingly punctured, with the mouth black: thorax with the disc rather obsoletely, and the lateral margins coarsely, punctate: elytra with the lateral margins lateous or reddish-yellow, the disc somewhat irregularly punctate-striate, the striæ irregularly approximating in pairs: body beneath black, with a bluish or greenish tinge, and the apex livid: legs and antennæ black, the base of the latter rufo-piceous; the tarsi piceous.
- The elytra are sometimes of a pale brassy castaneous hue, with the margin paler.

Somewhat rare, at least near London, though very widely dispersed. "Carlton-hill."—Rev. W. Little. "Meldon-park."— G. Wailes, Esq. "Horningsea-fen, Cambridgeshire."—C. C. Babington, Esq. "Brough-marsh."—T.C. Heysham, Esq. "Taken near Pontneddfechan, and in Crwmlyn-burrows."—L. W. Dillwyn, Esq. "Winterbourne-Stoke, Wiltshire; Middleton-one-Row, Yorkshire; and Roseberry-Topping, near the summit."—Rev. G. T. Rudd.

- † Sp. 9. lepida. Oblongo-ovata, supra picea, antennis, elytris pedibusque piceotestaceis. (Long. corp. 3 lin.)
- Ch. lepida. Leach MSS .- Steph. Catal. 222. No. 2281.
- Oblong-ovate, above *piceous*: thorax finely punctured, the punctures largest on the sides: *elytra* irregularly *punctate-striate*, *pitchy-testaceous*: antennæ and legs also pitchy-testaceous.

The only specimens I have seen of this species are in the British Museum: of their locality I am not aware.

Sp. 10. geminata. Oblongo-ovata, supra cupreo-virens, aut violacea, elytris per paria striato-punctatis, interstitiis subtilissime punctulatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>-S<sup>1</sup>/<sub>2</sub> lin.)

Ch. geminata. Paykul.-Steph. Catal. 222. No. 2282.

Ovate, above of a greenish-copper, or violet sometimes, but rarely, blue-black, or bright purple-copper: head sparingly, though faintly punctured, with a rounded depression above the mouth : thorax with the disc faintly and the lateral margins rather deeply punctured, and the hinder margin with a fovea in the middle: *elytra* rather glossy, *faintly punctate-striate*, the eight exterior striæ disposed in pairs, the interstices minutely and irregularly punctulate: body beneath pitchy-black: legs brassy-black; with the tarsi piceous: antennæ fuscous, with the base rufescent.

Also rather scarce near London; I have taken it occasionally in June at Hertford; near Bristol it appears to be more abundant. "Forfarshire, rare."—Rev. W. Little. "Common, particularly about Crwmlyn-burrows."—L. W. Dillwyn, Esq. "Once found on the top of York Minster."—W. C. Hewitson, Esq. "Epping." —Mr. Doubleday.

- Sp. 11. Hyperici. Oblongo-ovata, supra viridi-ænea aut cærulescens, elytris subtilissimè punctulatis seriebus punctorum majorum distantium, per paria approximatis. (Long. corp. 2½-3 lin.)
- Ch. Hyperici. Forster .- Steph. Catal. 222. No. 2283.
- Ovate; above greenish-brass or black: head smooth: thorax glossy, very obscurely punctured on the disc, but distinctly punctured within the base of the lateral margins: elytra slightly glossy, of a greenish-blue or dusky tint, finely but obsoletely punctulated throughout, each with four pair of stria, composed of deep remote punctures, and a single row next the suture, sometimes double at the base: body beneath dusky-brass or bluish: legs greenishblue: antennæ black.

The elytra are sometimes concolorous with the thorax, at others discrepant.

Very abundant in some parts of the metropolitan district, especially at Darenth-wood, in June; also in Copenhagen-fields, in grassy places. "Crwmlyn-burrows, sometimes very plentiful."— L. W. Dillwyn, Esq. "Caernarvon and Monk's-wood."—C. C. Babington, Esq.

#### 2. Body ovate.

† Sp. 12. lurida. Ovata, nigra, elytris castaneis, striato-punctatis. (Long. corp. 8 lin.)

Ch. lurida. Linné .- Steph. Catal. 222. No. 2284,

Ovate, black : elytra chestnut, punctate-striate.

In the British Museum; captured near Windsor, in June.

 Sp. 13. lamina. Ovata, supra viridi-cærulescens, nitida, thorace lævissimo, lateribus valde incrassatis, elytris punctis impressis striatis. (Long. corp. 4 lin.)
 Ch. lamina. Fabricius.—Steph. Catal. 223. No. 2285.

Ovate: head greenish-blue or olivaceous, scarcely punctured: mouth piceous: thorax deep blue, very glossy and smooth, with a deep sulcus on each side, giving the margins a thickened appearance: elytra glabrous, striated, the striæ simple and composed of large distant punctures: body beneath bluish, sometimes with a greenish tinge: legs the same: antennæ black, with the base rufo-piceous.

Not uncommon in grassy places, on the banks of the Thames, about Battersea, Fulham, &c. in June. "Near Ely."—Rev. L. Jenyns. "Arthur's-seat, not common."—Rev. W. Little. "Coomewood and Armathwaite."—T. C. Heysham, Esq. "Bath."—C. C. Babington, Esq. "Marsden, Meldon-park, &c."—G. Wailes, Esq. "Covehithe, Suffolk."—W. C. Hewitson, Esq.

Sp. 14. Hobsoni. Ovata, atra supra piceo-nigra subnitida, thorace læve, lateribus incrassatis, elytris punctis impressis striatis. (Long. corp. 4 lin.)
Ch. Hobsoni. Hope MSS.—Steph. Catal. 413. No. 2285.\*

Ovate, black, above pitchy, or brown-black, elytra glossy: thorax smooth, with the lateral margins incrassated : elytra simply punctate-striate.

Taken near Manchester, in plenty : its peculiar colour appears to distinguish it from the preceding insect.

† Sp. 15. Sparshalli. Curtis MSS .- Steph. Catal. 224. No. 2299.

I have never seen this insect, which I introduced into my Catalogue from a notice in an address delivered at the anniversary meeting of the Zoological Club of the Linnean Society, by J. G. Children, Esq., where it is said to be a beautiful and undescribed insect. It is, I believe, in Mr. Sparshall's Collection.— Locality unknown to me.

Sp. 16. Banksii. Ovata, supra ænea, subtus testacea, elytris punctis excavatis sparsis. (Long. corp. 4—5½ lin.)

Ch. Banksii. Fabricius.-Don. iv. pl. 138. f. 4.-Steph. Catal. 223. No. 2287.

- Ovate, above brassy, very glossy: mouth testaceous: thorax with the disc very finely and obscurely punctulated, the lateral margins greatly incrassated, the inner edge of the fold deeply punctate: *elytra* sprinkled with deep excavated *punctures*, the under margin testaceous: body *beneath*, legs and antennæ also *testaceous*.
- Sometimes pitchy above, with a very obscure trace of æneous: at others nearly black.

Extremely abundant in grassy hedges in the vicinity of Darenthwood : also near Bristol, and in Devonshire. "Teignmouth."-Rev. A. H. Matthews. "Dawlish."-C. C. Babington, Esq.

B. Elytra punctate. a. Thorax with its lateral margin thickened.

1. Body oblong.

Sp. 17. limbata. Suboblongo-ovata, nigra, nitida, subtiliter punctata, elytrorum limbo toto late ferrugineo. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4 lin.) Ch. limbata. Fabricius.-Steph. Catal. 223. No. 2287.

Somewhat oblong-ovate, black, shining, very finely punctate; forehead with a curved impression: thorax with the lateral margins thickened; the disc glossy, with a faint brassy tint, and rather distinctly punctate towards the apex of the lateral margin, and with a deep fovea on each side at the base: elytra black, with the entire limb broadly deep ferruginous or sanguineous, the disc finely punctured, the punctures somewhat disposed in lines on the margin: legs and antennæ black: antennæ fuscous, with the base beneath rufescent.

Very rare: specimens have been taken near Windsor in June, and, I believe, in Devonshire.

### 2. Body ovate.

Sp. 18. sanguinolenta. Ovata, atro-cærulescens, elytris profundè rugoso-punctatis, margine laterali late sanguineo. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-4 lin.)
 Ch. sanguinolenta. Linné.-Don. iv. pl. iii. f. 3, 4.-Steph. Catal. 223. No. 2288.

Ovate, deep *bluish-black*: head and thorax obsoletely punctured, except the lateral margins of the last, which are deeply and irregularly punctate and incrassated: *elytra* ample, *coarsely and thickly punctured*, the punctures irregularly confluent, forming a rugose surface, *the lateral margins broadly sanguineous*—the colour changing after death to rufo-testaceous:—body beneath and legs bluish: antennæ black, with the basal joints bluish.

Not uncommon at times within the metropolitan district. "Salthill, abundantly on Linaria vulgaris, in the beginning of October." --Mr. Ingpen. "Raehills."-Rev. W. Little. "In Neath-valley, sometimes not uncommon on the sands at the entrance to Caswellbay."-L. W. Dillwyn, Esq.

+ Sp. 19. Carnifex. Ovata, nigra, elytris lavissimis, margine exteriori sanguineo. (Long. corp. 4? lin.)

Ch. Carnifex. Paykul.-Steph. Catal. 223. Nc. 2289.

Ovate, black: elytra very smooth, with the outer margins sanguineous ;-rather larger than the preceding species.

I believe this insect was taken a few years since by Mr. Curtis, in Suffolk, in the spring.

Sp. 20. Staphylæa. Ovata, brunneo-testacea, supra subæneo micans, elytris crebrè subtiliter punctulatis. (Long. corp. 3-4 lin.)

Ch. Staphylæa. Linné.-Martyn, Col. pl. 14. f. 3.-Steph. Catal. 223. No. 2290.

Short, ovate, very convex, testaceous-brown, above slightly tinted with a metallic hue: head and thorax very finely punctured: the lateral margins of the last

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greatly incrassated: *elytra* very convex, irregularly and *thickly punctured*, the punctures not disposed in lines: *body beneath pale testaceous*, or deep-brown : antennæ pale ferruginous.

Very abundant in the metropolitan woods, especially about Hertford, in the autumn. "Ely, Cambridge, &c."—Rev. L. Jenyns. "Raehills, common."—Rev. W. Little. "Weston."—Rev. A. H. Matthews. "Newcastle, &c."—G. Wailes, Esq. "In Clinewood and hedges about Penllergare."—L. W. Dillwyn, Esq. "Cardew-mire."—T. C. Heysham, Esq. "York, &c."—W. C. Hewitson, Esq. "Bath, &c."—C. C. Babington, Esq. "Epping."—Mr. Doubleday.

Sp. 21. polita. Ovata, viridi-ænea aut cærulea, nitida, thorace aurato, elytris brunneo-testaceis, aut cærulescentibus, subtilitèr punctulatis. (Long. corp. 3-4½ lin.)

Ch. polita. Linné.-Martyn, C. pl. 14. f. 5.-Steph. Catal. 223. No. 2291.

Ovate, brassy-green or blue, very shining: thorax generally of a bright golden hue, or deep blue, extremely glossy, obsoletely punctured, with the lateral margins incrassated and greenish-brass: scutellum also greenish-brass: elytra generally testaceous-brown, of variable hue, but in very rare instances of a bright deep green-blue, the disc thickly sprinkled with small punctures irregularly placed: legs brassy-green, with the tarsi piceous: antennæ duskyblack, with the basal joints somewhat ferruginous, rarely black.

Also extremely abundant throughout the metropolitan district in hedges, during the summer. "Very abundant in Cambridgeshire." — Rev. L. Jenyns. "Cardew-mire." — T. C. Heysham, Esq. "Monk's-wood, Bath, &c." — C. C. Babington, Esq. "York and Newcastle." — W. C. Hewitson, Esq. "Common (near Swansea)." — L. W. Dillwyn, Esq. "Raehills, common." — Rev. W. Little.

b. Thorax with the lateral margin not thickened.

1. Body oblong.

Sp. 22. fulgida. Oblongo-ovata, convexa, viridi-aurea, cæruleo micans, nitidissima, elytris crebre et profundè inordinatė punctatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>-5<sup>1</sup>/<sub>2</sub> lin.)
Ch. fulgida. Fabricius.-Steph. Catal. 223. No. 2292.

Oblong-ovate, convex, golden-green, with a blue gloss, and very shining: head very obsoletely punctured, with an obsolete furrow on the forehead: thorax convex, very thickly punctured, the lateral punctures largest, the disc more or less tinted with blue: elytra also convex, thickly and deeply punctured, the punctures towards the sides and near the suture, a little disposed in striæ, and the colour of three parts of a bright golden-green, the disc, in certain lights, *blue*: antennæ and legs brassy-green, the base of the former sometimes ferruginous beneath.

Very abundant in some parts of the country, especially near Cambridge and in Huntingdonshire. "Cow-fen, near Cambridge, and neighbourhood of Ely."—Rev. L. Jenyns. "Whittlesea."— Rev. A. H. Matthews. "Very common on tansey, near York."— W. C. Hewitson, Esq.

- Sp. 23. graminis. Oblongo-ovata, convexa, viridi-cærulea nitida, elytris crebrè at obsoletè inordinatè punctatis. (Long. corp. 3<sup>1</sup>/<sub>2</sub>—5 lin.)
- Ch. graminis. Linné.—Don. xi. pl. 365. f. 1. var. viridi. Steph. Catal. 223. No. 2293.
- Oblong-ovate, convex, shining blue-green: head and thorax thickly punctulated, the punctures largest towards the sides of the latter: elytra thickly and finely punctured, the punctures distinct and irregularly placed in lines towards the lateral margins, the surface entirely of a uniform blue-green; antennæ and legs rich metallic green.

Much more rare than the preceding; found in the vicinity of Dover, and at times somewhat abundantly; also, I believe, in Norfolk. "Sandsfield."—*T. C. Heysham, Esq.* 

- †Sp. 24. violacea. Oblongo-ovata, convexa, cyanea, nitida, antennis pedibusque concoloribus. (Long. corp. 5 lin.)
- Ch. violacea. Fabricius?-Steph. Catal. 223. No. 2294.-Ch. graminis, var. violacea. Don. xi. pl. 365. f. 2?
- Oblong-ovate, convex, shining-blue : thorax smooth: elytra very finely punctulated: antennæ and legs also blue, or violet.

A specimen of this insect is in the British Museum, which is said to have been captured in Lincolnshire, and a second, in the collection of its captor, was taken "near Windsor."—J. H. Griesbach, Esq.

Sp. 25. cerealis. PLATE XXIII. f. 4.—Oblongo-ovata, thorace lineis tribus coleoptrisque quinque ad septem cæruleis, elytris vagè punctatis. (Long. corp.  $3\frac{1}{2}-4\frac{1}{2}$  lin.)

Ch. cerealis. Linné.-Steph. Catal. 224. No. 2295.

Oblong-ovate, above golden, beneath bright purplish violet: head impunctate, with a longitudinal furrow: thorax thickly punctured, bright coppery-gold, with the lateral margins and a narrow dorsal line bright blue: elytra deeply and thickly punctate, bright coppery-gold, with the suture and a broad central

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stripe rich-blue, and one or two other narrow streaks of the same colour: legs and antennæ violaceous, the apex of the latter fuscescent.

Var.  $\beta$ . With the head and thorax pitchy-brown with a brassy tint: elytra pale pitchy-brown, with three darker longitudinal streaks; lateral margin beneath blue: body beneath violet black.

Apparently not very rare in the Welsh mountains, having been taken on Snowdon, and other places, by the Revs. J. S. Hey, and F. W. Hope; and by Messrs. Fox, Darwin, and others, in comparative plenty within these few years.

#### 2. Body ovate.

- Sp. 26. varians. Ovata, convexa, colore vario, antennis basi concoloribus, thoracis margine subincrassato, elytris creberrimè, vagè punctatis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>— 3<sup>1</sup>/<sub>2</sub> lin.)
- Ch. varians. Fabricius.-Steph. Catal. 224. No. 2296.-Ch. Marshami.-Don. viii. pl. 286. f. 1.
- Ovate, convex, beneath violet-blue or greenish, shining, sometimes æneous, upper surface extremely variable in tint, sometimes of a splendid copper, at others blue, blue-green, violet or black, and occasionally of a brassy-brown: head obsoletely punctured, with the mouth pitchy-black: thorax with the lateral margins obsoletely thickened, the disc finely but obsoletely punctured : elytra very shining, thickly and irregularly punctured : antennæ at the base concolorous with the upper surface, the apex black: legs violaceous.

Rather scarce near London, but I have occasionally met with the insect in plenty in grassy places at Coombe-wood, in June, and also at Darenth: it is not uncommon near Bristol. "Raehills, common." — Rev. W. Little. "Newcastle, &c."—G. Wailes, Esq. "Neath valley, and on borders of the old Crwmlyn Canal, not uncommon." — L. W. Dillwyn, Esq. "Wood Ditton, Cambs."—B. D. Walsh, Esq. "Monk's-wood."—C. C. Babington, Esq. "Weston."— Rev. A. H. Matthews. "Epping."—Mr. Doubleday.

- Sp. 27. hæmoptera. Gibbosa, nigro-cærulea tota, antennis basi rufo-piceis, thorace obsoletè punctulato, elytris substriato-punctatis. (Long. corp. 3–4 lin.)
- Ch. hæmoptera. Linné.-Martyn, Col. pl. 15. f. 22.-Steph. Catal. 224. No. 2297.
- Gibbous, entirely of a blue-black, somewhat brassy above: head obsoletely punctured, with the mouth pitchy-black: thorax also obsoletely punctured, with the lateral punctures larger and more distinct: elytra very convex, with large moderately close punctures, somewhat disposed in irregular striæ towards

the sides and suture: wings pale rufous: antennæ with the base rufo-piceous, the apex dusky-black.

Variable in colour, like its congeners: the antennæ are sometimes piceous.

This species appears to frequent the coasts, on the banks of the larger rivers: it is very abundant in Devonshire and Cornwall, and occurs also near "Southend, and in the Isle of Sheppey."— *Rev. F. W. Hope.* "Teignmouth."—*Rev. A. H. Matthews.* 

Sp. 28. gættingensis. Ovata, toto violacea, subtilissimè punctulata, antennarum basi palpis tarsisque rufo-testaceis. (Long. corp.  $3-4\frac{1}{2}$  lin.)

Ch. gœttingensis. Linné.-Don. viii. pl. 286. f. 2.-Steph. Catal. 224. No. 2298.

Ovate, totally of a rich violet, of a purplish hue on the upper surface, which is throughout minutely and distinctly punctured, the punctures here and there on the elytra disposed in lines: femora violet: tibiæ the same, with the apex rufescent: tarsi, palpi, and base of the antennæ rufo-testaceous.

Not uncommon in the spring and early summer months, in hedges near Hertford.

# GENUS CCCCVI.—TIMARCHA, Megerle.

Antennæ moniliform, robust, the basal joint stout, tumid; second short, subnodose; third slightly elongate and obconic; the fourth to the tenth nodose, distinct, the terminal joint somewhat thicker, with the apex acuminate. Palpi rather long, the terminal joint somewhat securiform truncate: labrum transverse: head small, rounded, deeply inserted into the thorax, the latter transverse, with the lateral margins considerably dilated, the disc convex: elytra connate, ample, the lateral edges doubly margined: body very convex: wings none: legs elongate, stout: tibiæ incurved, thickened at the apex: tarsi very broad and dilated, the basal joints cordate, beneath spongy.

- Sp. 1. lævigata. Atro-purpurea, obscura, subtus nitida, undique subtilissimè creberrime punctulata, punctis subæqualibus. (Long. corp. 7-8½ lin.)
- Te. lævigatus. Linné.-Ch. tenebricosa. Fabricius.-Don. viii. pl. 276.-Ti. tenebricosa. Steph. Catal. 224. No. 2300.
- Deep purple, above obscure, beneath shining: forehead with a broad deep im-

pression; the entire surface thickly covered with minute nearly uniform *punctures*: legs and base of the antennæ slightly tinted with violet: tarsi very broad, griseous beneath.

Larva violet, with the apex of the body yellow; it is very robust and transversely wrinkled.

The Linnean name lævigata has been restored to this insect.

Extremely abundant in hedges and on heaths, from February to October, throughout the metropolitan district. "Abundant in Cambridgeshire."—Rev. L. Jenyns. "Weston."—Rev. A. H. Matthews. "York, Southwold, Suffolk, &c."—W. C. Hewitson, Esq. "Frequent (near Swansea)."—L. W. Dillwyn, Esq. "Epping."—Mr. Doubleday.

Sp. 2. coriaria. Nigra, subnitida, crebre inæqualitèr punctata, subtus violacea, (Long. corp. 3<sup>1</sup>/<sub>2</sub>-5 lin.)

Ch. coriaria. Fabricius.-Ti. coriaria. Steph. Catal. 224. No. 2301.

Black above, slightly shining, sometimes with a violaceous or purplish tinge: the upper surface deeply, thickly, and irregularly punctured, the punctures for the most part confluent: legs and basal joints of the antennæ violet; apex of the latter fuscous-black.

Also very common throughout the metropolitan district. "Remarkably abundant on the Devil's-ditch, appearing as early as February."—Rev. L. Jenyns. "Abundant near York."—W. C. Hewitson, Esq. "Weston."—Rev. A. H. Matthews. "On dry banks near the Mumbles."—L. W. Dillwyn, Esq. "Epping."— Mr. Doubleday.

### GENUS CCCCVII.-MELASOMA, Dillwyn.

Antennæ short, rather slender; the basal joint robust, dilated within; second short, subglobose; third elongate, subclavate; fourth also elongate, shorter than the third; the two following small, short, nodose; the remainder gradually increasing, and forming a slender compressed club, of which the four basal joints are transverse, and the apical one is large ovate-acute. Palpi slender, the terminal joint minute, obtuse: head small, rounded, inserted to the eyes, which are oblong, into the thorax, the latter narrow, deeply emarginate in front, and in general with the lateral margin incrassated: body oblong: wings and elytra ample: legs short, simple: tarsi with the joints cordate, the second from the base small.

The insects of this genus are distinguished from the genuine

Chrysomelæ by having the palpi slender, with the terminal joint small, obtuse; the antennæ short, subclavate, compressed; the thorax narrowed, with the lateral margins somewhat thickened; elytra broad, ample; wings long; body elongate, convex; legs short, &c.

- A. With the elytra punctate: thorax with its lateral margins distinctly incrassate.
- Sp. 1. Populi. Nigro-cærulea, nitida, elytris rufis, confertissime punctulatis ipso apice nigris. (Long. corp. 5–6 lin.)
- Ch. Populi. Linné.—Martyn, Col. pl. 15, f. 18, 19.—G. N. Populi. Steph. Catal. 225. No. 2302.
- Blue-black, shining: head finely punctured, with an angulated and a longitudinal impression in front: thorax with the disc very glossy and impunctate, the sides thickly punctate, with a deep impressed line considerably within the margin of each side: elytra rufous, very finely punctulate, with the apex of the suture black : legs and base of the antennæ blue-black, apex of the latter and the tarsi black.

Not very abundant near London, found, however, occasionally in Battersea-fields on poplars, in plenty. "Hornsey-wood."—Mr. Ingpen. "Whim, Peebles-shire."—Rev. W. Little. "York."— W. C. Hewitson, Esq. "Baron-wood."—T. C. Heysham, Esq. "Whittlesea."—Rev. A. H. Matthews. "Ely, Cambridge, &c." —Rev. L. Jenyns. "Very common in Crwmlyn-burrows."—L. W. Dillwyn, Esq. "Epping."—Mr. Doubleday.

- Sp. 2. Tremulæ. Cæruleo-virescens, nitida, elytris rufo-testaceis immaculatis, subrugosis. (Long. corp. 4–5 lin.)
- Ch. Tremulæ. Fabricius.-G. N. Tremulæ. Steph. Catal. 225. No. 2305.
- Greenish-blue, shining; head with an irregular impression in front: thorax very glossy, obsoletely punctured, the punctures most distinct on the lateral margins, each of which has a deep impressed curved fovea considerably within the margin: elytra rufo-testaceous, immaculate, the surface thickly and coarsely punctured, giving a somewhat rugose appearance: legs and base of the antennæ blue-black, apex of the latter fuscous.

Extremely abundant in some of the woods in the vicinity of the metropolis, especially about Highgate, Muswell-hill, Colney-hatch, &c. in June, destroying the young aspens and willows. "Monk's-wood, in plenty."—C. C. Babington, Esq. "Cambridge, less abundant than M. Populi."—Rev. L. Jenyns. "Near Swansea." —L. W. Dillwyn, Esq.

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#### B. With the elytra obsoletely striated.

Sp. 3. vigintipunctata. Oblongo-ovata, cæruleo-atra, thorace viridi-æneå, marginibus ochraceis, puncto-æneo, elytris ochraceis, maculis decem suturáque æneis. (Long. corp. 4 lin.)

Ch. vigintipunctata. Fabricius .- N. G. vigintipunctata. Steph. Cat. 225. No. 2304.

Blue-black, shining: head with a triangular impression: thorax greenish-brass, with the lateral margins ochraceous, with a small brassy dot on each: elytra pale ochraceous, with the suture, and ten spots of dissimilar form, brassy, the disc punctulated; the punctures obsoletely disposed in striæ: legs brassy: base of the femora rufous: tarsi with an ochraceous ring: antennæ brassy, with the apex fuscous.

Extremely rare: my specimen I obtained from the Marshamian cabinet: of the locality of the insect I am not aware.

- Sp 5. ænea. Ovata, supra viridi-ænea, nitidissima, creberrime punctulata, subtus obscurior, ano ferrugineo, thoracis lateribus obsoletè incrassatis. (Long. corp. 3 lin.)
- Ch. ænea. Linné.-N. G. ænea. Steph. Catal. 225. No. 2306.
- Ovate, above brassy-green, very glossy: head sometimes of a golden hue, closely punctured, with an impression on the forehead: thorax with the lateral margins very slightly incra-sated, the disc throughout thickly and rather coarsely punctured, with an obscure fovea on each side: elytra plicate at the base, the disc thickly and finely punctulate, frequently glossed with a golden tint: body greenish-brass beneath, with its apex and lateral margins slightly rufescent: legs greenish-brass, with the tarsi piceous: antennæ rufous beneath at the base, or æneous, the apex black.

Not found near London; but I understand this species occurs in considerable plenty in the Duke of Devonshire's Park at Chatsworth, in June. "Raehills."—Rev. W. Little.

- Sp. 6. cuprea. Suboblongo-ovata, viridi-ænea, thorace lateribus incrassato, elytris gibbosis, cupreis, basi plicatis, abdominis margine rufescente. (Long. corp. 4½ lin.)
- Sp. 4. Lapponica. Oblongo-ovata, viridi-ænea, elytris rufo-testaceis, suturâ, maculâ magnâ difformi baseos, fasciâ mediâ subundatâ arcûque intra apicem cæruleis. (Long. corp. 4 lin.)
- Ch. Lapponica. Linné.—Turton (!)—N. G. Lapponica. Steph. Catal. 225. No. 2305 note.
- Oblong-ovate, brassy-green: elytra rufo-testaceous, with the suture, an irregular patch at the base, a slightly waved fascia in the middle, and an arch within the apex, blue.
- Turton indicates this as British, but I have not seen a specimen. MANDIBULATA. VOL. IV. 31st DEC. 1831.

Ch. cuprea. Fabricius .- N. G. cuprea. Steph. Catal. 214. No. 2306 \*.

Somewhat oblong-ovate, brassy-green, with a golden tint, shining: head finely punctured, with a faint groove on the forehead: thorax with the lateral margins incrassated, and deeply punctate, the disc very obsoletely punctured, with a faint dorsal furrow: elytra ample, gibbous, of a coppery hue, irregularly and thickly punctured, with an elevated callous at the shoulder, and between the latter and the suture a deep fovea: body with its lateral margins and the apex rufescent: antennæ piceous black, with the base rufo-piceous.

A very rare British species; my specimens I obtained from the Marshamian Cabinet.

## GENUS CCCCVIII.-HELODES, Paykul.

Antennæ scarcely larger than the thorax; the basal joint large, clavate; four following slender, nodose; the remainder forming an elongate club, of which the four basal joints are semiglobose; terminal joint large, obtuse. Palpi short, thickened in the middle, with the terminal joint short, obconic: mandible's unidentate: head porrect, narrowed anteriorly: eyes oblong: thorax quadrate, slightly emarginate anteriorly: hody elongate, sublinear, three times as long as broad, somewhat depressed: legs very short, slender, simple: tarsi slender; basal joints uniform.

The distinctly clavate antennæ of this genus, united to the slenderness of their basal joints, the short, subfusiform-shaped palpi, the terminal joint of which is short, obconic, the quadrate thorax, elongate body, slender tarsi, &c. well distinguish it from the other genera of this family:---the species reside in damp places, feeding upon aquatic plants.

- Sp. 1. Phellandrii. Nigro-ænea, nitida, thoracis margine laterali elytrisque flavis suturâ totâ vittâque mediâ æneis. (Long. corp. 22-3 lin.)
- Ch. Phellandrii. Linné.-Steph. Catal. 225. No. 2308.-Ch. calmariensis. Don. vi. pl. 185. f. 1.
- Black or greenish-brass, shining: head punctate, with a frontal impression: thorax with a subovate æneous patch on the disc, the lateral margins broadly yellow: elytra punctate-striate, yellow, or ochraceous, with the suture entirely, and a broad longitudinal streak on each elytron greenish- or black-brass: body beneath with its apex and the sides of the thorax luteous: legs brassy, with the base of the femora and the tibiæ entirely luteous: antennæ brassy at the base, the apex black.

Very abundant in marshy places throughout the metropolitan district, during the spring and early summer months. "Raehills, frequent."—Rev. W. Little. "York."—W. C. Heroitson, Esg. "Weston."—Rev. A. H. Matthews. "Prestwick Car, Meldonpark, &c."—G. Wailes, Esq. "Common (near Swansea)."—L. W. Dillwyn, Esq. "Within the stems of Sium latifolium and Œnanthœ Phellandrium, in the Isle of Ely, abundantly."—Rev. L. Jenyns. "Cardew-mire." T. C. Heysham, Esq. "Epping."—Mr. Doubleday.

Sp. 2. Beccabungæ. Cærulea vel subvirescens, nitida, ano rufescente. (Long. corp. 2 lin.)

Ha. Beccabunge. Paykul.-Steph. Catal. 225. No. 2309.

Entirely blue or greenish, shining, with the apex of the body beneath rufescent, and the mouth piceous: thorax rather convex. a little unequal, thickly and somewhat deeply punctured: elytra regularly and prettily punctate-striate, the striæ straight, with the interstices finely coriaceous: legs and antennæ greenish-blue.

Less abundant than the last; found on the Beccabungæ, in June and July. "Cardew-mire."—*T. C. Heysham, Esq.* "Duddingston-loch."—*Rev. W. Little.* "Weston."—*Rev. A. H. Matthews.* "Bottisham."—*Rev. L. Jenyns.* "Common (near Swansea)."— *L. W. Dillwyn, Esq.* 

# GENUS CCCCIX,-CLYTHRA, Laicharting.

Antennæ very short, exserted, serrated; the basal joint large, clavate; two following stout, nodose; seven following very much produced within; the terminal ovate, acuminate. Palpi unequal, thickened in the middle, with the apical joint conic-cylindric: head rounded, entirely inserted into the thorax, vertical: thorax transverse, margined: body oblong-cylindric, obtuse at each extremity: scutellum elongate: elytra subcylindric: legs stout; the anterior frequently elongate in the males: tarsi with the basal joint elongate, the penultimate deeply bifid.

Exclusively of its cylindric body, and other characters, Clythra may be readily known from Cryptocephalus by the brevity of its antennæ, which are also distinctly serrated within :---from the preceding genera its concealed head at once distinguishes it :---the species chiefly reside in trees, and appear during the commencement of summer.

Sp. 1. quadripunctata. Nigra, nitida, elytris rufo-testaceis, singulo maculis duabus nigris. (Long. corp. 5 lin.)

A A 2

- Ch. 4-punctatus. Linné. Don. iv. pl. 111. f. 1, 2. Cl. 4-punctata. Steph. Catal. 225. No. 2310.
- Black, shining, with a faint griseous pile: head slightly rugose, with a faint frontal channel: thorax gibbous, very shining: elytra rufo-testaceous, finely punctured, each with two black spots, one rounded, placed on the shoulder, rather outwardly, the other placed transversely behind the middle towards the suture, of an irregular form, and sometimes divided: legs and antennæ black, the second and third joints of the latter testaceous.

Rather local, but not uncommon in certain places within the metropolitan district; I have taken it in profusion on oaks in the lane leading from Peckham to Oak-of-honour Wood, in June. "Wittonle-Wear and Prudhoe, in great profusion, in 1829, but local."— G. Wailes, Esg. "Epping."—Mr. Doubleday. "Abundant in Hampshire."—Rev. G. T. Rudd.

- Sp. 2. taxicorius. Nigro-cærulea, punctatissima, elytris testaceis immaculatis, thorace lateribus serratâ, antennis elongatis, compressis, nigris. (Long. corp. 5 lin.)
- Cl. taxicorius. Fabricius.-Steph. Catal. 226. No. 2312.
- Blue-black, thickly and rather finely punctured: head opaque, with a frontal impression: thorax with the lateral margins slightly rounded, and irregularly but finely serrated, the base with the hinder angles a little elevated: elytra pale testaceous, immaculate, finely and irregularly punctured: legs short, blueblack; anterior of the male very long, with the tibiæ considerably bent: antennæ elongate, compressed, deeply serrated, entirely black.

Very rare in Britain: I possess a fine specimen, which I obtained from the Marshamian collection.

- Sp. 3. tridentata. Cæruleo-virescens, punctatissima, elytris testaceis immaculatis, thorace lateribus integris, antennis brevioribuş, pedibus anticis elongatis. (Long. corp. 4-41/2 lin.)
- Ch. tridentata. Linné.-Cl. 3-dentata. Steph. Catal. 226. No. 2311.
- Blue-green, thickly punctured: head rugose-punctate, with an impression on the forehead: thorax a little glossy, with its lateral margins considerably rounded, and the basal angles greatly elevated and subcarinated: elytra entirely pale testaceous, rather coarsely punctured: legs slender; the anterior pair in both sexes elongate, especially in the male: tibiæ bent: antennæ blue-black, with the second and third joints dull testaceous beneath.

I have taken this insect in plenty on the sallow at Coombe-wood, and also at Darenth; it occurs in other parts of the metropolitan

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- district, and in Worcestershire. "Roseberry Topping, Yorkshire." -W. C. Hewitson, Esq.
- Cl. longipes. Fabricius. Leach. Entom. Trans. i. 248. pl. 8. f. sup. 5-fig. med. Q. -- Steph. Catal. 326. No. 2313.
- Black, obscure, with a faint ashy pile: thorax with the sides rounded: elytra pale testaceous, punctulated, each with three black spots, one placed on the shoulder, the other two transversely, towards the apex, rather behind the middle: legs black, the anterior in one sex elongate: antennæ serrate, with the base of the second and third joints testaceous.

The only indigenous examples I have seen of this insect are a pair in the collection at the British Museum, of which one was taken at "Sidmouth."—Dr. Leach:—the other was obtained from the late Dr. Lettsom's cabinet.

- \$\$\frac{1}{2}\$ Sp. 5. Hordei? Nigro-cærulea, nitida, punctatissima, capite latissimo fronte æneo, antennarum basi rufo. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
  Cl. Hordei. Fabricius?—Steph. Catal. 226. No. 2314.
- Blue-black, shining, punctured: head very broad and brassy in front: body beneath and legs blue: antennæ black, with the base pale rufous.
- The Ch. Hordei of Fabricius is said by him to be æneous, with the forehead coppery and the antennæ black: it is possible that the above may be a variety of the Fabrician insect.

Can this have been an imported insect?

Of this remarkable insect I have hitherto seen only the specimen that is in the collection of the British Museum, which was found near "Glasgow."—Dr. Leach.

### GENUS CCCCX.-CRYPTOCEPHALUS, Geoffroy.

Antennæ elongate, simple, filiform, and nearly as long as the body, the articulations cylindric-conic, the basal joint robust; second subglobose, minute; third short; two following slender, elongate; the remainder slightly incrassated. Palpi with the terminal joint conic-cylindric: head small, vertical, deeply inserted into the thorax; the latter globose, nearly as broad as the elytra, immarginate: body short, cylindric: legs short, tibiæ simple: tarsi with the basal joint elongate, the penultimate bilobed.

The slender, filiform, elongate, antennæ of Cryptocephalus at

once point out the difference of the genus from Clythra, added to which the subglobose thorax, somewhat exposed apex of the abdomen, shorter and comparatively more robust body, and less elongate form, seem also to distinguish the genus: the species of which are frequently to be observed in bright sunshine basking in flowers.

### A. Elytra dispersedly punctate.

- Sp. 1. sexpunctatus. Niger, fronte puncto luteo, thorace nigro flavoque variis, elytris rufo-testaceis, margine omni singuloque maculis tribus difformibus nigris. (Long. corp. 2½-3 lin.)
- Ch. sexpunctata. Linné.-Cr. 6-punctatus. Steph. Catal. 226. No. 2315.
- Black: head with a luteous spot between the antennæ: mouth spotted with white: thorax flavescent, or testaceous, more or less varied or spotted with black: elytra punctured, rufo-testaceous, with the margins entirely black, and with three spots of that colour on the disc, two placed transversely near the base, the other also transversely towards the apex: legs black, with a white spot at the tip of the outer margin of the femora: antennæ black, with the basel joints testaceous beneath.
- The colour of the thorax varies considerably: in some instances it is testaceous, with two distinct black spots; in others the black predominates, so as nearly to cover the disc, having a slender dorsal line alone pale:—the spots on the elytra are also very variable.

The only locality near London for this species that I am acquainted with is Darenth-wood, where I have frequently captured it in June, on the hazel and birch: it appears to be somewhat rare. "Raehills, not common."—*Rev. W. Little.* 

- Sp. 2. Coryli. Niger, fronte maculis duabus ochraceis, elytris rufis immaculatis, thorace nitido, maris nigro, feminæ rufo. (Long. corp.  $2\frac{1}{2}-3\frac{1}{2}$  lin.)
- Cr. Coryli. Fabricius.-Steph. Catal. 226. No. 2316.-Ch. Coryli. Don. xi. pl. 331. f. 1.
- Black: head with two more or less distinct ochraceous or yellow spots in the front: thorax very glossy, finely and sparingly punctured; black in the male, rufous in the female: clytra rather coarsely punctured, the punctures irregularly disposed in lines; entirely rufous: legs totally black: antennæ black, with some of the basal joints ferruginous.

Also found on the hazel at Darenth in June, but very rare: it likewise occurs in Norfolk.

Sp. 3. Histrio. Niger, confertim punctatus, thorace elytrisque flavo-variegatis,

elytris externé substriato-punctatis, pedibus ferrugineis nigro-variis. (Long. corp. 2–21 lin.)

Cr. Histrio. Fabricius.-Steph. Catal. 226. No. 2317.

Black, thickly and coarsely punctured: head yellow, with the crown and a frontal dash black: thorax more or less varied with yellow, or yellow with distinct black spots: elytra coarsely punctured, the lateral punctures a little disposed in rows, the disc irregularly varied with yellow or ochraccous, sometimes nearly black: legs ferruginous, with the base of the femora and sometimes the outer margin black, the apex of the latter with a whitish-yellow spot: antennæ black, with the base ferruginous.

I possess a specimen of this extraordinary species, which was taken near Rochford in Essex, and I have recently had a second lent to me for examination, which was taken "on the banks of the Wye, by Mr. Stevens."—*Mr. Waterhouse.* 

- Sp. 4. sericeus. Viridi-sericeus, aureo, æneo, vel cærulescenti-micans, antennis nigris, thorace punctulato, elytris rugoso-punctatis, segmento ultimo ventrali impresso. (Long. corp. 3-4 lin.)
- Ch. sericea. Länné.—Don. ix. pl. 321.—Cr. sericeus. Steph. Catal. 226. No. 2318.
- Silken-green, very glossy, tinctured more or less with brilliant gold, brass or blue: thorax finely but distinctly punctured: elytra rugosely punctured, elevated at the scutellum, with the apex of each rounded: *abdomen* in the female with a deep impression at the anal segment, and a faint one in the male: legs green: antennæ black.

Elytra sometimes concolorous with the elytra, at others discrepant.

Extremely abundant in June on the flowers of the Hieracium and similar plants, within the metropolitan district. "Not very unfrequent (near Swansea) in July."—L. W. Dillwyn, Esq. "Marsden."—G. Wailes, Esq. "York."—W. C. Hewitson, Esq. "Bath, Monk's-wood, &c."—C. C. Babington, Esq. "Devil's-ditch, abundantly."—Rev. L. Jenyns. "Whittlesea."—Rev. A. H. Matthews. "Near Chevening, Kent."—Mr. Ingpen. "Epping." —Mr. Doubleday.

- Cr. similis.-Leach MSS.-Steph. Catal. 226. No. 2319.
- Green, shining, dusky, and somewhat obscure beneath, above tinted with blue or brassy: thorax very glossy, and finely punctured: elytra coarsely rugose-

Sp. 5. similis. Viridis, nitens, subtus obscurior, supra cæruleo aut æneo micans, thorace subtilissime punctulato, elytris rugoso-punctatis, segmento ultimo ventrali integro. (Long. corp.  $2\frac{1}{2}-3$  lin.)

punctate, with an elevation near the scutellum, and the apex of each rounded: legs brassy: body with the terminal segment entire: antennæ brassy-black.

Less frequent than the last, but not uncommon throughout the metropolitan district in June. "Rochester, abundantly."—Rev. Professor Henslow.—" Near Chevening, Kent."—Mr. Ingpen.

Sp. 6. nitens. Atro-cæruleus, thorace lævissimo elytrisque nigro-cæruleis nitidis, ore, antennarum basi pedibusque anticis, in fæminis omnibus, flavis. (Long. corp.  $2\frac{1}{2}$  lin.)

Ch. nitens. Linné.- Cr. nitens. Steph. Catal. 226. No. 2320.

Dark blue, green, or black: head with the mouth, and a patch above yellow, and sometimes an adjoining spot: thorax very convex, extremely glossy and smooth, deep blue, or greenish: elytra also of similar hue, less shining, deeply punctate, the punctures slightly disposed in striæ towards the base and suture: anterior legs of the male and all of the female yellow; posterior of the male black: the latter sex with two small yellow streaks in the vertex, and the antennæ, which are yellow at the base in both sexes, slightly elongated.

Extremely rare: it has been found in Devonshire, and also, I believe, in the vicinity of the metropolis.

#### B. Elytra punctate-striate.

- Sp. 7. bipustulatus. Niger, nitidus, elytris striatis, singulo maculá rufá apice, antennarum basi piceo. (Long. corp. 3-3<sup>1</sup>/<sub>2</sub> lin.)
- Cr. bipustulatus. Fabricius.-Curtis, i. pl. 35.-Steph. Catal. 227. No. 2321.
- Black, shining: thorax convex, smooth, and very glossy: elytra less glossy, not very deeply punctate-striate, the apex of each with a rounded red spot: legs black: antennæ with the base piceous within.

Apparently not uncommon on heaths, in the vicinity of Lyndhurst, in the New-forest, whence I have seen numerous examples.

- Sp. 8. Lineola. Niger, nitidus, thorace lævissimo nitido, elytris rubris margine omni vittáque latá longitudinali singuli elytri nigris. (Long. corp.  $2\frac{1}{2}-3\frac{1}{2}$  lin.)
- Cr. Lineola. Fabricius.-Steph. Catal. 227. No. 2322. Ch. biliturata.-Don. iii. pl. 99. f. 1-3.
- Black, shining: thorax very smooth and glossy: elytra rufous, with the entire margins and suture black, each with a broad longitudinal streak on the disc, neither touching the apex or base: antennæ slightly piceous at the base.

Not uncommon on hazels, oaks, &c. in woods within the metropolitan district, especially at Darenth and its vicinity, in June. "In woods near Penllergare, not common."—L. W. Dillwyn, Esq. "In sallows, near Birchfield, Kent."—Mr. Ingpen. "New-forest."—Rev. A. H. Matthews. "York."—W. C. Hewitson, Esq. "Epping."—Mr. Doubleday.

Sp. 9. nigripennis. PLATE XXIII. f. 5. Rufus, vertice, antennarum apice, tarsis, elytris, maculisque duabus thoracis nigris. (Long. corp. 2½ lin.)
 Cr. nigripennis. Steph. Catal. 227. No. 2323.

Rufous, shining: head with the vertex black: thorax very glossy bright rufouswith a large triangular patch on each side black: elytra moderately punctatestriate, entirely deep black above, the reflexed margin rufous: abdomen and legs also rufous: tarsi and tip of the antennæ black, base of the last rufous.

Taken near Rochford in Essex.

- Sp. 10. Moræi. Niger, mas maculå frontali cruciatå, thoracis margine antico angulisque posticis flavis, elytris maculis duabus marginalibus flavo-testaceis : fæmina fronte maculis duabus flavis, thorace margine antico disco concolore. (Long. corp. 2–3 lin.)
- Cr. Moræi. Fabricius .- Steph. Catal. 227. No. 2324.
- Black, shining: elytra moderately punctate-striate, with two testaceous yellow spots, one elongate at the base of the outer margin, the other rounded, and at the apex: head of the male with a cruciform yellow patch, and the anterior margin of the thorax yellow: legs with the anterior femora beneath with a yellow line: tibiæ piceous: female larger, with the thorax immaculate: head with two distinct yellow spots: antennæ piceous at the base within.

Not common near London: it occurs at Coombe-wood, on the Hypericum perforatum. "Sand-hills (near Swansea)" -L. W. Dillwyn, Esq. "Kimpton, in Littleton-copse."—Rev. G. T. Rudd. "Bath and Monkswood."—C. C. Bubington, Esq. "Devil's-ditch, rare."—Rev. L. Jenyns. "Castle-Eden-Dean."—G. Wailes, Esq.

Sp. 11. vittatus. Niger, nitidus, elytris tenuè punctato-striatis, vittà abbreviatà, margineque laterali flavo-testaceis. (Long. corp. 2<sup>1</sup>/<sub>4</sub> lin.)

Cr. vittatus. Fabricius.- Steph. Catal. 227. No. 2325.

Shining black: thorax glossy, very smooth and polished: elytra moderately punctate-striate, black, with an oblique stripe on each, arising at the base, and reaching to a little behind the middle, and the lateral margins broadly testaceous-yellow: legs and antennæ black, the base of the latter a little piceous within.

I possess a fine pair of this insect, which were taken between Rochford and Southend. Sp. 12. flavilabris. Cæruleo-violaceus, ore antennarumque basi flavo-testaceis, thorace punctulato, pedibus virescentibus. (Long. corp.  $1\frac{1}{2}$ -2 lin.)

Cr. flavilabris. Fabricius -Steph. Catal. 227. No. 2326.

Violet-blue; mouth yellow, forehead finely punctured: thorax convex, shining, thickly punctulated: elytra violet, glossy, deeply punctate-striate, the striæ towards the apex somewhat evanescent: body beneath bluish-black: legs short, bluish- or brassy-green: antennæ black, with the base testaceous.

Not uncommon on the birch at Darenth and Birch Woods, in June, especially at the former place.

- † Sp. 13. Barbareze. Cylindrico-ovatus ater, subtus cærulescens, antennis basi oreque ferrugineis. (Long. corp. 2 lin.)
- Ch. Barbareæ. Linné.-Cr. Barbareæ. Steph. Catal. 227. No. 2327.
- Cylindric-ovate, black, above a little bluish: mouth flavescent: thorax deep black, shining: elytra black, slightly shining, moderately punctate-striate, especially towards the apex: legs black: femora slightly incrassated: antennæ fuscous, with the base ferruginous.

Rare : it occurs on the common Barberry (Berberis communis) : —it has been captured in Suffolk and in Devonshire.

- Sp. 14. punctiger. Niger, ore, maculá frontalis, margine anticis thoracis, pedibusque quatuor anticis flavis, elytris cyaneis profundè punctato-striatis. (Long. corp. 1<sup>1</sup>/<sub>4</sub>-2 lin.)
- Cr. punctiger. Paykul.-Steph. Catal. 227. No. 2328.
- Black: head punctulated, with a short impressed line on the forehead; on the latter is a bilobed yellow spot, and the mouth is also yellow, the colour united to the frontal spot: thorax short, very finely punctulate, its anterior margin, and sometimes the lateral ones, very narrowly yellow: elytra blue, deeply punctate-striate, with the interstices smooth: legs stout, the four anterior testaceous-yellow, the femora with a black line above; posterior black: antennæ black, with the base testaceous.

Found at Darenth-wood, in June, on the sallow, not uncommon.

- Sp. 15. frontalis. Ater, nitidus, fronte thoracis margine elytrorumque latere exteriori anticè, scutelloque apice antennarum basi pedibusque flavis. (Long. corp.  $1\frac{1}{2}$  lin.)
- Cr. frontalis. Marsham.-Steph. Catal. 227. No. 2329.
- Black, shining: head entirely yellow, the colour bilobed on the forehead, which is sparingly punctate: thorax very short, and glossy, deep black, with the anterior margin and angles, and a portion of the lateral margin, yellow: apex of scutellum yellow: elytra slightly shining, deeply punctate-striate, with the interstices flat; the lateral margin at the base yellow: the four anterior legs also dull yellow, with a dusky line on the femora, the hinder femora with a

large blackish patch, the rest of the body fulvescent: antennæ black, with the base pale.

I have seen but few examples of this insect, which has been taken in Suffolk and near London: I possess a specimen lately given to me by P. H. Desvignes, Esq., who captured it in the vicinity of London.

Sp. 16. labiatus. Niger, ore antennarum basi pedibusque anterioribus flavis, thorace lævissimo elytris anteriàs profundè punctato-striatis, apice lævibus. (Long. corp.  $1-1\frac{3}{4}$  lin.)

Ch. labiata. Linné.-Cr. labiatus. Steph. Catal. 227. No. 2330.

Black: head beneath the antennæ and the mouth entirely yellow: thorax very smooth and glossy: elytra anteriorly deeply punctate-striate, with the apex smooth: scutellum black, with the apex ascending: legs rather long, anterior yellow, the femora generally fuscescent above; posterior black, with the tibiæ occasionally more or less flavescent: antennæ black, with the base more or less yellow.

Extremely common on oaks in the vicinity of the metropolis in June and July. "Monks-wood."—C. C. Babington, Esq. "Newcastle and Frostenden, Suffolk."—W. C. Hewitson, Esq. "New Forest."—Rev. A. H. Matthews. "Bexley, &c."—Mr. Ingpen.

- Sp. 17. exilis. Ater, nitidus, ore antennarumque basi flavis, pedibus atro-piceis, thorace nitido, elytris tenuè punctato-striatis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
  Cr. exilis. Schuppel.—Steph. Catal. 227. No. 2331.
- Black, shining, with the mouth and base of the antennæ yellow; apex of the latter black: thorax very shining, impunctate: elytra faintly punctate-striate to the apex: legs deep-piceous, the anterior sometimes paler.

Occasionally found within the metropolitan district, and in Devonshire in June.

Sp. 18. bilineatus. Niger, thorace subtilissimè rugoso, flavo-marginato, elytris flavis suturá vittáque mediá nigris, antennarum basi pedibusque pallidè testaceis. (Long. corp. 1–1½ lin.)

Ch. bilineata. Linné.-Cr. bilineatus. Steph. Catal. 227. No. 2332.

Black; forehead rugose-punctate, yellow in the male, with two black streaks at the apex, black in the female, with the mouth and two spots in the crown yellow: thorax also rugose-punctate, slightly shining, with the anterior and lateral margins entirely yellow, the latter sometimes interrupted in the middle: scutellum with the apex elevated: elytra yellow, deeply punctate-striate, the sature entirely, and broadly, black nearly to the apex, and in the middle of each a broad *black* streak reaching nearly to the apex: *legs entirely pale testaceous*: antennæ pale testaceous at the base. On the hinder margin of the thorax, before the scutellum, are frequently two yellow spots; and the black vitta on the elytra is sometimes united to the dark suture.

Found not uncommonly in the vicinity of Bristol, and in other parts of the west of England, and I believe also found on the coast of Norfolk in sandy situations.

- Sp. 19. minutus. Capite, antennarum basi pedibusque testaceis, pectore abdomine antennarumque apice nigris, thorace lævissimo fulvo, elytris pallidis, sæpè nigro infuscatis. (Long. corp. 1−1½ lin.)
- Cr. minutus. Fabricius. Steph. Catal. 227. No. 2353. Chr. marginella. Don. x. pl. 335. 9.
- Shining: head, base of antennæ and legs entirely testaceous: thorax very smooth, fulvous: elytra regularly and somewhat deeply punctate-striate, the punctures sometimes dusky, pale ochraceous; the humeral callous occasionally infuscate, and sometimes the suture black, or a larger blotch of that colour towards the apex, occasionally forming a broad transverse fascia: breast, abdomen, and tip of the antennæ black: apex of abdomen pale.

Common in sandy open places near London, especially at Ripley, and also at Coombe-wood; and near Bristol. "Weston."—Rev. A. H. Matthews. "Brugh Marsh."—T. C. Heysham, Esq. "Newcastle and Frostenden, Suffolk."—W. C. Hewitson, Esq. "Near Penllergare, not common."—L. W. Dillwyn, Esq.

Sp. 20. ochraceus. Ochraceus, thorace fulvescenti lævissimo, elytris punctatostriatis, immaculatis, corpore subtus nigricante, ano testaceo. (Long. corp.  $1\frac{1}{2}$  lin.)

Cr. ochraceus. Curtis.-Steph. Catal. 228. No. 2354.

Ochraceous: thorax fulvescent, very smooth: elytra punctate-striate, immaculate, pale ochraceous: body beneath dusky, with the apex testaceous: base of the antennæ and the legs pale ochraceous; tip of the antennæ dusky.

Found in Suffolk, and in the neighbourhood of London.

- Sp. 21. gracilis. Niger, capite, antennarum basi, thoraceque fulvis, elytris lineâ marginali baseos pallidâ, pedibus fulvo-testaceis. (Long. corp.  $1-1\frac{1}{2}$  lin.)
- Cr. gracilis. Fabricius.-Steph. Catal. 228. No. 2355.
- Black: head and thorax fulvous, the latter very smooth: elytra black, punctatestriate, the outer margin with a narrow pale ochraceous streak, widest and most distinct at the base: legs entirely fulvo-testaceous: antennæ fulvous at the base, the apex black. Head sometimes varied with yellowish in front.

Out of hundreds of specimens of Cr. minutus, I have never found this species in company therewith; and as the present insect does not occur in Sweden, whereas the one above-named is plentiful in that country, I consider that it is perfectly distinct therefrom.

Found at Darenth-wood, and in Devonshire, in June.

GENUS CCCCXI.-EUMOLPUS, Fabricius.

Antennæ distinctly shorter than the body, with the basal joint subobconic; the terminal joints gradually increasing and broader, frequently compressed-dilated, the apical joint elongate, conic. Palpi thickened at the apex, the terminal joint subovate: head retracted: eyes prominent: thorax much narrower than the elytra, the back very convex, subgibbous: body elongate-ovate: elytra convex, entire: legs elongate: femora clavate.

The genus Eumolpus differs from Cryptocephalus by the dissimilarity of the structure of its antennæ, as well as by the narrowness of the thorax compared with the elytra, the length of legs, &c.

- Ch. obscura. Linné.-Eu. obscurus. Steph. Catal. 228. No. 2336.
- Black, slightly obscure, and a little pubescent; very thickly punctured: thorax subglobose: elytra subquadrate, very convex, with a transverse impression near
- Sp. 2. Vitis. Niger, pubescens, punctulatus, antennarum basi tibiis interdum femorum medio, elytrisque brunneo-sanguineis. (Long. corp. 3 lin.)

Eu. Vitis. Fabricius.-Steph. Catal. 228. No. 2337. note.-Cr. Vitis. Turton (!)

Black, publicent, punctured, with the base of the antennæ, the tibiæ occasionally, the middle of the femora and the elytra of a sanguineous brown: head with a frontal groove: elytra obseletely substriate: legs elongate: femora clavate.

Indicated by Turton as British, but I have never seen an indigenous specimen.

#### GENUS CCCCXII. COLASPIS, Fabricius.

Antennæ nearly as long as the body, subfiliform or scarcely thickened at the apex, the articulations, especially at the base, elongate-cylindric. Palpi fili,

the shoulders, which are elevated, the disc thickly and irregularly punctate: antennæ black, with the base ferruginous.

In the British Museum is a specimen of this insect, said to have been captured in Lincolnshire.

Sp. 3. Dillwynii. PLATE XXIII. f. 3.—Æneo-cupreus, nitidus, thorace transversim subrugoso, elytris punctato-striatis, interstitiis subrugosis, antennis apice tarsisque fuscis. (Long. corp. 2<sup>1</sup>/<sub>4</sub> lin.)

Eu. pygmæus. Olivier ?-Steph. Catal. 228. No. 2338.

Brassy-copper, very glossy: head punctate, with a frontal depression, and faintly rugose transversely: thorax with the sides dilated, the disc very thickly and finely wrinkled transversely: elytra somewhat unequal, with the shoulders anteriorly angular, the disc rather irregularly punctate-striate, with the interstices somewhat rugose; each elytron with two bronzed depressions on the disc: legs and antennæ brassy, with the tip of the latter and the tarsi fuscous.

As this splendid insect does not exactly accord with Olivier's description of Eu. pygmæus, which he describes as having the thorax smooth and the elytra punctate, I have named it after its captor, my friend, L. W. Dillwyn, Esq.

I have seen one specimen only of this beautiful insect, which was given to me by Mr. Dillwyn, and was " taken on July 29, 1820, among herbage on a hedge bank by a path near Penllergare, between Tyrdonkin and Cefnadley."—L. W. Dillwyn, Esq.

## FAMILY LII.-CASSIDIADÆ, Leach.

Antennæ inserted at a distance from the mouth, approximating at the base, the base itself generally concealed beneath the anterior margin of the thorax. *Palpi* small: head horizontal, concealed beneath the thorax; the latter generally semicircular: mouth received against the anterior margin of the sternum:

form: head small, retracted: thorax rather narrower than the elytra; the latter convex: body ovate: legs moderate, simple.

† Sp. 1. flavicornis. Punctata, viridi-ænea, antennis pedibusque flavis. (Long. corp. 2<sup>1</sup>/<sub>2</sub>? lin.)

Cr. flavicornis. Fabricius .-- Wilkin's Cat. (!)-Steph. Catal. 414. No. 2338 \* note.

Brassy-green, punctate : antennæ yellow : elytra somewhat punctate-striate, body brassy beneath : legs yellow.

This insect is introduced in the Catalogue of the rare British Insects in the collection of Mr. Wilkin; but as it is a native of South America, it is doubtless not indigenous.

body shield-shaped, suborbicular, flat beneath, above somewhat elevated, the margin of the thorax and elytra frequently dilated: legs moderate.

The larvæ of the insects contained in this singular family are broad, ovate, depressed, with the sides spinous, and the tail forked and round; they have six short legs, each furnished with a scaly hook: they obtain their nourishment from the sap of plants, and void their excrements upon their furcate tail, upon which they, in the course of time, form a complete covering to the body by this singular process, and when the mass becomes too large, or gets broken off by any accident, it is reproduced :—their pupæ considerably resemble the larvæ; they are depressed and broad, with the thorax ample and dilated, and the lateral margins of the body serrated.—The typical genus only is found in Britain.

## GENUS CCCCXIII.—CASSIDA Auctorum.

Antennæ subfiliform, rather increased towards the apex, the basal joint clavate, second globose, third elongate, terminal elongate-conic. Palpi maxillary clavate, with the apical joint elongate-conic, acute; labial filiform, with the apex acute: labiam elongate, entire: legs short: tibiæ simple.

The insects of this singular genus may be at once known by their depressed form, with the thorax and elytra expanding over the sides, and concealing the outline of the body, the tips of the antennæ and of the legs alone being visible: from their peculiarity of form they have been termed *tortoise-beetles*, as they do not inaptly represent the animal whence their name is derived: most of the species are of lively green or rufous hues, sometimes varied with black, or elegantly striped with metallic tints, which fade with death, but may be revived by holding the insect near the fire.

#### A. Without wings.

The interrupted vitta on the elytra varies considerably.

Sp. 1. vittata. PLATE XXIII. f. 1. Nigra, supra rubro, thorace maculis quatuor, elytrisque vittà interruptà suturâque atris. (Long. corp. 3-3½ lin.)

Ca. vittata. Fabricius.-Steph. Catal. 228. No. 2339.

Black, above rufous: thorax with four black spots, one minute over the head, behind which is a large one at the base, and two others on the posterior angles: *elytra* obsoletely rugulose transversely, with the suture and an interrupted streak on each black, and a spot of similar hue at the base: antennæ with the base ferruginous.

Rare near London: it has occurred in the vicinity of Windsor, and also near Godstone, in Surrey, in June. "Burghfield, on the ragwort."—*Rev. J. H. Bird*, to whom I am indebted for a fine series of specimens.

#### B. With wings.

a. With the posterior angles of the thorax not rounded, generally acute.

Sp. 2. Murræa. Nigra, thorace angulato, elytris punctato-striatis, juxta suturam confertiùs, disco parciùs nigro-maculatis, thorace elytrisque rubris aut viridibus. (Long. corp. 3-44 lin.)

Ca. Murræa. Linné.-Samouelle, pl. 2. f. 10.-Steph. Catal. 228. No. 2340.

- Black ; above red or green : thorax punctate, immaculate, with the posterior angles nearly straight: elytra punctate-striate, thickly and irregularly blotched with black near the suture, and rather prettily spotted with the same on the disc: edge of the abdomen pale.
- The spots on the elytra vary considerably in size, but the shoulder has generally an elongate dash of black.

Rather local, but very common in some places within the metropolitan district, especially by the banks of the Croydon Canal, near Greenwich. "Common on Inula dysenteria (near Swansea)."— L. W. Dillwyn, Esq. "Plaistow marshes, on ragwort."—Mr. Ingpen.

Sp. 3. rubiginosa. Ovata, obscurius viridis, elytris substriato-punctatis, basi rufescentibus, pedibus pallidis, femoribus nigris. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)
 Ca. rubiginosa. Illiger.—Steph. Catal. 228. No. 2341.

Ovate, black; above dull green: thorax with the posterior angles acuminated: elytra somewhat striate-punctate, with the base rufescent, the apex declining: body beneath with the lateral margins sometimes slightly edged with testaceous: femora black, with the apex, and the tibiæ and tarsi pale: antennæ pale at the base, the apex black.

Abundant on thistles within the metropolitan district from May to July—the larvæ subsisting upon that plant. "Bottisham, not uncommonly."—Rev. L. Jenyns. "Tynemouth, Newcastle, &c." G. Wailes, Esq.

Ovate, *black*: thorax rufescent, posteriorly ferruginous, with the hinder angles acute: elytra punctate-striate, green, with a ferruginous spot at the base, the

Sp. 4. thoracica? Nigra, thorace rufescente, posticè ferrugineo, elytris punctato-striatis, viridibus, maculà baseos ferrugineâ, pedibus testaceis. (Long. corp. 3<sup>1</sup>/<sub>2</sub> lin.)

Ca. thoracica. Fabricius?-Steph. Cutal. 228. No. 2342.

apex deflexed: sides of the abdomen pale testaceous: legs entirely and base of the antennæ pale testaceous.

Rare: taken near London.

- b. With the hinder angles of the thorax rounded.
  - 1. With the thorax very short, transverse.

Sp. 5. equestris. Supra læte viridis, crebrè vagè punctulata, subtus nigra, abdominis limbo late pedibusque totis luteo-ferrugineis. (Long. corp. 4-4½ lin.)
 Ca. equestris. Fabricius.-Steph. Catal. 228. No. 2343.

Short, ovate: deep green above, thickly and irregularly punctulate: the punctures coarse on the elytra, and rather obsolete on the disc of the thorax: body beneath, deep black; with the sides of the abdomen broadly luteous, with a ferruginous tinge: legs also entirely of a luteo-ferruginous hue, with the femora greenish during life: antennæ black, with the base testaceous.

Not uncommon within the metropolitan district in June, on mint and other verticillate plants. "Rachills, not uncommon."—Rev. W. Little. "Rickesby."—T. C. Heysham, Esq. "In North Valley and Crwmlyn Bog, not common."—L. W. Dillwyn, Esq. "York." —W. C. Hewitson, Esq. "Bath."—C. C. Babington, Esq.

2. Thorax moderate, not transverse.

\* Body ovate.

Sp. 6. Vibex. Nigra, supra viridis, elytris convexioribus, distinctè punctatostriatis, basi interiori, suturáque rufo-brunneis. (Long. corp. 3 lin.)

Ca. Vibex. Linné.-Steph. Catal. 229. No. 2344.

Oblong-ovate, black: thorax somewhat semicircular, above green, obsoletely punctate, with the lateral margin somewhat ferruginous: elytra a little convex, green, distinctly punctate-striate, with the base within and the suture irregularly reddish-brown: abdomen beneath with an interrupted pale margin: legs pale testaceous, with the base of the femora more or less dusky: antennæ piceous, with the base pale.

Not very common in the vicinity of the metropolis; on the Serratula arvensis: I have occasionally taken specimens at Hertford, and have received the insect from the neighbourhood of Bristol.

Sp. 7. nebulosa. Nigra, supra griseo-flavescens, elytris nigro-maculatis, profundè punctato-striatis, punctis subocellatis. (Long. corp. 3 lin.)
 Ca. nebulosa. Linné.—Steph. Catal. 229. No. 2345.

Ovate, black; above yellowish-griseous, or pale green: thorax very short, semicircular, with the angles rounded, obsoletely punctate, the middle of the base frequently paler than the disc: elytra with the disc very convex, deeply MANDIBULATA VOL IV 21cm I v 1920 punctate-striate, the punctures somewhat mamillated, the alternate interstices slightly elevated; the disc pale griseous, thickly sprinkled with minute irregular black spots and points, the spots a little confluent on the sides of the hinder margin: body beneath with the limb pale: legs pale, with the femora black, or clouded at the base: antennæ pale, with the apex fuscous.

Rather scarce; I have occasionally beaten specimens out of a hedge on the western border of Darenth-wood, in June. "Bottisham."—Rev. L. Jenyns. "Monk's-wood."—C. C. Babington, Esq.

- Sp. 8. ferruginea. Nigra, supra ferruginea, elytris vagè punctatis, lineis aliquot elevatis antennis pedibusque rufo-pallidis, femorum basi nigricante. (Long. corp. 3 lin.)
- Ca. ferruginea. Fabricius.-Steph. Catal. 229. No. 2346.
- Black beneath, above *ferruginous*: thorax finely punctured: *elytra* rather thickly *punctured*, the punctures irregularly disposed, and interrupted *with several elevated costæ*, of which two are parallel with the suture, and the others somewhat irregular: abdomen broadly testaceo-ferruginous beneath: legs pale rufescent, with the extreme *base of the femora dusky*: antennæ pale, with the apex fuscescent.

Very rare: I have hitherto seen but few specimens, of which I possess a fine series taken in Devonshire. The following insect is generally confounded with the present, but the elevated lines on the elytra, and the want of the depression in the middle of the thorax behind, sufficiently distinguish the two, exclusively of other differences. "Near Swansea."—L. W. Dillwyn, Esq.

- Sp. 9. obsoleta. Supra griseo-flavescens, fronte pedibusque pallidis, thorace postice foveů impressů, elytris profundè punctato-striatis, interstitiis alternis subelevatis. (Long. corp. 2½ lin.)
- Ca. obsoleta. Illiger .- Steph. Catal. 229. No. 2347.
- Above griseous-yellow: thorax with the lateral margins depressed, the base in the middle with a distinct impressed forea: elytra deeply punctate-striate, with the punctures somewhat ocellated, the alternate interstices slightly elevated: body beneath black, with the front and lateral margins of the abdomen pale: legs entirely pale testaceous: antennæ pale, with the apex dusky.

Not uncommon in grassy places within the metropolitan district; I have frequently captured it at Coombe-wood in May and June. "Not uncommon (near Swansea)."-L. W. Dillwyn, Esq. "Raehills."-Rev. W. Little. "Newcastle."-G. Wailes, Esq. "Near Ely."-Rev. L. Jenyns. "Monk's-wood."-C. C. Babington, Esq.

- Sp. 10. sanguinolenta. Nigra, supra viridis, thorace posticè arcuato, elytris distinctè punctato-striatis, plagă communi baseos sanguineă, pedibus pallidis. (Long. corp. 2-2½ lin.)
- Ca. sanguinolenta. Fabricius.—Steph. Catal. 229. No. 2348.—Ca. cruentata. Don. ii. pl. 63. f. 2, 3.
- Ovate, black; above green: thorax somewhat semicircular, curved posteriorly towards the sides, with the angles obtuse: elytra very convex, bright green, shining, with a rosy or bright red spot at the base of the suture, the disc deeply punctate-striate, with the second and fifth interstices from the suture slightly elevated: abdomen beneath with its lateral margins, broadly palegreen: legs entirely pale or greenish: antenux pale, with the apex dusky.

Very rare near London, and I believe not frequent in other places: I possess one specimen captured in Devonshire, and another found in Essex: it occurs in June, and has been taken at Highgate. "On Crwmlyn-burrows, not common."—L. W. Dillwyn, Esq.

- Sp. 11. singularis. Nigra, supra viridis, thorace punctato postice parum sinuato, elytris crebre vagèque punctatis, femorum apice, tibiis, tarsisque pallidis. (Long. corp. 24 lin.)
- Ca. singularis. Sturm ?-Steph. Catal. 229. No. 2349.
- Short, ovate, black; above green: thorax rather thickly punctate, a little minated at the base: elytra thickly, irregularly, and coarsely punctured, immaculate: margins of the abdomen slightly edged with pale testaceous; apex of femora, tibiæ, tarsi, and base of antennæ, pale.

I have a single example, agreeing in every particular with a specimen sent to this country, by Sturm, with the above name, which was taken near London.

#### \*\* Body elongate.

Sp. 12. viridula. Oblongo-ovata, convexa, nigra, supra pallidè virescens, unicolor, elytris sub profundè punctato-striatis, margine deflexo, pedibus pallido-viridibus, femoribus basi nigro fuscis. (Long. corp. 3 lin.)

Ca. viridula. Paykull.-Steph. Catal. 229. No. 2350.

Oblong-ovate, convex; above pale green, immaculate: thorax somewhat waved at the base, the disc very smooth: elytra faintly punctate-striate, with the third interstice dilated in the middle, and somewhat irregularly punctate, the margin deflexed: breast and abdomen fuscous, with the lateral margins of the last broadly pale greenish: legs pale greenish, with the base of the femora a little dusky: antennæ pale at the base, the apex fuscous.

Not common; found occasionally in July within the metropolitan district.

Sp. 13, Spergulæ. Oblongo-ovata, supra pallidè viridis, thorace lævi, elytris tenue punctato-striatis, corpore subtus atro, abdominis margine pedibusque pallidis. (Long. corp. 3 lin.)

Ca. Spergulæ. Marsham.-Steph. Catal. 229. No. 2351.

Oblong-ovate; above pale green: thorax smooth: elytra rather faintly punctatestriate, with the lateral margin deflexed: body beneath black, with the margin of the abdomen narrowly pale; legs entirely pale: antennæ pale, with the apex fuscescent.

Probably a variety of the last described species. Found near London and Bristol, on the Spergula arvensis. "Sometimes taken near Swansea."—L. W. Dillwyn, Esq.

- Sp. 14. Salicorniæ. Suboblongo-ovata, supra ochracea, elytris punctato-striatis, vittå abbreviatá metallico-viridis, suturâ fuscescente, pedibus pallidis. (Long. corp. 2<sup>1</sup>/<sub>2</sub> lin.)
- Ca. Salicornia. Curtis, iii. pl. 127.-Steph. Catal. 229. No. 2352.
- Black ; *above greyish-ochre*: thorax sparingly punctured ; the margins somewhat transparent: *elytra brownish*, punctate-*striate*, the third interstice with a few punctures in the middle placed irregularly, *the disc of each with a* waved *metallic-green stripe*, not reaching to the apex, and perishing with death : sides of the abdomen broadly ochreous, and margins of the segments narrowly edged with the same : *legs entirely ochreous* : apex of the antennæ fuscous, base pale. The green stripe upon the elytra is sometimes wanting.

I have occasionally met with this pretty insect flying in April near Ripley, but it is rather uncommon: but I had previously received specimens from the Rev. T. Skrimshire, who took them near Fakenham. "Aquatic plants in ponds, Coombe-wood."—Mr. Ingpen.

\* \* \* With the body suborbiculate.

Sp. 15. nohilis. Ovata, convexa, supra griseo-flavescens, elytris profundè punctato-striatis, interstitio secundo cœrulescenti-argenteo, pedibus pallidis, femoribus nigris. (Long. corp. 2-2½ lin.)

Ca. nobilis. Linné.-Don. iv. pl. 138. f. 1, 2, 3. Steph. Catal. 229. No. 2353. Ovate, convex: above yellowish-griseous: thorax with the disc smooth, the lateral margins a little punctate: elytra deeply punctate-striate, with the second interstice rather broad, and of a silvery-blue, or coppery, but fading after death to a pale yellow; the margin deflexed: body black, with the margins of the abdomen broadly testaceous: legs testaceous, with the base of the femora black: antennæ pale, with the apex fuscous.

This beautiful species I have frequently taken flying on Ockham-common, near Ripley, in April and June, but it appears to be somewhat uncommon. "Marton Lodge, Yorkshire."— L. Rudd, Esq. "Cambridge."—C. C. Babington, Esq.

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Sp. 16. splendidula. Ovata, convexa, grisea, elytris punctato-striatis, lineá stigáque cupreo-aureis, suturá fuscescente. (Long. corp. 2-2½ lin.)

Ca. splendidula. Marsham.-Steph. Catal. 229. No. 2354.

Ovate, convex : griseous above: thorax pale immaculate : elytra punctate-striate, with the suture fuscescent, with a golden-coppery stripe on the second interstices, and one or two abbreviated ones in the middle of the disc towards the apex ; and on the shoulders, the margins deflexed : beneath black, with the margin of the abdomen, apex of the femora, and base of the antennæ pale, and tip of the latter fuscous : tibiæ and tarsi testaceous.

Not common: taken within the metropolitan district, and in Devonshire. "Near Penllergare, not common."—L. W. Dillwyn, Esq.

- Sp. 17. margaritacea. Virens, elytris viridi-argenteis nitidis, subtilissimè punctatis, capite pectoreque nigris, pedibus pallidis. (Long. corp. 2 lin.)
   Ca. margaritacea. Fabricius.—Steph. Catal. 229. No. 2355.
- Greenish; above shining silvery-green, or pearlaceous, the colour fading after death to a pale shining testaceous; the elytra thickly and finely punctured, with the lateral margins deflexed and expanded: head and breast black: abdomen greenish: legs entirely and base of the antennæ pale, apex of the latter fuscescent.

Very rare: I have a single example only, which was captured near London.

- Sp. 18. concinna. Supra læte viridis, convexa, subnitida, elytris confertissimè vagè punctatis, capite pectoreque atris, abdomine pedibusque viridibus. (Long. corp. 2 lin.)
- Ca. reticulata. Kirby MSS.-Steph. Catal. 230. No. 2356.
- Above of a fine green; convex, and slightly glossy: thorax obsoletely punctured: elytra convex, very thickly and coarsely punctured, the punctures irregularly confluent, the lateral margins deflexed and expanded: head and breast black: abdomen and legs greenish: base of antennæ pale, apex black.
- I have not employed Kirby's MS. name as in my Catalogue, another insect having been described by that name, and the term Anglica is not applicable, as I have seen foreign specimens of this species.

Rare: I have taken two or three specimens at different times at Birch-wood, in September.

- Sp. 19. hemisphærica. Viridis subhemisphærica, antennis, abdomine, pedibusque flavescentibus, thoracis angulis subacuminatis, elytris confertissimè, vagè punctatis. (Long. corp. 2 lin.)
- Ca. hemisphærica. Herbst.-Steph. Catal. 230. No. 2357.

Green above; head black: thorax with the posterior angles somewhat acuminated, the disc obsoletely punctured: elytra ample, with the sides posteriorly rounded; the disc longitudinally convex, and throughout somewhat deeply and coarsely punctured; the lateral margins deflexed and expanded: breast black; abdomen yellow: legs short flavescent.

Very rare: I have hitherto seen but two specimens only, which were captured in Devonshire.

#### Subsection III.-TRIMERI, Dumeril.

Body hemispheric or oval. Antennæ 11-jointed, short, gradually thickening to the apex, or abruptly clavate: palpi short, filiform; or with the terminal joint securiform-truncate: mandibles horny, broad, trigonate, compressed, acute, the apex sometimes bifd: maxillæ membranaceous, bilobed, the inner lobe small: head deeply inserted in the thorax; the latter short, transverse; or subquadrate, flat: elytra arched, very convex, and covering the abdomen, which is ample; flat or convex beneath: legs rather short, unarmed; tarsi frequently three-jointed only, sometimes tetramerous.

Of this subsection the following families have been detected in Britain, thus cursorily distinguished.

maxillares artº. ultº. maximo, plerumque securiformi :			53. Coccinellidæ.	
filiformes, aut capitati :				
Antennæ elongatæ, extrorsum crassiores :	•	•	•	54. Епромусния.
breves, crassæ, cylindricæ:	•	•	•	55. HISPIDÆ.

## FAMILY LIII.—COCCINELLIDÆ, Latreille.

Maxillary palpi large, with the terminal joint largest, and generally securiform; labial small, subfiliform: labrum narrow, elongate, membranaceous. Antennæ shorter than the thorax, and more or less distinctly thickening to the apex, in the typical genus rather abruptly clavate, the club in form of a reversed triangle: body hemispheric, or short-ovate: thorax transverse, broad, the hinder margin forming a reversed arch: elytra ample, convex, covering the abdomen, which is flat beneath; tarsi obscurely tetramerous, or trimerous.

The insects of this family are known by the familiar names of *Lady-bird*, *Lady-cow*, &c. They are of moderate size, and do not possess the brilliancy of metallic colouring which so pre-eminently distinguishes many of the insects of the preceding subsection, though their colours are nevertheless very gay and lively, consisting generally of rich tints of red, black, luteous or whitish, varied with spots

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or blotches of the same, frequently in opposition to each other, the pale upon the dark ground, or vice versa. The varieties to which some of the species are subject are almost infinite, and authors who have taken colour alone as their guide in their attempts to describe the species, have consequently failed, and described the different varieties as so many species, as may be seen by a reference to my Catalogue. Their larvæ are carnivorous, and subsist upon Aphidæ; they are, in common with the imago, very active; provided with six triarticulate legs; their body is elongate, diminishing to a point behind, which is provided with a fleshy tubercle, answering the purpose of a seventh leg, and by which the pupa are eventually suspended; some are scaly, others pilose, or tuberculate, and some smooth and velvety behind; their colours are various: the imago is produced in from twelve to fifteen days; and several broods occur, the first appearing early in the spring; but many of the species hybernate beneath the bark of trees : they frequent trees and plants, and occasionally appear in countless multitudes: from the joints of the thighs a yellow mucilaginous narcotic fluid, of a disagreeable smell, exudes when they are laid hold of; and which in the Co. 7-punctata has been held as a specific for the tooth-ache. The genera of which the indigenous species consist may be thus externally distinguished.

#### Elytra haud striata. Corpus glabrum. Thorax postice haud angulatus : 414. CHILOCORUS. angulatus : 415. COCCINELLA. . . pubescens ; globosum : 416. Sphærosoma. subhem isphæricum aut oblongum, Antennæ breves, clavatæ: 417. SCYMNUS. • elongatæ, tenues, subclavatæ : 418. RHIZOBIUS. Elytra punctato-striata : 419. CACICULA. . . •

## GENUS CCCCXIV. CHILOCORUS, Leach.

Antennæ very short, slender at the base, the apex with a capitate-clava, the capitulum somewhat solid and acute. Palpi maxillary short, rather stout, with the terminal joint thickened and obliquely truncate; head deflexed: thorax broadest in the middle, margined, very short, truncate, the hinder angles rounded: elytra ample, with a broad dilated margin: body hemipheric, gibbous, very glossy, and glabrous.

Chilocorus may be distinguished with facility from Coccinella by

the ample margined elytra, as well as by the want of posterior angles to its lunate thorax : the antennæ are remarkably short, and the club is more solid than in the following genus : the thorax is apparently remote from the elytra, arising from the rounding of its posterior angles; and the palpi are of dissimilar form : all the species are of dark tints, usually black, more or less spotted or marked with rufous.

- Sp. 1. bipustulatus. Niger, capite abdominis margine elytrorumque fascià mediá composità abbreviatà rubris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
- Co. bipustulata. Linné.—Martyn, C. pl. 13. f. 21.—Ch. bipustulatus. Steph. Catal. 230. No. 2358.
- Gibbous, black, with the head rufous: elytra each with a transverse fascia in the middle, composed of two or three more or less confluent rufous spots: margins of abdomen also rufous: legs black, with reddish joints.
- Var.  $\beta$ . The dorsal fascia composed of three minute distinct rufous spots.
- Var. y. The dorsal fascia broad and entire.
- Var.  $\delta$ . With the anterior angles of the thorax rufescent.

Not an uncommon species on oaks, &c. in the neighbourhood of Hertford, Coombe and Darenth woods, &c. in the summer. "York."—W. C. Hewitson, Esq. "Raehills."—Rev. W. Little. "Armathwaite."—T. C. Heysham, Esq. "On Rosa spinosissma on Sketty-burrows, at times plentiful."—L. W. Dillwyn, Esq.

- Sp. 2. renipustulatus. Niger, elytris pustulà disci transversè ovatà, abdomineque rubris. (Long. corp. 2–21 lin.)
- Co. renipustulata. Illiger.—Ch. renipustulatus. Steph. Catal. 230. No. 2359. —Coccinella. Millard, pl. 2. f. 7.
- Gibbous, black: elytra finely punctured, each with a large ovate rufous spot, placed transversely: abdomen totally red: legs black; tarsi rufescent beneath.

Rather local, but in profusion about June in the sandy lane at the entrance to Darenth-wood from the village: I have also met with the insect at Hertford, and have received it from Bristol. "Raehills." — *Rev. W. Little.* "On Sketty-burrows, and plentiful on Vaccinum myrtillus in Crwmlyn-bog."—*L.W. Dillwyn, Esq.* "Weston." — *Rev. A. H. Matthews.* "Epping."—*Mr. Doubleday.* 

Sp. 3. Cacti. Niger, elytris maculá magná, pectore abdomineque rubris. (Long. corp. 24 lin.)

Co. Cacti. Linn, S. N. ii. 154.

- Sp. 4. rufipes. Niger, capite antici thoracis lateribus abdominis limbo pedibusque rufis. (Long. corp. 2 lin.)
- Ch. hæmorrhoidalis. Steph. Catal. 230. No. 2360.—Not Co. hæmorrhoidalis. Thunberg.
- Convex, *black*: head entirely and lateral margins of the thorax widely rufous: elytra finely punctulated entirely black: margins of the abdomen rufous: legs totally rufous.
- Var.  $\beta$ . With the head almost entirely black; the mouth alone rufous.

I have hitherto seen two specimens only of this very distinct species, one of which was captured near Windsor in June 1816, the other I obtained from the vicinity of Bristol.

- Sp. 5. quadriverrucatus. Niger, elytrorum lunulà humerali, pustulà pone medium anoque rubris. (Long. corp.  $1\frac{3}{4}$  2 lin.)
- Co. 4-verrucata. Fabricius.—Ch. 4-verrucatus. Steph. Catal. 220. No. 2361. —Co. Cassidoides. Don. vii. pl. 243. f. 3.
- Convex, black: elytra each with a lunular humeral spot, and a rounded pustule on the back, behind the middle, towards the suture, rufous: posterior margins of the abdomen pale rufous; joints of the legs and the tarsi beneath also rufescent.
- Var.  $\beta$ . With the spot on the shoulder of the elytra narrow and distinctly lunate, the posterior dorsal spot minute.
- Var. y. Elytra totally black.

Immature specimens are fuscous in lieu of black.

Extremely common on oaks in woody places throughout the metropolitan district in June. "York."-W. C. Hewitson, Esq. "Cambridge."-C. C. Babington, Esq. "Prestwick-car, New-castle, &c."-G. Wailes, Esq. "On Crwmlyn-bog."-L. W. Dillwyn, Esq. "Weston."-Rev. A. H. Matthews. "Arma-thwaite."-T. C. Heysham, Esq.

- Black: elytra each with a large rounded rufous spot: breast and abdomen entirely rufous.
- I obtained a pair of this species from Mr. Francillon's cabinet, doubtless introduced in mistake for the preceding species.

### GENUS CCCCXV.-COCCINELLA Auctorum.

Antennæ rather short, clavate, the capitulum compressed, obconic, with the apical joint largest and subtruncate. Palpi maxillary, long, very robust, the terminal joint very large, securiform: head small: thorax transverse, broadest at the base, but narrower near the elytra, the hinder margin rounded, with the angles acute: elytra ample, slightly margined: body subhemispheric, sometimes a little oblong-ovate, convex: legs short: tarsi obscurely quadriarticulate.

From Chilocorus the present genus differs not only by having distinct hinder angles to the thorax, which last is broadest behind, but by having the elytra scarcely margined, the maxillary palpi distinctly elongate and robust, with the terminal joint more or less securiform : the antennæ elongate, with the capitulum compressed obconic-truncate, and the body but slightly gibbous or hemispheric : the species are generally extremely prone to vary; and both in their larvæ and imago states seem destined to keep the numerous family of Aphidæ within due bounds.

- † Sp. 1. lateralis. Hemisphærica, nigra, nitida, thoracis lateribus, elytrorumque puncto pone medium rufis. (Long. corp. 1½ lin.)
  Co. lateralis. Illiger.—Steph. Catal. 230. No. 2362.
- Hemispheric, black, shining: thorax with its lateral margins rufous: elytra each with a rufous spot on the disc a little behind the middle: anterior tibiæ pale.

I formerly considered that my specimens of the following species were synonymous with this insect, but upon a re-examination of them, after a lapse of nearly twenty years, I am satisfied they are distinct: but as Mr. Curtis, after two examinations of this genus, indicates that he is in possession of indigenous specimens, the description is here inserted.

- Co. Reppensis. Herbst, Col. v. pl. 59. f. 14.
- Subhemispheric, shining black: thorax with its lateral margins broadly rufous: elytra ample, each with a more or less distinct rufous spot within the apex on the lateral margin: anterior tibiæ and all the tarsi testaceous. Generally applicable to be provided with the provided provided with the specific sector.

Generally confounded with the preceding insect in the London cabinets.

Found, though rarely, near Windsor, and also in Devonshire. "Cramond."—Rev. W. Little.

Sp. 2. Reppensis. Subhemisphærica, nigra nitida, thoracis lateribus punctoque versus apicem elytrorum rufis. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)

- Sp. 3. duodecimpunctata. Hemisphærica lutea, thorace nigro punctato, elytris suturâ punctis pluribus lineáque laterali flexuosá nigris. (Long. corp.  $1\frac{1}{4}-1\frac{1}{2}$ lin.)
- Co. duodecimpunctata. Linné.-Steph. Catal. 231. No. 2363.
- Hemispheric, pale luteous: thorax with six black dots, four placed transversely and two in the base, and occasionally two minute ones on the anterior margin above the eyes: elytra each with the suture, five distinct round spots and a flexuous lateral line composed of three or four united spots, black: body beneath black, with the margin pale: legs pale, femora generally black in the middle.
- Var.  $\beta$ . Thorax with the two inner spots united into an oblique line.
- Var.  $\gamma$ . Thorax with the spots on each side confluent.
- Var.  $\delta$ . Thorax with all the spots united.
- Var.  $\varepsilon$ . Elytra with the flexuous lateral line more or less divided into spots; thorax as in Var. a.

Local, but extremely abundant in grassy banks in certain districts during the spring and early summer months, especially near Hertford. "York."—W. C. Hewitson, Esq. "Raehills."—Rev. W. Little. "Monk's-wood."—C. C. Babington, Esq. "On the sandhills (near Swansea), not common."—L. W. Dillwyn, Esq. "Curwendale."—T. C. Heysham, Esq.

Sp. 4. quatuordecimguttata. Subhemisphærica, rufo-testacea, thorace utrinque lunula, elytro singulo guttis septem albidis sitæ 1, 3, 2, 1. (Long. corp.  $2\frac{1}{2}-2\frac{3}{4}$  lin.)

Co. 14-guttata. Linné.-Don. viii. pl. 243. f. 1.-Steph. Catal. 231. No. 2364.

Subhemispheric, rufo-*testaceous*: thorax on each side with a whitish lunule expanding to a blotch on the hinder angle: *elytra each with seven whitish spots*; *placed* 1 at the base, then 3 transversely, then 2 also transverse, and 1 within the apex: abdomen and breast piceous in the middle.

Found occasionally in plenty in whitethorn hedges within the metropolitan district, especially in the lanes leading from Birch to Darenth woods: also plentiful in Devonshire; and near Bristol. "York."—W. C. Hewitson, Esq. "Cramond."—Rev. W. Little. "Warwick-hall."—T. C. Heysham, Esq. "In the woods at Penrice."—L. W. Dillwyn, Esq.

Sp. 5. bissexguttata. Subhemispharica fulva, thorace utrinque, elytro singulo guttis sex albidis 1, 2 obliquis, 2, 1. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)

Co. bissexguttata. Illiger.-Steph. Catal. 231. No. 2365.

Subhemispheric; fulvous or rufo-testaceous: thorax slightly emarginate anteriorly, with the lateral margins transparent white: elytra each with six white spots, placed 1 at the base near the scutellum, 2 obliquely, 2 beyond transversely, and 1 within the apex : legs pale testaceous.

Rare: I possess a fine series, of which the greater portion were taken in the years 1815 and 1816 in Windsor-forest, and others near Bristol.

Sp. 6. bis-septemguttata. Subhemisphærica, fulva, polita, thoracis lateribus, elytris guttis septem, humerali minuta, margineque albis:—guttæ 1, 2, 2 et 2 obliquis. (Long. corp. 2½-3 lin.)

Co. bis-septemguttata. Illiger .- Steph. Catal. 231. No. 2366.

Subhemispheric, pale *fulvous*, shining: thorax with the lateral margins pale: elytra each with seven white spots, one small one at the shoulder, then 2, 2 and 2 oblique near the tip, the outer margin also narrowly white.

Extremely rare, apparently: I possess two examples from the vicinity of Bristol.

Sp. 7. decemguttata. Subhemisphærica, lutea, elytro singulo punctis albis quinque;
2, 2, 1. (Long. corp. 3 lin.)

Co. decemguttata. Fabricius .- Steph. Catal. 231. No. 2368.

Subhemispheric: luteous: thorax with the lateral margin whitish: elytra eack with five white spots, placed 2 and 2 transversely, and 1 within the apex.

Also very rare: in my collection is a single specimen, which was taken in the west of England; of its exact locality I am not aware.

- Sp. 8. sedecimguttata. Subhemisphærica, flavo-testacea, pellucida, elytris margine dilatato, guttisque octo; 1, 2, 2, 2, 1, paribus obliquis. (Long. corp. 2<sup>3</sup>/<sub>4</sub>-3 lin.)
- Co. sedecimguttata. Linné.-Martyn, Col. pl. 12. f. 27.-Steph. Catal. 231. No. 2367.
- Subhemispheric; *testaceous*, yellow: thorax with the lateral margins broadly pellucid-white: *elytra* broadly margined, *each with eight white spots*, placed 1 towards the base, then 2, 2 and 2 obliquely, and 1 within the apex: abdomen piceous in the middle: legs pale testaceous.

Occasionally not uncommon in Coombe-wood in May and June; found also in other parts of the metropolitan district, in Norfolk, Devonshire, &c. "Dalmeney."—*Rev. W. Little.* "Swansea."— *L. W. Dillwyn, Esq.* 

- Sp. 9. oblongo-guttata. Subhemisphærica rufo-testacea, thoracis lateribus elytrorumque lineatis guttisque albidis. (Long. corp. 3-4 lin.)
- Co. oblongo-guttata. Linné.—Don. xi. pl. 362.—Steph. Catal. 231. No. 2369. Subhemispheric ; rufo-testaceous, shining : thorax with the disc rufescent, the

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lateral margins broadly whitish: elytra with the suture, a small spot at the base, near the scutellum, a larger irregular one on the disc, behind which is an oblong one, and an exterior nearly continuous line towards the outer margin, whitish: legs rather pale: abdomen rufo-bruneous.

- Var.  $\beta$ . With the disc of the thorax rufous, with an oblique black streak on each side.
- Var.  $\gamma$ . With the disc of the thorax nearly black.
- Obs. The white blotch towards the middle of the elytra is frequently divided into two oblong spots.

Not uncommon in districts where pines or firs abound, upon which trees this insect occurs in the spring and autumn: near Hertford and Ripley I have taken it in utter profusion. "Stockton-common, near York."—W.C. Hewitson, Esq. "Dalmeney."—Rev.W. Little. "Penrice Castle, rather plentiful."—L. W. Dillwyn, Esq. "Newby Cross."—T. C. Heysham, Esq.

- Sp. 10. ocellata. Subhemisphærica, nigra, thorace flavo-vario, elytris rubris nigro marginatis, punctis nigris subocellatis. (Long. corp. 4—5½ lin.)
- Co. ocellata. Linné.-Curtis, v. pl. 208.-Steph. Catal. 231. No. 2370.
- Black: head with two frontal spots, the anterior and lateral margins white: thorax with the anterior margin narrowly, and the lateral broadly white, the last with a black spot on each towards the base, which has two white spots in the centre: *elytra rufous*, with 16 black spots, edged with whitish during life, pale after death, placed 1 at the base, then 3, 3 and 1 within the apex, the last elongate: margins of the abdominal segments narrowly pale: antennæ and tarsi beneath pale ferruginous.
- Var.  $\beta$ . With one or other of the spots on the elytra deficient.
- Var. γ. With a subocellated humeral spot and a minute one near the scutellum, and the remainder indicated by obsolete pale marks.
- †Var.  $\delta$ . With the elytra immaculate.

This elegant species also affects pines and firs, as well as the beech: upon the former trees I have captured it at Birch-wood and

- †Sp. 11. marginepunctata. Subhemisphærica, rufescens, capite thoraceque luteis, punctis plurimis nigris, elytris pallidis punctis 16. (Long. corp. 3 lin.)
- Co. marginepunctata. Fabricius. Turton. (!) Steph. Catal. 231. No. 2371, note.
- Subhemispheric, rufescent, with the head and thorax luteous, thickly spotted with black: elytra pale, each with eight black dots, of which the marginal ones sometimes alone exist.
- Turton introduces this species, but, as usual, without authority.

- near Ripley. "Stockton-common." W. C. Hewitson, Esq. "Tynemouth."—G. Wailes, Esq.
- Sp. 12. septempunctata. PLATE XXIII. f. 2. var. θ.—Hemisphærica nigra, thorace utrinque maculà apicis albidà, coleoptris rufis punctis septem nigris ½, 2 obliquis 1. (Long. corp. 3½-4½ lin.)
- Co. septempunctata. Linné.-Don. ii. pl. 39. f. 5; pl. 40. f. 1. larva.-Steph. Catal. 231. No. 2372.
- Hemispheric, black: head with two white spots on the front: thorax with a patch of the same on each of the anterior angles: elytra rufous, with a common black spot at the scutellum, bordered anteriorly with white, and each with three other simple black spots disposed in a triangle, one being in the middle of the back, the others on the lateral margin.
- Obs. The spots on the elytra very considerable in magnitude; and the elytra are sometimes irregularly sprinkled with black.
- Var.  $\beta$ . With the spot towards the shoulder wanting.
- Var.  $\gamma$ . With the apical spot obliterated.
- Var.  $\delta$ . With the dorsal spot deficient.
- Var. c. With the humeral and dorsal spots wanting.
- Var. 2. With the elytra immaculate.
- Var. n. The elytra together with nine spots, the additional one being placed on the shoulder, and the dorsal one being very large.
- Var. θ. PLATE XXIII. f. 2.—Each elytron with an irregular black circle, uniting the two lateral dots, and including the dorsal one.
- †Var. .. The elytra totally black.
- Var. ĸ. The elytra with a large common black and oval patch, leaving the humeral spot, which is large and irregular, alone free.

One of the commonest species of the genus throughout England, occurring at times in prodigious numbers: in July and August, 1828, the neighbourhood of Ripley was absolutely alive with the myriads that abounded in every hedge and lane.

- Sp. 13. quinquepunctata. Hemisphærica nigra, thorace utrinque maculâ albå, elytris sanguineis punctis quinque :  $\frac{1}{2}$ , 1, 1. (Long. corp. 2–3 lin.)
- Co. quinquepunctata. Linné.-Don. xvi. pl. 572. f. 1.-Steph. Catal. 232. No. 2373.
- Hemispheric, *black*: head with two small oblique white spots on the forehead: thorax with a large patch of white on each anterior angle, extending along the lateral margin in a fine line to the hinder angle: *coleoptra sanguineous*, with five black dots, placed on each  $\frac{1}{2}$  common, 1 dorsal, and 1 lateral towards the apex.
- Var.  $\beta$ . Coleoptra with 3 spots, the apical ones deficient.
- Var. y. Coleoptra with 3 spots, the dorsal one wanting.

- Var. 5. Coleoptra with 7 spots, a minute additional spot being placed towards the shoulder of each elytron, on the lateral margin.
- Var. c. Coleoptra with 9 spots, an additional one placed as in the preceding variety, and one upon the shoulder.

Also a common species, but less frequent than the last; the varieties are, however, rare. "York."—W. C. Hewitson, Esq. "Raehills, abundant."—Rev. W. Little. "Not uncommon (near Swansea)." — L. W. Dillwyn, Esq. "Harrowby." — T. C. Heysham, Esq.

- Sp. 15. vigintiduo-punctata. Hemisphærica sulphurea, thorace punctis quinque elytris decem nigris, 3, 3, 1, 2, 1, punctoque marginali. (Long. corp.  $1\frac{1}{2}-2$  lin.)
- Co. 22-punctata. Linné.-Don. ii. pl. 39. f. 1. 4.-Steph. Catal. 232. No. 2375.
- Hemispheric, light shining sulphureous yellow: thorax with five black spots: elytra with eleven each, placed 3, 3, 1, 2 and 1, and a minute one on the lateral margin opposite the second series, extending to the under surface: legs testaceous, femora more or less black.
- Var.  $\beta$ . With the lateral spot on the elytra wanting.
- Var.  $\gamma$ . With the spots on the elytra more or less confluent.

Var.  $\delta$ . With the spots on the thorax confluent.

Very common in hedges where thistles and nettles abound, throughout the south of England, during the summer. "York."— W. C. Hewitson, Esq. "Beach, Northumberland."—G. Wailes, Esq. "Bath, Cambridge, &c."—C. C. Babington, Esq. "Weston."—Rev. A. H. Matthews. "Rockcliff."—T. C. Heysham, Esq. "Swansea."—L. W. Dillwyn, Esq.

Sp. 16. variabilis. Subhemisphærica, thoracis margine flavo, elytris lineû plus minus elevatâ transversâ subapicali, pedibus maxima parte luteis. (Long. corp. 2-2<sup>1</sup>/<sub>2</sub> lin.)

Ca. variabilis. Illiger .- Steph. Catal. 232. No. 2376.

- Subhemispheric, luteous or black: margin of the thorax yellow: elytra with a more or less elevated transverse line within the apex, the disc extremely vari-
- **†Sp. 14.** trifasciata. Subhemisphærica, nigra, thoracis angulis anticis albidis, elytris rubris, fasciis tribus abbreviatis nigris. (Long. corp.  $2\frac{1}{2}$  lin.)

Co. trifasciata. Linné.-Stewart (!)-Steph. Catal. 232. No. 2374, note.

Subhemispheric, black: thorax with the anterior angles whitish: elytra red, with three abbreviated black fasciæ.

Introduced by Stewart, but improperly.

able in colour and punctuation: legs luteous or rufescent, with the femora generally clouded with black.

- Var. a. Thorax with from 5 to 7 black dots, or obscure fuscous marks: elytra luteous, immaculate.
- Var.  $\beta$ . Thorax as before; elytra each with a single black spot:—placed either at the shoulder, the middle of the lateral margin, on the disc, towards the middle of the suture, the apex of the hinder margin, or towards the apex of the suture.
- Var.  $\gamma$ . Thorax as before: elytra each with two black spots, embracing 15 combinations of those enumerated in var.  $\beta$ .
- Var.  $\delta$ . Thorax as before: elytra each with three black spots, consisting of the various combinations (18 in number) of the spots in var.  $\beta$ .
- Var. s. Thorax as before: elytra each with four black spots, composed of 15 various combinations of the spots in var.  $\beta$ .
- Var. ζ. Thorax as before: elytra each with five black spots, one or other of the six spots of var.  $\beta$ . being obliterated.
- Var.  $\eta$ . Thorax as before: elytra with six black spots; placed 1 on the shoulder, 3 transversely in the middle, and two, also transversely, towards the apex: and it is the deficiency of one or more of these that constitutes all the numerous varieties and sub-varieties above-mentioned.
- Var.  $\theta$ . The same as the last, with the scutellum also black.—*Obs.* Some of the preceding varieties also occur with this character.
- Var. .. Thorax as before: the spots on the elytra simply confluent, in various combinations of twos and threes.
- Var. K. Thorax with the spots united : elytra with the spots for the most part confluent, in various degrees.
- Var.  $\lambda$ . The same, with the suture black.
- Var.  $\mu$ . The same, with the elytra black or fulvous, leaving 5 more or less united rufous or lutescent spots on the disc of each.
- Var. ». The same, but the pale spots all distinct, and placed 2, 2, 1, the outer ones attached to the lateral margin.
- These two last varieties form, with their innumerable subvarieties, the Co. instabilis.—Steph. Catal. 233. No. 2377.
- To enumerate further varieties of this eminently Protean species would lead to no good end, as the above general definition embraces all the combinations that can occur; I have, therefore, not followed the methods employed by Illiger and Gyllenhall, of describing each variety (of which I possess above 300), as they are manifestly defective.

Extensively common on oaks and lime-trees throughout the metropolitan district in June. "Raehills, abundant."—Rev. W. Little. "Bath, &c."—C. C. Babington, Esq. "Newcastle, Tynemouth, &c."—G. Wailes, Esq. "Swansea."—L.W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews. "Cardew-mire."— T. C. Heysham, Esq.

- Sp. 17. humeralis. Subhemisphærica, elytris lineâ transversali plus minus elevatâ sub-apicali, maculâ unicâ humerali pallidiore lunatâ. (Long. corp. 2-2½ lin.)
- Co. humeralis. Schönherr.-Steph. Catal. 234. No. 2378.
- Subhemispheric, black: thorax with the lateral margins white, the colour broadest anteriorly: elytra with a more or less distinct raised line within the apex, the shoulders with a pale lunular mark, differing considerably in form and magnitude, and sometimes nearly wanting.
- The colour of the elytra varies considerably; in some examples it is black, as above indicated, in others brown, or rufescent, or pale luteous; the result probably of immaturity.
- Notwithstanding the very great dissimilarity of this insect from the foregoing, I conceive it to be merely a variety thereof; but as I am not perfectly satisfied upon this point, I have kept the two distinct; as in my Catalogue.

Found with the preceding insect, and of which, as above noticed, it is probably a variety. "Rachills."—Rev. W. Little. "Newcastle, &c."—G. Wailes, Esq. "Swansea."—I. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews. "Armathwaite."—T. C. Heysham, Esq.

- Sp. 18. conglomerata. Hemisphærica, supra albido-lutescens, elytrorum suturâ punctisque septem nigris, plerisque quadrangulis et vagè confluentibus, pedibus pallidis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>4</sup>/<sub>4</sub> lin.)
- Co. conglomerata. Linné.-Steph. Catal. 234. No. 2379.
- Hemispheric, black; above whitish-luteous, or ochraceous: elytra with the suture and seven, mostly quadrangular, spots black, the spots more or less confluent: sides of the breast and of the abdomen spotted with yellow: legs pale.
- Var. a. Thorax with six black spots, sometimes confluent; elytra with the suture and 7 quadrate distinct black spots, placed 3 and 3 in two curves, and 1 at the apex.
- Var.  $\beta$ . Thorax pale, with a large quadrilolate black patch behind: elytra with the spots quadrate, and more or less united between themselves and the suture.
- Var.  $\gamma$ . Thorax the same ; elytra with all the discoidal spots contiguous, and united to the suture.
- Var.  $\delta$ . The same, with the lateral spots united to those on the disc.
- Var. s. (var. d. of Syst. Catal. l. c.) The same, with the spots on the elytra so close as to leave on each six whitish spots, placed 2 at the base, 2 marginal, 1 near the suture, and 1 transverse and situated within the apex.

Abundant in hedges and in clover fields, especially in the vicinity of Darenth-wood in June. "Monk's-wood, Cambridge, &c."--C.

сс

C. Babington, Esq. "Swansea."-L. W. Dillwyn, Esq.

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Sp. 19. quatuordecimpustulata. Subhemisphærica, nigra, thorace anticè sinuatim, elytro singulo pustulis septem flavo-albidis, 2, 2, 2, 1. (Long. corp. 2 lin.)

Co. 14-pustulata. Linné.-Steph. Catal. 235. No. 2380.

Subhemispheric, black: head with a white spot on each side near the eyes: thorax with the anterior margin and its angles irregularly whitish-yellow: elytra each with 7 rounded yellowish-white spots, placed 2 at the base, 2 before and 2 behind the middle, and 1 within the apex: legs pale, with the femora and base of the tibiæ more or less black.

Var.  $\beta$ . With the head entirely pale, the anterior legs fulvous.

Very scarce, at least within the metropolitan district: I possess a pair captured near Windsor, and have seen others from the same neighbourhood. "Raehills." — Rev. W. Little. "Weston." — Rev. A. H. Matthews.

- Sp. 20. dispar. Ovato-hemisphærica, corpore pedibusque nigris, elytris argutè marginatis, varie coloratis. (Long. corp. 2-21/2 lin.)
  Co. dispar. Illiger.-Steph. Catal. 235. No. 2382.
- Ovate-hemispheric: body and legs black: an oblong white spot near each eye on the forehead, sometimes wanting: thorax with the lateral margins white, and occasionally a slight line of the same on the anterior margin; passing centrally backwards on the disc of the thorax; the posterior margin with a double spot of the same: elytra very slightly margined, the colours black and red in various proportions.
- Var. a. (var. a.  $\beta$ .  $\gamma$ . Syst. Catal.) Thorax variable : elytra rufous-yellowish, with a round central black dot of variable bulk.
- Var.  $\beta$ . (var.  $\delta$ . Syst. Catal.) The same, with a minute black spot about the middle of the lateral margin.
- Var.  $\gamma$ . (var.  $\varepsilon$ . Syst. Catal.) The same as var.  $\alpha$ . with a small black spot between the apex and the suture.
- Var.  $\delta$ . The same as in var. a. with a small black spot on each side, forming three spots placed transversely.
- Var.s. (var. Z. Steph. Catal.) With the spot in the centre of the elytra rhombic, sometimes transversely elongate.
- Var. 2. The same as var. a. with an interrupted black transverse fascia.
- Var.  $\eta$ . With the transverse fascia on the elytra continuous.
- Var.  $\theta$ . The same, with a fuscous cloud on the shoulder extending to the central fascia.
- Var.  $\iota$ . The same as var.  $\eta$ . with an angulated black line turning inwards on each elytron towards the suture.
- Var. K. The same as var. . with a black twig turning forwards towards the shoulder, leaving 7 distinct rufous spots of variable bulk.

- Var.  $\lambda$ . Coleoptra black, with 8 rufous spots: 1 large at the shoulder, 2 transverse, and 1 at the apex.
- Var.  $\mu$ . Coleoptra black, with 6 red spots: 1 large at the shoulder, 1 behind the middle near the suture, and 1, of variable size, at the apex.
- Var. .. Coleoptra black, with 4 red spots: 1 at the shoulder, and 1 (sometimes very minute) near the suture, behind the middle.

Var. 5. Black, coleoptra with a large red patch at the shoulder.

Abundant in every hedge and garden throughout the year. "York."-W. C. Hewitson, Esq. "Raehills, common."--Rev. W. Little. "Swansea."-L. W. Dillwyn, Esq. "Cardew-mine."-T. C. Heysham, Esq. "Weston."-Rev. A. H. Matthews.

Sp. 21. impustulata. Ovato-hemisphærica, nigra, elytris latids marginatis. (Long. corp. 2 lin.)

Co. impustulata. Linné.-Steph. Catal. 235. No. 2382.

- Ovate-hemispheric: head black: sometimes pale, with a transverse black line, or totally black: thorax with the anterior angle white: elytra slightly margined, generally black: legs black, with the tarsi ferrugincus beneath.
- Var.  $\beta$ . The same, with the legs pitchy-testaceous.
- Var.  $\gamma$ . The same as var.  $\alpha$ . with the lateral margins of the elytra, and a minute dot on the shoulder, reddish.
- Var.  $\delta$ . The same, with an incurd spot at the shoulder and the apex of the elytra rufescent.
- Var. s. The same, the elytra with three obsolete rufescent spots, placed one on the outer margin near the shoulder, and irregular, a second smaller within, and a third obsolete towards the suture in the middle.
- Var. 2. The same; with five reddish spots on each elytron, placed 2 at the base, 2 about the middle, and 1 at the apex.

Rare; at least within the metropolitan district: I have taken a few specimens at Coombe in June; it occurs in Norfolk. "Raehills."—Rev. W. Little. "Cummersdale."—T. C. Heysham, Esq. —"Near Marino, on Ranunculus aquatilis."—L. W. Dillwyn, Esq.

- Sp. 22. conglobata. Ovato-hemisphærica, rosea vel flavescens, thorace nigro maculato, elytris marginatis sutura, punctisque octo nigris. (Long. corp. 2 lin.)
- Co. conglobata. Fabricius.-Steph. Catal. 236. No. 2384.
- Ovate-hemispheric, black, above rosy or yellowish : thorax with eight black spots frequently confluent: elytra margined, with the suture and eight spots also black : legs testaceous, femora sometimes black.
- Var. a. Thorax with 7 black spots, one being common to both sides: elytra with the suture and eight spots black, 2 oblique within towards the

scutellum, 2 exterior, 1 towards the suture, frequently connected therewith, and 3 oblique towards the apex, the 2 outermost of which are generally connected by a flexuous black line.

- Var.  $\beta$ . The same, with the spots on the thorax and elytra more or less confluent.
- Var.  $\gamma$ . Thorax with the base black, with a pale line, the lateral margin yellow, with a black dot: the elytra with all the spots more or less confluent.

Also very rare; the only locality I am acquainted with of this species being the vicinity of Church Cobham, in Surrey.

Sp. 23. hyperborea. Subovata, nigra, thoracis lateribus lunuláque baseos albis, elytris rubris, posteriùs fasciis duabus utrinque abbreviatis nigris, flavo-marginatis. (Long. corp. 2<sup>1</sup>/<sub>4</sub> lin.)

Co. hyperborea. Paykul, F. S. p. ii. 38.

Subovate, *black*: with an oblong white spot over each eye: the sides of the thorax and a lunule at the base white: posterior margin with a didymated white spot in the middle: *elytra red, each with two black fasciæ*, composed of spots, and placed obliquely from the scutellum to the lateral margin posteriorly, being *edged* on each side *with whitish*, and slightly interrupted, the first composed of three united spots, and the second of two: tarsi ferruginous beneath.

I possess a single specimen captured in Scotland.

- Sp. 24. undecimpunctata. Subovata, nigra, thorace utrinque maculà apicis albâ, elytris rufis, punctis nigris. (Long. corp. 2-2½ lin.)
- Co. undecimpunctata. Linné.-Don. xvi. pl. 572. f. 2.-Steph. Catal. 236. No. 2384.
- Subovate, *black*: head with a pale spot before each eye: thorax with an irregular whitish or flavescent spot on each anterior angle: scutellum black: *elytra rufous*, more or less *spotted with black*: legs black.
- Var. *a*. Coleoptra with 11 black spots, placed on each,  $\frac{1}{2}$ , 1, 2, 2, the two pairs obliquely.
- Var.  $\beta$ . Elytra with the first pair of spots united.
- Var. y. Elytra with the second pair of spots united.
- Var.  $\delta$ . (var.  $\beta$ . Syst. Catal.) Elytra with both pair of spots united, so as to form two abbreviated transverse fasciæ.
- Var. s. (var. S. Syst. Catal.) Coleoptra with 9 spots, the humeral one wanting.
- Var. 2. (var. s. Syst. Catal.) Coleoptra with the common spot nearly obliterated, the posterior lateral one wanting.
- Var. n. Coleoptra with both the lateral spots of the two pairs wanting.
- Not uncommon in the neighbourhood of London, frequenting weedy banks in June and July, especially. "York."—W. C.

Hewitson, Esq. "Raehills."—Rev. W. Little. "Caernarvon."— C. C. Babington, Esq. "Newcastle, &c."—G. Wailes, Esq. "Cummersdale."—T. C. Heysham, Esq. "Common (near Swansea)."—L. W. Dillwyn, Esq.

- Sp. 25. hieroglyphica. Subovata nigra, thorace anticè utrinque albo, elytris rubris lineá subscutello elongata vittáque singuli elytri flexuosa, sæpè obsoleta, nigris. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)
- Co. hieroglyphica. Linné.-Steph. Catal. 236. No. 2385.
- Subovate, *black*: head with two minute white spots: thorax with its anterior angles white: *elytra* rufous, *with* an elongate *black streak at the base of the suture*, and on the disc with a flexuous vitta, more or less obsolete or broken.
- Var. a. Elytra with an elongate stripe at the base, a black dot on the disc united thereto, and a full black dot towards the apex.
- Var.  $\beta$ . Elytra with the posterior spot united by a black line within the dorsal one, which is also confluent with the humeral line.
- Var.  $\gamma$ . The same, with the addition of a black spot on the lateral margin, between it and the posterior spot.
- Var.  $\delta$ . As in var.  $\beta$ , but the discoidal spot united by a black streak to the sutural line.
- Var.  $\varepsilon$ . The same as in var.  $\beta$ . with a black twig adjoining the shoulder, streak laterally.
- Var. 2. The same, but the discoidal spot wanting.
- Var.  $\eta$ . With a slightly elongated spot on the shoulder, and a small dot towards the apex.
- Var.  $\theta$ . With a faint black streak at the base of the suture, the elytra immaculate.

Rather local; found occasionally at Coombe-wood and in Norfolk. "Cardew-mire."—T. C. Heysham, Esq.

Sp. 26. octodecimguttata. Subovata, ferruginea, thoracis lateribus guttâque duplici baseos, elytro singulo guttis novem luteis, 2, 1, 3, 2, 1, duabus baseos lunatis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2 lin.)

Co. 18-guttata. Linné.-Samouelle, pl. 2. f. 11.-Steph. Catal. 236. No. 2386.

- Subovate, *rufo-ferruginous*: thorax *with* its lateral margins and two spots at the base whitish or luteous: elytra each with 9 *luteous spots*, placed 2 lunular ones at the base, 1 on the disc anteriorly, then 3, one of which is nearly united to the suture, the other two lateral, 2 near the apex, and 1 in the apex itself: body dusky brown or griseous beneath.
- Var.  $\beta$ . With the spots in the elytra larger, the two outer ones of the third series united.
- Var. y. With an additional minute spot interior to the exterior basal one.

- Var.  $\delta$ . The spots small, with the last pair united transversely.
- Var.  $\epsilon$ . With all the spots nearly obliterated.

Not uncommon on fir trees throughout the metropolitan district, especially near Ripley and Hertford. "Madingley, Cambridgeshire."—C. C. Babington, Esq. "Swansea, not common."—L. W. Dillwyn, Esq. "Weston."—Rev. A. H. Matthews. "Broughmarsh."—T. C. Heysham, Esq.

- Sp. 27. mutabilis. Oblongo-ovata, thoracis marginibus maculisque duabus flavoalbidis, elytris rubris, nigro-punctatis, pedibus anticis semi-rufis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>1</sup>/<sub>2</sub> lin.)
- Co. mutabilis. Illiger.-Steph. Catal. 236. No. 2387. Co. 7-notata.-Don. xi. pl. 362. f. 3. var.
- Oblong-ovate, black : margins of the thorax and two spots on the disc behind yellowish-white; front of the head sometimes the same : elytra rufous, with a variable number of black spots placed in the type; 1 on the shoulder; then 2, one marginal, the other near the suture, then 2 oblique, one larger slightly discoid, the other lateral; then 1 within the apex: scutellum generally black: legs black, with the tibix and tarsi of the first pair, and the apex of the intermediate tibix rufo-testaceous.
- As in Co. variabilis, scarcely two examples of this species are to be found alike, one or other of the spots above indicated being generally absent, the fullspotted varieties being rare; as are also those with few spots, more especially those with the elytra immaculate; the two most common varieties consisting of those which have the scutellar spots, with the two oblique ones towards the apex and the apical one, and with or without the humeral one. The thorax has from one to three yellow lines passing backwards near the disc; and in some rare instances the thorax is yellow, with a quadrate central black patch, and a small spot of the same on each side.

Frequent within the metropolitan district, in thick hedges. "Common (near Swansea)."-L. W. Dillwyn, Esq. "Liverpool." -Rev. A. H. Matthews.

- Sp. 28. tredecimpunctata. Oblonga, nigra, thorace anticè lateribusque flavo, puncto nigro, elytris rubris flavisve nigro punctatis, tibiis tarsisque rufo-testaceis. (Long. corp. 3 lin.)
- Co. 13-punctata. Linné. Don. xi. pl. 362. f. 2. Steph. Catal. 237. No. 2388.
- Oblong, black: head fulvous anteriorly: thorax with the anterior and lateral margins yellow, the latter with a black dot on each side: elytra rufous or luteous, with, typically, 13 black spots, placed, 1 common, 1 transversal, 2, 2, and 1, near the apex: femora black, tibix and tarsi rufo-testaceous.
- Var.  $\beta$ . With the second pair of spots confluent.

- Var.  $\gamma$ . With the three posterior spots on the elytra united in the form of an arch.
- Var.  $\delta$ . With the common spot at the base of each elytron wanting.
- Var. s. With one or more of the spots deficient.

Var.  $\zeta$ . With the elytra immaculate.

*Obs.* The first pair of spots are placed before the middle of the elytra.

Found in damp and marshy situations amongst reeds, especially in Battersea-fields. "Raehills."—Rev. W. Little. "Monk's-wood." —C. C. Babington, Esq. "Meldon Park."—G. Wailes, Esq. "Swansea, not common."—L. W. Dillwyn, Esq. "Rockcliff."— T. C. Heysham, Esq.

Sp. 29. septemmaculata. Oblonga, thorace flavo marginato, elytris rubris, maculis magnis nigris, scutellari trilobo. (Long. corp. 3 lin.)

Co. 7-maculata. Fabricius, E. S. 1. 275 .- Co. notata. Schnied. Mag. i. 144.

Oblong, black: head with a triangular flavescent mark: thorax with the margins narrowly edged with yellow: elytra red, with a large trilobed black blotch at the suture; five large spots of similar hue on the disc, 1 humeral, 1 fasciæform, 1, composed apparently of two united, about the middle of the disc, 2 placed transversely towards the apex, and 1 at the apex of the suture: legs entirely black: antennæ and palpi rufous, with the tips dusky.

Of this very distinct insect I possess a single specimen, which I formerly received from the neighbourhood of Bristol.

- Sp. 30. novendecimpunctata. Oblonga, supra flava, thorace punctis sex coleoptris novendecim nigris, pedibus testaceis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2 lin.)
  Co. 19-punctata. Linné.-Steph. Catal. 237. No. 2389.
- Oblong, black: above sulphurous, sometimes with a rosy tinge: head with the vertex black: thorax with six black spots: elytra each with a line at the base of the suture and 9 spots black, placed 1 large, transverse, on the shoulder, 2 small before the middle, then 3 in the middle, the central one largest, 2 equal ones behind the middle, and 1 within the apex: legs entirely testaceous yellow.

Var.  $\beta$ . With the spots on the elytra more or less contiguous, or united. Var.  $\gamma$ . With the spots on the thorax more or less confluent.

Also found in moist places; amongst reeds, in June. "Cambridge." C. C. Babington, Esq. "On the sand hills (near Swansea)."—L. W. Dillwyn, Esq.

Sp. 31. globosa. Hemisphærica, capite pedibusque rufo-ferrugineis, elytris ferrugineis sæpiùs nigro punctatis, aut ferè nigris rufo-variis. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-1<sup>4</sup>/<sub>4</sub> lin.)

- Co. globosa. Illiger.—Steph. Catal. 237. No. 2390. Co. 24-punctata.— Don. ix. pl. 362. f. 5. var. μ.
- Hemispheric, generally with wings: head and legs for the most part rufo-ferruginous: thorax the same, sometimes spotted: elytra ferruginous, frequently with black spots, or nearly black, with the apex more or less rufous.
- Var. a. Entirely ferruginous, immaculate.
- Var.  $\beta$ . With the thorax having from 1 to 5 black spots, the body often black.
- Var.  $\gamma$ . The same, with a black dot on the shoulder of the elytra.
- Var. 5. Thorax ferruginous; elytra with 7 black dots, 3 in the middle, 1 towards the suture, and 3 near the apex.
- Var. ε. Thorax ferruginous with black dots, or black with a ferruginous edge; elytra with 8 black spots, as in var. δ. with 1 additional at the shoulder; scutellum sometimes black.
- Var. ζ. The same; but the elytra with 10 spots, placed 1, 3, 1, 3, 2, the last in the apex.
- Var. n. The same; the elytra with 10 spots, placed 3, 3, 1, 3, the apex immaculate.
- Var. θ. The same; the elytra with 11 distinct or confluent spots, placed 2, 3, 1, 3, 2, the last at the apex.
- Var. .. Thorax with black spots, the elytra with 11 spots, frequently confluent, placed 3, 3, 1, 3, 1.
- Var. ĸ. The same; the elytra with 12 spots, placed 3, 3, 1, 3, 2, and often a small one near the scutellum.
- Var.  $\lambda$ . The same, with the spots more or less confluent.
- Var.  $\mu$ . The same, with the spots united into regular fasciæ.
- Var. .. Thorax ferruginous, with the middle black: elytra black, with a ferruginous common spot in the middle, or the apex rufous with two black dots, and at the base of the elytra a small lunate rufous spot.
- +Sp. 32. impunctata. Hemisphærica, aptera, capite ventreque nigris, thorace elytrisque lividè rufis, his posteriùs gibbosis. (Long. corp. 1½ lin.)
- Co. impunctata. Linné.—Marsham (!) Co. aptera.—Steph. Catal. 238. No. 2391.
- Hemispheric, apterous: head black: thorax of a livid red, generally with a longitudinal fuscous cloud in the middle: elytra also livid red, very gibbous behind, and immaculate; or with a few obscure dots towards the base: body beneath black, with the margins of the abdominal segments and the sides of the breast pale: legs black, with the tibiæ and apex of the anterior femora testaceous.
- Marsham and other writers give this as an indigenous species, but out of the myriads of Coccinellidæ which have passed beneath my examination, I have never seen a British specimen.

Very abundant in hedges and grassy places throughout the metropolitan district. "Caernarvon, Bath, &c."—C. C. Babington, Esq. "Crwmlyn-burrows, not common."—L. W. Dillwyn, Esq.

## GENUS CCCCXVI.-SPHEROSOMA, Leach MSS.

Antennæ elongate, 10-jointed, the basal joint very robust, dilated; second also robust and dilated, shorter; third and fourth slender, a little elongate, the former longest; three following also slender, minute; the remainder forming an abrupt robust elongate-ovate club. Palpi short: head rounded, deeply immersed in the thorax, the last convex, nearly as broad at the base as the elytra, and closely embracing the latter: body very convex, nearly spherical, pilose: legs short, robust, simple.

This curious little genus differs from the following by the greater length of its antennæ; of which the basal joint is very robust, the next slightly so, the five following slender, and the remainder form an abrupt elongate-ovate club; the body is nearly spherical and pilose; and the palpi very short.

- Sp. 1. Quercus. Nigro-picea, subnitida, ore, antennis pedibusque piceo-testaceis, elytris subtilissimè punctulatis. (Long. corp. <sup>3</sup>/<sub>4</sub>-1 lin.)
   Sp. Quercus. Leach MSS.-Steph. Catal. 238. No. 2392.
- Pitchy-black, slightly shining: mouth piceous: thorax immaculate, with a few minute, remote, punctures: elytra rather thickly but finely punctured: legs and antennæ pitchy-testaceous.

Found on the oak, in the vicinity of the metropolis and in Suffolk and Devonshire, in June; not very abundant.

# GENUS CCCCXVII.-SCYMNUS, Herbst.

Antennæ very short, rather slender at the base, the apex abruptly clavate, obtuse. Trophi nearly as in Coccinella: head small, deflexed: eyes oblong: thorax transverse, scarcely narrower than the elytra, the posterior margin as broad as, and closely applied to, the base of the elytra, the latter generally very convex, large, rarely spotted: body generally more or less hemispheric and pubescent: legs short, simple: femora slightly incrassated.

Scymnus as a genus is evidently distinct from Coccinella, although the trophi are nearly similar; the antennæ and general habit, combined with the minute size of the insects and their pubescent clothing, nearly uniform colouring, &c. warrant their separation. The species are generally found in hedges in grassy and sandy situations; some few are found on trees.

Sp. 1. ater. Ovalis, ater, nitidus, pubescens antennis tarsisque piceis. (Long. corp. <sup>2</sup>/<sub>4</sub> lin.)

Sc. ater. Kugellan.-Steph. Catal. 238. No. 2393.

Oval, slightly convex : head black, rounded, pubescent : mouth piceous : thorax also black, slightly pubescent and obsoletely punctured : elytra ample, with an oblong elevated tubercle on the shoulder, black, slightly shining, clothed with a short pubescence, and thickly, but finely punctured : legs black : tarsi and antennæ piceous.

In profusion in July 1827 on a whitethorn hedge near Ripley; but not generally common.

- Sp. 2. minimus. Subhemisphæricus, niger, pubescens, antennis, palpis, tibiiş tarsisque rufo-testaceis. (Long. corp. § lin.)
- Co. minima. Paykul: vide Syst. Catal. 238. No. 2393.-Gyllenhall, I. S. iv. 195.
- Subhemispheric, black, pubescent; head small, punctured: thorax immaculate: elytra ample, shining black, clothed with an ashy pubescence: femora black; apex of the anterior, with the *tibiæ* and *tarsi* entirely pale rufo-testaceous; *palpi and antennæ* also *pale testaceous*.

Found near Hertford.

Sp. 3. nigrinus. Subhemisphæricus, niger, pubescens, postice obtusus, antennis tarsisque rufo-piceis. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)

Cu. nigrinus. Herbst.-Steph. Catal. 238. No. 2394.

Subhemispheric, black, pubescent: head with the throat flat, punctured; the mouth and antennæ rufo-piceous: thorax broadly, but not deeply, emarginate in front, entirely black, finely punctured, and clothed with a short cinerous pubescence: elytra large, obtusely rounded behind, very convex, rather thickly punctured, and clothed with a decumbent griseous pale: legs black; tarsi rufo-piceous.

Not common; taken at Birch-wood, and in Norfolk, on the fir.

Sp. 4. femoralis. Subhemisphæricus, niger, pubescens, antennis piceis, tibiis tarsisque ferrugineis, pectore fortiùs punctato. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
 Sc. femoralis. Kirby MSS.—Gyllenhall, I. S. iv. f. 196.

Subhemispheric, black, pubescent; head shining: mouth and antennæ rufopiceous: elytra large, very convex, with the apex obtusely rounded: the disc finely punctured, and clothed with a delicate short, ashy, pubescence:

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breast very thickly and deeply punctured: apex of the abdomen piceous: femora black; tibiæ and tarsi entirely rufo-ferruginous.

Found at Ripley in June 1827, on the pine.

- Sp. 5. parvulus. Subhemisphæricus, niger, pubescens, capite ano pedumque maxima parte rufo-flavescentibus. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
- Co. parvulus. Fabricius.-Sc. parvulus. Steph. Catal. 238. No. 2396.
- Subhemispheric, black, pubescent: head rufo-testaceous: eyes black: thorax with its lateral margins broadly rufo-testaceous or flavescent, or entirely black: elytra very convex, finely and sparingly punctured, the extreme tip slightly ferruginous: body with the extreme segments rufescent: legs reddishyellow, with the posterior femora slightly dusky or fuscous at the base: antennæ pale.

Not uncommon on oaks near Hertford in the autumn. "Wood Ditton, Cambridgeshire."—Rev. L. Jenyns. "Swansea, not uncommon." — L. W. Dillwyn, Esq. "Baron-wood." — T. C. Heysham, Esq.

- Sp. 6. fulvifrons. Subhemisphæricus, ater, pubescens, fronte fulvo, pedibus flavescentibus. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
- Co. fulvifrons. Marsham.-Sc. fulvifrons. Steph. Catal. 238. No. 2395.
- Subhemispheric, black, pubescent, slightly shining: forehead fulvous or ferruginous: thorax immaculate, or with its lateral margins slightly edged with reddish: elytra convex, finely punctured, and totally black: abdomen also entirely black: legs yellowish.

Found with the preceding species, of which it may be a variety.

- \*Sp. 7. Colon. Niger, nitidus, subpubescens, coleoptris punctis quatuor luteis, thorace immaculato. (Long. corp. 1 lin.)
- Co. Colon. Thunberg, Ins. Suec. ix. 111.
- Shining black, slightly pubescent; thorax immaculate: elytra each with two small luteous spots placed longitudinally: apex of abdomen rufescent.

I have seen one specimen only of this species, which was captured at "Wood Ditton, May 19, 1827."—*Rev. L. Jenyns.* 

- Sp. 8. quadripustulatus. Hemisphæricus, niger, pubescens, thorace utrinque rubro, elytris singulo punctis duobus rubris. (Long. corp. 1<sup>1</sup>/<sub>2</sub> lin.)
   Sc. 4-pustulatus. Kugellan.—Steph. Catal. 238. No. 2397.
- Hemispheric, black, slightly pubescent: head black: thorax on each side with a yellowish-red spot or margin: elytra each with two red spots, one large and rounded towards the middle of the disc near the suture, the other smaller

near the apex: legs black, with the tibiæ and tarsi ferruginous: antennæ also pale ferruginous.

Var.  $\beta$ . With the head yellow; and the lateral margins of the thorax edged with the same.

Not common; found occasionally at Hertford, and near Darenth. "(Swansea,) not common."-L. W. Dillwyn, Esq.

- Sp. 9. bisbipustulatus. Subrotandus, minus convexus, niger pubescens, elytro singulo punctis duobus rubris, thorace immaculato. (Long. corp. 1<sup>1</sup>/<sub>4</sub> lin.)
- Co. bisbipustulata. Fabricius.—Co. bisbipustulatus. Steph. Catal. 238. No. 2393.
- Somewhat rounded, moderately convex, black, pubescent: head and thorax immaculate: elytra each with two round red spots, placed one behind the other at an equal distance from the suture, the posterior one largest: femora black, with the apex, the tibiæ, and the tarsi, ferruginous; antennæ also ferruginous.

Rare; I possess only the Marshamian specimen: this insect has been captured in the vicinity of the metropolis. "Crwmlyn sand hills."—L. W. Dillwyn, Esq.

- Sp. 10. bipustulatus. Subovalis, niger, nitidus, labro, tibiis tarsisque testaceis, elytris maculá rotundâ rubrâ pone medium disci. (Long. corp. 1 lin.)
  Sc. bipustulatus. Thunberg.—Steph. Catal. 239. No. 2399.
- Suboval, shining black, pubescent: mouth and labrum testaceous: elytra ample, moderately convex, each with a large, round, pale rufous spot on the disc behind the middle: femora black: tibiæ and tarsi rufo-testaceous: antennæ testaceous, with the club fuscous.

Also rare, at least within the metropolitan district. "Crwmlynburrows, not common."—L. W. Dillwyn, Esq. "Bottisham."— Rev. L. Jenyns.

- Sp. 11. frontalis. Subhemisphæricus, niger, pubescens, elytro singulo maculá intra marginali rubrá sub-humerali. (Long. corp. 1 lin.)
- Co. frontalis. Fabricius.-Sc. flavilabris. Steph. Catal. 239. No. 2400.
- Subhemispheric, black, pubescent: head entirely reddish-yellow, or black, with the mouth and labrum pale: thorax with the anterior angles reddish-yellow, or totally black: elytra ample, each with a rounded, or oblique ovate, red spot within the margin, beneath the humeral tubercle: legs testaceous, the posterior femora, or the base of all black.

Not very common; found in grassy places in June near London: I have taken it at Coombe. "On the sand hills near Swansea."— L. W. Dillwyn, Esq.

- Sp. 12. marginalis. Subhemisphæricus, niger, pubescens, elytris maculå magnå subtriangulari rubrå, angulum humeralem occupante. (Long. corp. 1 lin.)
- Co. marginalis. Gyllenhall, Ins. Suc. iv. 199.—Co. frontalis,  $\beta$  et  $\gamma$ . Illiger, K. i. 417.
- Subhemispheric, black, pubescent: head entirely or labrum alone testaceous: thorax with the anterior angles more or less broadly testaceous: elytra each with a large somewhat triangular red spot at the base, occupying the humeral angle, and produced towards the suture: legs entirely testaceous, or with the base of the posterior femora alone dusky.

Rare: I have three specimens, which I captured at Ripley in July, 1827.

- Sp. 13. analis. Subovalis, niger, pubescens, capite thoracis lateribus, elytrorum apice, ano pedibusque totis flavo-rufis. (Long. corp. 3/2 lin.)
- Co analis. Fabricius Sc. analis. Steph. Catal. 239. No. 2401.
- Subovate, black, pubescent: head entirely rufo-testaceous: thorax with the lateral margins anteriorly reddish-yellow: elytra ovate, very convex, shining, with the apex more or less indeterminately rufo-testaceous: body beneath black, with the terminal segment and the margins of some of the preceding testaceous: legs and antennæ entirely rufo-testaceous.
- Colours of the thorax variable, sometimes black, with the anterior angles alone rufo-testaceous, at others with the middle of the base more or less black, the anterior and lateral margins reddish-yellow.

Abundant in hedges in the neighbourhood of Hertford in the autumn, and at Ripley in July. "Bottisham."-Rev. L. Jenyns.

- Sp. 14. discoideus. Subovatus niger, elytris rufo-brunneis, basi magineque nigris, pedibus rufis, femoribus interdum nigris. (Long. corp. <sup>3</sup>/<sub>4</sub> lin.)
- Co. discoidea. Fabricius .- Sc. discoideus. Steph. Catal. 239. No. 2402.
- Subovate, black, slightly pubescent: palpi and mouth testaceous: thorax immaculate, the disc convex and thickly punctulate: elytra red-brown, with the base and margins black, the suture sometimes fuscescent, the disc rather thickly, but finely punctured: legs rufo-testaceous, with the femora occasionally black: antennæ testaccous, with the apex dusky.

Extremely abundant on firs and pines in the vicinity of Hertford and Ripley, and I believe equally common in other places where those trees abound. "Dalmeney."—Rev. W. Little.

- Sp. 15. limbatus. Subovatus, niger, elytris rufis limbo omni nigro, pedibus nigro-piceis. (Long. corp. 1-5 lin.)
- Sc. limbatus. Kirby MSS .- Steph. Catal. 239. No. 2404.
- Subovate, black, slightly pubescent: head and thorax rather shining, immacu-

late: elytra of a rather bright castancous-red, with the suture and the entire margin deep black: legs pitchy black.

Taken in Suffolk and near Hertford: it may be a small and dark variety of the immediately preceding species.

Sp. 16. atriceps. Subovatus, capite atro, thorace rufo-brunneis elytris pedibusque pallide testaceis. (Long. corp. 3 lin.)
Sc. atriceps. Steph. Catal. 239. No. 2403.

Subovate, pubescent: head dusky black: thorax red-brown, finely punctured: elytra very slightly pubescent, entirely pale testaceous: legs the same: the body beneath piceo-testaceous, with the apex paler.

I have a single example of this very distinct insect, which was taken in the neighbourhood of the metropolis.

## GENUS CCCCXVIII,---RHYZOBIUS mihi.

Antennæ elongate, pilose, the basal joint large, robust; second subcylindric, shorter and more robust than the third, which is longer than the fourth, both of which are slender; the three following short, subnodose; the remainder forming an elongate, slender, club. Palpi short: mandibles acute, and entire at the apex: head small, rounded: eyes oblong: thorax short, convex, the hinder margin closely applied to the base of the elytra, the latter convex: body pubescent: legs simple: femora slender: tibiæ slightly compressed: tarsi short.

Rhyzobius evidently differs from Scymnus by the greater length of the antennæ, the structure of which also approaches more nearly to that of Cacicula than to any other genus of this family, the club being very slender and elongate; like Scymnus, its body is convex and pubescent, and the elytra are not striated, by which it may be at once recognized from the other genus above alluded to. The only indigenous species occurs at the roots of plants, whence the name of the genus, adopted from the MSS. of Dr. Leach.

Sp. 1. Litura. Sub-glaber, rufo-testaceus, nitidus, oculis, abdomineque nigris, elytris fusco aut nigro-maculatis, vel immaculatis. (Long. corp. 1-1<sup>1</sup>/<sub>4</sub> lin.)
 Ni. Litura. Fabricius.—Ch. Litura. Steph. Catal. 239. No. 2405.

Slightly glabrous, rufo-testaceous, shining: eyes black: head and thorax immaculate: elytra finely punctured, with an interrupted black fascia placed a little behind the middle: legs pale testaceous.

Var.  $\beta$ . Rufous, with the elytra immaculate, and the abdomen black.

Var.  $\gamma$ . As in var.  $\alpha$ , but the thorax with a dusky central spot.

Var.  $\delta$ . Pale testaceous, with the eyes black, and the elytra immaculate.

Var. c. Dull piceous, with the disc of the elytra, in common, black; the eyes and abdomen also black.

Very common at the roots of plants and on flowers, within the metropolitan district in June. "Dalmeney."—Rev. W. Little. "Swansea, common."—L. W. Dillwyn, Esq. "Wood Ditton."— Rev. L. Jenyns. "Weston."—Rev. A. H. Matthews.

# GENUS CCCCXIX.-CACICULA Megerle.

Antennæ longer than the thorax, slightly pilose, basal joint robust; second short, slightly thickened; third elongate, slender; fourth shorter than the fifth, both rather slender; three following short, subovate; the remainder forming an elongate club, the terminal joint being largest and truncate. Palpi short, very robust: mandibles with the apex bifid: head trigonate, sub-porrect: eyes depressed: thorax short, with the sides rounded, the base closely applied to that of the elytra, the latter ovate, striated: legs simple.

The genus Cacicula,—which has been improperly called Cacidula, from copying a typographical error,—may be readily distinguished from the other Coccinellidæ by the elongation of its body and antennæ, and by the somewhat punctate-striate elytra. The species are chiefly found, as in the preceding genus, at the roots of plants.

Sp. 1. pectoralis. Oblonga, rufa, pectore nigro, elytris subpunctato-striatis, immaculatis. (Long. corp. 1-1<sup>4</sup>/<sub>4</sub> lin.)

Ch. pectoralis. Fabricius .- Ca. pectoralis. Steph. Catal. 240. No. 2406.

Oblong, rufous: eyes black: thorax pale rufous, generally *immaculate*, sometimes with two obscure fuscous spots on the disc: elytra thickly punctured, the larger punctures somewhat disposed in striæ, the disc immaculate: *breast and anterior part of the abdomen black*: apex of the latter and legs rufous: antennæ pale.

Var.  $\beta$ . With the entire body pale-testaceous: the result of immaturity.

Very abundant at the roots of grass in damp situations, especially in Copenhagen and Battersea fields. "Dalmeney."—Rev. W. Little. "Monk's-wood, &c."—C. C. Babington, Esq. "Skettyburrows, Cardiff, &c."—L. W. Dillwyn, Esq. "Upware, Cambridge."—Rev. L. Jenyns. "Baron-wood."—T. C. Heysham, Esq. "Weston."—Rev. A. H. Matthews.

- Sp. 2. scutellata. Oblonga, rufa, elytris substriatis singulo macula communi scutellari, punctis duobus pectoreque nigris. (Long. corp. 1<sup>3</sup>/<sub>4</sub> lin.)
- Ch. scutellata. Fabricius.—Ca. scutellata. Curtis, iii. pl. 144.—Steph. Catal. 240. No. 2407.
- Oblong, rufous: eyes black: head and thorax immaculate: elytra slightly punctate-striate; each with a spot adjoining the scutellum at the base, and two other spots, one about the middle of the lateral margin and one behind the middle of the suture, black: breast also black, and base of the abdomen the same; apex pale: legs pale rufous.

Not common; found in Norfolk, and also in "Plaistow-marshes." —A. Cooper, Esq.

# FAMILY LIV.-ENDOMYCHIDÆ, Leach.

Palpi maxillary filiform, or capitate, with the terminal joint not reniform nor very large: labrum not longer than broad. Antennæ longer than the thorax, slightly incrassate towards the apex: thorax subquadrate, margined: body ovate, glabrous: legs simple: tarsi obscurely tetramerous.

The insects of this family subsist apparently upon vegetable matter; those of the genus Endomychus preferring the sap of decaying trees, while the Lycoperdinæ attack, and reside in, fungi. The larvæ of the former genus are broad ovate depressed, with six short legs; and at first sight bear considerable resemblance to that of a glow-worm in its earlier state: those of Lycoperdinæ are more elongate, but somewhat similar.

Two genera alone are indigenous; they may be known from each other by the following simple characters, and from the insects of the foregoing family also by having the antennæ elongate and scarcely clavate.

Palpi maxillares capitati :	•	•	•	•		•	420. Endomychus.
filiformes :	•	•	•		•	•	421. LYCOPERDINA.

## GENUS CCCCXX.-ENDOMYCHUS, Paykul.

Antennæ rather short, the first eight joints, excepting the third, which is elongate, short subcylindric, the three terminal ones forming an elongate club, of which the first joint, or the ninth from the base, is considerably longer than the eighth, and the terminal joint itself is ovate, with the apex obtuse. *Palpi* maxillary capitate; the terminal joint subobtrigonal: mandibles with the apex bifid: head subtrigonate: eyes prominent: thorax short, deeply emarginate in front, broadest behind : body ovate, glabrous : elytra free : legs two : femora rather slender, not abruptly clavate.

Only one indigenous species of this beautiful genus occurs in Britain; the genus differs from the following, not only by the form of its palpi, but by having the antennæ differently constructed, with the ninth joint considerably longer than the eighth, and the basal joints not remarkably dissimilar to each other: the species are generally of very gay and lively colours, and are furnished with wings, and the mandibles are bifid at the apex.

- Sp. 1. coccineus. Sanguineo-ruber, thorace maculi oblongi longitudinali, elytroque singulo maculis duabus magnis nigris, antennis pedibusque piceo-atris. (Long. corp. 1<sup>1</sup>/<sub>2</sub>-2<sup>3</sup>/<sub>4</sub> lin.)
- Ch. coccinea. Linné.-Don. iv. pl. 111. f. 5, 6. En. coccineus.-Steph. Catal. 240. No. 2408.
- Bright blood-red, shining above: head black, mouth with the labrum rufous: thorax with a broad oblong black patch placed longitudinally in the middle, leaving a wide space on each side sanguineous: elytra each with two large round black spots on the disc, one before, and the other behind; the middle of the breast and the legs black, the joints of the latter and the tarsi rufescent: antennæ black, piceous at the base.

Var.  $\beta$ . With the thorax immaculate.

Found in fungi and putrescent wood; generally somewhat uncommon within the metropolitan district, but found in all the woods: in the autumn of 1816 the insect was literally crowded together by thousands on a decayed alder stump at Coombe-wood, being taken up by handsful, though in general it is a solitary species. "Paddington Canal in February, Copenhagen-fields, &c."—A. Cooper, Esq. "Bottisham, under rotten wood."—Rev. L. Jenyns. "Sevenoaks."—A. H. Davis, Esq. "Langwith, near York."—W. C. Hewitson, Esq. "Gibside, sparingly."—G. Wailes, Esq. "Newbiggen-wood."—T. C. Heysham, Esq. "Not unfrequent on the Crwmlyn sand hills."—L. W. Dillwyn, Esq. "Neath."—G. Waring, Esq. "Sundridge, Kent."—Mr. Ingpen.

## GENUS CCCCXXI.-LYCOPEBDINA Latreille.

Antennæ gradually incrassated to the apex, the basal and two following joints elongate, the first robust, the others slender, the five following very short, the next slightly longer, the two following a little longer and stouter, the terminal one subtruncate. Palpi filiform, the apical joint ovate: mandibles MANDIBULATA, VOL IV 31eT JAN 1839 acute, entire: *labium* transverse: *head* subquadrangular: *thorax* subquadrate, a little dilated in front, and narrow at the base: *body* elongate-ovate: *elytra* free; *wings* none: *femora* abruptly clavate: *tibiæ* pubescent.

This genus differs remarkably in habit from the foregoing by its sombre hues; it is destitute of wings, and the antennæ have several of the basal joints elongate, while the ninth is scarcely shorter than the eighth; the mandibles are entire, and the palpi filiform, exclusively of other discrepant characters.

- Sp. 1. Bovistæ. Atea, nitida, ore, antennis, thoracis angulis, elytrorum apice ano pedibusque ferrugineis. (Long. corp. 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>4</sub> lin.)
- En. Bovistæ. Paykul.—Ly. Bovistæ. Steph. Catal. 240. No. 2409.—Curtis, viii. pl. 355. var.
- Pitchy-black, glabrous, shining: mouth rusty-piceous: thorax with a deep angulated striga behind, with the anterior angles and sometimes the lateral margins rufo-piceous: elytra with the apex indeterminately rufo-piceous, the anterior evidently depressed: sides of the body and its apex rufopiceous: legs dull ferruginous: antennæ the same.
- Sometimes entirely rufo-piceous, or castaneous, with the legs and antennæ paler: or totally pale testaceous; arising from immaturity.

Somewhat rare; I have taken the insect at Birch-wood, and in the autumn of 1821 I found a considerable number of specimens in a fir grove near Guildford, out of some puff-balls. "In great profusion in September, in a fir plantation at Quarry-hill, and near Kimpton, Hants."—Rev. G. T. Rudd.

# FAMILY LV.-HISPIDÆ, Kirby.

Palpi short: mouth deflexed, not received into the anterior part of the sternum: head exserted, vertical: antennæ also exserted, porrect; thorax trapeziform, or subquadrate, narrowed anteriorly: body elongate-ovate, narrowed in front, frequently hispid, or spinous: legs short, stout: tibiæ compressed, angulated: tarsi tetramerous.

Of this family there is but one indigenous

## GENUS CCCCXXII.-HISPA, Linné.

Antennæ cylindric, the basal and terminal joints largest, the former spinous without. Palpi equal, incrassated in the middle: maxillæ bifid: mandibles somewhat triangular-quadrate, with the apex scarcely narrowed, and bidentate: labium entire: head obtuse: eyes small: thorax narrowed in front, the lateral edges very much rounded, spinous: elytra elongate, spinous.

The only species of this singularly constructed genus, which may be instantly recognized by its spinous thorax and elytra, is found at the roots of grass.

Sp. 1. atra. PLATE XXIII. f. 6. Atra, opaca, thorace elytrisque spinosis. (Long. corp.  $1\frac{1}{2}-1\frac{3}{4}$  lin.)

Hi. atra. Linné.-Steph. Catal. 241. No. 2410.

Black, opaque: antennæ with the basal joint elongate, unispinous: thorax with two geminated divaricating spines towards the anterior margin, the lateral margins dilated, each with a simple and a geminated spine: elytra coarsely punctate-striate, each with six rows of elongate spines, planted thickly together, the marginal ones stoutest, longest, and more regular: legs black: anterior tibiæ with a spine near the middle of the outer edge.

Of this extraordinary insect I possess a pair; one of which was captured near Rochfort in Essex; the other I obtained from the Marshamian Cabinet.

# A P P E N D I X.

- Page 5. RHYCOLUS ater. This insect, for a specimen of which I am indebted to Mr. Ingpen, has been recently captured within the metropolitan district, "in an old elm in Copenhagen-fields."—Mr. Bainbridge.
- Page 8. Cossonus linearis. "Granchester, Cambridge."—C. C. Babington, Esq. "On a willow near Holloway."—A. Cooper, Esq.
- Page 12. MECINUS semicylindricus. "Raehills."- Rev. W. Little. "Baronwood."-T. C. Heysham, Esq.
- Page 13. GYMNAETRON Beccabunge. "Cardew-mire."-T. C. Heysham, Esq. "Monk's-wood, &c."-C. C. Babington, Esq.
- Page 15. MIARUS Campanulæ. "Black-hall wood."-T. C. Heysham, Esq.
- Page 17. CIONUS Scrophulariæ. "Bath, &c."-C. C. Babington, Esq. "Harrowby."-T. C. Heysham, Esq.
- Page 18. CIONUS Blattariæ. "Lord Roseberry's Park, Dalmeney."—Rev. W. Little. "Bath."—C. C. Babington, Esq.
- Page 19. CLEOFUS pulchellus. "Harrowby."-T. C. Heysham, Esq. "Cambridge and Bath."-C. C. Babington, Esq.
- Page 20. OROBITIS cyaneus. "Cramond."-Rev. W. Little. "Newbiggenwood."-T. C. Heysham, Esq.
- Page 20. SPHÆBULA Lythri. "Bath, Monk's-wood, &c."-C. C. Babington, Esq.
- Page 21. CEUTORHYNCHUS Quercus. "Cramond."—Rev. W. Little. "Baronwood."—T. C. Heysham, Esq.
- Page 22. CEUTORHYNCHUS melanorhynchus. "Caernarvon."-C. C. Babington, Esq.
- Page 23. CEUTORHYNCHUS rufirostris. "Raehills."-Rev. W. Little.
- Page 23. CEUTORHYNCHUS rubicundus. "Raehills."-Rev. W. Little.
- Page 24. CEUTORHYNCHUS Urticæ. "Raehills."-Rev. W. Little.
- Page 25. CEUTORHYNCHUS fuliginosus. "Dalston."-T. C. Heysham, Esq.
- Page 25. CEUTORHYNCHUS melanocephalus. "Raehills."-Rev. W. Little.
- Page 26. CEUTORHYNCHUS sulcicollis. "Raehills."-Rev. W. Little.
- Page 27. NEDYUS Sisymbrii. "Cramond."-Rev. W. Little.
- Page 28. NEDYUS assimilis. "Cramond."-Rev. W. Little.

- Page 28. NEDYUS Erysimi. "Rachills."-Rev. W. Little.
- Page 29. NEDYUS contractus. "Raehills."-Rev. W. Little. "Cricketgate."-T. C. Heysham, Esq.
- Page 29. NEDYUS Cochleariæ. "Raehills."-Rev. W. Little.
- Page 33. NEDYUS ovalis. "Dalmeney."-Rev. W. Little.
- Page 34. NEDYUS pollinaris. "Cramond."-Rev. W. Little.
- Page 35. NEDYUS pallidactylus. "Raehills."-Rev. W. Little.
- Page 35. NEDYUS rugulosus. "Rachills."-Rev. W. Little.
- Page 40. RHYNONCHUS Pericarpius. "Raehills."-Rev. W. Little.
- Page 43. MONONYCHUS Pseudacori. I now possess this species, given to me by my friend Mr. Westwood, who found several specimens in the pupa state last August, in the Isle of Wight.
- Page 46. CRYPTORHYNCHUS Lapathi. "Copenhagen-fields."— Mr. Ingpen. "Cambridge and Bath."—C. C. Babington, Esq.
- Page 51. PACHYBHINUS 4-nodosus. "Rachills."-Rev. W. Little.
- Page 53. AMALUS scortillum. "Rachills."-Rev. W. Little.
- Page 60. ORCHESTES ferrugineus. "Madingley-wood, near Cambridge."-C. C. Babington, Esq.
- Page 60. ORCHESTES atricapillus. "Cambridge."-C. C. Babington, Esq.
- Page 64. ORCHESTES Avellanæ. "Caernarvon."-C. C. Babington, Esq.
- Page 68. BALANINUS Nucum. "Wood Ditton, Cambridgeshire."- Rev. J.. Jenyns.
- Page 69. BALANINUS Glandium. "Madingley-wood, Cambridgeshire."— C. C. Babington, Esq.
- Page 69. BALANINUS villosus. "Madingley-wood, Cambridgeshire."—C. C. Babington, Esq.
- Page 70. BALANINUS tenuirostris. "Cambridge."--C. C. Babington, Esq.
- Page 71. BALANINUS salicivorus. "Raehills."—Rev. W. Little. "Bottisham."—Rev. L. Jenyns.
- Page 74. ANTHONOMUS fasciatus. "Cambridge."-C. C. Babington, Esq.
- Page 75. ANTHONOMUS Pedicularius. "Raehills."-Rev. W. Little. "Blackhall wood."-T. C. Heysham, Esq.
- Page 75. ANTHONOMUS ater. "Cambridge and Monk's-wood."-C. C. Babington, Esq.
- Page 76. ANTHONOMUS Rubi. "Madingley-wood, Cambridgeshire, and Bath."-C. C. Babington, Esq.
- Page 77. HYDRONOMUS Alismatis. "Bath, in plenty."-C. C. Babington, Esq.
- Page 77. GRYFIDIUS Equiseti. "Raehills."-Rev. W. Little.
- Page 80. ERIBHINUS Arundineti. "Cambridge."-C. C. Babington. Esa.

- Page 81. NOTARIS acridulus. "Bottisham."-Rev. L. Jenyns. "Monk'swood, Bath, &c."-C. C. Babington, Esq.
- Page 83. DORYTOMUS Tortrix. "Once abundantly on poplars in Copenhagenfields."—A. Cooper, Esq. "Cramond."—Rev. W. Little. "Epping."— Mr. Doubleday.
- Page 85. DORYTOMUS fumosus. "Bottisham."-Rev. L. Jenyns. "Cramond." -Rev. W. Little.
- Page 87. PISSODES Pini. "I have received specimens of this insect from Hewett Watson, Esq., who informed me that he took them in the woods above Inverary Castle, in Argyleshire, on the trunk of a Scotch fir: he also caught it on the Clona mountains, at an elevation of 1500 feet.—Rev. W. Little.
- Page 89. GRONOPS lunatus. "Epping."—Mr. Doubleday. "In a lane leading from Cobham to Wisley-heath."—A. Cooper, Esq. "Gravel pit, Coombe-wood, June 1831."—Mr. Ingpen.
- Page 92. HYPERA punctata. "Roxburghshire."-Rev. W. Little. "Bottisham."-Rev. L. Jenyns. "Dawlish, Devon."-C. C. Babington, Esq.
- Page 93. HYPERA Arator. "Bottisham."—Rev. L. Jenyns. "Raehills, common."—Rev. W. Little.
- Page 98. Hypera murina. "Cramond."-Rev. W. Little.
- Page 105. MOLYTES anglicanus. "Near Cambridge."-Rev. L. Jenyns. "Bristol."-G. Waring, Esq.
- Page 106. LEIOSOMA punctata. "Cambridge and Dawlish."-C. C. Babington, Esq.
- Page 107. HYLOBIUS Abietis. "Raehills, abundant."—Rev. W. Little. "Newby Cross, &c."—T. C. Heysham, Esq.
- Page 109. ALOPHUS Vau. "Eden-bridge."-T. C. Heysham, Esq. "Cambridge."-Rev. L. Jenyns. "Epping."-Mr. Doubleday.
- Page 110. BARYNOTUS mercurialis. "Near Edinburgh."-Rev. W. Little. "Dalston."-T. C. Heysham, Esq.
- Page 111. MERIONUS obscurus. "Eden-bridge."-T. C. Heysham, Esq. "Reche Chalk-pits."-Rev. L. Jenyns.
- Page 111. MERIONUS elevatus. "Cambridgeshire."-C. C. Babington, Esq.
- Page 112. LEIOPHLÆUS nubilus. "Monk's-wood."-C. C. Babington, Esq. "Epping."-Mr. Doubleday.
- Page 114. OTIORHYNCHUS sulcatus. "Raehills."—Rev. W. Little. "Common near Ely."—Rev. L. Jenyns. "Epping."—Mr. Doubleday.
- Page 114. OTIORHYNCHUS notatus. "Raehills."—Rev. W. Little. "Caernarvon, &c."—C. C. Babington, Esq.
- Page 115. OTIORHYNCHUS scaber. "Newby-cross."-T.C. Heysham, Esq.
- Page 116. OTIORHYNCHUS ovatus. "Raehills."-Rev. W. Little.

- Page 117. OTIORHYNCHUS tenebricosus. "Rachills."-Rev. W. Little. "Bottisham, abundantly."-Rev. L. Jenyns. "Weston-supra-Marne." -G. Waring, Esq.
- Page 118. OTIORHYNCHUS ater. "Brugh-marsh."-T. C. Heysham, Esq.
- Page 119. OTIORHYNCHUS piceus. "Sea-shore, Cramond."-Rev. W. Little. "Bottisham."-Rev. L. Jenyns.
- Page 119. OTIORHYNCHUS scabrosus. "Dalston."-T. C. Heysham, Esq.
- Page 122. TRACHYPHLÆUS scabriculus. "Braidhill, near Edinburgh."—Rev. W. Little.
- Page 125. PHILOFEDON plumbeus. "Cummersdale."-T. C. Heysham, Esq.
- Page 126. STROPHOSOMUS Coryli. "Jedburgh, Roxburgh."--Rev. W. Little.
- Page 127. STROPHOSOMUS retusus. "Monk's-wood."-C. C. Babington, Esq.
- Page 131. SCIAPHILUS muricatus. "Dalmeney."-Rev. W. Little.
- Page 133. SITONA Spartii. " Dalmeney."-Rev. W. Little.
- Page 138. SITONA tibialis. "Rachills."-Rev. W. Little.
- Page 139. SITONA crinita. "Raehills."-Rev. W. Little.
- Page 140. SITONA fusca. "Forfarshire."-Rev. W. Little.
- Page 147. PHYLLOBIUS cæsius. "Bath."-C. C. Babington, Esq.
- Page 148. PHYLLOBIUS alneti. "Bath."--C. C. Babington, Esq.
- Page 149. PHYLLOBIUS uniformis. "Cambridgeshire, Monk's-wood, and Bath."—C. C. Babington, Esq.
- Page 154. CLEONUS nebulosus. "Cambridge."-C. C. Babington, Esq.
- Page 155. CLEONUS sulcirostris. "Sands between Leith and Portobello, rare."—Rev. W. Little.
- Page 158. LIXUS productus. "Holme fen, Hunts."-C. C. Babington, Esq.
- Page 167. APION Pomone. "Bath and Monk's-wood."-C. C. Babington, Esq.
- Page 169. AFION Rumicis. "Raehills."-Rev. W. Little.
- Page 170. APION Spartii. "Dalmeney, plentiful."-Rev. W. Little.
- Page 170. APION curtirostre. "Dalmeney."-Rev. W. Little.
- Page 172. APION violaceum. "Dalmeney."-Rev. W. Little.
- Page 173. APION Hydrolapathi. "Dalmeney."-Rev. W. Little.
- Page 176. APION Radiolus. "Bath, Caernarvon, Cambridgeshire, and Monk's-wood."-C. C. Babington, Esq.
- Page 177. APION æneum. "Bath."-C. C. Babington, Esq.
- Page 178. APION rufirostre. "Bath."-C. C. Babington, Esq.
- Page 182. APION Ervi. "Bath and Monk's-wood."-C. C. Babington, Esq.
- Page 185. APION pavidum. "Monk's-wood."-C. C. Babington, Esq.

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- Page 194. APION punctifrons. "Dalmeney."-Rev. W. Little. "Caernarvon, &c."-C. C. Babington, Esq.
- Page 198. DEPORAUS Betulæ. "Monk's-wood."-C. C. Babington, Esq.
- Page 200. RHYNCHITES Alliariæ. "Weston."-Rev. A. H. Matthews.
- Page 202. RHYNCHITES Æquatus. "Weston."-Rev. A. H. Matthews.
- Page 203. RHYNCHITES Betulæ. "Monk's-wood."-C. C. Babington, Esq.
- Page 204. RHYNCHITES Populi. "Cambridge and Monk's-wood."-C. C. Babington, Esq.
- Page 208. ANTHRIBUS albinus. "Abundant near Newcastle." G. Wailes, Esq.
- Page 212. BRACHYTARSUS scabrosus. "Weston."-Rev. A. H. Matthews.
- Page 214. BRUCHUS Lathyri. "Bath."-C. C. Babington, Esq.
- Page 217. SALPINGUS ruficollis. "Ravelstone."—Rev. W. Little. "Under bark of elms, Kentish Town."—Mr. Ingpen. "Epping."—Mr. Doubleday.
- Page 217. SALPINGUS viridipennis. "New Forest."--Rev. A. H. Matthews. "Harrowby."-T. C. Heysham, Esq. "Cambridge."-C. C. Babington, Esq.
- Page 217. SALFINGUS planirostris. "Weston."—Rev. A. H. Matthews. "Harrowby."—T. C. Heysham, Esq. "Bottisham."—Rev. L. Jenyns.
- Page 222. Cucusus dermestoides. "New Forest."—Rev. A. H. Matthews. "On Waterloo-bridge."—Mr. Ingpen.
- Page 226. PRIONUS coriarius. "Neath, Glamorganshire."—G. Waring, Esq. "Misley, near Colchester."—C. C. Babington, Esq. "Norwich."—W. C. Hewitson, Esq. "Epping."—Mr. Doubleday.
- Page 229. CERAMBYX Moschatus. "Weston."-Rev. A. H. Matthews. "Keswick."-G. Wailes, Esq.
- Page 233. POGONOCHERUS pilosus. Ce. hispidus.-Wood, i. 46. pl. 16-"Keswick."-G. Wailes, Esq.
- Page 234. POGONOCHERUS hispidus. "Weston."-Rev. A. H. Matthews.
- Page 235. POGONOCHERUS nebulosus. "Weston."-Rev. A. H. Matthews.
- Page 236. The generic name should be APHELOCNEMIA, from  $\alpha\phi\epsilon\lambda\alpha_{\zeta}$ , simplex,  $\kappa_{\gamma\eta\mu\epsilon}$ , tibia; the term APLOCNEMUS having been previously employed by me to designate a genus of Melyridæ.
- Page 238. SAPERDA Cardui. "Weston."-Rev. A. H. Matthews.
- Page 239. SAFERDA populnea. "Whittlesea-mere."—Rev. A. H. Matthews. "Blenden-wood, and in profusion on young aspens in Highgate and Hornsey woods."—Mr. Ingpen. "Epping."—Mr. Doubleday.
- Page 240. SAPERDA cylindrica. "Whittlesea-mere."-Rev. A. H. Matthews.
- Page 242. TETROPS præusta. "Monk's-wood."—C. C. Babington, Esq. "Weston."—Rev. A. H. Matthews. "Epping."—Mr. Doubleday.

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- Page 242. CLYTUS mysticus. "Monk's-wood."-C. C. Babington, Esq. "New Forest"-Rev. A. H. Matthews. "Epping."-Mr. Doubleday.
- Page 243. CLYTUS Arietis. "Weston."-Rev. A. H. Matthews. "Bath, Caernarvon, &c."-C. C. Babington, Esg.
- Page 243. CLYTUS arcuatus. " Epping."-Mr. Doubleday.
- Page 249. CALLIDIUM Alni. "Monk's-wood."—C. C. Babington, Esq. "Forest-hill."—Rev. A. H. Matthews.
- Page 249. CALLIDIUM variabile. "New Forest."-Rev. A. H. Matthews.
- Page 254. RHAGIUM inquisitor. "Monk's-wood."-C. C. Babington, Esq. "New Forest."-Rev. A. H. Matthews.
- Page 254. RHAGIUM bifasciatum. "New Forest."-Rev. A. H. Matthews.
- Page 256. TOXOTUS meridianus. " Monk's-wood."-C. C. Babington, Esq.
- Page 256. Toxotus chrysogaster. "Monk's-wood."-C. C. Babington, Esq.
- Page 266. PACHYTA 8-maculata. "Plymouth."-C. C. Babington, Esq.
- Page 269. DONACIA cincta. "Canal at Bath in great plenty; also Sawtryfens, Hunts."-C. C. Babington, Esq.
- Page 270. DONACIA melanocephala. "Cambridge."-C. C. Babington, Esq.
- Page 270. DONACIA Lemnæ. "Bath and Sawtry-fen."-C. C. Babington, Esq.
- Page 285. AUCHENIA 4-maculata. PLATE XXII. f. 6. Q.--" On rushes, fens near Ely."-Rev. L. Jenyns.
- Page 286. ADIMONIA Alni. PLATE XXII. f. 5.
- Page 286. ADIMONIA halensis. "On flowers, Devil's-ditch."—Rev. L. Jenyns. "On the sand hills near Liverpool in profusion."—Rev. A. H. Matthews.
- Page 288. GALERUCA Caprez. "Bottisham."—Rev. L. Jenyns. "Weston." —Rev. A. H. Matthews.
- Page 289. GALERUCA Viburni. "Weston."-Rev. A. H. Matthews. "Scarborough."-W. Bean, Esq.
- Page 289. GALERUCA Cratægi. "Bottisham."-Rev. L. Jenyns.
- Page 289. GALERUCA Nymphær. "Bottisham."-Rev. L. Jenyns.
- Page 290. GALERUCA Calmariensis. "Bottisham."—Rev. L. Jenyns. "Weston."—Rev. A. H. Matthews.
- Page 291. GALERUCA lineola. "Bottisham."-Rev. L. Jenyns.
- Page 292. GALERUCA tenella. "Bottisham."-Rev. L. Jenyns.
- Page 293. LUPBRUS flavipes. "New Forest."-Rev. A. H. Matthews.
- Page 300. HALTICA Pseudacori. "Bottisham."-Rev. L. Jenyns.
- Page 302. HALTICA ferruginea. "Bottisham."-Rev. L. Jenyns.
- Page 305. HALTICA Helxines. "New-walk, York."-W. C. Hewitson, Esq. "Near Edinburgh."-Rev.W. Little. "Rose Castle."-T. C. Heysham, Esq.

- Page 305. HALTICA nitidula. "Weston."-Rev. A. H. Matthews.
- Page 306. HALTICA oleracea. "New-walk, York."-W. C. Hewitson, Esq. "Weston."-Rev. A. H. Matthews. "Near Edinburgh."-Rev. W. Little.
- Page 307. HALTICA Erucz. "New-walk, York."-W. C. Hewitson, Esq. "Weston."-Rev. A. H. Matthews. "Cramond."-Rev. W. Little.
- Page 311. THYAMIS suturalis. "Weston."-Rev. A. H. Matthews.
- Page 325. CHÆTOCNEMA is the name I would retain for this genus, called ODONTOCNEMA in mistake, p. 285.
- Page 357. CRYPTOCEPHALUS sericeus. In the observation read Elytra sometimes concolorous with the thorax, at others discrepant.
- Page 359. CRYPTOCEPHALUS Morai. "Bristol."-G. Waring, Esq.
- Page 359. CRYPTOCEPHALUS nigripennis. This insect appears to be closely allied to Cr. bothnicus of Herbst.
- Page 363. EUMOLPUS Hobsoni. I have never seen this insect, therefore I am compelled to pass over its description.
- Page 363. ↑ Sp. 4. Badgeri. Æneo niger, supra viridis, capite thoraceque concinne punctatis, elytris confertissimè vagèque rugoso-punctatis, marginihus aureis, antennis pedibusque piceo-testaceis. (Long. corp. 2½ lin.)
- Eumolpus? Badgeri mihi.
- Brassy-black, glabrous, above rich shining green: forehead with a small central fovea, tinted with golden; head very broad, finely punctured: thorax very convex, the sides rounded and margined, the disc throughout moderately and regularly punctured, the anterior margin slightly elevated: elytra coarsely and irregularly rugose-punctate, especially towards the shoulders, which are slightly elevated, the lateral margins elevated and of a golden hue: femora somewhat fusiform, very thick in the middle, and with the tibiæ, tarsi, and antennæ of a pitchy-testaceous; the latter (which are unfortunately broken short), with the seven basal joints elongate, the first and second being thickened, and the remainder slender, though gradually increasing in stoutness to the apex.
- Of this singular insect, which appears to connect Colaspis with Clythra and Eumolpus, I have, as yet, seen but a single specimen, which was captured "in Cambridgeshire, by Mr. Badger."—Mr. Waterhouse.

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### ERRATA.

Page 1, line 4 from bottom, for Brahcelytra, read Brachelytra.

- 3, 30, for biungulato, read biungulato.
- 3, \_ 36, for CEUTORHYNCHA, read CEUTORHYNCHUS.
- 3, 43, for canaliculum, read canaliculam.

4. - 31, for 2-tio, read 3-tio.

- 5, 7, for NEMOIC, read NEMOICUS.
- 6, 6, for third, read second.
- 9, 13, for indigneous, read indigenous.
- 92, \_\_\_\_ 3, for joints, read joint.

159, - 4, for 1672\*, read 1862\*.

176, \_\_\_\_ 1, for caliginosus, read caliginosum.

- 179, \_\_\_\_ 4, for piloso-subricanus, read piloso-subricanum.
- 207, 19, for Philoebius, read Philoeobius.
- 228, 10,) for APLOCNEMIA, read APHELOCNEMIA. 236, 10, 5 for APLOCNEMIA, read APHELOCNEMIA.
- 267, 23, for MACROPALEA, read MACROPLEA.
- 277, 17, for hos, read has.
- 285, 14, for Odontocnema, read Chatocnema.
- 285, \_\_\_ 33, for 4-maculate, f. 5, read 4-maculate, f. 6.

286, \_\_\_\_ 25, for f. 6, read f. 5.

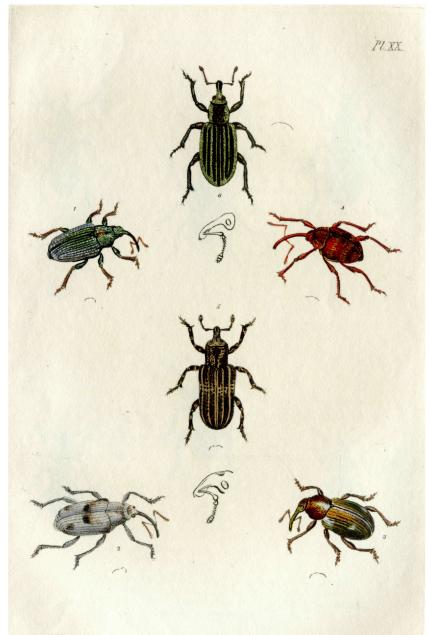
- 357, 26, for with the elytra, read with the thorax.
- 363, 17, for obscura read obscurus.
- 364, 14, for rugose read rugose.

#### END OF VOL. IV.

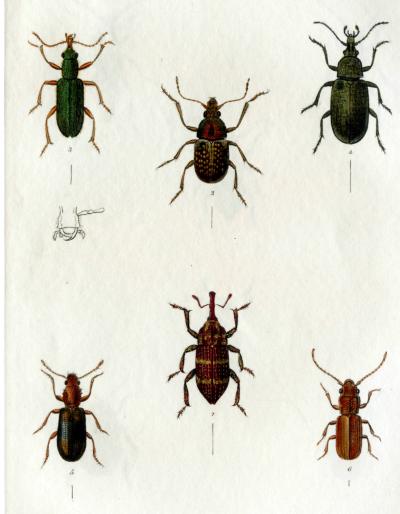
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