C. F. RILEY, Washington, D.

THE

ENTOMOLOGISTS MONTHLY MAGAZINE:

CONDUCTED BY

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VOL. VII.

"Wenn man so in sein Museum gebannt ist; Und sieht die Welt kaum einen Feiertag, Kaum durch ein Fernglas, nur von weiten, Wie soll man sie durch Ueberredung leiten?" Goethe.



248871

LONDON:

JOHN VAN VOORST, 1, PATERNOSTER ROW.

1870-71.

240 [March, 1871.

ON CERTAIN BRITISH HEMIPTERA-HOMOPTERA. (Revision of, and additions to, the Aphrophoridæ and Ulopidæ). BY JOHN SCOTT.

(Continued from page 196).

Some few families of the Homoptera are but poorly represented in this country; so poorly indeed, that it is not uncommon to find a family represented by a single genus, and that genus by but one species; whilst the chances of increasing their numbers are, in most instances, hopeless. As examples, take the Issida and the Cercopida: the former only boasts of the well-known Issus coleoptratus, Fab., and the latter of the equally well-known Cercopis vulnerata, Illig. (sanguinolenta, Panz., nec Lin.). Both of these insects appear to belong exclusively to the south, as I have hitherto not seen either of them, nor am I aware of their having occurred, in Scotland or the northern or midland counties of England. Of Ireland, as usual, I can say nothing; nor will much be learned until she has a Birchall in Bugs, as she has in Butterflies. Why vulnerata has not been noticed in Scotland seems strange to me, as its wide distribution certainly leads to the conclusion that it ought to be found there. Of the Tettigometridæ, we did not possess a single species until the year 1866, when the sharp eye of the Rev. T. A. Marshall led him to detect one amongst his captures in Pembrokeshire. The same species had also been taken in the Isle of Wight by Mr. J. C. Dale, and was subsequently recognized by Mr. Douglas amongst that gentleman's stores. I refer to the Tettigometra impressopunctata, L. Duf., a species unknown to Fieber, who in the Verhandl. d. k. k. zool. bot. Gesell., 567, 14 (1865), describes it under the name frontalis. The insects of this genus are very similar in appearance to Acocephalus, and perhaps still more resemble Ptyelus; but the shape of the anterior margin of the pronotum and the hinder tibiæ (without spines) will lead any one at a glance to discover whether they are mixed up in collections with either of these genera. On the continent, some 30 species are known, and it is just within the range of probability that we may add T. atra, Hagenbach (taken by Flor), T. læta, H. Sch., and obliqua, Panz. (said by Fieber to occur in Germany); the others are all from places too far south to permit us to hope of their being correctly enumerated as British.

The above, I believe, are all the families interposing between the Cixiidæ, which I have already dealt with, and the Aphrophoridæ; and I have not thought it necessary in this paper to do more than point to them in passing, as they have been already sufficiently described in

this country.

Section.—Cercopina.

Family APHROPHORIDÆ.

Aphrophorida, Stål, Hem. Afr., iv, 66 (1866).

- Head: crown almost horizontal and somewhat flattened; anterior margin sometimes rounded, generally obtusely angulated; clypeus of variable length, reaching to or beyond the 1st pair of coxæ. Rostrum 2- or 3-jointed. Ocelli 2, or sometimes wanting; when present, placed near the posterior margin of the crown, and more or less remote from the eyes.
- Thorax: pronotum trapezoidal or hexagonal, anterior margin rounded or obtusely angulated, posterior margin frequently deeply angulate-emarginate; scutellum triangular. Elytra coriaceous; clypeus acuminate. Wings: the inferior nerve furcate from the base or before the middle. Legs: posterior tibiæ armed with one or two spines.
- I.—Ocelli almost equidistant from each other and the eyes.

A .- Clypeus reaching to the apex of the 1st pair of coxæ.

Genus 1.—PTYELUS.

" 2.—LEPYRONIA.

II.—Ocelli half again as far from the eyes as from each other.
B.—Clypeus extending beyond the 1st pair of coxæ.

Genus 3 .- APHROPHORA.

Genus 1.-PTYELUS, Lep. et Serv.

- Head short, including the eyes about as wide as the pronotum: crown depressed, with a distinct plate in front as wide as the ocelli, and having a somewhat curved, transverse channel at its base, anterior margin more or less obtusely rounded. Face convex, somewhat sulcate transversely. Clypeus reaching to the 1st pair of coxe. Rostrum with two joints of equal length, reaching to the 2nd pair of coxe. Antennæ placed in a deep recess immediately underneath the crown and adjoining each eye, the somewhat conical basal joint of the bristle visible from above. Ocelli, between themselves and the eyes, equidistant.
- Thorax: pronotum hexagonal, anterior margin obtusely angulate, lateral margins very short, posterior margin deeply angulate-emarginate. Scutellum flattish, longer than broad. Elytra longer than the abdomen, narrowed posteriorly, apex rounded. Legs: posterior tibiæ with two large spines exteriorly, apex with a 'vandyked' fringe; tarsi, 3rd pair, 1st and 2nd joints with a vandyked fringe at the apex.

- I.—Crown short, along the posterior margin almost four times wider than the breadth across the centre.
 - Ferruginous-brown. Elytra: corium with two large, somewhat triangular, white patches, next the anterior margin, placed one near and one beyond the middle; at the apex of the clavus, a short, transverse, white streak.
 - var. 1. White, or greenish-white; scutellum, except the apex, black. Elytra: corium, the anterior margin before the middle with a somewhat square dark brown patch, and a broad, oblique, dark brown band, extending from beyond the middle to the apex of the clypeus.
 - var. 2. Dark brown. Elytra: corium, anterior longitudinal half, white, or yellowish-white.

 - Pale cinnamon-brown, or fawn colour. Elytra: corium with two large white patches of irregular shape next the anterior margin, placed one before and one beyond the middle....

 2. campestris, Fall.
- II.—Crown somewhat elongate; along the posterior margin scarcely three times wider than the breadth across the centre.
 - Pale yellow. Elytra: corium with a black streak along the 1st nerve; remaining nerves pale brown 4. lineatus, L.

The members of this genus appear strictly to be attached to grasses and other low plants, and never to occur upon trees or shrubs, except by accident.

P. spumarius is certainly the commonest of all our species of Homoptera, and is met with throughout the whole summer everywhere

and by everybody.

P. exclamationis is the smallest of the four species; and, although not common, it is widely distributed. Leicestershire (Marshall); Glanville's Wootton (Dale); Mickleham, Sanderstead Downs, Richmond Park, Seaford Downs, &c. (Douglas and self). Time of appearance, July and August.

Length, 1½ lines.

^{*} There are other varieties, but the above examples are sufficient here.

P. lineatus. Of the size of spumarius, and similarly haired, but by no means such a common species. It rarely varies from the characters given above, the length of the crown alone being sufficient to separate it from the last named. In the London district it has occurred at Weybridge and Beckenham, in July and August. Length, 2½ lines.

The above have all previously been recognised as British; but, as campestris is now for the first time brought forward, I give a description in detail.

I.

Genus 1.-PTYELUS, Lep. et Serv.

Species 2.—PTYELUS CAMPESTRIS.

Cercopis campestris, Fall., Hem. Suec., Cicad., ii, 20, 7 (1826); Zett., F. Lap., 516, 3, ♂♀ (1828); Ins. Lap., 287, 4 (1840).

Ptyela campestris, H. Sch., Nom. Ent., i, 67 (1835).

Ptyelus campestris, Flor, Rhyn. Liv., ii, 125, 3 (1861).

- Crown short; along the posterior margin almost four times wider than the breadth across the centre.
- ∂ ♀. Pale cinnamon-brown or fawn colour, clothed with very short, depressed, pale yellow hairs.
- Head: crown, on the sides very finely wrinkled; front plate delicately punctured and with a fine central keel; its margins, and the transverse channel at its base, very narrowly black. Face convex, pale brownish-yellow, with a faint central longitudinal channel, on each side of which are 9 or 10 fine, transverse, whitish streaks. Antennæ pale brownish-yellow.
- Thoras: pronotum finely punctured, with two channels down the middle placed near to each other, and leaving a very narrow and somewhat depressed middle keel between them; on each side, near the anterior margin, two or three deep Scutellum flat, slightly reddish or brownish-yellow. Elytra pale cinnamon-brown or fawn colour, sometimes dark brown: clavus very finely punctured, apex generally with a short, fine, black streak: corium very finely punctured; next the anterior margin are two large white patches, one before the middle extending inwardly as far as the 1st nerve, the other beyond the bifurcation of the 1st nerve, and extending to its inner branch, its exterior margin generally bilobed; the space between the two patches and the exterior margin of the second patch, for a short distance, generally darker than the other portion of the corium; next the apex of the clavus a short white streak, followed by a similar black one. Sternum: mesosternum, in the middle, black. Legs yellow or brownish-yellow. Tibia, spines and fringe at the apex of the 3rd pair, black; tarsi, 3rd joint, and claws of all the pairs and fringes of the 3rd joint, tipped with black.

Abdomen above, in the middle, black, sides broadly yellowish or reddish, or brownishyellow; underneath, similar to the upper-side; genital segment yellow.