

There can be but little doubt that the last two classes of malformation are the consequences of injuries received while the insects were in the penultimate state; but for the first-mentioned kind of aberration I hesitate to offer a hypothesis. I have not detected the suppression of a joint of one of the antennæ in any other section than the three above-mentioned; and I should be very glad to hear if it has been noticed by others in these or other sections.

(To be continued.)

ADDITIONS TO THE BRITISH FAUNA (HEMIPTERA).

BY J. W. DOUGLAS AND JOHN SCOTT.

(Continued from page 220.)

FAMILY 12.—PSALLIDÆ.

Genus 4.—STHENARUS, Fieb.

Species 2.—STHENARUS ROSERI.

CAPSUS ROSERI, *H. Schf. Wanz.* iv. 78, fig. 407 (1839). *Meyer*, Caps. 105, 94 (1843). *Kirschb.* Caps. 87, 115 (1855).

CAPSUS (CAPSUS) ROSERI, *Flor.*, Rhyn. Liv. i. 560, 53 (1860).

STHENARUS ROSERI, *Fieb.*, *Europ. Hem.* 309, 1 (1861).

Orange-yellow, clothed with fine depressed golden-yellow hairs.

Head—black. *Antennæ*, 1st and 2nd joints black; 3rd and 4th reddish brown, the base of each narrowly black. *Rostrum* black.

Thorax—*Pronotum* reddish-yellow, finely wrinkled transversely, the hinder margin of the callosities, a central line and the posterior margin blackish-brown. *Scutellum* black. *Elytra* orange yellow; *Clavus*, inner margin narrowly black; disk from thence to the nerve suffused with blackish; *Corium* in the middle with a large, somewhat triangular, black patch between the 1st nerve and the claval suture, extending to the posterior margin; *Cuneus* red; *Membrane* blackish brown, between the apex of the cuneus and the lesser cell-nerve whitish; cell-nerves reddish, narrowly margined with whitish, lesser cell white. *Legs*, 1st pair reddish yellow; *tibiæ* at the apex blackish; *tarsi* yellow; 3rd joint and *claws* black (2nd and 3rd pair of legs of the specimen wanting).

Length $1\frac{1}{2}$ line.

We have only seen a single ♂ example of this species, which was taken by the Rev. T. A. Marshall at Battersea. It was submitted for determination to Dr. Fieber, who returned it as a variety of *Sthenarus*

Roseri. The typical form, according to Fieber and Flor, has the head, pronotum, antennæ, and scutellum black. Dr. Fieber also points out to us in a letter that the *Capsus saliceticola* of Stål is a variety of the above with black pronotum and elytra.

FAMILY 13.—CAPSIDÆ.

Genus 2.—AGALLIASTES.

Species.—AGALLIASTES WILKINSONI, Douglas and Scott.

Black. *Elytra* clothed with very short, depressed, yellowish hairs. *Tibiæ* without black spots. ♀ *Elytra* generally undeveloped, not covering more than half the abdomen; *clavus* not distinct; *cuneus* and *membrane* wanting.

Head—shining. *Antennæ*, 1st joint black, apex pale yellow; 2nd pitchy brown; 3rd and 4th brownish-yellow, 3rd at the base piceous.

Rostrum pitchy-brown, 1st joint and the apex of the 4th black.

Thorax—*Pronotum* in the ♂ with an X shaped depression between the callosities; in the ♀ the disk posteriorly wrinkled transversely.

Scutellum with a transverse channel in front, the anterior portion very convex; posteriorly flattish-convex, level with the *clavus*.

Elytra—*Clavus* pitchy brown, somewhat shagreened. *Corium* and *cuneus* pitchy brown, the anterior and inner margin of the latter darker; *Membrane* pitchy-brown, iridescent; cell-nerves white, narrowly margined on both sides with brown. *Legs*—*thighs* black, apex brownish yellow; *tibiæ* brownish yellow, with longish, erect, somewhat spinose black hairs, but without black spots; *tarsi* brownish-yellow, 3rd joint and *claws* brown.

Length ♂ $1\frac{1}{2}$, ♀ $\frac{2}{3}$ line.

Mr. T. Wilkinson, after whom we name the species, has met with it in some numbers at Scarborough, amongst moss at the roots of *Convallaria bifolia*, in May and June.

It is very closely allied to *A. pulicarius*, but may at once be separated from that species by the absence of the black spots on the *tibiæ*. It should stand as the first species in the genus in our Volume.

Species 4.—AGALLIASTES ALBIPENNIS, Fall.

PHYTOCORIS ALBIPENNIS Fall. Hem. Succ. i. 107, 59 (1829). *Hahn*.

Wenz. ii. 91, p. 177 (1839).

CAPSUS ALBIPENNIS, II. Schf., Nom. Ent. i. 82 (1835). *Meyer*, Caps. 79, 56 (1843). *Kirschb.* Caps. 92, 127 (1855).

CAPSUS (CAPSUS) ALBIPENNIS, Flor, Rhyn. Liv. i. 598, 78 (1860).

AGALLIASTES ALBIPENNIS, Fieb. Europ. Hem. 311, 2 (1861).

Grey or greyish black, with longish, depressed, silvery white hairs. ♂ narrower and more elongate than the ♀. *Tibiæ* with large black spots.

Head—black. *Crown*; hinder margin broadly brownish yellow. *Antennæ*, 1st and 2nd joints black, the apical half of the latter yellow; 3rd and 4th yellow. *Rostrum* yellow or brownish yellow, tip black.

Thorax—*Pronotum* pale or dark grey, more or less suffused with blackish gray on the sides and in front to behind the callosities. *Scutellum* black, basal angles orange yellow or yellow. *Elytra*—*clavus* inner margin from the scutellar angle to the apex black, the colour extending for a little way upon the disk; disk blackish gray. *Corium*, anterior margin pale grey, or with the apex more or less blackish gray; disk between the 1st nerve and the inside of the anterior margin white, occasionally more or less suffused with blackish grey; towards, and at the apex, between the 1st nerve and the claval suture blackish grey, darkest towards the apex; *Cuneus* white at the base, the apex broadly black; *Membrane* blackish, iridescent, between the apex of the cuneus and the lesser cell a somewhat triangular white patch; cell nerves white, cells brown; inner marginal nerve brown-black. *Legs*—*thighs* black; 1st and 2nd pairs at the apex frequently piceous; *tibiæ* brownish-yellow with large black spots, and long, erect, somewhat spinose, black hairs, the base narrowly black; *tarsi* brownish yellow; 3rd joint and *claws* piceous.

Abdomen—black.

Length ♂ $1\frac{1}{2}$, ♀ $1\frac{1}{3}$ line.

Several examples taken at the side of the bridge between Havant and Hayling Island, on *Artemisia maritima*, in September (Douglas). Immature specimens are of a uniform pale gray colour.

FAMILY 14A.—BOTHYNOTIDÆ.

Genus—BOTHYNOTUS, Fieb.

♂ Longish oval, sides almost straight; ♀ broad oval, with undeveloped elytra.

Head—viewed from above short, vertical in front, $2\frac{1}{2}$ times wider across the eyes than long, posteriorly produced into a short neck, its sides very convex. *Crown* almost horizontal, flattish-convex. *Olypeus* convex, nearly parallel with the anterior margin of the eyes; apex in a line with the base of the antennæ; antenniferous

processes very short, in a line with the underside of the eyes. *Face* triangular, central lobe broad, longish, convex, produced beyond the clypeus; side lobes short, somewhat triangular, and slightly rounded outwardly. *Antennæ* shorter than the body. 1st joint cylindrical, a little longer than the head, its entire length reaching beyond the end of the face; 2nd $2\frac{1}{2}$ times longer than the first, in the ♂ stoutish, almost cylindrical, in the ♀ slightly clavate; 3rd and 4th filiform, together shorter than the 2nd; 4th $\frac{3}{4}$ of the 3rd. *Eyes* very prominent, projecting considerably beyond the anterior margin of the pronotum; viewed from above hemispheric, from the side oval. *Rostrum* short, reaching to the end of the mesosternum.

Thorax—*Pronotum* trapeziform, $1\frac{1}{2}$ time as broad on the posterior margin as long; anterior margin in the ♂ almost straight, and with a raised collar; behind the latter a transverse depressed space bounded posteriorly by a deep curved channel, its extremities terminating a little within the anterior angles; in the ♀ the collar is flat; sides straight; posterior margin in the ♂ straight across the scutellum, rounded towards and at the hinder angles; disk convex, very much deflected to the head from in a line with the base of the elytra; in the ♀ the posterior margin is slightly concave across the scutellum, and somewhat raised; disk horizontal, almost flat as far as the channel. *Scutellum* triangular, equilateral, convex, raised above the clavus, with a transverse channel in front, the anterior portion concealed beneath the posterior margin of the pronotum. *Elytra* in the ♂ longer than the abdomen, in the ♀ undeveloped, without cuneus or membrane; *Clavus* convex, deflected to the corium; *Corium* in the ♂ almost flat, anterior margin slightly reflexed; in the ♀ elevated towards the apex of the clavus; *Cuneus* long, triangular. *Legs* thin; *thighs* of almost equal thickness, somewhat cylindrical; *tarsi*, 3rd pair, 1st and 2nd joints of almost equal length; 2nd shortest.

Figure 3 (♂ & ♀) Ent. Ann. 1866.

Species—*BOTHYNOTUS MINKI*, Fieb.

BOTHYNOTUS MINKI, Fieb. Wiener Entomol. Monatschrift, viii. 77, Taf. 2, fig. 7 (1864).

♂ Shining, pitchy black, or with a faint greenish-brown tinge; clothed with fine, erect, pale yellowish hairs. *Legs* red.

Head—black; *Face*, side lobes reddish. *Antennæ* pitchy brown, sparingly clothed with longish, very fine, pale yellowish hairs. *Rostrum* piceous.

Thorax—*Pronotum* black, rugose, thickly and very deeply punctate, the depressed portion alone smooth and somewhat convex. *Scutellum* black, wrinkled transversely, depressed in the centre at the transverse channel. *Elytra* somewhat diaphanous; *Clavus* pitchy black, finely wrinkled transversely; *Corium* pitchy-yellow, the anterior margin, 1st nerve, and a narrow space adjoining the clavus pitchy-brown; *Cuneus* pitchy or reddish brown; anterior margin at the base rounded, and leaving a small but distinct notch; *Membrane* pitchy-brown, finely but irregularly wrinkled longitudinally, clothed with very fine short hairs; cell-nerves black. *Legs*—*thighs* and *tibiæ* red, the latter narrowly brownish at the apex; *tarsi* brown; *claws* reddish.

Abdomen pitchy-black, clothed with fine, pale yellowish hairs.

Length 2—2½ lines.

♀ Black, shining, clothed with fine, erect, yellowish hairs. *Legs* very pale reddish yellow.

Head—reddish; *Crown* with a slightly curved blackish line on each side of the centre extending to the inside of the antenniferous processes; *Face*, central lobe black. *Antennæ*, 1st joint reddish or brownish yellow, base and apex narrowly blackish; 2nd, 3rd, and 4th pitchy-black.

Thorax—*Pronotum* rugose, the punctures deeper than in the ♂. *Scutellum* wrinkled transversely, with a faint central keel extending from the apex to the transverse channel, disk depressed on either side next the latter. *Elytra* undeveloped, without cuneus or membrane; *Clavus* and *Corium* rugose, anterior margin of the latter thickened, apex rounded. *Legs*—*thighs* very pale reddish-yellow; *tibiæ* pale yellow, clothed with somewhat erect, fine, yellowish hairs; *tarsi* and *claws* pitchy-brown.

Abdomen entirely black, clothed with pale yellowish hairs; *Connexivum* broad, perpendicular, and somewhat reflexed inwardly.

Length 1¾ line.

Four specimens of this insect were taken in July last by Mr. D. Sharp, on the hills between Loch Long and Loch Lomond, at a height of about 1500 feet.

(To be continued.)