Habitat.—Medicine Hat, Alberta, Canada. One specimen collected by Mr. J. R. Malloch. Type Cat. No. 15212, U.S.N.M.

THE CANADIAN ENTOMOLOGIST.

This species in general appearance, very closely resembles Neolarra pruinosa, but in addition to the generic differences, differs also in the dark tegulæ, the carina on the propodeum more elevated, the appressed pubescence not covering the abdomen, etc. P. vigilans and P. nanus are both smaller, with light coloured tegulæ and with the appressed pubescence covering abdomen; P. vigilans also has the carina on the propodeum indicated at base only, the process on metanotum only indicated, etc.

Perdita canadensis, new species.—Female. Length about 9 mm. Head blue-green, thoracic notum green, pleuræ bluegreen; clypeus and labrum black, the former with purplish tinges, smooth, with a few fine punctures and produced anteriad of a line connecting the lower ends of eyes fully one-third the length of the distance between eyes at lower ends; face without markings; antennæ dark, scape with a narrow yellow line, apical joints of flagellum reddish beneath; pubescence of head and thorax long, erect, strongly tinged with ochraceous; collar with two small yellow spots; tubercles dark; wings milky white; veins hyaline; the stigma and costal vein light brown; first recurrent vein interstitial or almost so; legs dark, anterior knees and a short narrow stripe on anterior tibiæ yellow; pubescence on outer side of legs greyish, on inner side ochraceous, on tarsi reddish; first abdominal segment with a small yellow spot on each side; segments 2-5 with yellow bands, the ends of which are turned caudad on segments 3-5; band on second segment dilated laterally so that the posterior margin is diagonal; bands on segments 2-3 notched medially on posterior margin; pygidium broad at apex with the apical martin emarginate.

Habitat.—Medicine Hat, Alberta, Canada. Two females collected by Mr. J. R. Malloch. Type Cat. No. 15213, U.S.N.M.

This species belongs to the group with albipennis Cresson, lacteipennis Swenk and Cockerell, and pallidipennis Grænicher; it differs from all of them in the dark face and other markings; albipennis and pallidipennis have the first recurrent vein received by the second submarginal cell and the pygidium rounded apically; albipennis has the clypeus produced hardly half as much as canadensis; pallidipennis has it produced about as much; lacteipennis has the clypeus produced about as in albipennis the first recurrent vein received by the second submarginal cell and the pygidium emarginate at apex. Of the value of this last character I am at present doubtful.

## NEW SPECIES OF FURCOMYIA (TIPULIDÆ). BY CHAS. P. ALEXANDER, ITHACA, N. Y.

(Continued from page 341.)

Furcomyia libertoides, sp. n.

Closest allied to *liberta* O. S. of the Eastern U. S., but differs as follows: The præscutal stripes are not clearly defined, the middle of the dorsum being suffused with bright brown; tergum of abdomen brownish, not clear gray; wings with the stigma conspicuous, rectangular, not a narrow seam to cross-vein r. Hypopygium from above—see fig. 5.). The pleural piece triangular, the ventral apical appendage fleshy, its inner margin produced into a point which is directed cephalad; two short spines about equal in size, projecting caudad on the middle of this appendage; dorsal arm, or apical appendage, rather short, gently curved. Venation, fig. l.

Length about 6.5-7.5 mm.; wing, 8.7-8.8 mm.

Holotype. - &. Marin Co., Cal.; March 23, 1897.

Paratypes. - 3 s 5. With the type.

The material is part of the Wheeler collection; one paratype in author's collection.

Furcomyia simillima, sp. n.

Yellowish thorax, with a dark brown median stripe; halteres very long.

3.—Length about 5.5 mm.; wing, average, 6.8 mm.

Q.—Length about 5 8 mm.; wing, average, 7.4 mm.

Head: rostrum and palpi dark brown. Antennæ, first segment dark brown, thickly gray pruinose, remaining segments dark brownish black. Front, vertex and occiput brown, thickly gray pruinose, producing a gray effect.

Thorax: cervical sclerites dark, almost black; pronotum light dull yellow, dark brown along the dorsal median line. Mesonotum bright brownish yellow, becoming grayish on the sides; a broad dark brown median stripe continued from the pronotum, ending just before the suture; lateral stripes indistinct, grayish brown, beginning behind the pseudo-suture, continued across the suture and suffusing the lobes of the scutum; median line of the scutum and the scutellum paler yellowish white; postnotum brown; metanotum light yellow. Pleuræ light yellow, becoming grayish toward the metapleuræ. Halteres very long, extreme base yellowish, rest dark brown. Legs: coxæ and trochanters yellowish; femora yellow becoming somewhat darker apically; tibiæ and tarsi

December, 1912

yellowish brown. Wings subhyaline; no stigmal spot; veins yellowish brown. Venation: (See fig. n.) Sc ending before origin of Rs, Sc<sub>2</sub> far before tip so that Sc<sub>1</sub> is long, somewhat shorter than Rs; basal deflection of Cu<sub>1</sub> before the fork of M.

THE CANADIAN ENTOMOLOGIST.

Abdomen: tergum yellowish brown, apices of the sclerites narrowly paler; sternum light yellow.

Holotype. - 3. Totonicipan, Guatemala. (Dr. G. Eisen.)

Allotype. - 9. Antigua, Guatemala. (Dr. G. Eisen.)

Paratypes.—11 &s, 8 &s. Quichi (July, 1902); Antigua and Totonicipan (July, 1902); Guatemala.

Types in U. S. Nat. Mus. coll. (No. 15,134.) Paratypes in author's collection.

Resembles particeps Doane (Ent. News, Jan., '08, p. 7), from northwestern U.S., but head is more gray, abdomen much lighter coloured and the thoracic stripes different.

Furcomyia andicola, sp. n.

Head gray; thorax brownish yellow; wings with scanty brown marks.

Q.—Length, 8.1 mm.; wing, 11.2 mm.

Q.—Head: rostrum and palpi dark brown. Antennæ, basal segments brown, flagellar segments very dark brown. Front, vertex and occiput gray.

Thorax: pronotum dull yellow, the dorsum indistinctly suffused with brown. Mesonotum dull brownish yellow, a broad brown median stripe and shorter, less distinct lateral ones; scutum reddish brown, suffused with darker brown; scutellum and postnotum brown, with a grayish brown bloom. Pleuræ dark brown. Halteres, stem greenish at base, darkening to brown at the tip. Legs: coxæ greenish, femora brownish yellow, the tip clearer yellow; tibiæ light brown, darkened at tip; tarsi brown. Wings subhyaline, veins brown, C, Sc and R, more yellowish; a large, rectangular brown stigma, which is continued back over the fork of Rs as a rounded spot; narrow brown seams on the cord and outer end of cell 1st  $M_2$ . Venation (see fig. h.): Sc ending just beyond origin of Rs; Sc2 removed from the tip so that Sc1 is rather more than half as long as Rs; Rs about one and one-half the length of the deflection of  $R_{4+5}$ ; basal deflection of  $Cu_1$  before the fork of M.

Abdomen: tergum and sternum brown, the apices of the sclerites yellowish. It is probable that, in life, the insect is quite greenish.

Holotype.—?. San Antonio, Bolivia. (Received from Staudinger-Bang-Haas.)

Type in author's collection.

Agrees most closely with phatta Phil, which has the thorax gray and the wing-pattern very different, three black spots in cells 1st R<sub>1</sub> and 2nd R<sub>2</sub>.

Furconvia insignifica, sp. n.

Head brownish gray; thorax reddish brown, durker medially.

Q.—Length, 8.5 mm.; wing, 9.6 mm.; fore leg, femur, 59 mm.; tibia, 7.3 mm.

Q.—Head: rostrum, palpi and antennæ dark brown. Front, vertex

and occiput brownish gray.

Thorax: pronotum yellowish brown. Mesonotum, præscutum reddish brown, darkest brown medially on præscutum; paler, yellowish, on the humeral angles; pleuræ brownish yellow, brightening to yellow on the sternum. Halteres long, slender, brown, brighter at the base. Legs long, slender; coxæ and trochanters yellowish; femora yellowish brown; tibiæ and tarsi brown. Wings hyaline, veins light brown; stigma barely indicated, rectangular, very pale. Venation (see fig. i.): Sc short, Sc quite removed from the tip of  $Sc_1$ ; Rs short, not much longer than the deflection of  $R_{4+5}$ ; basal deflection of  $Cu_1$  far before the fork of M.

Abdomen: tergum dark brown on the basal segments, lighter brown

on the apical segments; sternum light brown.

Holotype.— Q. Iquico, Peru. (Received from Staudinger-Bang-Haas),

Type in author's collection.

This species cannot be referred to pallida Macq, which has a triangular cell 1st M<sub>2</sub> which bears a spur, this character of an appendiculate cell also separating elquitensis Blanch. The other species with unspotted wings, flavida Phil. and chlorotica Phil., are quite different insects, specimens of which are before me, and will be redescribed in a later paper.

Furcomyia argentina, sp. n.

Head gray; thorax gray, darker on dorso-median line.

Q.—Length, 8 mm.; wing, 8.9 mm.; fore leg, femur, 6 mm.; tibia, 7 mm.; hind leg, femur, 7.1 mm.; tibia, 7.7 mm.

9.—Head: rostrum and palpi dark brown. Antennæ dark brown, grayish pollinose; segments submoniliform. Front, vertex and occiput gray.

Thorax: pronotum brownish gray, the gray being pollen. Mesonotum, præscutum gray, with an indistinct, broad, brown, median stripe; scutum, scutellum and postnotum pale, with a gray pollen. Pleuæ pale

gray pollinose. Halteres short, stem dull yellow, knob brown. Legs: coxe and trochanters dull yellow; femora similar, rather darkened toward the tip; tibiæ and tarsi light brown. Wings hyaline, veins dark brown, conspicuous; stigma indistinct, brownish. Venation (see fig. k.): So ends opposite the origin of Rs;  $Sc_2$  far retracted so that  $Sc_1$  is almost as long as the stigma; Rs only a little longer than the deflection of  $R_{4+3}$ ; basal deflection of  $Cu_1$  at the fork of M.

Abdomen: tergum dull brown; sternum yellowish brown.

Holotype.— ?. Neuquen, Argentina, 1907. (Dr. Adolf Lenol.)

Type in author's collection.

Differs from the hitherto described species by the characters given in under *insignifica*. From *insignifica* it differs in its wing venation, colour of veins, and body tone.

? Furcomyia fumosa, sp. n.

Wings infumed, with darker clouds.

Q.—Length about 5.5 mm; wing, 6.3 mm.

Q.—Head: rostrum and palpi dark brown. Antennæ dark brownish black. Front, vertex and occiput brownish, with a grayish pubescence.

Thorax: pronotum dark brown. Mesonotum light brown, the postnotum darker. Pleuræ dark brown. Halteres dark brown, base of the stem light coloured. Legs: coxæ and trochanters dark brown, rest of legs broken. Wings infumed with brown, darker brown clouds arranged as follows: At origin of Rs, at tip of Sc, at tip of R<sub>1</sub>, along cord; most of veins and tip of wing clouded with dark brown. Venation (see fig. t.): Sc long, Sc<sub>1</sub> ending slightly before the fork of Rs, Sc<sub>2</sub> at its tip; R<sub>1</sub> bends down near its end and touches R<sub>2+3</sub>, obliterating the cross-vein r; basal deflection of Cu<sub>1</sub> beyond the fork of M.

Holotype.— 9. Amatuk, British Guiana; July 14, 1911. (F. E. Lutz.)

Type in American Museum of Natural History.

This insect is closely allied to Limnobia insularis Will. (Dipt. St. Vincent, Trans. Ent. Soc. Lond, 1896, p. 287, pl. 10, fig. 58), but the wing has quite a different pattern, cell 1st M<sub>2</sub> less elongated, basal deflection of Cu<sub>1</sub> farther distad, etc. The two species are certainly as close to Furcomyia as they are to Limnobia, but seem to represent a peculiar group which needs further study with more material.

MR. EDWARD P. VAN DUZEE, of Buffalo, leaves early in December for a four months' vacation in California. His temporary address will be San Diego, Calif.