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XXIII.—*New or little-known Tipulidæ (Diptera).*—LXXIII.
Neotropical Species. BY CHARLES P. ALEXANDER,
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THE various novelties discussed herewith are from Peru, where they were collected chiefly by Messrs. Pedro Paprzycki and Felix Woytkowski, to whom our greatest advance in knowledge of Peruvian crane-flies is due. The types of the species are preserved in my personal collection of Tipulidæ.

Tipula (Eumicrotipula) conspicillata, sp. n.

Belongs to the *glaphyoptera* group; mesonotal præscutum obscure yellow, with four brown stripes; posterior sclerites of mesonotum with wide central markings; antennæ (male) elongate, about one-half the body, flagellar segments bicoloured; halteres yellow; femora brownish yellow, each with two black subterminal rings enclosing a subequal yellow ring, the actual tip again narrowly yellow; wings broad, pale yellow, the costal border more saturated; an unusually conspicuous and contrasted brown pattern; male hypopygium with the ninth tergite narrowly transverse, the produced central portion with a very shallow U-shaped notch; eighth sternite with a flattened median lobe that is slightly more than twice as long as its width across base.

Male.—Length about 14 mm.; wing 14 mm.; antenna about 7.5 mm.

Frontal prolongation of head obscure brownish yellow; nasus long and conspicuous; palpi with first segment

obscure yellow, the remainder broken. Antennæ (male) elongate, approximately one-half the length of either body or wing; scape brownish yellow, pedicel clearer yellow; flagellar segments conspicuously bicoloured, the basal swelling black, the succeeding portions of the stems infuscated, the outer portions becoming clear yellow, this bicolourous nature continuing through the penultimate segment; flagellar segments elongate, gently incised, the outer portion of the stem a little expanded; longest verticils a trifle shorter than the segments. Head brownish fulvous; vertical tubercle simple but relatively conspicuous; front and anterior vertex yellow, the centre of the latter infuscated, with a narrow median vitta immediately behind.

Pronotum obscure yellow, with three brown marks: anterior pretergites opposite the foveæ conspicuously blackened. Mesonotal præscutum with the ground obscure yellow, with four brown stripes that are narrowly and vaguely bordered by slightly darker brown; intermediate stripes vaguely separated on the cephalic third only, confluent behind: lateral præscutal border behind the foveæ infuscated; præscutal vestiture short and inconspicuous; scutum obscure yellow, each lobe chiefly covered by two separate brown marks: scutellum obscure yellow, its central portion extensively infuscated: mediotergite broadly darkened on central portion, especially behind, the lateral borders obscure yellow: pleurotergite with its anapleurotergite obscure yellow, more infuscated in front, the katapleurotergite conspicuously dark brown. Pleura obscure yellow, the propleura dark brown. Halteres yellow. Legs with coxæ obscure yellow, narrowly more infuscated basally; trochanters yellow; femora brownish yellow, clearer basally, with two conspicuous blackened subterminal rings that enclose a subequal clear yellow one, the extreme tip very narrowly yellow; remainder of legs pale yellowish brown, the outer tarsal segments darker. Wings broad; ground-colour pale yellow, conspicuously patterned and variegated with dark brown subcostal areas and very slightly paler clouds in most of the cells; cells *C* and *Sc* more saturated yellow; the darker subcostal areas include a major basal one extending from *h* across the bases of cells *R* and *M* into *Cu*; second and third areas in cell *Sc*. not involving

cell *Sc*, behind extending about to mid-width of cell *R*, interconnected by a narrow linear dark central streak; fourth dark area small, at outer end of cell *Sc*; fifth and last area at stigma; the darkened clouds of remainder of wing exceed in area the yellow ground except in the central portion of cells *R* and *M*; post-stigmal ground area extending into cell *R*₅; a narrower pale area across cell 1st *M*₂ from the outer end of cell *R* to beyond mid-length of cell *M*₃; cell *M*₁ with pale spot near base, cells 2nd *M*₄ to *M*₄, inclusive, with similar pale marginal spots; basad of cord, in cells *Cu* through 1st *A*, the dark pattern becomes more irregular and zigzag; veins brown, yellow in the ground areas. Venation: *R*₁₊₂ entire; *Rs* about twice *m-cu*; vein *R*₃ almost straight, not sinuous as in *juventa*; petiole of cell *M*₁ subequal in length to the cell.

Basal abdominal tergites obscure brownish yellow, on sides narrowly patterned with dark brown, the outer segments becoming somewhat more uniformly darkened; sternites clear yellow; hypopygium chiefly yellow. Male hypopygium with the ninth tergite narrowly transverse, its width exceeding twice the greatest length; central portion produced, with a further shallow U-shaped median notch; lateral angles obtuse. Lobe of basistyle nearly circular in outline, covered with short dense setulæ. Outer dististyle long and slender, only a trifle expanded on distal half. Inner dististyle elongate, slightly more dilated across base, the outer surface and margin with unusually few setæ. Ninth sternite with the lobe suboval, with several very long setæ, the longest exceeding the lobe itself. Eighth sternite with the caudal margin truncate, with a conspicuous depressed median lobe that is slightly more than twice as long as the width across base.

Hab. Peru (Junin).

Holotype, ♂, Monobamba, Tarma, altitude 6000 feet, December 3, 1940 (*Woytkowski*).

Tipula (Eumicrotipula) conspicillata is generally similar to species such as *T. (E.) arecuna* Alexander, *T. (E.) browniana* Alexander, *T. (E.) delectata* Alexander, and *T. (E.) juventa* Alexander, especially the latter. It differs particularly in the elongate antennæ of the male, the coloration of the body, legs and wings, and in all details of structure of the male hypopygium.

Tipula (Eumicrotipula) huanca, sp. n.

Belongs to the *glaphyoptera* group; size large (wing, female, about 20 mm.); general coloration grey, patterned with brown; antennæ black, the pedicel a little more reddened; knobs of halteres blackened; legs black, the broad central portion of tibiæ paler; wings relatively narrow, whitish subhyaline, conspicuously clouded and marbled with dark brown, pale brownish grey and buffy; cell 1st M_2 narrowed at its outer end; abdomen chiefly reddish brown, more or less distinctly striped with blackish; posterior lateral borders of intermediate tergites with conspicuous light grey areas.

Female.—Length about 22 mm.; wing 20.5 mm.; antenna about 3.4 mm.

Frontal prolongation of head dark grey above, dark brown beneath, of moderate length, being about three-fourths the remainder of head; nasus lacking; palpi black. Antennæ (female) black, the pedicel more reddened, scape slightly pruinose; flagellar segments with feebly-developed basal enlargements; longest verticils unilaterally distributed. Head grey; posterior vertex with a conspicuous dark brown median area that is narrowed in front; vertical tubercle very low.

Pronotum grey, restrictedly darkened medially. Mesonotal præscutum light grey, with dark brown markings, as follows:—The normal four stripes are much reduced, the intermediate pair being represented by washes and individual spots, separated by a capillary dark brown median vitta; sublateral stripes short and relatively small but entire; interspaces with a few scattered setigerous punctures that bear very inconspicuous setæ; scutum clear light grey, each lobe with two small, disconnected brown spots, the median area weakly darkened; scutellum grey, with a conspicuous central darkening, parascutella slightly darker; mediotergite grey, with a more or less distinct central infuscation on its cephalic portion; pleurotergite variegated brown and light grey. Pleura patterned with light and dark grey, the latter especially evident on the ventral sternopleurite, the anepisternum even more conspicuously patterned with blackish; anterior dorso-pleural membrane surrounding the spiracle light yellow, the posterior membrane dark brown. Halteres relatively long,

stem yellow, knob blackened. Legs with coxæ grey; trochanters dark brown; femora black, the bases narrowly reddened; tibiæ with both ends narrowly blackened, the extensive central portion paler; tarsi black. Wings with the ground whitish subhyaline, very heavily clouded and marbled with dark brown, pale brownish grey and buffy; prearcular field and cell *C* chiefly light brown; cell *Sc* yellow, with three dark brown clouds as described below; a clear light yellow spot at arculus; the darkest areas are subcostal in distribution, including one at origin of *Rs* and a second just basad of it, both involving cell *Sc* as well as *R* but not reaching vein *M* behind; stigma and a confluent seam over anterior cord dark brown; narrower dark brown seams over posterior cord, outer end of cell 1st M_2 and on the veins beyond cord; restricted dark brown areas near arculus and over outer end of cell *Sc*; paler brownish-grey washes in the centres of the outer cells to form a very zigzag pattern in cells *M* to 2nd *A*, inclusive, in cells *M* and M_3 merging into buffy margins; the subhyaline ground does not form uninterrupted bands either before or beyond the stigma; veins dark brown, somewhat paler in the more brightened costal field. Wings much narrower than in *mocou*. Venation: Extreme tip of R_{1+2} atrophied; vein R_2 very short, cell R_2 pointed at base; *Rs* unusually long, about two-and-one-half times the long *m-cu*; cell 1st M_2 narrowed at its outer end; petiole of cell M_1 nearly twice *m*; vein 2nd *A* nearly straight.

First abdominal tergite brownish grey; succeeding tergites with the ground reddish brown, with a more or less distinct more blackened lateral stripe, the lateral margin of posterior half of each segment heavily and conspicuously light grey pruinose, forming a series of six marks on either side of abdomen; sternites reddish brown, patterned laterally and along the centre with darker; genital shield reddish brown; ovipositor with cerci long and straight, reddish brown.

Hab. Peru (Ayacucho).

Holotype, ♀, Yanamonte, La Mar, in fog forests, altitude 3000—4100 metres, September 26, 1941 (*Woytkowski*); in bushy thickets along brook-margin.

The specific name, *huanca*, is that of a native Peruvian tribe. From other approximately similar species having

marbled wings, including *Tipula* (*Eumicrotipula*) *mocoa* Alexander, of Colombia, the present fly differs in the coloration of the body, legs and wings, and in the narrower wings with distinct venational details.

Tipula (*Eumicrotipula*) *immorsa*, sp.n.

Belongs to the *monilifera* group; general coloration of notum fulvous brown, the præscutal stripes poorly differentiated; antennæ (male) almost as long as body, basal flagellar segments weakly bicolored, the outer ones uniformly blackened; thoracic pleura uniform yellow; femora obscure yellow, the tips blackened; wings strongly suffused with fulvous brown, very restrictedly patterned with darker brown and whitish subhyaline; abdominal tergites trivittate with brownish black, on the subterminal segments forming a blackened ring; hypopygium yellow, the ninth tergite with a broad caudal emargination, bearing at its base a second narrower median notch; outer dististyle dilated on outer half; inner dististyle with a row of strong bristles on distal half of outer margin; lobe of eighth sternite unusually short and broad, only about as long as the width across the base.

Male.—Length about 12-13 mm.; wing 16-17 mm.; antenna about 10.5-11 mm.

Female.—Length about 18-19 mm.; wing 17.5-18 mm.

Frontal prolongation of head yellow above, including the long nasus, infuscated on sides, particularly just cephalad of the eyes; palpi brownish black, the incisures and apex of terminal segment a trifle brightened. Antennæ (male) with the scape and pedicel yellow; basal flagellar segments brown, the basal knots black, the outer segments becoming uniformly black; segments beyond the abrupt knot uniformly cylindrical. In female, antennæ small and simple. Head buffy yellow, with a capillary black median vitta.

Pronotum and mesonotum chiefly fulvous brown, the præscutal stripes poorly differentiated from the ground; in cases, the stripes a little darker and more conspicuous, with a further dark capillary median vitta; interspaces with very conspicuous black setigerous punctures; scutal lobes again vaguely patterned with darker; scutellum with a linear black median dash on basal portion. Pleura and pleurotergite, including the dorsopleural membrane,

yellow. Halteres with stem brown, the base narrowly light yellow, the knob blackened. Legs with the coxæ and trochanters yellow; femora obscure yellow, the tips blackened; tibiæ and basitarsi dark brown; outer tarsal segments black; claws (male) with a very weak denticle. Wings very strongly suffused with fulvous brown, very restrictedly patterned with darker brown and whitish subhyaline; dark areas include the stigma and an adjoining cloud on the anterior cord, with restricted areas in the prearcular field and vicinity of the arculus; the subhyaline areas include a restricted, incomplete, post-stigmal area across the bases of the outer radial cells; a similar, disconnected area in cell 1st M_2 , crossing into cells R and M_3 ; a very inconspicuous pale area near outer end of cell R_5 ; very restricted pale marks beyond mid-length of cells R and M and on basal half of Cu , where they alternate with darker clouds; cell 1st A with two vague brightenings on proximal half, the remainder of anal cells uniformly of the ground-colour; cells C and Sc slightly darker than the remainder of ground, unpatterned; veins dark brown. In the female, wing-pattern somewhat better indicated. Venation: R_{1+2} entire; m longer than the petiole of cell M_1 .

Abdominal tergites yellow, heavily and conspicuously trivittate with brownish black, increasing in amount on the outer segments and here restricting the yellow ground; segments six to eight, inclusive, chiefly blackened; sternites and hypopygium yellow. In cases, the median tergal stripe poorly indicated on the more basal sclerites. Male hypopygium (fig. 1) with the tergite, $9t$, broadly transverse, the caudal margin with a very broad and shallow emargination, with a further deep and narrow median notch; dorsal surface of tergite with a median groove for the entire length, much widened on more than the posterior half of sclerite; lateral tergal lobes obtusely rounded. Outer dististyle conspicuously dilated on its outer half, where it is more than three times as wide as it is across the stem. Inner dististyle with the beak unusually long, not heavily blackened; setæ of distal half of outer margin forming a strong row, the more basal ones becoming very small and delicate. Basistyle entire, without a lobe. Lobe of ninth sternite small, elongate-oval, with apical setæ that exceed it in length. Lobe

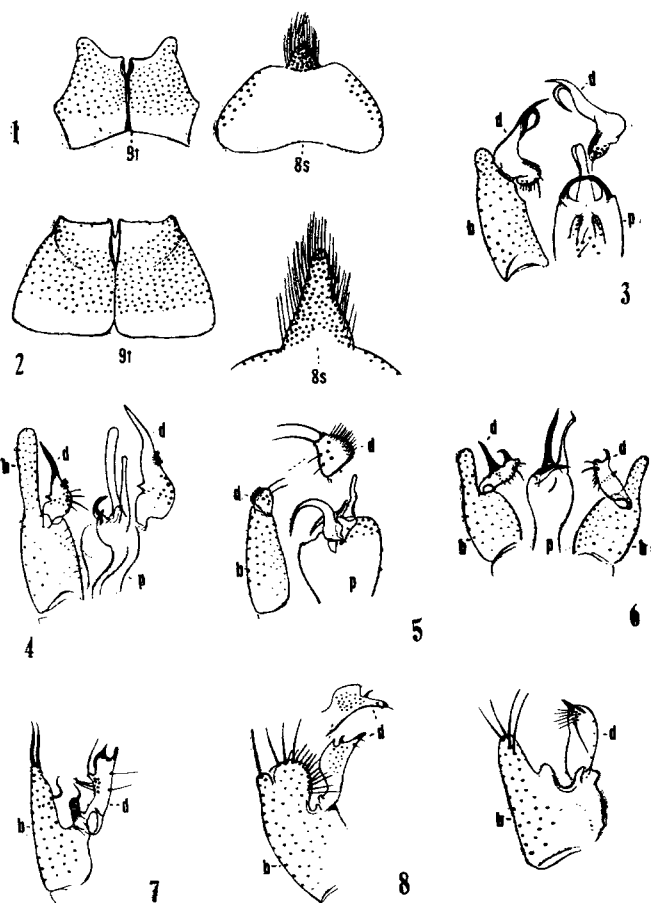


Fig. 1.—*Tipula* (*Eumicrotipula*) *immorsa*, sp. n.; male hypopygium.
 Fig. 2.—*Tipula* (*Eumicrotipula*) *yanamontea*, sp. n.; male hypopygium.
 Fig. 3.—*Gonomyia* (*Lipophleps*) *mythica*, sp. n.; male hypopygium.
 Fig. 4.—*Gonomyia* (*Lipophleps*) *dotata*, sp. n.; male hypopygium.
 Fig. 5.—*Gonomyia* (*Lipophleps*) *scelerata*, sp. n.; male hypopygium.
 Fig. 6.—*Gonomyia* (*Lipophleps*) *philomela*, sp. n.; male hypopygium.
 Fig. 7.—*Styringomyia* *mystica*, sp. n.; male hypopygium.
 Fig. 8.—*Styringomyia* *americana* Alexander; male hypopygium.
 Fig. 9.—*Styringomyia* *simplex*, sp. n.; male hypopygium.

(Symbols: *b*, basistyle; *d*, dististyle; *p*, phallosome; *s*, sternite; *t*, tergite.)

of eighth sternite, 8s, unusually short and broad, its length about equal to the width across base, provided with numerous long yellow setæ; remainder of sternite with central portion without major setæ, these represented by about 15 to 18 on either side.

Hab. Peru (Junin).

Holotype, ♂, Carpapata, Tarma, altitude 2600 metres, May 10, 1940 (*Woytkowski*). *Allotopotype*, ♀, pinned with type. *Paratopotypes*, 3 ♂♂, 1 ♀, May 4-6, 1940 (*Woytkowski*).

The present fly is readily told by the coloration of the body and wings, in conjunction with the structure of the male hypopygium, especially the tergite, outer dististyle and eighth sternite. In the small lobe of the latter the fly is most similar to species such as *Tipula* (*Eumicrotipula*) *armillata* Alexander, of Colombia.

Tipula (*Eumicrotipula*) *yanamontana*, sp. n.

Belongs to the *monilifera* group; mesonotal præscutum yellow, heavily patterned with brown, including four medium brown stripes and an additional brownish-black capillary median vitta; antennæ elongate, about two-thirds the length of body; halteres blackened; femora pale brown, the tips brownish black; wings whitish subhyaline, with a very heavy contrasted dark brown pattern; male hypopygium with the caudal margin of tergite having a small median notch, the very broad lateral lobes truncated; lobe of eighth sternite broad at base, narrowed outwardly, provided with conspicuous setæ.

Male.—Length about 17 mm.: wing 19.5 mm.; antenna about 12 mm.

Frontal prolongation of head elongate, slightly exceeding the remainder of head, obscure brownish yellow, sparsely pruinose above, including nasus, the sides dark brown; palpi black. Antennæ (male) elongate, approximately two-thirds as long as body; scape and pedicel light yellow; first flagellar segment pale brown, succeeding segments weakly bicoloured, the abrupt basal knot black, the pedicel medium brown, on the outer segments the color almost uniformly blackened. Head buffy, more yellowed on front, with a narrow black median vitta on vertex.

Pronotum light grey, with three brown areas. Mesonotal præscutum with the ground-colour yellow, patterned with brown, including four medium brown stripes and isolated blackened borders; intermediate stripes separated by a conspicuous brownish-black capillary median vitta, all three stripes becoming confluent behind; interspaces with very conspicuous dark brown setigerous punctures that become more or less confluent; scutum brownish grey, conspicuously patterned with brown, especially on the lobes; scutellum medium brown, slightly darker medially at the base but not forming a stripe; mediotergite brownish grey, the central portion narrowly darkened, the sides less evidently so; posterior border with a pair of circular, more buffy spots. Pleura and pleurotergite chiefly greyish yellow, very vaguely and indistinctly patterned with pale brown. Halteres elongate, blackened, the base of stem restrictedly yellow. Legs with the coxæ greyish yellow; trochanters pale yellow; femora pale brown, narrowly clear yellow at bases, the tips rather narrowly brownish black; tibiæ pale brown, the tips more narrowly blackened; proximal tarsal segments pale brownish yellow, the outer ones blackened. Wings whitish subhyaline, heavily patterned with dark brown, the dark colour much exceeding the pale, the areas highly contrasted; the white appears as a broad post-stigmal stripe extending from *C* into the base of cell M_3 ; an isolated longitudinal area near wing tip, including the distal end of cell R_5 , nearly the basal half of M_1 and tiny droplets in 2nd M_2 ; cell R_1 largely white, the area crossing *Rs* at near mid-length into cell *R*; a major oblique white area crosses both cells *R* and *M* at near mid-length of wing; basad of this, cells *R*, *M*, *Cu* and 1st *A* all with white areas, in the last-named irregular in outline and restricted to the proximal half of cell; axillary third of cell 2nd *A* whitened; markings near base of cell *M* and outer part of *Cu* more yellowed: cell *C* uniformly brown, cell *Sc* only vaguely patterned by the darker areas; veins brown, paler where the white areas are traversed. Venation: *Rs* a little less than twice *m-cu*; cell 1st M_2 large; petiole of cell M_1 shorter than *m*.

Abdominal tergites fulvous yellow, trivittate with brown, the lateral stripes becoming much darker and wider on the outer segments, though interrupted by the

pale posterior borders of the segments and partially by the more yellowed basal tergal rings; sternites yellow, the subterminal segments more extensively darkened, including the broad basal portion of the ninth tergite, the eighth sternite and most of the basistyles; remainder of hypopygium yellow. Male hypopygium (fig. 2) with the tergite, 9*t*, narrowed outwardly, the lobes truncated and with both the outer and the inner angles a trifle produced; a small, narrow, median notch, with a further dorsal groove extending the whole length of the sclerite, broadest on the posterior half. Inner dististyle with setæ of outer margin strong, those of proximal half much more delicate. Basistyle and ninth sternite without developed lobes. Gonapophyses appearing as broadly flattened pale plates, the tips obtusely rounded. Eighth sternite, 8*s*, with the lobe moderately long, broadest across base thence strongly narrowed, the length approximately twice the width across base; surface with abundant long coarse setæ.

Hab. Peru (Ayacucho).

Holotype, ♂, Yanamonte, La Mar, in fog forests, altitude 3000-4100 metres, September 3, 1941 (*Woytkowski*).

The pattern of the wings of the present fly is almost as in *Tipula* (*Eumicrotipula*) *woytkowskiana* Alexander, of Peru, but the structure of the male hypopygium is quite distinct. This latter species is one of the few members of the *monilifera* group having a median tooth on the tergite of the male hypopygium instead of a notch, as in the present fly.

Tipula (*Eumicrotipula*) *chanca*, sp. n

General coloration of mesonotum almost unicolorous brown, virtually unpatterned except for a blackened U-shaped mark at suture and paired brown areas on posterior portion of mediotergite; posterior portion of vertex dark brown, sending a median spur cephalad onto the brownish-yellow anterior vertex; halteres relatively long, dark brown; femora obscure yellow, the tips blackened; wings whitish subhyaline, handsomely patterned with dark brown and paler brownish grey; abdominal tergites yellow, with three interrupted brown stripes; subterminal segments blackened.

Female.—Length about 17 mm.; wing 18 mm.

Frontal prolongation of head obscure brownish yellow, darker outwardly, including the long conspicuous nasus; palpi black. Antennæ with scape and pedicel yellow, the basal flagellar segments more obscure yellow, the outer ones passing into brown; flagellar segments subcylindrical, beyond the second a trifle produced at base and here provided with long setæ; terminal flagellar segment elongate, a little exceeding the penultimate. Anterior vertex rich brownish yellow, the posterior portion dark brown, sending a median spur forward almost to the level of the antennæ; posterior orbits narrowly light grey; no vertical tubercle.

Pronotum uniformly brown. Mesonotal præscutum almost unicolorous brown, the surface with four stripes that are scarcely differentiated from the slightly more yellowish ground; at the suture a conspicuous U-shaped blackened mark; no conspicuous setigerous punctures on the interspaces, the setæ exceedingly delicate; posterior sclerites of notum similarly brown, the mediotergite conspicuously patterned with dark brown, appearing as a major oval area on either side of a delicate yellow mid-line; pleurotergite infuscated, its cephalic portion paling to yellow. Pleura yellow, the dorsopleural membrane a trifle darker. Halteres relatively long, dark brown, the extreme base of stem yellow. Legs with the coxæ yellow, trochanters more greenish yellow; femora obscure yellow, the tips rather narrowly but conspicuously blackened, the amount subequal on all legs; tibiæ and basitarsi obscure brownish yellow, the tips more narrowly darkened; outer tarsal segments passing into black. Wings with the ground-colour whitish subhyaline, with a very heavy dark brown and paler brownish-grey pattern; the dark brown arranged as follows:—A major area over *h* and the bases of cells *R* and *M*, more extensive in *R*, interconnected with a second area about mid-distance to origin of *Rs*; origin of *Rs* reaching *M* behind; stigma and a confluent seam on anterior cord, the former darker, without trichia; outer radial field and a backward prolongation across *m*; a major cloud at near mid-length of cell *M* adjoining vein *Cu*; *m-cu* and broad adjoining portions of vein *Cu*, including all of the distal section; a smaller area near base of cell *Cu*; the paler

brown washes include the outer medial, cubital and anal fields, in cell 1st *A* enclosing a large whitish droplet; the white pattern includes a broad post-stigmal band from costa to vein M_{1+2} , there narrowly separated from the chiefly white cell 1st M_2 ; outer end of cell R_5 and subbasal portions of cells M_1 to M_4 whitened; before the cord an irregular white pattern fills most of the area in cells R_1 , R , M , the interspaces of *Cu*, and the broad axillary field of the anal cells; cell *C* brownish yellow, whitened at distal end; cell *Sc* light yellow, with the four brown areas above described; veins brown, paler brown in the brightened costal interspaces. Venation: R_{1+2} entire but pale and with trichia only on basal portion; *m* longer than petiole of cell M_1 ; vein 2nd *A* a little sinuous on its distal quarter.

Abdominal tergites yellow, with an interrupted dark brown sublateral stripe, pale at base and apex of each segment; on the third and succeeding tergites with a similar median brown vitta; sternites light yellow, the caudal margins of outer segments narrowly more darkened; subterminal tergites and sternites, including the genital shield, conspicuously blackened. Ovipositor with the cerci long and slender, nearly straight, horn-yellow.

Hab. Peru (Ayacucho).

Holotype, ♀, Yanamonte, La Mar, in fog forests, altitude 3000–4100 metres, September 29, 1941 (*Woytkowski*).

The specific name, *chanca*, is that of an aboriginal tribe inhabiting Ayacucho. From the structure of the female antennæ, I am inclined to believe that this fly will be found to belong to the *monilifera* group, where, also, the nature of the wing-pattern agrees well. The species is distinguished by the almost unpatterned mesonotum and the peculiar coloration of the dorsum of the head. Superficially it resembles species such as *Tipula* (*Eumicrotipula*) *callisto* Alexander, from the same general region, but there is no close relationship.

Teucholabis (*Paratropesa*) *prænobilis*, sp. n.

General coloration of body polished black, the anterior portion of pronotum yellow; all legs having a different colour-pattern, as in *heteropoda*; wings whitish, heavily patterned with brown, appearing as three complete or nearly entire cross-bands; *Rs* strongly arcuated; abdomen

black, narrowly ringed with yellow; male hypopygium with the apical spine of the outer dististyle short; inner dististyle bilobed, simple in structure.

Male.—Length about 6.5 mm.; wing 5.6 mm.

Rostrum obscure yellow; palpi brownish black. Antennæ with scape yellow, pedicel brownish yellow, flagellum black; flagellar segments oval. Head with front and anterior portion of vertex yellow, the major portion of vertex black, the extreme posterior border of head obscure yellow.

Pronotum yellow in front, black behind. Mesothorax uniformly polished black, the scutal lobes with violaceous reflexions; pleura weakly pruinose on mesepimeron and metapleura; dorsopleural membrane pale. Halteres with base of stem narrowly yellow, the remainder blackened, knob pale yellow. Legs with fore coxæ yellow, remaining coxæ black; fore and middle trochanters obscure yellow, posterior pair black; fore legs black, the basal fourth of femora yellow; middle femora yellow, with about the distal fifth blackened; tibiæ and proximal two segments of tarsi obscure brownish yellow, outer tarsal segments blackened; hind femora narrowly yellow at base, followed in turn by a broad black ring, a subequal subterminal yellow annulus and a slightly narrower black, almost terminal band, the yellow annulus involving nearly one-third the total length of the segment; tibiæ brown; basitarsi obscure yellow, the outer tarsal segments passing into black; posterior basitarsi slightly dilated at base. Wings whitish, heavily patterned with dark brown, appearing as three bands; basal dark area at and beyond arculus, extending from *C* to vein *2nd A*, widest in the uniformly darkened cells *C* and *Sc*, narrowed posteriorly, the portion in cell *1st A* slightly disconnected from the main area; second band at cord, extending from *C* to vein *Cu*, narrowed behind, slightly interrupted above the fork of *M*, in cells *Cu* and *1st A* reaching the posterior border as a much paler wash; third band involving the wing tip, extending basad to the general level of fork of *R*₃₊₄ and outer end of cell *1st M*₂, becoming paler and less evident in the outer medial cells; origin of *Rs* very narrowly seamed with brown; veins pale brown, somewhat darker in the patterned areas. Venation: *Rs* strongly arcuated; *R*₂ in alignment with *r-m*, about one-

fourth its length beyond the fork of *Rs*; R_{3+4} a little longer than R_4 ; vein R_3 suberect; *r-m* elongate; cell 1st M_2 long and narrow, widened outwardly, subequal in length to vein M_{1+2} beyond it; *m-cu* about one-fourth its length before the fork of *M*; cell 2nd *A* wide.

Abdomen with basal tergites black, the succeeding ones more bicolored, black, with narrow, obscure yellow borders; outer segments and hypopygium more uniformly blackened. Male hypopygium much as in *heteropoda* but differing in all details. Basistyle with a narrowly blackened flange on its face. Outer dististyle broader, the apical spine short. Inner dististyle very simple in structure, merely bilobed instead of the trilobed condition in *heteropoda*; outer lobe a simple rounded head provided with a few powerful setæ. Ædeagus with the outer portion obtusely rounded.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800-900 metres, April 8, 1941 (*Paprzycki*).

The most similar described species is *Teucholabis (Paratropesa) heteropoda* Alexander, likewise from Peru, but from much higher altitudes in the Andes. This latter fly differs conspicuously in the coloration of the legs and wings, in the venation, and in the details of structure of the male hypopygium.

Teucholabis (Paratropesa) paracollaris, sp. n.

Belongs to the *collaris* group, allied to *neocollaris*; size large (wing, male, over 7 mm.); all femora differently patterned; wings relatively narrow, conspicuously marked with brown, including three more or less complete bands, the last occupying the wing-apex; abdomen with the more proximal segments bicoloured, purplish black with yellow apices, the outer segments, including the hypopygium, more uniformly blackened; male hypopygium with the apical spine of the basistyle stout, with its terminal point directed laterad; outer dististyle slender throughout, with about nine strong setæ; inner dististyle with its outer lobe unusually slender, with about six strong setæ that are restricted to the distal third; outer cephalic angle of inner blade strongly produced into a spine.

Male.—Length about 8 mm.; wing 7.2 mm.

Rostrum testaceous yellow; palpi brown. Front and anterior vertex testaceous yellow; palpi brown. Front

and anterior vertex testaceous yellow, the posterior portion of head uniformly polished black; anterior vertex broad, approximately six times the diameter of scape.

Pronotal scutum and cervical region light yellow, the scutellum black. Mesonotum uniformly polished black, with greenish reflexions; pleura almost uniformly black, variegated by restricted silvery pruinose areas above the mid-coxæ and on the metapleura; dorsopleural membrane buffy yellow. Halteres with stem blackened, knob abruptly pale yellow. Legs with the fore and middle coxæ pale yellow, the posterior coxæ and trochanters purplish black; remaining trochanters deep yellow; fore legs black, the femoral bases obscure brownish yellow, including about the proximal fourth; middle femora obscure yellow, the remainder of this leg broken; posterior femora bicoloured, black at either end, the central portion yellow, involving about two-fifths the total length of segment; remainder of posterior legs black; fore femora conspicuously clavate, more so than the posterior pair, with unusually long and abundant black setæ. Wings relatively narrow, whitish subhyaline, conspicuously patterned with brown, including three more or less complete bands; basal band incomplete, covering *h* and arculus, thence expanding into the subbasal portions of cells *Cu* and *1st A*; second band complete, beginning at the darker triangular stigma, crossing the wing to the end of vein *1st A*, lying almost entirely basad of cord, widest at mid-length; third band including the entire broad apex, extending basad almost to outer end of cell *1st M*₂, the inner ends of cells *R*₅ to *M*₃ restrictedly brightened; veins brown, paler near extreme wing base. Venation: *Sc*₁ ending just beyond origin of *Rs*; *R*₂ immediately before level of basal section of *R*₅; vein *R*₃ suberect; vein *R*₅ extensively fused with *M*₁₊₂, as in the *collaris* group; *m-cu* shortly before fork of *M*.

Abdominal tergites purplish black, the more proximal segments ringed with yellow on posterior borders, the outer segments, including hypopygium, uniformly blackened; the more proximal sternites with the incisures even more extensively yellow. Sternal pocket on segment five very conspicuously developed, with blackened lobes in addition to the usual setæ. Male hypopygium with general structure of *neocollaris* but with important

differences. Spine at apex of basistyle very stout at base, the small acute apex directed laterad into a spine; in *neocollaris* the spine slender throughout, erect. Outer dististyle long and slender, simple, the tip an elongate spine; surface of style with about nine strong setæ, the most proximad almost at base of style; in *neocollaris* the style much more dilated on basal half, the major setæ fewer, about six in number. Inner dististyle with the outer lobe even more slender, pale, with about six strong setæ that are restricted to the outer third or nearly so; inner blade with its cephalic angle with about eight setæ that occupy the outer two-thirds; inner blade with the cephalic angle less produced.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, January 1943 (*Paprzycki*).

The nearest described ally of the present fly is *Teucholabis* (*Paratropesa*) *neocollaris* Alexander, which differs in the smaller size and, especially, in the structure of the male hypopygium, as compared above.

Gonomyia (*Lipophleps*) *mythica*, sp. n.

Belongs to the *manca* group; general coloration of mesonotum dark brown; thoracic pleura striped longitudinally with brown and yellow; Sc_1 ending opposite origin of R_s , the latter long, approximately six-sevenths as long as its anterior branch; male hypopygium with the paired elements symmetrical; outer lobe of basistyle small; dististyle bilobed, the outer arm bispinous; inner arm with its outer surface densely set with microscopic spiculæ; phallosome consisting of outer blackened rods that are incurved to the mid-line.

Male.—Length about 3 mm.; wing 3 mm.

Head broken.

Pronotum and pretergites chiefly pale yellow. Mesonotum chiefly dark brown, the region of the scutellum destroyed. Pleura striped longitudinally with brown and yellow. Halteres broken. Legs beyond the trochanters uniformly dark brown. Wings with a weak brownish tinge, the prearcular and costal fields clear light yellow; stigma scarcely indicated as a pale brown cloud; veins brown, more brownish yellow in the luteous fields. Venation: Sc_1 ending opposite the origin of R_s , Sc_2 a short

distance from its tip; *Rs* relatively long, approximately six-sevenths as long as its anterior branch; cell 1st M_2 a little shorter than vein M_4 beyond it; *m-cu* close to the fork of *M*; cell 2nd *A* wide.

Abdomen dark brown, patterned with yellow; hypopygium chiefly yellow, the basistyles weakly infuscated on their proximal halves. Male hypopygium (fig. 3) with the outer lateral lobe of basistyle, *b*, unusually small, subequal in size to the mesal lobule of the dististyle, provided with long setæ. Dististyle, *d*, alike on the two sides, of distinctive conformation, the outer lobe sinuous, blackened, narrowed to a slender spinous point, before apex with an even longer and more slender recurved spine; mesal lobe with a single fasciculate or enlarged seta; outer surface of lobule with rows of microscopic spicules, forming a dense covering over the entire surface. Phallosome, *p*, symmetrical, consisting of two outer blackened rods that are incurved and decussate at mid-line; a central pair of flattened blades that jut caudad beyond the other elements of the phallosome.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, March 21, 1941 (*Paprzycki*).

In its symmetrical hypopygium, the present fly suggests species such as *Gonomyia* (*Lipophleps*) *extensa* Alexander and numerous others. The shape and structure of the dististyle is distinctive of the present fly. Other species of the group having a bispinous dististyle, such as *G. (L.) ramus* Alexander and *G. (L.) vindex* Alexander, have the phallosome asymmetrical and with all other structures of the hypopygium quite distinct.

Gonomyia (*Lipophleps*) *philomela*, sp. n.

Belongs to the *manca* group; general coloration of thorax pale brown, the pleura more testaceous brown, unpatterned; legs brown; wings with *Sc*₁ ending shortly before origin of *Rs*, cell 1st M_2 shorter than vein M_4 beyond it; male hypopygium with the dististyles of the two sides asymmetrical, one with a large erect inner spine, the other with this spine reduced to a small cone; phallosome asymmetrical, terminating in three points, all of which are acute at tips.

Male.—Length about 3.5 mm.; wing 3.5 mm.

Rostrum obscure yellow; palpi black. Antennæ black; flagellar segments elongate, with the usual very long verticils of the male sex in this subgenus. Head brown, somewhat brighter on the anterior vertex.

Pronotum pale brown; pretergites restrictedly pale yellow. Mesonotum almost uniformly pale brown, the posterior border of scutellum broadly paler. Pleura pale testaceous brown, unstriped. Halteres infuscated. Legs with coxæ and trochanters obscure yellow, the fore coxæ a little darker; remainder of legs uniformly brown. Wings with a brownish tinge, the prearcular and costal portions light yellow; stigma large but barely indicated; veins brown. Venation: Sc_1 ending shortly before origin of Rs , the latter about three-fifths as long as its anterior branch; cell 1st M_2 narrow, shorter than vein M_4 beyond it; $m-cu$ close to the fork of M .

Abdominal tergites brown, sternites paler; hypopygium brownish yellow. Male hypopygium (fig. 6) with the dististyles and phallosome asymmetrical. Outer lobe of basistyle, b , elongate, extending caudad about to the outer level of the dististyles. Armature of the dististyles of the two sides quite distinct, one, d , having the apex of the terminal spine directed basad and with the inner spine very long and powerful, much exceeding in length the outer spine; the opposite style, d , has the outer spine a curved hook that is directed outwardly, the inner spine reduced to a small blackened elongate-conical structure, both dististyles terminating in a small obtuse knob with a single very powerful fasciculate seta near the margin, just back from the apex on the lower edge. Phallosome, p , terminating in three points, of which two are blackened, both ending in acute spines; third arm directed caudad, paler, terminating in a long pale acute point.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, December 10, 1914 (*Paprzycki*).

This is the first regional member of the subgenus to be discovered in which the dististyles are unlike on the two sides of the body. Various other species showing this condition are found elsewhere in Tropical America, including *Gonomyia (Lipophleps) carrerai* Alexander, of south-eastern Brazil, and *G. (L.) macswaini* Alexander, of north-

ern Panama and southern Costa Rica, but all of these are quite different from the present fly.

Gonomyia (Lipophleps) dotata, sp. n.

Belongs to the *manca* group; general coloration of mesonotum dark brownish grey; thoracic pleura striped longitudinally with brown and silvery white; antennæ (male) relatively long, the flagellar segments with unusually abundant long erect setæ; wings with a brownish tinge, the prearcular and costal fields light yellow; male hypopygium with the outer lobe of basistyle elongate, fleshy; dististyle a single, powerful, nearly straight black spine from a dilated pale base; phallosome consisting of two short blackened spines and two elongate pale blades, both of the latter obtuse at tips, the longer ones very broadly so.

Male.—Length about 3.8 mm.; wing 4 mm.

Rostrum testaceous yellow; palpi black. Antennæ black throughout, unusually long for a member of the group; flagellar segments long-cylindrical, with very abundant long erect setæ that are nearly as long as the segments and are scattered over their entire length; a few still longer scattered setæ that are longer than the segments. Head obscure yellow in front, more infuscated behind.

Pronotum above and the pretergites whitish yellow, the sides of the former infuscated. Mesonotal præscutum and scutal lobes dark brownish grey, the central portion of scutum and posterior borders of the scutal lobes obscure yellow; scutellum infuscated medially at base, broadly obscure yellow on margin; mediotergite pale brown, extensively yellow on sides. Pleura pale brown, with a conspicuous silvery-white longitudinal stripe extending from behind the fore coxæ across the dorsal sternopleurite, ventral pteropleurite and meral region to the abdomen; dorsal pleurites more strongly darkened, the dorsopleural membrane yellow. Halteres weakly infuscated, knobs obscure yellow. Legs with the coxæ and trochanters obscure brownish yellow; remainder of legs dark brown. Wings with a brownish tinge, the prearcular and costal fields light yellow; stigmal region very weakly darkened; veins brown, including those in the brightened fields, only those at base a trifle brighter. Venation: *Sc*₁ ending immediately before origin of *Rs*,

Sc_2 some distance from its tip; Rs nearly three-fourths as long as its anterior branch; cell 1st M_2 small, M_{3+4} varying from only a little more than one-half to about three-fifths M_4 ; $m-cu$ about one-fourth its length before fork of M .

Abdominal tergites obscure brownish yellow, more darkened on sides; sternites clearer yellow. Male hypopygium (fig. 4) with the outer lobe of basistyle, b , elongate, extended caudad beyond the extreme tip of the dististyle and only a little shorter than the length of the basistyle itself. Dististyle, d , a single powerful, nearly straight black spine from the dilated pale base, the latter bearing a single enlarged seta and a slightly smaller one, additional to the normal bristles; on lateral face of style opposite the fasciculate setæ a strong conical point or spine; inner face at base of spine with a small area of erect setæ. Phallosome, p , consisting of two small blackened spines and two much longer, pale blades, both of the latter obtuse at their tips; one of the spines longer and more curved than the other, one of the pale blades longer and broader than the second, its apex very obtuse.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, December 20, 1940 (*Paprzycki*).

Very different from other regional members of the *manca* group. The nearest relative appears to be *Gonomyia* (*Lipophleps*) *petronis* Alexander, of south-eastern Brazil, which has the antennæ of the male very much the same and with somewhat similar basic features of the male hypopygium, but with all details quite different.

Gonomyia (*Lipophleps*) *scelerata*, sp. n.

Belongs to the *manca* group; general coloration of the mesonotum medium brown; thoracic pleura with a whitish longitudinal stripe; wings with a weak brownish tinge; Sc_1 ending a short distance before origin of Rs ; male hypopygium with the dististyle fleshy, apical in position, the entire outer surface with abundant erect setulæ additional to the two fasciculate setæ and sparse normal bristles; phallosome large, terminating in two acute blackened points, one a slender curved sickle and a short pale blade.

Male.—Length about 3 mm.; wing 3.2 mm.

Rostrum and palpi black. Antennæ with the scape and pedicel brown, flagellum passing into black; subbasal flagellar segments with unusually long verticils. Head yellow on anterior vertex, grey behind; eyes large.

Pronotum above and the pretergites whitish. Mesonotum medium brown, pleurotergite paler. Pleura of the unique type crushed, evidently pale with a moderately conspicuous yellowish white longitudinal stripe. Halteres with stem pale, knob weakly infuscated. Legs with the coxæ and trochanters yellow; remainder of legs broken. Wings with a weak brownish tinge, the prearcular and costal fields pale yellow; stigma faintly darker, its margins very poorly delimited; veins brown, paler in the more brightened fields. Venation: Sc_1 ending a distance before origin of R_s equal to more than one-third the length of the latter; anterior branch of R_s strongly upcurved, on its outer portion nearly parallel to R_1 ; cell 1st M_2 pointed at its inner end; $m-cu$ at fork of M .

Abdominal tergites brown, sternites more yellowish; hypopygium brownish yellow. Male hypopygium (fig. 5) with the basistyle, b , long and slender, the single dististyle, d , apical in position, fleshy; vestiture of dististyle, additional to the two enlarged or fasciculate setæ, including about six or seven weaker bristles from conspicuous punctures; entire outer surface of style with abundant erect setulæ from very inconspicuous punctures. Phallosome, p , a large, compact, central mass that terminates in two acute points and a short flattened pale blade; longest element a strong curved glabrous sickle, its long acute tip blackened; second spine much shorter, the outer margin with abundant delicate setulæ; pale blade obtuse at tip.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, March 1, 1941 (*Paprzycki*).

Although superficially resembling species allied to *Gonomyia* (*Lipophleps*) *inermis* Alexander, the present fly is quite distinct in all details of structure of the male hypopygium. The presence of abundant delicate setulæ on the outer face of the dististyle is a noteworthy feature.

Neognophomyia sparsiseta, sp. n.

General coloration of mesonotum reddish yellow, clearer yellow behind : a broad black dorsal longitudinal stripe on thoracic pleura ; antennal flagellum dark brown : legs yellow, the tips of the tibiæ and basitarsi darkened, the fore basitarsi uniformly so ; wings subhyaline, with a narrow brown band extending from the stigma over the anterior cord ; cell R_2 at margin very narrow ; male hypopygium with the tergal spines pale, gently twisted, the narrow spinous tips about one-half as long as the more expanded basal blades ; both dististyles unusually simple in conformation, the outer one with three setæ of which one is apical in position ; inner style slender, narrowed gradually to a blackened subacute point, the outer surface with unusually few setæ.

Male.—Length about 5.5 mm. ; wing 5.2 mm.

Rostrum and palpi yellow, the outer two segments of the latter slightly infuscated. Antennæ with the scape yellow, pedicel brownish yellow, flagellum dark brown ; verticils long and conspicuous, especially on the basal and intermediate flagellar segments. Head yellow.

Pronotum yellow above, more infuscated on sides. Mesonotal præscutum chiefly reddish yellow, the posterior sclerites of notum clearer yellow ; most of the notum with a microscopic appressed white pruinosity. Pleura with the dorsal portion occupied by a broad black longitudinal stripe extending from the propleura to the base of abdomen, including much of the pleurotergite, very narrowly interrupted at the sutures between the various segments ; ventral pleurites more reddish yellow, the meron pale yellow. Halteres with stem yellow, knob infuscated. Legs with coxæ and trochanters pale yellow : femora uniformly yellow ; tibiæ and basitarsi yellow, the tips narrowly but conspicuously dark brown ; remainder of tarsi brownish black ; fore legs with the tarsi uniformly blackened. Wings subhyaline, the extreme base more yellowed : a narrow brown band extending from the stigma across the anterior cord ; on the posterior cord and outer end of cell 1st M_2 much narrower and less conspicuous ; veins brown, darker in the patterned areas, in the prearcular field more yellowed. Venation : R_{2+3+4} subequal to R_{3+4} ; vein R_3 short, cell R_2 at margin very narrow, cell R_3 correspondingly wider ; *m-cu* about its own length beyond the fork M .

Basal abdominal tergites yellow medially, darker laterally, the intermediate segments more uniformly darkened, the outer ones again bicoloured, pale basally, with a darkened subterminal band; eighth segment reduced in size, pale; sternites chiefly yellow; hypopygium brownish yellow. Male hypopygium with the tergal spines pale, appearing as moderately long, gently twisted blades, the tips gradually narrowed into acute points that are only about one-half as long as the expanded portions. Both dististyles unusually simple in conformation, provided with very few setæ. Outer dististyle with three such setæ, one apical in position; inner style unusually slender, narrowed gradually to a blackened subacute point, the outer surface with only three major setæ and a few additional paler ones. Phallosome narrow, obtusely rounded at the blackened tip.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, July 17, 1940 (*Paprzycki*).

The most similar described species is *Neognophomyia hostica* Alexander, which differs particularly in the structure of the male hypopygium, particularly the shape and vestiture of the two dististyles.

Neognophomyia citripes, sp. n.

General coloration orange or fulvous, the mesothorax polished, variegated only by a large oval black spot on the pleurotergite; knobs of halteres brownish black; legs deep orange, the tarsi and tips of tibiæ blackened; wings relatively narrow, about three-and-one-half times as long as wide, tinged with brown and with a narrow, darker brown cross-band at the cord; *Rs* short, subequal to *R*; *R*₂₊₃₊₄ very short, *R*₂ in alignment with *r-m*; abdomen orange, the tergites with narrow black rings at base of segment two and at the incisure between segments four and five.

Female.—Length about 6.5 mm.; wing 5.7 × 1.6 mm.

Rostrum and palpi brown. Antennæ with scape and pedicel obscure yellow, flagellum black; flagellar segments elongate-oval to subcylindrical, with very long, conspicuous verticils. Front and anterior vertex brownish yellow, the posterior vertex darker brown; anterior vertex narrow, less than the diameter of scape, the eyes correspondingly large.

Pronotum yellow. Mesonotum and pleura deep fulvous yellow, the surface polished, the humeral and lateral borders of præscutum narrowly yellow; pleurotergite concolorous, with a large oval black spot occupying much of the sclerite; remainder of thorax quite unmarked. Halteres with stem yellow, knob brownish black. Legs with the coxæ and trochanters fulvous; femora and tibiæ deep orange, the tips of the latter brownish black, the tarsi passing into black. Wings relatively narrow, as shown by the measurements; ground-colour rather strongly infuscated; prearcular field very restricted in area, more or less darkened; costal border a little more yellowed; a narrow brown band at cord; outer end of cell 1st M_2 less evidently darkened; veins brown, still darker along cord, more yellowed in the prearcular and costal fields. Venation: R_s unusually short, subequal in length to that portion of vein R beyond the arculus; R_{2+3+4} very short, only about one-half the basal section of R_5 ; R_2 in direct alignment with $r-m$; R_{3+4} a little shorter than R_3 , R_4 ending close to wing-tip; cell 1st M_2 widened outwardly, basal section of M_3 angulated beyond mid-length; $m-cu$ approximately two-thirds its length beyond fork of M ; vein 2nd A moderately long, the distal half straight, the end of the cell pointed.

Abdomen obscure orange, yellow pollinose, the tergites with an unusually restricted pattern of black, including a narrow transverse band at extreme base of second tergite and a broader band involving the posterior border of tergite four and base of tergite five: cerci compressed-flattened, yellow.

Hab. Peru (Loreto).

Holotype. ♀, Iquitos, March–April 1921 (*Shannon*).

Neognophomyia citripes is most similar to *N. bisecta* (Alexander), likewise from the Amazonian region, differing most evidently in the coloration of the body, legs and wings, and in the narrow wings with distinctive venation, especially the short R_s and position of R_2 .

Erioptera (Erioptera) susurra, sp. n.

Size very small (wing, male, 2.5 mm.); general coloration of thorax yellow, the dorsum slightly infuscated medially, the pleura weakly pruinose; legs slightly darkened; wings greyish yellow, unpatterned:

male hypopygium with the outer dististyle profoundly branched beyond base, the outer arm a strong curved rod that bears a slender erect spine on its lower margin beyond base; gonapophyses appearing as long, decussate rods, the tips produced into long-extended spines, with abundant spinulose points on lower face back from tip.

Male.—Length about 2.2 mm.; wing 2.5 mm.

Head broken.

Thorax above chiefly obscure yellow, the mid-dorsal portion weakly infuscated. Pleura obscure yellow, with a weak grey pruinosity. Halteres with stem pale, the knob a trifle infuscated. Legs with the coxæ pale yellow, the fore pair a trifle darker; trochanters obscure yellow; remainder of legs weakly darkened, the colour produced chiefly by abundant dark-coloured setæ. Wings greyish yellow, without pattern; veins brownish yellow; macrotrichia dark brown. Venation: Sc_1 ending shortly before level of fork of R_s , Sc_2 about opposite one-fifths the length of the latter; $r-m$ and $m-cu$ almost in transverse alignment, the latter about one-third its length beyond the fork of M ; tip of vein Cu_1 deflected slightly cephalad; vein 2nd A gently sinuous, ending about opposite one-fourths the length of R_s .

Abdominal tergite pale brown, sternites yellow; hypopygium brownish yellow. Male hypopygium with the complex outer dististyle profoundly branched shortly beyond base, one branch appearing as a straight dusky rod that narrows to the obtuse tip; second arm a much stronger and more powerful curved rod that narrows gradually to the pointed blackened tip; on lower face of this arm, shortly beyond base, with a slender erect spine; distal third of arm, including all of the blackened portion, with microscopic roughened points. Inner dististyle a shorter pale flattened blade, weakly sinuous and very gently curved, its tip with microscopic punctures. Gonapophyses appearing as long powerful rods that near their tips are decussate across the mid-line, each longer than either of the dististyles, narrowed to the long-extended acute tips; distal third of lower face with abundant appressed spinulose points.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, January 6, 1941 (*Paprzycki*).

The most similar described species is (*Erioptera micromyia* Alexander, which differs in the entirely different male hypopygium.

Erioptera (Mesocyphona) histrio, sp. n.

General coloration pale yellow; thoracic pleura with two narrow brown longitudinal stripes, each only about one-third as wide as the yellow enclosed area; apex of knob of halteres infuscated; fore and middle coxæ infuscated, posterior pair yellow; remainder of legs yellow, the femora with a pale brown subterminal ring; wings whitish yellow, patterned with darker brown spots and pale brown washes in many of the cells, to produce a conspicuously variegated appearance; Sc_2 ending about opposite mid-length of R_s ; abdomen yellow, with a narrow brown lateral stripe.

Female.—Length about 3·3·2 mm.; wing 3·2–3·5 mm.

Rostrum brownish yellow; palpi black. Antennæ medium brown; flagellar segments oval, the verticils long and conspicuous. Head obscure yellow, darker on the more ventral portions.

Pronotum yellow. Mesonotum yellow, the præscutum with an intermediate pair of pale brown stripes, more clearly indicated near the suture. Pleura pale yellow, with two narrow, longitudinal, pale brown stripes, the more dorsal including the fore coxæ, ending beneath the wing-root; ventral stripe including the mid-coxæ, reaching the base of abdomen; dark stripes only about one-third as wide as the enclosed yellow area. Halteres with stem yellow, apex of knob infuscated. Legs with the fore and middle coxæ darkened, as above described, posterior coxæ uniformly pale yellow; femora brownish yellow, clearer yellow basally and as narrow apical and subapical rings, the two latter enclosing a slightly broader pale brown annulus; remainder of legs pale yellow; femora with long darkened setæ. Wings whitish yellow, conspicuously patterned with brown; spots and paler brown washes in most of the cells; the darker areas include the origin of R_s , Sc_2 , cord, fork of M_{1+2} , and a marginal series, lacking at tips of veins R_4 , M_{1+2} and 1st A , more extensively seamed back from margin on veins R_5 , Cu_1 and 2nd A ; the dark area at tip of vein R_3 crosses cells R_3 and R_4 , becoming confluent with the seam on R_5 and

thus forming a short cross-band; the pale brown washes include much of the outer medial field and all cells of basal third of wing; veins yellow, darker in the more heavily infuscated fields; macrotrichia long and conspicuous. Venation: Sc_2 about opposite mid-length of R_s ; R_{2+3+4} only a little longer than the basal section of R_5 ; tips of outer medial veins bent slightly caudad, of Cu_1 very slightly cephalad; $m-cu$ nearly transverse, approximately one-half its length before fork of M .

Abdominal tergites obscure yellow, the sternites clearer yellow; a narrow dark brown lateral stripe.

Hab. Peru, southern Ecuador.

Holotype, ♀, Satipo, Jauja, Junin, Peru, altitude 800–900 metres, December 4, 1940 (*Paprzycki*). *Paratype*, ♀, Zumbi, Rio Zamora, Santiago-Zamora, Ecuador, altitude 700 metres, October 30, 1941 (*David Laddey*).

The present fly is very distinct from all other regional members of the subgenus, differing particularly in the coloration of the body and wings. There is no species with which the fly may profitably be compared.

Styringomyia mystica, sp. n.

General coloration pale yellow, the mesonotum more reddish yellow, sparsely pruinose; wings pale yellow, with a small brown cloud over $r-m$ and adjoining veins; male hypopygium with the apical lobe of basistyle narrowed outwardly, terminating in two powerful flattened black setæ, with a third strongly sinuous bristle more basad; dististyle complex in structure.

Male.—Length about 7.5–8 mm.; wing 5 mm.

Female.—Length about 6 mm.; wing 4.5 mm.

Rostrum brownish yellow; proximal segments of palpi obscure yellow, the outer segments more infuscated, with narrow pale bases. Antennæ with scape yellow above, more infuscated beneath; pedicel infuscated; flagellum chiefly pale yellow, appearing weakly bicoloured because of the ring of basal verticils. Head pale yellow, the centre of vertex weakly darkened; vertical setæ black, conspicuous, but not modified.

Pronotum pale medially, sparsely pruinose. Mesonotum chiefly pale reddish yellow, slightly pruinose, with a more or less distinct more testaceous median stripe over

much of the notum; setæ black, erect, unmodified. Pleura pale testaceous yellow throughout. Halteres yellow. Legs with the coxæ and trochanters pale yellow; remainder of legs yellow, the fore femora with a narrow subterminal pale brown ring and vague indications of one or two other annuli more proximad in position; middle femora likewise with a narrow subterminal ring, posterior femora uniformly yellow; remainder of legs chiefly yellow, the terminal tarsal segments blackened. Wings pale yellow, with a small brown cloud over $r-m$; veins yellow, $r-m$ and adjacent veins in the darkened area infuscated. Venation: Cell 2nd M_2 sessile to short-petiolate; vein 2nd A simple.

Abdomen with tergites obscure yellow, their caudal borders narrowly ringed with brown, the basal annuli of the outer segments with a paler brown central triangle, wider posteriorly; sternites and hypopygium clearer yellow. Male hypopygium (fig. 7) with the lobe of basistyle, b , narrowed outwardly, terminating in two powerful flattened black setæ; mesal edge of lobe with a further smaller, very strongly sinuous bristle. Dististyle, d , of unusual conformation, approximately as illustrated; at base on outer margin bearing a blackened clavate lobe provided with a single powerful spinous bristle; remainder of style narrowed basally, thence expanded into a relatively narrow spatulate blade that terminates in two blackened points, the more basal a slender straight rod; outer margin of blade before apex with a small lobe that terminates in a very strong, powerful seta; remainder of blade with scattered setæ, the two on the inner margin stronger than the group of about a dozen on lateral portion of style. Ovipositor with apex of cercus slightly longer and more attenuated than in *dorsolineata*, its tip truncate.

Hab. Peru (Junin).

Holotype, ♂, Satipo, Jauja, altitude 800–900 metres, February 5, 1940 (*Paprzycki*). *Allotopotype*, ♀, pinned with type. *Paratopotypes*, 4 ♂♀, July 17–29, 1940 (*Paprzycki*).

Styringomyia mystica is quite distinct from all other Neotropical members of the genus so far discovered. As is usual in this genus, the chief specific characters lie in

the structure of the male hypopygium, particularly of the basistyle and dististyle.

Styringomyia simplex, sp. n.

General coloration yellow, patterned with brown; mesonotum extensively infuscated, its central portion obscure yellow; legs yellow, the fore and middle femora with a narrow brown subterminal ring, the posterior legs uniformly yellow; wings relatively long and narrow, the medial fields and adjoining veins infuscated, especially the veins; basal third of wing with costal fringe of male long and conspicuous; abdominal tergites with the posterior borders broadly infuscated, more extensively so on the outer segments; male hypopygium with basistyle narrowed at apex, bearing three or four strong black setæ; dististyle simple, more or less resembling the head and beak of a bird.

Male.—Length about 7–8 mm.; wing 4.5–5 mm.

Female.—Length about 5 mm.; wing 4 mm.

Rostrum and palpi brown. Antennæ with the more proximal segments weakly infuscated, the outer ones passing into clearer yellow; flagellar segments oval, the outer ones more elongated. Head above light brown, more brownish yellow on sides; setæ of head black, long but not modified.

Pronotum dark brown, the median portion very restrictedly paler. Mesonotum chiefly dark brown, the central portion, including the posterior half of præscutum, central area of scutum, including part of the lobes and the median region of scutellum, obscure yellow, the remainder of scutal lobes and most of the scutellum brownish black; postnotum infuscated; setæ of thoracic notum erect, black, long and conspicuous but not modified. Pleura and pleurotergite uniformly yellow. Halteres yellow. Legs with the coxæ and trochanters yellow; femora yellow, the fore and middle pairs with a narrow brown subterminal ring, posterior femora uniformly yellow; tibiæ yellow, slightly more darkened at tips; posterior tibiæ more uniformly yellow; tarsi yellow, the terminal segment of anterior legs weakly darkened. Wings relatively long and narrow, yellow, the prearcular field clearer yellow; a brown seam over *r-m*; medial

veins beyond cord, R_3 and $m-cu$ all vaguely bordered by brown, best indicated by a darkening of the otherwise yellow veins; Cu and bases of anal veins less evidently darkened. Costal fringe on basal third of wing long and conspicuous, much shorter on the outer portion. Venation: Vein R_3 oblique; $r-m$ subequal to R_{2+3+4} ; cell 1st M_2 long and narrow, widened outwardly; cell 2nd M_2 barely sessile; $m-cu$ about one-and-one-half times its own length beyond the fork of M ; vein 2nd A simple.

Abdominal tergites bicoloured, the bases of the segments obscure yellow, the apices broadly infuscated, more extensively so on the outer segments; sternites yellow, weakly patterned with pale brown; hypopygium brownish yellow. Male hypopygium (fig. 9) quite different in construction from that of *americana*. Basistyle, b , narrowed distally into a short, relatively slender lobe that bears three or four long black powerful setæ, additional to the normal ones. Dististyle, d , simple, a generally long oval blade that narrows to a blackened spinous apical point; on face of style near apex with a small black spine, better indicated in the paratypes; before apex, style with about nine or ten long setæ on one face, together with about two smaller setæ, with a third more basal one of great length, on the opposite face; outer margin of style with a few scattered additional setæ, the entire style more or less resembling the head and beak of a bird.

Hab. British Guiana, Peru.

Holotype, ♂, Bartica, British Guiana, January 28, 1913 (*Parish*); confused in collections with *americana*. *Allotype*, ♀, Satipo, Jauja, Junin, Peru, altitude 800–900 metres, November 10, 1940 (*Paprzycki*). *Paratypes*, 2 ♂♂, 1 ♀, with the allotype, November 10, 1940–April 5, 1941 (*Paprzycki*).

Styringomyia simplex is entirely distinct from *S. americana* Alexander, with which it had been confused in collections. The latter species has a very extensive range in Central and northern South America, as now known including British Honduras, Costa Rica, Colombia, Venezuela, British Guiana, Surinam and north-western Ecuador. I am illustrating the male hypopygium (fig. 8), not previously figured.