

—The following paper by Mr. Coquillett was read by title :

NEW NORTH AMERICAN DIPTERA.

By D. W. COQUILLET.

At various times in the past few years, in the course of identifying specimens of Diptera for various correspondents, the writer has given manuscript names to new species, at the request of the senders, and as several of these names have since appeared in print, while others are shortly to be published, it is desirable to have these species characterized so as to give the names a standing. Accordingly the descriptions are appended herewith, together with those of several other species which are as yet apparently undescribed :

Family CHIRONOMIDÆ.

Ceratopogon medius, n. sp.

Near *varicolor*, but differs in the coloring of the legs, the presence of black bristles on the hind tibiæ, etc. Black, the face, mouth parts, joints two to seven of the antennæ, the halteres, abdomen, tarsi except the narrow apices of the joints, a ring before apex of each front femur and both ends of the front and middle tibiæ except their extreme apices, yellow. Eyes narrowly separated on the front. Thorax bluish gray pruinose. Front femora slightly thickened, each bearing four black spines on the under side, other femora without spines, first tarsal joint nearly twice as long as the second, the fourth joint dilated, bilobed at the apex, less than one-half as long as the fifth, the latter without spines on the under side, the two claws of each tarsus subequal in size. Wings bare, whitish hyaline, third vein separated from the first, not connected by a cross-vein, reaching three-fourths length of wing, apex of first vein a short distance before middle of the third, fourth vein forks almost opposite the small cross-vein. Length 2 mm.

Riverton, New Jersey. A female specimen collected on July 7 by Mr. C. W. Johnson.

Type.—No. 7942, U. S. National Museum.

Family CULICIDÆ.

Tæniorhynchus nigricans, n. sp.

Near *perturbans*, but smaller and darker, the first joint of the hind tarsi devoid of a median light colored band, etc. Deep black, a median band on the proboscis and the halteres yellow. Scales of palpi black, those at the apex white, appressed scales of occiput yellow, the upright ones brown. Mesonotum nearly covered with golden yellow scales, those of the abdomen black and with a lateral patch of whitish ones in the front angles of

segments two to seven, venter black scaled and with a broad fascia of whitish ones on the base of each segment. Legs black scaled, femora with a stripe of yellow ones toward the base of the posterior side, a few on the front side toward the base, a ring of whitish scales at three-fourths the length of the femora, scales at extreme apices of femora and bases of tibiæ whitish, tibiæ also with a narrow streak of whitish ones extending nearly the entire length of the posterior side, a broad band of whitish ones at two-thirds their length, those at the apex also whitish, tarsi with a rather narrow band of whitish ones at the base of each joint, tarsal claws not toothed. Wings hyaline, the scales brown the lateral scales of the veins broadly lanceolate, second submarginal cell much longer than the second posterior, about four times as long as its petiole. Length 3.5 mm.

Panama. Two females collected by Dr. J. W. Ross.

Type.—No. 7943, U. S. National Museum.

Tæniorhynchus signipennis, n. sp.

Distinguished by the apical half of the costa of each wing being covered with light yellow scales with the exception of two patches of black ones.

♀.—Brown, varied with yellowish, the bases of the antennæ, a broad band at middle of the proboscis, the first tarsal joint except the apex and a ring near the base, also the bases of the following joints, very narrowly on the last two, yellow. Scales of palpi and the upright ones on the occiput mixed black and light yellow, the appressed scales of the occiput and mesonotum light yellow, those on the abdomen chiefly white, on the femora and tibiæ mixed black and light yellow, not forming distinct bands or spots, those on the tarsi black except at bases of the joints and the broad median portion of the first, which are chiefly whitish; on the second joint of the hind tarsi the whitish scales cover its basal half; tarsal claws not toothed. Wing-scales mixed black and light yellow, the former collected into three spots, two on the apical half of the costa and one on the sixth vein at a point near three-fourths of its length; scales on apical half of the costa and of the sixth vein wholly yellow with the exception of the patches of black scales; of the latter, the first one on the costa is slightly longer than the second and equals about one-half of the yellow interval between them; lateral scales of the veins varying from broadly oblanceolate to very narrow, almost linear; petiole of the first submarginal cell slightly longer than the cell; hind cross-vein nearly its own length before the small. Length 3 mm.

♂.—Palpi slender, brown, bases of last two joints and the preceding joint except its apex, yellow; proboscis reaching slightly beyond base of penultimate joint of palpi; hairs of antennæ golden yellow, many on the lower side brown. Scales of abdomen mixed brown and whitish. Front and middle tarsi bearing two teeth under one of the claws and one under the other, hind tarsal claws not toothed. Length 4 mm. Otherwise as in the female.

Monterey, Mexico. One female and four males (the latter much abraded), bred by Dr. Joseph Goldberger.

Type.—No. 8029, U. S. National Museum.

Culex nivitarsis, n. sp.

♀.—Black, the thorax and scutellum brown, the first antennal joint, halteres, coxæ, femora and tibiæ yellow, the hind tarsi white and with a faint median brownish band on the three middle joints. Scales of palpi brown, those on the basal portion yellow, on the apex white; scales of upper part of occiput golden yellow, on the sides and lower part chiefly white, those on the mesonotum golden yellow, on the abdomen purple, those on the extreme bases and front angles of the segments yellowish, including all on the seventh and following segments, those on the venter white. Scales of legs brown and whitish, not forming bands or spots, those on the first two pairs of tarsi brown and with white ones on the narrow bases and broad apices of the first two joints as well as on the narrow bases of the remaining joints of the middle tarsi; scales of the hind tarsi almost wholly white; all tarsal claws toothed. Wings grayish hyaline, the scales brown, lateral scales of the veins narrow and almost linear, petiole of first submarginal cell about two-thirds as long as this cell, hind cross-vein about its own length from the small. Length 4 mm.

♂.—Palpi slender, black, a broad band in middle of first joint and bases of the following joints white, proboscis reaching almost to apex of penultimate joint of palpi. Front and middle tarsi with one of their claws bidentate and the other unidentate, hind tarsal claws also unidentate; some of the brown bands on the hind tarsi quite distinct, especially the one on the third joint. Petiole of the first submarginal cell almost as long as that cell. Length 4.5 mm. Otherwise as in the female.

Paterson, New Jersey, May 12. A specimen of each sex submitted by Dr. J. B. Smith, to whom they have been returned.

Culex pullatus, n. sp.

♀.—Near *punctator* and *impiger*, but the bristles of the scutellum are chiefly black instead of yellow, etc. Black, the halteres and femora largely yellowish. Scales of palpi black, those on the occiput pale yellow, the upright ones in the middle yellow, those on the sides and the bristles black. Scales of the mesonotum golden yellow, the sides with a few lighter colored ones, the bristles and those of the scutellum chiefly black. Scales of abdomen black and with a tinge of violet, a crossband of whitish ones at base of each segment, dilated at each end, scales of venter whitish, a few black ones in hind angles of the segments. Scales of coxæ and on lower part of anterior, and posterior sides of the femora yellowish white, on upper part of femora and toward their apices chiefly black; scales of tibiæ blackish and mixed with a few yellowish ones, those on the tarsi blackish; all tarsal claws toothed. Wings hyaline, the scales brown, lateral scales of the veins narrow and almost linear, petiole of first sub-

marginal cell nearly as long as this cell, hind cross-vein about its length from the small. Length 4.5 mm.

♂.—Palpi slender, the scales and hairs black, the latter, like those of the antennæ, appear whitish in certain lights; proboscis reaching slightly beyond apex of palpi. Mesonotum with a pair of subdorsal bare vittæ on its anterior two-thirds. Abdomen with a cross-band on the apices of ventral segments 3 to 7. Petiole of the first submarginal cell longer than the cell. Otherwise as in the female.

Kaslo, British Columbia. One female and ten males bred from the larvæ, June 8 to 16, by Dr. H. G. Dyar; also ninety females and thirty-three males bred from the pupæ, or captured, by Dr. Dyar.

Type.—No. 803c, U. S. National Museum.

Although so similar to *punctor* and *impiger* in the adult state, the larva is very different, as Dr. Dyar has pointed out to me.

Family MYCETOPHILIDÆ.

Eugnoriste brevirostris, n. sp.

Black, the stems of the halteres yellow. Head narrow and elongated, about three times as long as wide, proboscis slightly longer than the head, slender, horny, over six times as long as wide. Wings grayish, apex of first vein a short distance before the forking of the fourth. Length 3.5 mm.

Halfway House, Pike's Peak, Colorado, September. A female specimen collected by Prof. T. D. A. Cockerell.

Type.—No. 7944, U. S. National Museum.

Acnemia varipennis, n. sp.

Yellow, the antennæ beyond the second joint, a circle around each ocellus, a spot in front of each wing the breast largely, a streak at each hind angle of the mesonotum, the margins of the scutellum except at the extreme apex, two longitudinal vittæ on lower half of metanotum, a spot in front of the halteres, the abdomen except bases of segments and the genitalia, the tarsi except their bases, and the knobs of the halteres, black; a pair of widely separated brownish subdorsal vittæ on the mesonotum; hairs and bristles chiefly yellow. Wings grayish hyaline, tinged with yellow along the costa, first section of third vein clouded with brown, a brown cross-band extends from apex of marginal cell to apex of third posterior cell, becoming grayish posteriorly, a large brown spot along under side of fifth vein before its apex. Length 5 mm.

Mountains near Claremont, Cal. A female specimen collected by Prof. C. F. Baker.

Type.—No. 8044, U. S. National Museum.

Phronia tenebrosa, n. sp.

Black, the halteres and legs yellow, the last two pairs of coxæ, the hind edge of the front ones, a streak on under side of each femur near the base, the apices of the hind femora, and the tarsi except their bases, brown. Third joint of antennæ nearly twice as long as wide, the following joints becoming successively shorter to the fourteenth which is as wide as long, first joint slightly longer than wide, the second as wide as long; outer ocelli contiguous to the eyes. Body grayish pruinose, the hairs and bristles yellowish. Lateral bristles of tibiæ shorter than the diameter of the tibiæ. Wings hyaline, the apex from a short distance before apex of first vein to tip of lower fork of fifth vein, and a cloud below the latter, dark gray; auxiliary vein attenuated toward its apex, becoming obsolete slightly beyond middle of first basal cell, third vein strongly bowed toward the first, ending in the costa at an acute angle only a short distance before apex of costal vein, fourth vein forks at one-third of distance from the small cross-vein to the forking of the fifth vein. Length 2.5 mm.

San Mateo Co., Cal. A female specimen collected by Prof. C. F. Baker.

Type.—No. 8031, U. S. National Museum.

Cælosia pygophora, n. sp.

Black, the first two joints of the antennæ, a large humeral spot, the hypopygium, halteres, coxæ, femora, tibiæ and bases of tarsi, yellow. First joint of antennæ shorter than the second, wider than long, the second as wide as long, the third three times as long as wide, the following joints increasing slightly in length to the eleventh, which is about six times as long as wide, the remaining joints decreasing in length to the last one, which is slightly shorter than the preceding joint; two outer ocelli separated from the eyes a distance equal to one-half of that between these ocelli. Body thinly grayish pruinose, the hairs yellowish, the bristles on sides of thorax and the hairs on the hypopygium chiefly brown; hypopygium very large, nearly globular, the two joints of each clasper subequal in length, the second joint with a long, downwardly directed process near the base of the under side; a large, subtriangular piece in the middle of the upper side of the hypopygium has its point of attachment on a line with that of the claspers and reaches about to the middle of the second joint of the latter. Lateral bristles of the tibiæ not or scarcely longer than the diameter of the latter. Wings grayish hyaline, auxiliary vein terminating in costa slightly before base of third vein, no auxiliary cross-vein, third vein strongly bowed forward toward its apex, costal vein extending slightly over half way from apex of third to that of the fourth vein, the latter forking midway between the small cross-vein and fork of the fifth. Length 3 mm.

San Mateo Co., Cal. Two male specimens collected by Prof. C. F. Baker.

Type.—No. 8032, U. S. National Museum.

Platyura pullata, n. sp.

Black, the mouth parts, sides of mesonotum, the scutellum, metanotum, hind margins of the abdominal segments, the genitalia, venter, coxæ, femora, tibiæ, bases of tarsi, and the halteres, yellow; hairs and bristles chiefly black. Thorax thinly gray pruinose, the abdomen polished. Wings hyaline, apex of auxiliary vein opposite base of the third, auxiliary cross-vein near one-fourth of distance from the humeral to apex of auxiliary vein, upper branch of third vein very oblique, terminating about its own length beyond apex of first vein, sixth vein prolonged to the wing-margin. Length 3.5 mm.

Claremont, Cal. A female specimen collected by Prof. C. F. Baker.

Type.—No. 8045, U. S. National Museum.

Family BIBIONIDÆ.

Bibiodes, n. gen.

Same as *Bibio* except that the third vein a short distance beyond its base coalesces completely with the fourth vein for a distance equal to the succeeding section of the fourth vein; the small cross-vein is therefore absent.

Type: The following species:

Bibiodes halteralis, n. sp.

♂.—Black, the halteres yellow, the hairs yellowish white. Body polished. Outer spur of front tibiæ very large, the inner one minute; hind tibiæ clavate, enlarging considerably toward the apex, hind tarsi somewhat swollen. Wings grayish hyaline, stigma brown, first and third veins and first section of the fourth, brown, remaining veins nearly colorless.

♀.—Like the male except that the front coxæ, all femora and the front and hind tibiæ are reddish yellow, the femora with a brown stripe on the upper and lower sides and the hind tibiæ with a similar stripe on the outer side. Length 3 mm.

San Mateo Co., Cal. (C. F. Baker); Los Angeles Co., Cal., Dec. 19, Jan. 12, and March 18 (D. W. Coquillett). Nine males and one female.

Type.—No. 8033, U. S. National Museum.

Family LEPTIDÆ.

Symphoromyia securifera, n. sp.

Black; the palpi, halteres, tibiæ and apices of femora yellow; hairs black, those on the occiput except along the upper edge, on the palpi, pleura, sides and venter of abdomen, coxæ and femora, white. Third

joint of antennæ two and one-half times as wide as long, over twice as wide as greatest width of the first joint; face bare. Head, first joint of antennæ, body, coxæ and femora opaque, grayish pruinose, mesonotum marked with three brown vittæ, the median one about one-fourth as wide as the gray space on either side of it; an oblong brown dorsal spot on abdominal segments two to five. Wings hyaline, the stigma pale brown. Length 5 mm.

Santa Clara Co., Cal. A female specimen collected by Prof. C. F. Baker.

Type.—No. 5034, U. S. National Museum.

Family BOMBYLIIDÆ.

Phthiria melanoscuta, n. sp.

Black, the sides of the front, posterior half of the cheeks, lateral and lower margins of the occiput, sides of the mesonotum, a broad vitta on upper edge and one below middle of pleura, connected by a cross-line below the wings, a spot above front coxæ, the hypopleura, halteres, abdomen, coxæ, femora, tibiæ and bases of tarsi, yellow (antennæ wanting). Head polished, face and cheeks almost bare, proboscis about six times as long as the head, palpi slender, linear, nearly as long as the head. Hairs of body whitish, scutellum and the black portion of the mesonotum opaque, velvety. Wings hyaline, stigma grayish, last two sections of fifth vein subequal in length. Length 2.5 mm.

Dripping Springs, Organ Mts., N. M. A female specimen collected in September, 1899, by Prof. T. D. A. Cockerell.

Type.—No. 5013, U. S. National Museum.

Phthiria fulvida, n. sp.

Yellow, a large spot on either side of the face which extends considerably on the cheek and slightly on the front, the third antennal joint except its base, the mouth parts, center of occiput, an ocellar dot, middle of metanotum and apices of tarsi, black; three vittæ on the mesonotum, a few spots on the upper and lower portions of the pleura, and the narrow bases of some of the abdominal segments, reddish yellow. First two joints of antennæ of nearly an equal length, the second wider than long, the third about four times as long as the first two taken together, its upper and lower edges almost parallel, but converging toward the apex which is deeply emarginate; proboscis about twice as long as the head, palpi rather robust, dilated toward the apex, reaching slightly beyond apex of second antennal joint; head polished, face and cheeks almost bare. Hairs of thorax and scutellum yellowish, mesonotum somewhat polished. Wings hyaline, apical half of subcostal cell yellowish, last two sections of fifth vein subequal in length. Length 3.5 mm.

Frontera, Tabasco, Mexico. A female specimen collected at light, April 30, by Mr. C. H. T. Townsend.

Type.—No. 8014, U. S. National Museum.

***Phthiria marginata*, n. sp.**

Head yellow, a spot on either side and another above the insertion of the antennæ, an ocellar dot, and center of the occiput, black; antennæ and mouth parts black, antennæ formed as in *fulvida*, proboscis a little over twice as long as the head, palpi very slender, only slightly dilated toward the apex, reaching slightly beyond apex of second antennal joint. Body black, opaque, gray pruinose, sides of mesonotum, spots on the pleura, the scutellum except a median vitta which is dilated at the base, and the hind margins of the abdominal segments both dorsally and ventrally, yellow; mesonotum with a pair of whitish pruinose vittæ near the middle, hairs of body whitish. Legs dull yellowish, apices of tibiæ and the tarsi except their bases, brown. Wings hyaline, stigma grayish, last two sections of fifth vein of nearly an equal length. Length 3 mm.

Pecos, New Mexico. A female specimen collected on September 4 by Prof. T. D. A. Cockerell.

Type.—No. 8015, U. S. National Museum.

***Phthiria vittiventris*, n. sp.**

Head and its members as in *marginata* except that the black of the occiput is more extended and at the upper corners sends a spur to each eye, while the proboscis is over three times as long as the head. Body black, the sides of the mesonotum, a large spot in front of the scutellum, several spots on the pleura, the scutellum except a line below the outer edge, a pair of broad subdorsal vittæ on the abdomen, and the middle of the venter, yellow; mesonotum opaque, grayish pruinose and with a pair of whitish pruinose subdorsal vittæ, black of abdomen somewhat velvety, hairs of body chiefly yellowish. Legs yellow, the front and hind femora except their ends, the apices of the tibiæ, and the tarsi except their bases, brown. Halteres yellow. Wings hyaline, last two sections of fifth vein of nearly an equal length. Length 2 mm.

Pecos, N. M., Aug. 29 (T. D. A. Cockerell); Las Vegas Hot Springs, N. M., Aug. 3 (H. S. Barber). Two female specimens.

Type.—No. 8016, U. S. National Museum.

***Phthiria nubeculosa*, n. sp.**

Head yellow, a spot on either side of the antennæ, another on posterior half of each cheek, an ocellar dot and the center of the occiput, black; antennæ black, the first joint chiefly yellow, slightly longer than the second, each wider than long, the third elongate-oval, about three times as long as the first two, deeply emarginate at the apex; mouth parts black, proboscis slightly over twice as long as the head, palpi considerably enlarged toward the apex, almost reaching the tip of the antennæ. Body

black, the sides of the mesonotum, several spots on the pleura, the scutellum except a pair of basal spots, and the hind margins of the abdominal segments both dorsally and ventrally, yellow; hairs whitish, body gray pruinose, mesonotum marked with a pair of whitish pruinose subdorsal vittæ. Legs yellow, tarsi except their bases brown. Halteres yellow. Wings hyaline, stigma pale gray, a faint, almost imperceptible brownish cloud on the veins and cross-veins at bases of the submarginal and posterior cells, last two sections of fifth vein of nearly an equal length. Length nearly 2 mm.

Las Cruces, New Mexico. A female specimen collected by Prof. T. D. A. Cockerell.

Type.—No. 8017, U. S. National Museum.

Phthiria inornata, n. sp.

Head yellow, a spot on either side of the antennæ, another on the posterior half of either cheek, the ocellar triangle and the occiput except the lower part, black; face and cheeks polished, nearly bare; antennæ black, formed as in *nubeculosa* (mouth parts wanting). Body black, gray pruinose, mesonotum not vittate, the sides narrowly, a few spots on the pleura, the scutellum except two brown vittæ, and the hind margins of abdominal segments 2 to 7, yellow, hairs yellowish. Legs brown, the tibiæ and bases of tarsi yellow. Halteres brown, the stems yellow. Wings hyaline, a distinct brown cloud on veins and cross-veins at bases of the submarginal and posterior cells, at apex of anal cell, and on the second vein, above the small cross-vein; a small, indistinct cloud near apex of second vein; stigma pale gray; last section of fifth vein somewhat longer than the preceding section. Length 2 mm.

Texas. A male specimen collected by Belfrage.

Type.—No. 8018, U. S. National Museum.

Phthiria badia, n. sp.

Yellow, a spot on either side of the antennæ, another on the posterior half of either cheek, the ocellar triangle, the antennæ and mouth parts except base of the former, the occiput except the lower portion, and the middle of the metanotum, black; the mesonotum except the sides and two short streaks at the front end, deep reddish brown; the breast and a few spots on the pleura reddish yellow, tarsi, except at bases, brown. First two joints of antennæ of nearly an equal length, each wider than long, the third somewhat more than three times as long as the first two, the upper and lower edges only slightly convex, the apex emarginate; proboscis about twice as long as the head, palpi rather robust, enlarging gradually toward the tip, reaching slightly beyond apex of second antennal joint. Body opaque, not grayish pruinose, hairs of thorax light yellowish. Wings hyaline, apical half of subcostal cell yellowish, an indistinct brownish cloud on the veins and cross-veins at bases of the second sub-

marginal and of the posterior cells, last two sections of fifth vein of nearly an equal length. Length 3.5 mm.

Brownsville, Texas. A male specimen collected in May by Mr. C. H. T. Townsend.

Type.—No. 8019, U. S. National Museum.

Phthiria picturata, n. sp.

Yellow, the antennæ, mouth parts, center of occiput prolonged as a vitta over the ocelli and as far as the antennæ, the sides of the oral opening narrowly, three vittæ on the mesonotum (the median one abbreviated posteriorly and greatly dilated anteriorly, the lateral ones abbreviated anteriorly and emarginate on the outer edge near the transverse suture), a small spot above each wing, several on the pleura, the metanotum, bases of the abdominal segments, and the legs except the coxæ and median portion of the middle femora, black. Head and body polished, hairs of head, many on the mesonotum and those of the scutellum, black, hairs of cheeks very sparse and bristle-like. First two joints of antennæ of nearly an equal length, the second wider than long, the third narrow and almost linear, about four times as long as the first two, emarginate at the apex; proboscis nearly four times as long as the head, palpi narrow, about one-fifth as long as the proboscis. Wings hyaline, stigma grayish, last two sections of fifth vein of nearly an equal length. Length 3 mm.

Pecos, N. M., August 25, and Mescalero, N. M. Two females collected by Prof. T. D. A. Cockerell.

Type.—No. 8020, U. S. National Museum.

Phthiria flaveola, n. sp.

Yellow, the proboscis except at base, black, apices of antennæ and of tarsi brown, mesonotum except the sides and a spot in middle of the posterior end, yellowish brown, extreme bases of many of the abdominal segments also yellowish brown, the hairs yellowish. Head and body opaque, mesonotum thinly gray pruinose. Cheeks nearly bare, first two joints of antennæ of nearly an equal width, each wider than long, the third about four times as long as the first two, considerably tapering on the apical half, the narrow apex emarginate; proboscis slightly over twice as long as the head, palpi slender, considerably enlarged toward the apex, about one-fifth as long as the proboscis. Wings hyaline, stigma grayish, last two sections of fifth vein of nearly an equal length. Length 3.5 mm.

San Marcial, New Mexico (T. D. A. Cockerell); Merced Co., Cal. (D. W. Coquillett). Two female specimens.

Type.—No. 8021, U. S. National Museum.

Phthiria amplicella, n. sp.

Head yellow, ocellar triangle and occiput except its lower edge black, the hairs whitish, those of the cheeks rather long and quite abundant; antennæ yellow, the third joint except at the base brown, first joint

slightly longer than the second, the latter wider than long, the third over four times as long as the first two, nearly straight on the lower edge but convex on the upper, emarginate at the apex, the hairs along its upper edge very short and sparse; proboscis black, somewhat more than twice as long as the head, palpi yellow, slender, slightly enlarged toward the apex. Thorax black, thinly grayish pruinose, the humeri and a spot at base of wings yellow, hairs whitish; scutellum yellow, the bases of the sides and the under surface black. Abdomen black, apices of the segments yellow. Legs yellow, greater part of coxæ and apices of tarsi brown. Halteres yellow. Wings whitish, unusually broad, discal cell very large, last section of fifth vein less than one-half as long as the preceding section. Length 3.5 mm.

Texas. A male specimen.

Type.—No. 8022, U. S. National Museum.

Phthiria bicolor, n. sp.

♂.—Black, the humeri, scutellum except under side and sides at base, hind margins of the abdominal segments except the first, lower half of hypopygium, and the halteres except upper side of the knobs, yellow, knees of the front and middle legs broadly yellowish brown. Frontal triangle gray pruinose, sides of face polished and nearly bare; first two joints of antennæ subequal in length, each slightly broader than long, the third joint nearly four times as long as the first two taken together, its upper and lower edges almost parallel, the apex deeply emarginate and bearing a short style in the middle of the emargination; proboscis three times as long as the head, palpi nearly reaching middle of the third antennal joint, very slender and almost linear. Body opaque, the genitalia polished, hairs chiefly whitish, mesonotum somewhat velvety, the sides and front end grayish pruinose. Wings hyaline, stigma obsolete, small cross-vein near middle of discal cell, last two sections of fifth vein subequal in length.

♀.—Black, the head except center of occiput, the sides of the mesonotum, a vitta through middle of pleura, the scutellum except under surface and sides toward the base, hind margins of abdominal segments both dorsally and ventrally, also the halteres, yellow. Mesonotum bluish gray pruinose. Otherwise as in the male. Length 2.5 mm.

Rio Ruidoso, White Mts., N. M., July 27 (C. H. T. Townsend); Filmore Canyon, Organ Mts., N. M., August 29 (C. H. T. Townsend); and Pecos, N. M., in August (Mrs. W. P. Cockerell). One male and two females.

Type.—No. 8023, U. S. National Museum.

Acreotrichus atratus, n. sp.

Black, the halteres and hind margins of ventral segments yellow, hairs black. First joint of antennæ slightly longer than the second, distinctly longer than wide, the third joint rather slender and of nearly an equal width, about three times as long as the first two taken together, the upper

edge bearing about a dozen long bristly hairs, the apex deeply emarginate and with a short style in the middle of the emargination; proboscis about two and one-half times as long as the head. palpi slender and linear, reaching about to base of the third antennal joint. Head, thorax and scutellum very thinly grayish pruinose, the mesonotum with a median and lateral vitta of lighter gray. Wings grayish hyaline, tinged with yellowish toward the base and costa, apical half of subcostal cell yellow, small cross-vein slightly beyond middle of discal cell, last section of fifth vein longer than the preceding section. Length 5 mm.

Head of Rio Piedres Verdes, Sierra Madre, Chihuahua, Mexico, August 16 (C. H. T. Townsend). A male specimen.

Type.—No. 8024, U. S. National Museum.

Family THEREVIDÆ.

Psilocephala aurantiaca, n. sp.

Black, the base of the third antennal joint, halteres, apices of femora, and the tibiæ except their apices, dull yellow; palpi pale yellow, segments 2 to 5 of abdomen and the apex of the first reddish yellow; frontal triangle and face silvery white pruinose; third joint of antennæ subequal in length to the first two and about twice as wide, less than twice as long as wide; thorax somewhat opaque, grayish pruinose, not distinctly vittate, its hairs golden yellow, those on lower part of pleura and in front of the halteres white; scutellum gray pruinose, bearing two bristles; abdomen polished, the hind angles of the first segment and hind margins of the second, third, fifth and sixth segments, white pruinose, hypopygium rather large; wings hyaline, somewhat grayish along the costa, stigma brown, fourth posterior cell broadly open. Length 5.5 mm.

Claremont, Cal. A male specimen collected by Prof. C. F. Baker.

Type.—No. 8035, U. S. National Museum.

Family ASILIDÆ.

Leptogaster virgatus, n. sp.

Readily recognized by the three polished vittæ on the otherwise pruinose mesonotum. Head black, grayish pruinose, antennæ yellow, the arista black, mystax and the slender bristles on upper part of occiput white; thorax reddish brown, light gray pruinose except three polished vittæ on the mesonotum; abdomen black, brownish pruinose, the first segment and both ends of the others light gray pruinose; legs yellow, a broad band before apex of hind femora and apical half of hind tibiæ brown, apices of tarsi yellowish brown, empodia spine-like, about half as long as the claws; wings hyaline, the apex narrowly gray, base of fourth posterior cell with a long peduncle. Length 13 mm.

Washington, D. C., June 22 (Nathan Banks); Texas (Bel-
frage). Three female specimens.

Type.—No. 7945, U. S. National Museum.

Leptogaster hirtipes, n. sp.

Near *murinus*, but with a conspicuous patch of snow-white hairs on the under side of the penultimate fifth of the hind femora. Head black, light gray pruinose, antennæ yellowish, the arista brown, mystax white, bristles on upper part of occiput rather stout and chiefly black; thorax black, the four corners yellowish, light gray pruinose, mesonotum with three brown pruinose vittæ; abdomen black, brownish pruinose, the first segment and both ends of the others gray pruinose; legs yellowish, the enlarged portion of hind femora and apical portion of hind tibiæ yellowish brown, apices of tarsi brown, empodia spine-like, about half as long as the claws; wings hyaline, base of fourth posterior cell with a short peduncle. Length 11 to 14 mm.

Colorado (Morrison), and Rio Ruidosa, White Mts., N. M., altitude about 7,600 feet, August 2 (C. H. T. Townsend). Two males and two females.

Type.—No. 7946, U. S. National Museum.

Ablautus flavipes, n. sp.

Black, the abdomen except at base, the halteres and legs, yellow, apices of the femora, of the tibiæ and of the tarsi, also a vitta on upper side of front femora, brown; hairs of head white, bristles of lower side of first two joints of antennæ and on upper part of occiput, yellowish white; hairs of body white, bristles of thorax pale yellow, abdomen densely yellowish gray pruinose, usually marked with a median and a lateral row of brown spots; hairs and bristles of legs white, the sides of the last three joints of the front tarsi in the male with a cluster of black hairs, giving these joints the appearance of being dilated, the bristles of these joints black; wings hyaline, the veins chiefly yellow. Length 5 mm.

Los Angeles and San Diego Cos., Cal. Three males and two females, collected by the writer in May.

Type.—No. 7947, U. S. National Museum.

Ablautus rubens, n. sp.

Reddish yellow, the hairs and bristles whitish, several on the tarsi black, most numerous on the hind ones; head, thorax and scutellum opaque, yellowish gray pruinose, the pleura except the anterior portion, the under side of the scutellum and middle of the metanotum, polished; abdomen polished, a pair of small gray pruinose spots on the second and third segments, sides of abdomen and the venter yellowish gray pruinose; wings hyaline. Length 6 mm.

Washington State. A female specimen received from Prof. O. B. Johnson.

Type.—No. 7948, U. S. National Museum.

***Stenopogon nigrutilus*, n. sp.**

Black, the first two joints of antennæ, halteres, genitalia, and legs except the coxæ and a vitta on each femur, reddish yellow, the hairs and bristles yellowish white; third joint of antennæ about three times as long as the style; mesopleura and hypopleura bare, abdomen thinly gray pruinose; wings hyaline, veins brown, first and fourth posterior cells broadly open. Length 10 to 13 mm.

Los Angeles and Kern Cos., Cal. Three males and four females, collected by the writer in July.

Type.—No. 7949, U. S. National Museum.

The genus *Stenopogon* was founded by Loew as a section of the old genus *Dasyopogon*.* He gave a rather extended description of it under the caption “3te Gruppe des *Das. sabaudus*.—*Stenopogon*,” and treated of six European species, of which *sabaudus* is the sixth and last. It is evident from his heading, quoted above, that Loew considered this latter species as being the type of this group or genus, and it should therefore be accepted as such.

In July, 1866, Loew established a closely related genus under the name of *Scleropogon* † for a new species from California which he named *picticornis*; he stated that this genus resembles *Stenopogon* in several particulars, but differs in the narrower face and front, shorter third antennal joint, longer style, also in having the first posterior cell closed before the margin of the wing and the third posterior cell greatly dilated—all of them relative characters which are seldom alike in any two species, and many of the characters mentioned are found to vary considerably in the different specimens of the same species.

A recent comparison of specimens which I identified as *picticornis*, with Italian specimens of *sabaudus* received from Prof. M. Bezzi resulted in the firm conviction that the most pronounced difference existing between them is to be found in the nature of the hypopleura which is bare in *sabaudus*, but nearly covered with bristles and hairs in *picticornis*. Wishing to ascertain if Loew's type of *picticornis* was identical in this respect with the specimens I had referred to this species I applied to Mr. Samuel Henshaw, the Curator of the Museum of Comparative Zoology at Cambridge, Mass., who, under date of May 17, 1904, wrote as follows: “Loew's type of *Scleropogon picticornis* has a

* Linnæa Entomologica, II, p. 453, 1847.

† Berliner Ent. Zeit., x, p. 26.

cluster of bristles and hairs in front of the halteres"—that is, on the hypopleura, agreeing in this respect with my specimens.

An examination of a large series of North American specimens belonging to nineteen different species in these two genera shows that this character is equally marked in all of them, the hypopleura being either quite bare, or else nearly covered with bristles and hairs; it will therefore be advisable to employ this character in separating these two genera in place of the variable and unsatisfactory characters taken from the antennæ and wings which have heretofore been employed for this purpose.

Laphystia flavipes, n. sp.

Black, the halteres, and femora and tibiæ except their apices, yellow, the hairs and bristles whitish; second joint of antennæ about two-thirds as long as the first, the third as long as the first two together, rather slender, gradually tapering to the apex, the second joint of the style wider than the first, only slightly longer than wide; head and body densely gray pruinose, somewhat yellowish on the face, front and mesonotum, the broad front portion of the abdominal segments two to six except on the sides, and the narrow hind margins of the first five segments, polished; wings hyaline, the auxiliary, first vein and bases of the others, yellow, remainder of the latter brown. Length nearly 10 mm.

Montana and North Carolina. Two males collected by H. K. Morrison.

Type.—No. 7950, U. S. National Museum.

Laphystia limatula, n. sp.

Differs from *flavipes* as follows: Second joint of antennæ nearly as long as the first, the third robust, of nearly an equal width; mesonotum not gray pruinose except along the lateral and posterior margins, that on the abdomen very thin, broad posterior ends of the last five segments reddish yellow.

La Luz, New Mexico. A male specimen collected August 23 by Mr. C. H. T. Townsend.

Type.—No. 7951, U. S. National Museum.

Laphystia opaca, n. sp.

Black, the halteres, bases of tibiæ and of the hind femora, yellow, the hairs and bristles whitish; second joint of antennæ about half as long as the first, the third broad and only slightly tapering to the apex; head and body densely grayish pruinose, three broad vittæ on the mesonotum and a subtriangular spot at middle of base of abdominal segments two to six, polished; the median vitta of the mesonotum is on its anterior third; wings hyaline; auxiliary vein and bases of the others yellow, remainder of the latter brown. Length 8 mm.

Padre Island, Texas. A male specimen collected June 29 by Mr. C. H. T. Townsend.

Type.—No. 7952, U. S. National Museum.

Dioctrodes, n. gen.

Near *Dioctria*, but the face gently convex, antennæ not inserted upon a protuberance, etc. Head twice as broad as high, front slightly widening upwardly, face bare above the mystax, bristles of the latter nearly in a single row, an isolated bristle above each lower corner of the face, oral margin scarcely projecting; antennæ twice as long as the head, the first joint one and one-third times as long as the second, the third more than twice as long as the first two together, of nearly a uniform width, bearing a small, forwardly directed spine a short distance in front of the middle of the upper side and with a slight depression just beyond the spine, style not apparent; body slender, scutellum bearing a marginal pair of bristles, otherwise bare, abdomen almost bare, legs rather slender, bearing a few slender bristles, otherwise almost bare, front tibiæ devoid of a terminal claw, pulvilli large; marginal, submarginal, posterior and anal cells open, fourth posterior cell separated from the second basal by a cross-vein.

Type: the following species:

Dioctrodes flavipes, n. sp.

Black, the halteres, femora, tibiæ except apices of the hind ones, and bases of the tarsal joints, yellow, the hairs and bristles whitish; head grayish pruinose, the front except the narrow lateral margins and center of face, polished. Thorax yellowish pruinose inside of the humeri, at base of wings, on hind margin of mesonotum, on the pleura and metanotum; scutellum with a median vitta and the under surface yellowish pruinose; mesopleura, sternopleura and pteropleura bare. Abdomen punctured, not pruinose except a small spot at hind angles of the first five segments. Femora nearly bare, a few hairs and bristles on the under side. Wings hyaline, the veins brown. Length 7 mm.

Missouri. A male specimen, collected June 19.

Type.—No. 7953, U. S. National Museum.

Metapogon, n. gen.

Near *Cyrtopogon*, but the face is nearly flat, only slightly swollen on the lower part, the mystax very sparse except along the oral margin and composed chiefly of bristles, etc. Head unusually broad, over twice as broad as high, deeply excavated on the vertex, ocellar tubercle very prominent, front only slightly widening upwardly, at its lower end about three-fifths as wide as either eye, face slightly widening below, subequal in width to the front, eyes unusually prominent (nearly as in *Holcocephala abdominalis*); antennæ less than twice as long as length of head, first joint subequal in length to the second, the latter as wide as long, each

bearing a stout bristle on the under side, third joint nearly twice as long as the first two together, slightly widening outwardly, about five times as long as its greatest width, style less than half as wide as the third joint and at most one-third as long; proboscis straight, tapering to the tip. Mesonotum greatly swollen, provided with strong bristles. Abdomen subcylindrical. Femora with long but slender bristles on the under side, tibiæ and tarsi with strong bristles, front tibiæ devoid of a stout spur at the apex, pulvilli well developed, hind tibiæ and their tarsi somewhat thickened, but not unusually thick. Marginal, submarginal and posterior cells open, the anal open or closed in the margin, the fourth posterior with a cross-vein at its base, the fifth separated from the discal by the fourth.

Type: M. gilvipes, n. sp.

Metapogon gilvipes, n. sp.

Black, the first two joints of the antennæ and the legs except the tarsi toward their apices, brownish yellow, the halteres light yellow. Mystax yellowish, its bristles arranged in three rows on lower half of face, bristles of occiput whitish, those of the ocellar tubercle black. Antennal style about one-third as long as the third joint. Bristles of mesonotum black, the hairs very short and sparse, bristles and hairs of hypopleura white, mesopleura, pteropleura and sternopleura bare; scutellum rather flat, nearly bare, with a subapical pair of stout bristles. Abdomen yellowish gray pruinose, the hind margin of the first segment, a large triangular spot on the five succeeding segments, covering nearly the whole of the hind end of each segment and prolonged nearly across the segment in the middle, also the whole of the seventh segment and the genitalia, polished. Hairs and bristles of the femora white, bristles of the tibiæ and tarsi dark brown, tarsal claws black. Wings hyaline, veins and cross-veins beyond base of first submarginal cell indistinctly bordered with pale brown; small cross-vein near three-fourths of the length of the discal cell. Length 6.5 mm.

Los Angeles Co., Cal. A female specimen collected by the writer.

Type.—No. 7954, U. S. National Museum.

Metapogon punctipennis, n. sp.

Black, the first two joints of antennæ, the tibiæ, bases of tarsi, and extreme apices of femora, reddish yellow, the halteres pale yellow, all hairs and bristles white. Antennal style about one-fifth as long as the third joint, mystax ascending to about three-fourths height of face. Mesonotum grayish pruinose, marked with a submedian pair of black vittæ which extend from the front end three-fourths of the distance to the scutellum, also with a pair of blackish spots on either side, separated by the suture, hairs of mesonotum very short and sparse, mesopleura, pteropleura and sternopleura bare, scutellum flattened, nearly bare, thinly grayish pruinose,

bearing a subapical pair of stout bristles. Abdomen polished, first segment gray pruinose on the base and sides, second with a gray pruinose fascia near the base and an oblique spot in each hind angle, segments three to six each with a gray pruinose fascia at the base connected at either end with an oblique spot that extends to the hind angle of the segment, the spots on the third segment of the female separated from the fascia; each of these fasciæ is rather strongly narrowed in the middle of the posterior side; a gray pruinose spot on either side of the seventh segment. Wings hyaline, veins and cross-veins at bases of the discal, posterior and submarginal cells distinctly but rather narrowly clouded with brown, small cross-vein near two-thirds length of the discal cell. Length 7 mm.

Organ, New Mexico. A specimen of each sex collected by Prof. T. D. A. Cockerell.

Type.—No. 7955, U. S. National Museum.

Cyrtopogon nigricolor, n. sp.

Near *rattus*, but the bristles of the tibiæ are black, the abdomen is largely polished, etc. Black, the halteres yellowish, the knees narrowly brownish yellow. Hairs of the front whitish, on the vertex mixed with black, bristles of upper part of occiput black, hairs of the lower part white, mystax mixed white and black, mounting nearly to the antennæ, face strongly convex; first joint of antennæ slightly longer than the second, the latter with a pair of stout black bristles on the under side, third joint one and one-fourth times as long as the first two taken together, strongly constricted a short distance beyond the base and considerably narrowed at the apex, about three times as long as the slender style. Bristles of the body and on the tibiæ and tarsi black. Brown vittæ of mesonotum diffuse, the hairs sparse and rather short. mesopleura, pteropleura and sternopleura bare, hairs of hypopleura chiefly black; scutellum flat, yellowish gray pruinose, almost bare, with six strong marginal bristles. Abdomen polished, sides of first segment, bases and hind angles of the three following ones, gray pruinose (the remaining segments may also have had similar markings but these do not now appear, possibly owing to the partial greasing of the specimen). Tarsal claws black. Wings hyaline, the apical half faintly tinged with yellowish, small cross-vein slightly beyond middle of discal cell. Length 9 mm.

Los Angeles Co., Cal. A female specimen collected by the writer in June.

Type.—No. 7956, U. S. National Museum.

Cyrtopogon tibialis, n. sp.

Near *plausor*, but the mystax is black and rather sparse, not concealing the ground color, scutellum flat, etc. Black, the halteres yellow, the tibiæ,

bases of tarsi and extreme apices of femora, reddish yellow. Hairs of front and on upper edge of occiput black, on remainder of occiput white; third joint of antennæ slightly longer than the first two joints taken together, greatly widening medially, two and one-third times as long as the rather slender arista; face strongly gibbous. Mesonotum gray pruinose, marked with a pair of submedian brown vittæ not extending on the posterior portion, and on either side with a pair of large brown spots separated by the suture, hairs sparse and rather short, bristles black, mesopleura and sternopleura hairy, pteropleura bare, hairs of hypopleura whitish, scutellum gray pruinose on the upper surface, sparsely covered with rather long black hairs most abundant around the margin, devoid of stout bristles. Abdomen polished, with a bluish tinge on the first five segments, a gray pruinose fascia on hind part of the first six segments, that on the first and sixth broadly interrupted in the middle. Hairs of coxæ and femora white, bristles of tibiæ and tarsi black, tarsal claws whitish, their apical third black. Wings hyaline, small cross-vein near one-third length of discal cell. Length 9.5 to 11 mm.

Arizona. Three females collected by H. K. Morrison.

Type.—No. 7957, U. S. National Museum.

Cyrtopogon maculosus, n. sp.

Near *rejectus*, but the wings distinctly spotted, thorax with a crest of hairs, etc. Black, including the halteres. Face strongly gibbous, mystax black, rather dense, mounting nearly to the antennæ; third joint of antennæ one and one-fourth times as long as the first two taken together, gradually tapering to the apex, three times as long as the robust style; hairs of front and on upper edge of occiput chiefly black, on remainder of occiput whitish. Thorax with the usual brown markings, a median crest of rather long black hairs, bristles black and rather slender; mesopleura and sternopleura hairy, pteropleura bare, hairs of hypopleura whitish; scutellum strongly convex, yellowish gray pruinose, rather densely covered with long white hairs and with a row of slender black bristles around the margin. Abdomen polished, the lateral margins narrowly gray pruinose, produced inward a short distance at the hind angles of each segment. Hairs and bristles of legs chiefly whitish, tarsal claws black. Wings hyaline, a distinct brown cloud on veins and cross-veins at bases of the submarginal, discal and posterior cells, small cross-vein near middle of discal cell. Length 10 mm.

Pullman, Washington. A female specimen collected April 29, 1902, by Prof. C. V. Piper.

Type.—No. 7958, U. S. National Museum.

Cyrtopogon varipennis, n. sp.

Near *nebulo*, but the first basal cell marked with two black spots near the middle, etc. Black, the halteres dull yellow. Face rather strongly

convex, mystax black, somewhat sparse, hairs of front and on upper part of occiput chiefly black, those on remainder of occiput whitish; third joint of antennæ slightly longer than the first two, gradually tapering to the apex, only slightly longer than the rather slender style. Mesonotum quite densely covered with rather long erect black hairs, the bristles scarcely longer or stouter than the hairs; mesopleura and sternopleura hairy, pteropleura bare, hairs of hypopleura mixed black and white; scutellum convex, not pruinose, the upper surface rather densely covered with long whitish hairs, the many marginal bristles very slender, chiefly white but several are brown on the basal portions. Abdomen polished, the hind angles of the first six segments marked with a gray pruinose spot. Hairs and bristles of legs whitish, many of the bristles with brown bases, tarsal claws black. Wings gray, with a few hyaline spots and streaks, the costa from apex of auxiliary vein to apex of upper branch of the third broadly bordered with brown, a dark brown spot in base of first submarginal cell extending across the marginal, one in base of second submarginal, first and second posterior, and two near middle of first basal cell; of the last two spots one is along the basal part, the other along the apical portion of the prefurca of the third vein; the brown spot on the small cross-vein extends to apex of discal cell; small cross-vein slightly beyond middle of discal cell. Length 7 to 10 mm.

Washington State. One male and two females collected by Prof. O. B. Johnson.

Type.—No. 7959, U. S. National Museum.

Saropogon luteus, n. sp.

Reddish yellow, apices of antennæ brown, the proboscis on apex and upper side black, all hairs and bristles yellowish; head except on the vertex, yellow pruinose, pleura and sides of thorax in front of the humeri yellowish pruinose, abdomen polished, hind angles of segments two to five yellowish pruinose; wings brownish along the veins and in the costal cell, fourth posterior cell rather broadly open. Length 11 to 17 mm.

Claremont, Cal. (Baker), and Los Angeles Co., Cal. (Coquillett). Three males and seven females taken May 31 and in June.

Type.—No. 8036, U. S. National Museum.

Saropogon hyalinus, n. sp.

Very similar to *luteus* except that the mesonotum is rather densely yellowish gray pruinose and marked with three brown vittæ, and the wings are pure hyaline. Length 13 mm.

Los Angeles Co., Cal. A specimen of each sex collected by the writer.

Type.—No. 8037, U. S. National Museum.

Saropogon semiustus, n. sp.

Black, the abdomen except the first segment, and the apices of the femora, reddish yellow, the halteres light yellow, all hairs and bristles whitish; in the female the femora, tibiæ and tarsi are also reddish yellow, the antennæ yellowish brown. Body slender, head, thorax, scutellum, and coxæ densely grayish pruinose. Third joint of antennæ tapering from the middle to the tip, one and one-fourth times as long as the first two, the style very small. Scutellum bearing two bristles. Abdomen polished, sides of first segment and a spot in hind angles of segments 2 to 5, gray pruinose. Wings hyaline, the fourth posterior and anal cells open. Length 10 mm.

San Diego Co., Cal. Four males and two females collected by the writer.

Type.—No. 7960, U. S. National Museum.

Family DOLICHOPODIDÆ.

Sciapus pruinus, n. sp.

♂.—Head and body bluish green, bases of abdominal segments 1 to 6 black, genitalia small, the terminal portion black; face bare, yellowish pruinose, front wholly white pruinose, antennæ black, the second joint bearing on its under side one very long and several short bristles, arista plain, less than one-half as long as the body, proboscis yellow, palpi black, hairs on lower two-thirds of occiput white; thorax grayish pruinose, the mesonotum very thinly so, apices of abdominal segments 3 to 6 and the whole of the seventh thinly grayish pruinose, apex of abdomen devoid of long bristles. Wings hyaline, costa not ciliate, hairs of calypteres black. Legs dark green, narrow apices of front and middle femora, the whole of their tibiæ and base of the front tarsi yellow, hind tibiæ and their tarsi black; tarsi plain, not ciliate, first two pairs of tibiæ bearing two long bristles on the inner side, the middle tibiæ also with two long bristles, other bristles of these tibiæ short, hind tibiæ bearing a few short bristles only. Knobs of the halteres whitish.

♀.—Same as the male except that the front is not pruinose and the bristles of the tibiæ are rather short.

Length 4.5 to 5 mm.

Miami, Florida. Two males and four females collected by Mrs. A. T. Slosson.

Type.—No. 7961, U. S. National Museum.

Family TACHINIDÆ.

Distichona auriceps, n. sp.

Black, the second joint of antennæ and the palpi yellow. Front at narrowest point slightly wider than either eye, sides of front and of face

golden yellow pruinose, a row of about five bristles outside of each frontal row, the latter descends a short distance below the arista, a patch of bristly hairs on lower part of sides of face, extending from the vibrissæ half way to the lowest frontal bristle, facial ridges bristly on the lower three fourths, vibrissæ nearly on a level with the front edge of the oral margin, antennæ slightly shorter than the face, the third joint five times as long as the second, arista thickened on the basal three-fourths, the penultimate joint about six times as long as wide. Thorax grayish pruinose, mesonotum marked with four black vittæ, four pairs of postsutural dorsocentral bristles, four sternopleurals, of which the lowest is noticeably smaller than the others. Abdomen grayish pruinose and with darker reflecting spots, last three segments with marginal bristles only. Middle tibiæ bearing three bristles on the anterior outer side, pulvilli of front tarsi elongated. Wings hyaline, third vein bearing three bristles near the base, first posterior cell closed in the margin; calypteres whitish. Length 6.5 mm.

Frontera, Tabasco, Mexico, February 12. A male specimen collected by Mr. C. H. T. Townsend.

Type.—No. 7962, U. S. National Museum.

Family SARCOPHAGIDÆ.

Sarcophaga amblycoryphæ, n. sp.

Black, the fourth abdominal segment and the genitalia yellow. Head gray pruinose, on the face and lower part of sides of front grayish yellow, vertex three-fifths as wide as either eye, frontal vitta deep brown, on the upper portion nearly twice as wide as either side of the front at the same point, two pairs of orbital bristles, frontals descending almost to base of third antennal joint, antennæ three-fourths as long as the face, the third joint less than three times as long as the second, longest hairs of arista about four times as long as its greatest diameter. Body gray pruinose, abdomen with darker reflecting spots, mesonotum marked with three black vittæ, only three pairs of postsutural dorsocentral bristles, these are large and of nearly an equal length, three sternopleurals in a curved row; middle of dorsum of abdomen bearing only bristly hairs on the first two segments, the third and fourth segments each with a marginal row of stout bristles, basal segment of genitalia not cleft dorsally, bearing a marginal row of rather short bristles. Legs devoid of long hairs, hind tibiæ bearing two bristles on the anterior-inner, anterior-outer and posterior-outer sides besides those at the apex. Wings hyaline, third vein bristly two-thirds of distance from base to the small cross-vein. Calypteres whitish. Length 7 mm.

Springfield, Mass. A female specimen bred by Dr. George Dimmock from a larva that issued from a living adult of *Amblycorypha oblongifolia*.

Type.—No. 7963, U. S. National Museum.

Dr. Dimmock writes that the *Amblycorypha* was collected on August 19, 1897, by Miss Annie G. Edwards, who brought it to him the same day. It appeared to be sickly, and in the evening two larvæ issued from its abdomen and soon pupated, and the specimen of *Sarcophaga*, described above, emerged on September 11 of the same year.

Family ANTHOMYIDÆ.

Pegomya bucculenta, n. sp.

Black, the frontal triangle usually deep brown, the halteres yellow. Eyes approximated, frontal vitta at narrowest point narrower than the lowest ocellus, sides of face broad, projecting nearly the length of the third antennal joint in front of the eyes, third joint of antennæ nearly twice as long as the second, about two-thirds as wide as long, arista nearly bare, thickened on the basal fourth, epistoma only slightly produced, cheeks broader than sides of face, proboscis rather robust, labella small. Thorax grayish pruinose, not distinctly vittate, three pairs of postsutural dorsocentral bristles, sternopleurals one and two, discal pair of scutellar bristles much longer than the bristly hairs. Abdomen narrow, olive gray pruinose and with a broad black dorsal vitta, hairs of upper side of abdomen long and nearly erect, venter devoid of bristles of an unusual length, genitalia projecting nearly the length of the last abdominal segment beyond the apex of the latter. Front tibiæ bearing a single bristle, situated on the inner-posterior side, middle femora ciliate with long bristles on the basal two-thirds of the under side, their tibiæ bearing three long bristles on the outer-posterior side and two on the inner-posterior side, hind femora ciliate on nearly the entire length of the under side with rather long bristles and hairs, their tibiæ bearing two rather short bristles on the inner-anterior side, four long ones on the outer-anterior side, three long and one rather short one on the outer-posterior side, the inner-posterior side usually with two small ones; pulvilli rather short. Wings hyaline, the extreme base dark gray, costal spines very short and scarcely perceptible, auxiliary spine as long as the small cross-vein, last section of fourth vein straight. Calypteres whitish. Length 5 mm.

Mountains near Claremont, Cal. Two male specimens collected by Prof. C. F. Baker.

Type.—No. 8038, U. S. National Museum.

Family MICROPEZIDÆ.

Nerius longicornis, n. sp.

Head brown, the lower part of the front, the face and lower part of the head, yellow, two black spots along the front border of each eye near the

junction of the front and face, and a brown vitta extending from middle of hind border of each eye to the neck; antennæ brown, the second joint and base of the first joint yellow, apical slender portion of the arista white; second joint of antennæ nearly four times as long as the first; mouth parts brown. Body brownish black, grayish pruinose, mesonotum marked with three median brown vittæ, sometimes confluent, the sides and pleura with many brown dots; scutellum and abdomen with a broad median brown vitta, sides of abdomen with many brown dots. Legs brownish yellow, usually a paler ring before the apex of each femur. Wings grayish hyaline, the outer portion beyond apex of auxiliary vein tinged with brown along the costa and veins. Halteres yellow, the knobs brown. Length 8 to 9 mm.

San Diego, Tex. (E. A. Schwarz) and Brownsville, Tex. (C. Schæffer, C. H. T. Townsend); Tucson, Arizona, Feb. 8 and 10 and Dec. 30 (H. G. Hubbard); Los Angeles Co., Cal., March (D. W. Coquillett). Two males and twelve females.

Type.—No. 7781, U. S. National Museum.

Family SAPROMYZIDÆ.

Lauxania signatifrons, n. sp.

Black, the first two joints of antennæ, extreme apices of femora and the halteres, yellow, the antennal arista, tibiæ and tarsi yellowish white. Front thinly grayish pruinose, in the middle of each side a pair of elongated velvet-black spots, the outer one contiguous to the eye, the other between this one and the middle of the front, the orbital bristles situated between the two spots which form each pair; face strongly convex, polished, the orbits gray pruinose; antennæ longer than the face, narrow, of nearly an equal width, the third joint three times as long as the second, arista very long-plumose. Thorax thinly grayish pruinose, upper side of scutellum wholly velvety-black, abdomen polished. Wings yellowish gray, darkest in the marginal cell. Length 3 mm.

Brownsville, Texas. A single specimen collected by Mr. Charles Schæffer.

Type.—In museum of Brooklyn Institute of Arts and Sciences.

Sapromyza picticornis, n. sp.

Yellow, the narrow frontal vitta, four vittæ on the mesonotum, two on the pleura and two on upper side of the scutellum, brownish, an ocellar dot, the first two joints of antennæ, the arista except at base, a round spot in middle of lower part of the face, the palpi, a pair of subapical spots on

the scutellum, a transverse row of three spots on each segment of the abdomen except the first two, and a band near the bases of the hind tibiæ, black, the hairs and bristles also black; the spots on the abdomen are least distinct toward its base. Third joint of antennæ oblong, about one and one-half times as long as wide, arista long-plumose. Wings yellowish hyaline, small and hind cross-veins narrowly bordered with brown. Length 3.5 mm.

Chinandega, Nicaragua. A single specimen collected by Prof. Carl F. Baker.

Type.—No. 7964, U. S. National Museum.

I have also examined a specimen of this species collected by Mr. Charles Schæffer near Brownsville, Texas.

Family DROSOPHILIDÆ.

Drosophila ordinaria, n. sp.

Distinguished by the arrangement of the fronto-orbital bristles. Yellow, the broad hind margins of the abdominal segments, except in middle of the dorsum, brown. Front opaque, somewhat velvety, orange yellow, at the insertion of the orbital bristles polished, a few hairs on the lowest fourth; the three orbital bristles on either side in a longitudinal row, the middle one very small, the front one proclinate, the other two somewhat reclinate; the bristle next below each vibrissa less than one-fifth as long as the latter. Mesonotum and abdomen polished. Wings grayish hyaline, unmarked, last section of fifth vein less than half as long as the penultimate section of the fourth. Length 2.5 mm.

White Mountains, N. H. Three specimens collected by H. K. Morrison.

Type.—No. 7965, U. S. National Museum.

Family GEOMYZIDÆ.

Sinophthalmus, n. gen.

Near *Anthomyza*, but the face strongly carinate in the middle, etc. Head about as wide as high, slightly longer at the vibrissæ than at base of antennæ, front narrowing anteriorly, at vertex nearly twice as wide as either eye, postvertical bristles very small, two pairs of vertical bristles, one of ocellar, three pairs of frontal bristles, arranged in two longitudinal rows on the upper half of the front, the lowest pair proclinate, the others reclinate; antennæ two-thirds as long as the face, the second joint furnished with a rather long bristle on the upper side, the third suborbicular but

somewhat truncated at the base, slightly longer than the second, arista almost bare, the penultimate joint wider than long; face with a high median carina which extends from the lower edge of the front to three-fourths of the length of the face; vibrissæ well-developed, inserted distinctly above the level of the middle of the lower edge of the face. clypeus strongly projecting, eyes bare, distinctly higher than long, five times as high as width of cheek, occiput strongly concave on the upper half where it projects very little beyond the eyes, on the lower half it projects strongly behind the eyes. Thorax bearing two pairs each of acrostichal, dorso-central, supra-alar, notopleural and sternopleural bristles, one humeral, scutellum bearing four marginal bristles. Legs robust, front femora ciliate with a few bristles on the under side, other femora and all tibiæ devoid of bristles. Auxiliary vein distinct on slightly over its basal half, the remainder obsolete, the anal and both basal cells, complete, hind cross-vein present, anal angle well-developed.

Type: The following species:

Sinophthalmus pictus, n. sp.

Head yellow, an ocellar dot, two dots on each cheek, the sides of the clypeus and the occiput except the lower part and middle of the upper, black; antennæ and palpi yellow, proboscis largely brown, robust, and with large labella. Thorax black, grayish pruinose and marked with many brown dots and a few brown spots; scutellum gray pruinose, a pair of brown spots near the base, a black or brown spot occupies most of the apical half except the sides and extreme apex, also a black dot at base of each bristle comprising the first pair. Abdomen opaque black, the first two segments except a spot toward each side of the second, the narrow hind borders of the next two, and the front ends of the following two, yellow and covered with a whitish pruinosity. Legs black, the knees, two bands on each tibia, and the tarsi except their apices, yellow. Wings hyaline, pale grayish along the costa, a brown cloud on the hind and the small cross-vein, a brown dot near middle of last section of the fourth vein. Length 3 to 3.5 mm.

Mountains near Claremont, Cal. (C. F. Baker); Yosemite, Cal., September 3. Twelve specimens. Reported as being annoying to the eyes of visitors to the locality last mentioned.

Type.—No. 8039, U. S. National Museum.

Family AGROMYZIDÆ.

Agromyza tæniola, n. sp.

Near *magnicornis*, but the third joint of the antennæ is very small, the mesonotum not pruinose, etc. Black, the proboscis, narrow lateral mar-

gins of the mesonotum, narrow hind margins of the abdominal segments, the hypopygium and halteres, yellow, second joint of antennæ and the knees narrowly yellowish brown. Apparently three pairs of dorsocentral bristles, the anterior pair situated slightly behind the suture. Abdomen polished. Wings hyaline, veins brown, strong, small cross-vein near middle of the discal cell, last two sections of fifth vein subequal in length, costal vein prolonged beyond the end of the fourth. Length 2 mm.

Mountains near Claremont, Cal. A male specimen collected by Prof. C. F. Baker.

Type.—No. 8040, U. S. National Museum.
