Descriptions of New Genera and Species of Hymenoptera from India.

By P. Cameron.

(Continued.)

Eyes bare, incised on the innerside; the malar space three times the length of the 2nd antennal joint. Clypeus not separated from the face. Legs short; slender; the calcaria fully half the length of the metatarsus; the claws small, bare; the tibiae and tarsi are spinose. The median segment is short and has an oblique, straight slope; there is a complete keel on the middle of the metapleurae; there is one large lateral area on the base and one longish lateral area, which extends to the apex of the segment, it becoming gradually narrowed towards the apex; the petiole is smooth, long and slender; the post-petiole is only very slightly widened; the apex of the clypeus is broadly rounded.

This genus has the form and abdomen of *Campoplex*. It is readily known by the flattish scutellum, furrowed and keeled laterally and by the keels on the median segment.

D. cariniscutis sp. nov. Q.

Black, the 3rd to 5th abdominal segments ferruginous, the tibiae more or less and the spurs testaceous; the flagellum of the antennae brownish beneath; the wings hyaline, the stigma and nervures testaceous, the areolet shortly appendiculated. — Length 12 mm.

Hab. Darjeeling.

Head: the face and elypeus closely, distinctly and uniformly punctured and covered with white pubescence, which is longer on the elypeus than on the face, which projects slightly in the middle. Mandibles black, their upper edge rufo-testaceons. Palpi black. Pro- and mesothorax closely punctured. Scutellum irregularly rugose, the base less strongly than the middle or apex; its sides are distinctly keeled; it is rather flat, not much raised above the level of the mesonotum. Median segment broadly depressed in the middle; in the centre is a narrow, smooth furrow; it is irregularly transversely striated. Pro- and mesopleurae closely punctured, except the lower part of the propleurae, which is smooth and shining; the part of the metaplenrae below the keel it closely rugose,

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the part above it is more coarsely and irregularly obliquely striated. Legs black, the tibiae for the greater part rufotestaceous, darker at the base; they are, as are also the tarsi, spinose. Petiole black, smooth and shining; the 2nd segment black above, rufons laterally; the 3rd, 4th and 5th segments are rufous.

18. Bosnaima Cam.

B. mandibularis sp. nov. J.

Black, the abdomen from the 2nd segment ferruginous; the mandibles and palpi pallid yellow; the legs testaceous, the anterior paler, more yellowish than the posterior; all the coxae, the 4 posterior trochanters and base of femora broadly, the apex of the hinder tibiae and the hinder tarsi, black; the wings hyaline, the nervures and stigma black; the tegnlae pallid yellow. — Length 8 mm.

Hab. Darjeeling.

Antennae as long as the body, black, the scape yellow in the middle beneath. Head thickly covered with silvery pubescence; the face and elypens closely and uniformly puncfured; the front and vertex are nearly as strongly, but not quite so closely, punctured. Mandibles yellow, the base narrowly black, the teeth black and rufous; the palpi pallid yellow. Thorax closely and almost uniformly punctured; the propleurae irregularly striated in the middle and at the apex; the meso- finely and closely striated in front of the smooth space. The median segment is thickly covered with long silvery pubescence. All the coxae, the 4 hinder trochanters, the middle femora on the basal fourth, the hinder for the greater part, the apex of the hinder tibiae and the hinder tarsi are black; the middle tarsi are infuscated towards the apex. Abdomen ferruginous; the petiole and the basal two thirds of the 2nd segment black.

Bosmima was described by me in Manchester Memoirs, 1899 p. 120, from a female. I now supplement the description from this male. The transverse basal nervure is interstitial; there are only 2 closed cellules in the hinder wings, a longer upper cellule extending to shortly beyond the middle and a shorter lower one not half its length; the apical nervures are completely obliterated; there is a short basal, somewhat triangular areola on the base of the median segment, the narrowed part being at the apex; next to this is a cellule which extends to the top of the apical slope; it is obliquely narrowed at the base and becomes slightly and gradually narrower towards the apex which is open; the face and clypeus are flat; the apex of the clypeus is rounded; the abdo-

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minal petiole is long and slender and has a clearly separated postpetiole; the malar space is as long as the scape of the antennae. The present species differs from the type (B. spinipes Cam.) in the front not being keeled. The tibiae and tarsi are not so thickly spined as in the Q of B. spinipes.

19. Campoplex Gr.

1. C. cytaeis sp. nov. Q.

Black; the 2^{nd} abdominal segment, except above, and the whole of the 3^{rd} rufous; the apex of the 4 front femora and their tibiae dark testaceous; the front keeled in the middle; the wings hyaline, highly iridescent; the stigma and nervures dark fuscous. — Length 14 mm.

Hab. Darjeeling.

Head black, closely punctured, the face and elypeus thickly covered with white pubescence; the front with shallow, scattered punctures; the middle distinctly keeled. Mandibles black, broadly rufous in the middle; the palpi dark fuscous. Scutellum roundly convex; its sides obscurely striated. The median segment more strongly punctured than the mesonotum; at its base, in the middle, is a small square area, from the apex of which, on the sides, issues, obliquely, a short keel. On the apex of the metapleurae, above the keel, are some stout oblique keels. The hinder legs are entirely black, except that the tibiae are dark testaceous at the apex; the apex of the 4 front femora, their tibiae and their tarsi are dark testaceous. The wings have a steely iridescence; the areolet is shortly appendiculated; the recurrent nervure is received behind its middle. The 2nd abdominal segment is rufous on the lower half; the 3rd is almost entirely rufous.

The metanotum is broadly, but not deeply, depressed in the middle and is closely transversely striated, the striae being stronger and more distinctly separated on the apical half; the lower part of the propleurae is shining and is irregularly striated; the keel on the middle of the metapleurae is stouter than usual; the depression at the sides of the seutellum is stoutly striated; the hair on the scutellum is sparse and pale; and the keel bordering the metasternum is stout and distinct. The species comes near to *C. orasus Cam.* (olim carinifrons *Cam.* non Holmgr.)

2. C. prytanes sp. nov. Q.

Black; the abdomen from the post-petiole rufous; the mandibles, palpi and front legs yellowish-testaceous; the apex of the middle femora, the tibiae and tarsi testaceous, the

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hinder tibiae rufo-testaceous; the wings hyaline, the nervures and stigma black, the areolet shortly appendiculated. — Length 10 mm.

Hab. Darjeeling.

Antennae entirely black, longer than the body. Face and elypeus closely punctured, the elypeus less closely than the face. Mandibles black at the base, the rest and the palpi yellowish-testaceous. Prc- and mesothorax closely punctured; the propleurae shining, finely striated in the middle. Median segment more closely ingosely punctured than the meso- and more thickly covered with white pubescence; on the sides, at the apex, is an oblique keel which reaches to the keel on the middle of the pleurae. The hinder tibiae are darker towards the apex, the hinder tarsi black; the tibiae and tarsi are weakly spinose.

VIII. Tryphonini.

20. Icyona gen. nov.

Face elongate, the malar space large, as long as the scape of the antennae; the face roundly projects in the middle. Clypeus not separated from the face, its apex rounded; above, at the sides, is a deep depression. Mandibles with two large teeth, the upper longer and more sharply pointed than the lower. Head obliquely narrowed behind the eyes; the occiput widely incised, margined. Scutellum roundly convex. Median segment elongate without keels; the spiraeles elongate. Legs elongate; the apex of the hinder femora reaching near to the apex of the abdomen; there are two spurs on the 4 hinder tibiae; the tarsi are spinose; the claws bear thick, clearly separated teeth. Radial cellule narrow, elongate; the areolet moderately large, four-angled; the nervures unite at the top; the recurrent nervore is received in its middle; it is straight and is largely bullated above the middle; the transverse median nervure is received in its middle; there is a distinct stump of a nervure on the cubito-disco nervure; the nervures in the hind wings are traced to the apex; the lower longitudinal one originates near the top. The basal four abdominal segments are distinctly longer than broad; the petiole is long and is not much widened towards the apex; its spiracles are almost in the middle; the sheath of the ovipositor largely projects; it is stout and straight. The eyes are large and parallel; the hinder coxae are elongate, fully four times longer than broad.

Belongs to the Ctenopelmini and comes near to Ctenopelma.

I. rufipes, sp. nov. Q.

Nigra, pedibus abdomineque rufis; coxis trochanteribusque nigris; tarsis posticis flavis; alis hyalinis, stigmate testaseo. — Long.: 14 mm.

Hab. Simla (Nurse).

Antennae black. Head black; the lower half of the inner orbits broadly yellow; the lower part of the face rufous; the lower two thirds of the elypeus yellow. Vertex and front closely punctured; the elypeus sparsely punctured above. The basal third of the mandibles lemon-yellow, the middle rufous, the apex black. Palpi testaceous. Pro- and mesothorax closely and uniformly punctured, as is also the scutellum, except at the apex, where it is smooth, shining and testaceous. The median segment is much more strongly, more rugosely, punctured and is thickly covered with short, white pubescence. Wings hyaline, highly iridescent; the stigma is testaceous, the nervures blackish. Legs rufous; the coxae, the basal joint of the trochanters above and a line on the four front femora behind, black; the apical 4 joints of the hinder tarsi yellow. Abdomen rufous, shining; the basal half of the petiole has a yellowish tinge.

The \mathcal{O} is similarly coloured; the scape of the antennae is yellowish; the flagelium brownish beneath; the malar space is marked with yellow.

IX. Mesoleptini.

21. Fovaya, gen. nov.

Areolet small, oblique and shortly stalked. Head transverse, the temples broader than the width of the eyes. Mandibles nnequally toothed. The long spur of the hinder tibiae shorter than the 2nd joint of the hinder tarsi. Antennae long and slender; the first joint of the flagellum longer than the second; the flagellum broadly ringed with white. Median segment completely areolated; the basal central area is long, narrow and contracted before the middle; the apical is much wider and semicircular. Legs of moderate length; the tibiae and hinder tarsi thickly spinose; the claws simple. Metathoracic spiracles small, oval; the spiracular area is bounded by distinct keels, the spiracles being placed near the apical one; at the base of the apical third of the spiracular area is a transverse curved keel. Abdomen flat; becoming broader towards the apex of the 5th segment; the apical is bluntly pointed. The stigma is longish and is moderately broad; the

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radius originates behiud its middle; the first recurrent and the disco-cubital nervores are not angularly broken. The eyes are large and reach to the base of the clypeus; they are parallel and do not converge below. The abdominal petiole is twice the length of the 2nd segment; the spiracles are placed shortly behind the middle; from them the petiole becomes gradually wider towards the apex.

F. annulicornis sp. nov. ♂.

Nigra, flavo-maculata; abdominis medio late rufo; pedibus nigris; tibiis femoribusque anterioribus basique tibiarum posticarum rufo-testaceis; tarsis posticis late albo-annulatis; alis hyalinis; nervis stigmateque nigris. — Long.: 10 mm.

Hab. Simla. (Nurse).

Antennae longer than the body, slender; the 14th to 24 th joints white; the scape on the under side thickly covered with silvery hair. Head black; the clypeus, two short, oblique lines above its middle; the inner orbits, the mandibles, except at the apex, and the palpi, yellow, Face alutaceous; the clypeus sparsely and distinctly punctured; the front and vertex alu. taceous, as is also the thorax. There is a small, somewhat pyriform, mark on eitherside of the mesonotum near the base. Scutellum roundly convex, the post-scutellum is furrowed at the base; the lateral depressions are striated. The median segment is depressed in the middle at the base; in the centre are two longitudinal keels, which approach each other before the middle, thus becoming obliquely dilated. Legs rufotestaceous; all the coxae, trochanters and the hinder femora are black; the rest rufo-testaceous, the hinder pair with the colour darker and the apex of the hinder tibiae black, the metatarsus infuscated and the other joints of the hinder tarsi yellow. Wings clear hyaline; the stigma and nervures black. Abdomen black; the apex of the 2nd segment and the whole of the 3rd and 4th segments, rufous.

X. Metopiini.

22, Cultrarius Davies.

C. flavo-balteatus, sp. nov. ♂.

Black, the antennae brownish beneath; the elypeus bordered with yellow, the abdomen with a purplish tint and banded with yellow; the wings fuscous-violaceous. — Length 12-13 mm.

Hab. Darjeeling.

Antennae black, brownish beneath. Clypeus closely

punctured, its apex broadly rounded, depressed; its sides are broadly margined, yellow, as is also the upper edge; the lower inner orbits are lined with yellow, the line being narrowed above. The front and vertex are smooth and shining. Thorax black, a small mark below the tegnlae, the curved keels on the sides of the scutellum at the base, the apex of the scutellum and the base and apex of the tegulae broadly, yellow. Mesonotum closely and uniformly punctured; the scutellum is more rugosely punctured; its basal depression is rounded at the base, transverse at the apex and bearing 6 stout longitudinal keels. The sides of the scutellum are raised and end at the apex in a short stout tooth; its apex has a long, perpendicular slope and is keeled down the middle. On the sides of the median segment is a large area, depressed, smooth and shining, rounded at the apex and longer on the outer than on the inner side; the space between them is stontly transversely striated; the rest of the segment is irregularly, coarsely reticulated. The upper part and apex of the propleurae are closely rugose, the rest shining and irregularly striated. Mesopleurae closely rugosely punctured, the oblique apical slope is smooth and shining; the lower furrow is wide and deep; it is smooth and shining and widest at the base. Legs black, covered with a white pubescence; the apical half of the fore femora, the tibiae and the tarsi rufo-testaceous; the fore spurs are testaceous, the middle white, the hinder black. The basal segment of the abdomen is raised in the centre, bears there 2 yellow, stont keels, which converge at the base; the apex of the segment is broadly yellow, the band being broadest at the keels; the 2nd segment has a yellow mark on the apex at the sides; the 3rd has a yellow band on the apex; the 4th a narrower one and the 5th a still narrower one; the 6th segment is raised and projects slightly at the apex; the 7th is small, obliquely narrowed towards the apex.

The antennae are broken off before the middle in my specimen. The genus *Cultrarius Daries* differs from *Metopius* in having the head small, narrower than the thorax, the 2nd joint of palpi normal, not abnormally swollen and the transverse median nervure in hind wings augularly broken above the middle.

Braconidae.

1. Celiestiella, gen. nov.

Fore wings with 3 cubital cellules. Radiale cellule elongate, reaching to the apex of the wings. Recurrent nervure interstitial with the first transverse enbital; the transverse

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median nervure is received in front of the transverse basal. The radius in the hind wings is almost obliterated; the cubitus does not reach to the apex of the wings; the pobrachial nervure is received in the middle of the praebrachial areolet; the stigma is thickened linear, longish. Head cubital, largely developed behind the eyes, which are widely separated from the base of the mandibles. Apex of elypeus broadly rounded; separated laterally by an oblique furrow from the face but not on the top. Ocelli in a triangle; the anterior placed in the centre of a deep eurved furrow. Maudibles large, broad at the apex, where there are two short blunt teeth, the upper of which is more distinct, larger and more rounded than the lower. Antennae slender, longer than the body. Prothorax large. Parapsidal furrows absent. Scutellum large, roundly convex. Post-sentellum distinct. Median segment not areolated, furrowed at the base. Legs longish; the hinder trochanters long, the basal joint fully 3 times longer than the apical, which is thicker. Abdominal petiole large, twice longer than broad; the base of the petiole is depressed; its sides at the base are broadly raised; the last segment is bluntly rounded. The abdomen is not much longer than the thorax. The occiput, especially at the sides, is sharply margined; the spiracles of the first segment are placed near the middle; the 2^{ud} cubital cellule is twice longer on the lower than on the upper side; the first transverse cubital nervore, the recurrent and the cubitus are bullated near their junction; the 2nd transverse cubital nervure is faint: the basal two abscissae of the radius are straight and oblique; the apical is slightly curved upwards; the tibial spurs are short; the radius issues from shortly behind the middle of the large stigma.

This genus does not fit very well into any of the families of *Bracouidae*; but may, for the present, be referred to the Meteorinae.

C. testaceipes, sp. nov. J.

Nigra; mandibulis scapoque antennarum rufis; pedibus pallide testaceis; alis hyrlinis, stigmate fusco. - Long: 4 mm. Hab. Simla (Nurse).

Antennae black; the scape and second joint rufous; the flagellum is thickly covered with short stiff hair. Head smooth and shining; the base of the clypeus with a row of punctures; the face and clypeus are thickly covered with short white pubescence; the edge of the elypeus is piceous. Mandibles rnfous; their teeth black; the long palpi are pale yellow.

(To be continued.)

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