

upper latus, and *scutum* are present, and the inner surface of the *right scutum* (*s*) and that of many of the subscutal scales of the peduncle can be seen projecting from beneath the opposing series. Circa $\times 2$ diam.

(Figs. 1 and 2 represent the three syntypes of *Loricula darwini*, H. Woodward, all three shells being much flattened transversely.)

- Fig. 3. A shell (the holotype of *L. pulchella*, G. B. Sowerby, Jun.) with the outer surface of the *left* side uppermost, and showing the *scutum* (*s'*), *upper latus* (*ul'*), and *carinal-latus* (*cl'*), the *carina* and *tergum* being absent from the capitulum. This shell has a much greater transverse convexity than those represented by figs. 1 and 2. Circa $\times 3$ diam.

PLATE IV.

Stramentum haworthi, S. W. Williston, sp. Senonian
(Niobrara series): Kansas, U.S.A.

- Fig. 1. Remains of two immature individuals. A, the *right* side of a shell with the inner surface uppermost, the *carina* only missing of the capitular valves, and the *scutum* (*s*) shows the adductor muscle-pit; the peduncle has only twelve scales. B, the lower part of a peduncle with its inner surface exposed. C, capitular valves probably belonging to B, and consisting of the linear *carina* (*c*), the *right carinal-latus* (*cl*), *left upper latus* showing inner surface, and paired *scuta* (*s*), the *left scutum* being broken and exposing the *right scutum* beneath. Circa $\times 6$ diam.
- Fig. 2. A fine example of a shell lying on its *right* side, and owing to the displacement of the capitular valves both the *left* and *right* valves can be seen, the *right scutum* (*s*) showing the adductor muscle-pit; the peduncle in the main shows the inner surface of the three median series of scales of the *right* side of the shell, except that the whole of the *left carino-lateral* scales (*cls'*) are present. Circa $\times 4.5$ diam.
- Fig. 3. A shell with the *right* side uppermost and showing the whole of the capitular valves, the *carina* (*c*) being somewhat incomplete. Circa $\times 4.5$ diam.

VII.—On Indo-Chinese Hymenoptera collected by R. Vitalis de Salvaza.—IV. By ROWLAND E. TURNER, F.Z.S., F.E.S.

Superfamily TENTHREDINOIDEA.

Family Tenthredinidæ.

Subfamily CIMBICINÆ.

Clavellaria (*Euclavellaria*) *marginata*, sp. n.

- ♀. Fusco-nigra; capite thoraceque obscure nigro-chalceis; propodeo nigro-æneo, apice anguste ochraceo-fasciato; tergitis nigris, opacis, apice anguste ochraceo-fasciatis, sternito apicali

ochraceo; clypeo labroque luteis; genis, mandibulis, apice excepto, antennis articulis quatuor basalibus, scutello, tibiis tarsisque fusco-ferrugineis; pronoto margine postico tegulisque ochraceis; alis subhyalinis, anticis basi et dimidio costali fortiter infuscatis, venis fuscis.

Long. 15 mm.

♀. Clypeus broad and transverse at the apex, not emarginate; labrum large, very broadly rounded at the apex. Antennæ longer than the thorax, the third joint about three times as long as the fourth; fifth as long as the fourth, gradually thickened from the base, and very distinctly separated from the club; sixth joint nearly as broad at the apex as long, not fused into the club; the joints beyond the sixth fused together, about twice as long as broad. Front and vertex closely and finely punctured-rugose; clypeus finely punctured and sparsely clothed with short black hairs; vertical area longer than broad, the lateral grooves only distinct posteriorly. Thorax finely and closely punctured-rugulose; scutellum moderately convex, with a distinct but shallow median groove. Propodeum sparsely punctured, with a strongly raised longitudinal carina which is almost tuberculate at the base. Abdominal tergites opaque, very finely and closely punctured. Third transverse cubital nervure straight, the second oblique.

Hab. Chapa, Tonkin, May 25, 1916.

This seems nearer to the East Siberian species *C. gracilentia*, Mocs., and to the Formosan *C. formosana*, Ensl., than to the two species already described from Tonkin, but is very differently coloured. The club of the antennæ is much more slender than in the European *C. americana*, corresponding in this character with the other Oriental species.

Abia vitalisi, sp. n.

♀. Purpurea; mandibulis, palpis, antennis tarsisque nigris; valvulis flavis; alis flavis, anticis cellula cubitali apicali infuscata; venis testaceis, apice fuscis.

Long. 14 mm.

♀. Robust, the whole insect with short black hairs. Front and clypeus closely and finely punctured, vertex much more sparsely punctured, cheeks smooth and shining. Clypeus very feebly emarginate at the apex, almost transverse. Eyes strongly divergent towards the clypeus. Antennæ seven-jointed, third joint slender, a little thickened towards the apex, twice as long as the fourth; fourth and fifth joints subequal

in length, broadened from the base, the fifth about half as broad again at the apex as the fourth, the sixth joint shorter by one-third and half as broad again at the apex as the fifth, seventh joint very stout, nearly as long as the sixth. Vertex with a deep, broad, longitudinal depression reaching to the ocellar region; eyes separated on the vertex by a distance equal to about two-thirds of the length of the third joint of the flagellum. Mesonotum closely and finely punctured; mesopleuræ convex, rather more sparsely punctured; scutellum obliquely sloped anteriorly, closely punctured. Abdomen robust, very closely punctured, the three basal segments with a shallow longitudinal impressed line in the middle; all the segments strongly depressed at the base. Tarsal unguis shallowly bifid at the apex.

Hab. Xieng Khouang, March 18. Described from three females.

The fuscous cloud at the apex of the fore wing is very variable in extent, and in one specimen is wholly absent. The species bears a strong superficial resemblance to the Chinese species *Athermantus imperialis*, Sm., which belongs to the Arginæ.

Subfamily ARGINÆ.

Pampsilota euterpe, sp. n.

♀. Nigro-purpurea; antennis nigris; abdomine ochraceo, propodeo tergitisque secundo tertioque transverse nigro maculatis; sternito apicali extremo apice nigro; alis fusco-violaceis, apice dilutioribus; venis nigris.

Long. 12 mm.

♀. Clypeus shallowly emarginate at the apex, minutely punctured and sparsely clothed with black hairs; frontal sulcus deep and broad, with strong lateral carinæ. Antennæ a little longer than the thorax, clothed with very short black hairs, the third joint thickened to the apex, below with two longitudinal carinæ, above rounded and without distinct carinæ. Vertical area very short and broad, not distinctly defined laterally. Head and thorax shining, almost smooth, the punctures microscopic; the dorsal surface of the thorax clothed with extremely short black hairs; the thorax much broader than the very small head. Abdomen broad, smooth, the vagina short and stout. Wings ample; the third abscissa of the radius about equal to the first and second combined; third transverse cubital nervure rather feebly

curved outwards above the middle ; second recurrent nervure interstitial with the second transverse cubital nervure.

Hab. Chapra, Tonkin, May 7-21, 1916.

Differs from the other Oriental species of the genus in the colour of thorax. The black marks on the basal tergites are not constant.

Subfamily *TENTHREDININÆ*.

Tribe *SELANDRIADES*.

Selandria cæruleiceps, Cam.

Selandria cæruleiceps, Cam. Mem. Manchester Lit. & Phil. Soc. xliii. p. 45 (1899). ♀.

Four males from Hanoi, taken in April, differ from the description of the females in having the legs entirely whitish, the base of the coxæ only black, and the tarsi infuscate at the apex. It is possible that these represent a distinct species, but as the difference may only be sexual, I do not think it would be justifiable to treat them as distinct. The costa is thickened before the stigma, so I follow Cameron in placing the species in *Selandria*, and not transferring it to *Stromboceros*, as is done by Konow.

Tuxonus varicolor, sp. n.

♀. Nigra ; antennis articulis 5 apicalibus, quinto basi infuscato, labro, pronoto, scutello, postscutello maculis tribus parvis, maculaque parva sub alis albis ; propodeo, segmentis abdominalibus duobus basalibus pedibusque rufo-testaceis ; tibiis posticis apice extremo, metatarsisque posticis, apice excepto, nigris ; tarsis posticis, basi nigris, luteis ; alis hyalinis, venis nigris, stigmate basi luteo-maculato ; alis posticis cellulis medianis clausis nullis.

Long. 9 mm.

♀. Clypeus broadly truncate at the apex ; head closely and strongly punctured, not narrowed behind the eyes ; vertical area broader than long posteriorly, narrowed anteriorly, a smooth shining space on each side of the area. Antennæ shorter than the abdomen, slender, third joint scarcely longer than the fourth, more than half as long again as the fifth, which is as long as the three apical joints combined. Mesothorax rather closely punctured ; scutellum flattened, shining, and very sparsely punctured. Hind coxæ broad and long, closely punctured, the hind femora reaching to the apex of the abdomen ; hind metatarsus stout, as long as the four apical tarsal joints combined. Second recurrent nervure

received just beyond the second transverse cubital nervure; the transverse nervure of the humeral cell very long and strongly oblique.

Hab. Hué, Annam, February 1915; 1 ♀.

This belongs to the section of the genus in which the cubitellan and discoidellan cells are not closed, the intercubitella and recurrentella being absent. The truncate clypeus and the lengthened hind coxæ are unusual in the genus. In the former character it resembles *T. rufobalteatus*, Cam., described as a *Siobla*, which seems to be its nearest relation.

Beleses atrofemoratus, sp. n.

♀. Testacea; antennis articulis 2-4, mandibulis apice, femoribus posticis, tibiis posticis apice, tarsis posticis, maculaque inter ocellos nigris; tergitis 5-7 in medio infuscatis; alis flavo-hyalinis, tertio apicali leviter infuscatis, stigmatè basi flavo, apice nigro.

Long. 10 mm.

♀. Mandibles broad, bidentate; clypeus short, minutely punctured, very feebly emarginate at the apex, almost transverse. Head closely and rather strongly punctured, not narrowed behind the eyes; vertical area a little broader than long, the lateral grooves well defined. Antennæ tapering to the apex, densely clothed with short hairs, the third and fourth joints subequal. Pubescence of the head and thorax blackish. Thorax sparsely and finely punctured, much more closely and coarsely on the mesopleuræ than on the dorsal surface. Abdomen smooth and shining. Hind metatarsus distinctly less than twice as long as the four apical joints of the hind tarsus combined, the fourth joint asymmetrical, scarcely half as long as the third; tarsal unguis bifid. Hind wing with a closed median cell, but without a closed cubital cell. The basal nervure of the fore wing reaches the costa at the point of origin of the cubitus.

Hab. Chapa, Tonkin, June; Thatom, Laos, September 1915.

Easily distinguished from *B. stigmaticalis*, Cam., and *B. fulvus*, Cam., by the black hind femora.

Tribe TENTHREDINES.

Siobla maxima, sp. n.

♀. Fulva; clypeo labroque flavis; mandibulis apice, mesonoto lateribus maculaque magna triangulari antice, mesosterno, propodeoque in medio nigris; tergitis apicalibus in medio sæpe in-

fuscatis; alis flavo-hyalinis, anticis apice leviter infuscatis, venis nigris.

Long. 17 mm.

♀. Clypeus finely punctured, transverse at the apex, labrum broadly rounded and sparsely covered with pale hairs. Head punctured-rugose, a little swollen behind the eyes; vertical area broader than long, the lateral furrows distinct. Eyes very distinctly convergent towards the clypeus. Antennæ nine-jointed; fourth and fifth joints subequal, combined about equal in length to the third. Thorax rather closely punctured; scutellum strongly convex, obliquely sloped from the base, rather abruptly truncate posteriorly. Propodeum with a longitudinal carina in the middle at the base; the basal tergites smooth, the fourth and two following tergites rather closely punctured on the sides. Hind coxæ rather long; hind femora stout, scarcely reaching to the apex of the abdomen; joints of the hind tarsi distinctly arcuate beneath, the hind metatarsus about equal in length to the four apical tarsal joints combined; tarsal unguis strongly bifid. Humeral cell divided far beyond the middle by a strongly oblique nervure; basal nervure half as far from the base of the cubitus as that is from the base of the radius.

Hab. Chapa, Tonkin, May and June 1916.

This is congeneric with *Siobla mooreana*, Cam., the type of *Siobla*, which belongs to the Tenthredininae, and is allied to *Macrophya*, though well distinguished by the oblique dividing nervure of the humeral cell. The genus is identical with *Encarsioneura*, Konow, which must sink.

Colochelyna fulva, sp. n.

♀. Fulvo-ochracea; flagello, articulis primo toto secundoque basi exceptis, tibiisque tarsisque posticis nigris; mandibulis flavis, apice nigris; clypeo, labro, propodeo, tibiisque tarsisque anticis intermediisque flavis; alis flavis, venis fulvis.

Long. 17 mm.

♀. Head narrower than the thorax; clypeus broadly truncate at the apex; eyes converging moderately towards the clypeus, very narrowly separated from the base of the mandibles; third joint of the antennæ nearly as long as the three following joints combined, the joints beyond the fourth gradually decreasing in length; vertical area half as broad again as long. Head and thorax closely punctured and clothed with very short golden hairs; the vertical area divided by a low longitudinal carina; scutellum strongly

convex, subconical; propodeum smooth and shining, with a median longitudinal carina; abdomen very closely and minutely punctured; mesopleuræ swollen below, but not tuberculate; vagina strongly exerted. Humeral cell of the fore wing divided beyond the middle by an almost perpendicular feebly curved nervure. Third abscissa of the radius twice as long as the second.

Hab. Chapa, Tonkin, May 27, 1916; 1 ♀.

This is nearly allied to *C. magretti*, Konow, which occurs in the same locality, but differs in the much paler colouring of the thorax and abdomen; in the longitudinal carina of the propodeum, which almost reaches the apex, but in *magretti* is only represented by a tubercle at the base; in the less strongly swollen mesopleuræ, and in the black antennæ and hind tibiæ and tarsi.

Tenthredella vitalisi, sp. n.

♀. Ochracea; mandibulis apice, antennis, tibiisque tarsisque posticis nigris; mandibulis, clypeo labroque flavis; alis flavis, apice late fuscis; scutello mesopleurisque infra tuberculatis.

♂. Feminae similis.

Long., ♀ 15 mm., ♂ 14 mm.

♀. Clypeus emarginate; labrum long, narrowly rounded at the apex and sparsely punctured. Eyes converging toward the clypeus; antennæ clothed with very short black hairs, the third joint about one-quarter longer than the fourth; frontal sulcus with strongly raised lateral carinæ which are raised into rounded tubercles above the base of the antennæ, and extend posteriorly to the hind ocelli; vertical area broader posteriorly than long, but as long as the anterior breadth, finely and closely punctured and divided by a very shallow longitudinal groove. Thorax finely and closely punctured; scutellum raised into a conical tubercle; the mesopleuræ produced into a large blunt tubercle below, very distinctly carinate behind the tubercle; mesosternum with an acute tubercle on each side before the intermediate coxæ. The fuscous border of the fore wing reaches to the apex of the stigma.

Hab. Chapa, Tonkin, May 27, 1916; 1 ♀. Tong King, Haut Mékong, April 13, 1918; 1 ♂.

This belongs to the group of *T. xanthoptera*, Cam., and may be distinguished from other species of the group by the wholly black antennæ and the wholly ochraceous abdomen.

Superfamily ICHNEUMONOIDEA.

Family Braconidæ.

Subfamily BRACONINÆ.

Medinoschiza laosensis, sp. n.

♀. Nigra; capite, thorace, pedibus anticis intermediisque, tibiisque tarsisque posticis testaceis; antennis, mandibulis apice, mesonotoque antice lateribusque nigris; alis flavis, apice leviter infumatis, macula magna ante stigmatis basin fusca.

Long. 14 mm., terebræ long. 13 mm.; antennarum, long. 11 mm., 65-articulatis.

♀. Head large, cubical; eyes oval, temples as broad as the eyes; cheeks long, more than half as long as the eyes, slightly concave. Face sparsely and rather finely punctured, sparsely clothed with long brown hairs; vertex and front smooth and shining, the front between the anterior ocellus and the base of the antennæ rather deeply excavated, the concave area not reaching the eyes. Thorax smooth and shining; notauli narrow but distinct; scutellum not separated by a groove from the mesonotum. Median segment shining; with a few small scattered punctures, each bearing a black hair; the sides of the segment and the hind coxæ more closely punctured. First tergite about half as long again as broad, the marginal lateral carinæ very strong, the longitudinal lateral grooves transversely rugulose; the raised median portion with two longitudinal carinæ, the space between them smooth and shining, the space between them and the lateral grooves longitudinally rugulose. Second tergite broadened from the base, twice as broad at the apex as long, irregularly obliquely striated; with a large, smooth, and shining diamond-shaped basal area, from the apex of which a carina runs to the apex of the segment; second suture strongly crenulate; tergites 3-5 smooth and shining, the basal angles of the third with an area separated from the rest of the tergite by a shallow groove. The apical tergites testaceous brown, microscopically punctured, and sparsely clothed with fulvous hairs. Hypopygium pointed, projecting beyond the apical tergite; valvulæ clothed with very short hairs. Legs densely clothed with short hairs; hind metatarsus as long as the three following joints combined; calcaria short, about one-quarter of the length of the hind metatarsus. Radius originating at one-third from the base of the stigma; second abscissa of the radius very long, longer than the third; recurrent nervure interstitial, nervulus very slightly

postfurcal. The fuscous spot on the fore wing occupies the base of the first cubital cell and the upper basal portion of the first discoidal cell.

Hab. Xieng Khouang, Laos, May 13, 1919.

Closely related to the type of this genus, *M. cratocephala*, Cam., from the Solomons, though very different in colour. The form of the head and the distinctly postfurcal nervulus seem to be the chief characters dividing the genus from *Ipobracon*, to which it is very close.

Medinoschiza excerpta, sp. n.

♀. Very similar to *M. laosensis*, but is less robust; the wings are without a fuscous mark; the hind legs and the apical tergites wholly black; the third tergite coarsely rugose on the sides, and the sculpture on the two basal tergites closer.

Long. 11 mm.; terebræ, long. 11 mm.

Hab. Tonkin, May 1917.

I think the colour-differences, combined with the differences in the sculpture of the abdomen, are sufficient to separate this from *laosensis*; but the range of variation in the family is still little understood.

Chaoilta intrudens, Sm., subsp. *nigriscapis*, nov.

♀. Differs from the typical form from Celebes in having the scape entirely black.

Hab. Muong You, Luang Prabang, May 25, 1919; 1 ♀.

Not recorded from any intermediate locality.

Subfamily *EXOTHECINÆ*.

Spinaria attenuata, Westw.

Spinaria attenuata, Westw. Tijdschr. f. Entom. xxv. p. 30 (1882). ♀.

Subsp. *flavostigma*, nov.

♀. Differs from the typical form from Borneo in having the stigma entirely clear yellow, and a large yellow patch below the stigma occupying the whole of the first cubital cell excepting the extreme base.

Hab. Luang Prabang, September 15, 1917.

Subfamily *RHOGADINÆ*.

Megarhogas indochinensis, sp. n.

♀. Testacea; pedibus anticis intermediisque palpisque pallide

flavo-testaceis; alis hyalinis, anticis in medio hic illic fusco leviter suffusus, venis flavo-testaceis; stigmatе magno, dimidio basali piceo, dimidio apicali pallide flavo.

Long. 12 mm.; antennarum long. 16 mm.

♀. Eyes large and prominent, widely emarginate in the middle of the inner orbits; ocelli large, narrowly separated from each other; vertex short, narrowed rapidly behind the eyes, the occipital carina feebly arched. Vertex smooth and shining, face closely and rather finely punctured, raised along the median line, cheeks very short; antennae very long and slender, about 83-jointed; maxillary palpi very long and slender. Notauli deep, minutely crenulate, the mesonotum finely and closely punctured, mesopleurae rather sparsely punctured. Median segment with a distinct median carina and several lower transverse carinae on each side, an irregular undulating carina on the lateral margin of the dorsal surface; the sides of the segment finely rugulose, with short strong striae above. Abdomen finely longitudinally rugulose on the dorsal surface, subpetiolate, the two basal tergites with a strong median longitudinal carina; first tergite broadened from the base, three times as long as its apical breadth, the spiracles situated at about two-fifths from the base, the apical angles produced into a very distinct tubercle on each side; second tergite about twice as long as its apical breadth, about three-quarters of the length of the first segment, second suture strongly crenulate; third tergite as broad at the apex as long, very little more than half as long as the second; fourth and fifth tergites the broadest; terebra very short. Hind calcaria short and curved, shorter than the fourth joint of the hind tarsi. Radius in hind wing strongly upcurved in the middle; first transverse cubital nervure meeting the cubitus at right angles; second abscissa of the radius long, strongly swollen at the base, and distinctly curved on the basal third.

Hab. Muong You, Luang Prabang, November 13; 1 ♀.

Very nearly related to *M. mindanaensis*, Baker, but seems to be paler in colour, the first tergite seems to be somewhat more slender, there is no median carina on the third tergite in the present species, and the hind calcaria seem to be somewhat shorter. *Troporhogas*, Cam. (1905), must, I think, sink as a synonym of this genus.

Subfamily MACROCENTRINÆ.

Macrocentrus tricoloratus, sp. n.

♀. Nigra; mandibulis, apice excepto, palpis, clypeo, orbitis, pro-

thorace, tegulis, mesopleuris postice, segmento mediano lateribus, sternitis tribus basalibus, pedibus anticis intermediisque tarsisque posticis pallide flavis; antennis articulis octavo sequentibusque pallide testaceis; tergitis duobus basalibus, tertio dimidio basali, terebra, pedibusque posticis ferrugineis; alis hyalinis, iridescentibus, venis nigris, stigmatè dimidio basali sordide flavo.

Long. 9 mm.; terebræ long. 10 mm.

♀. Antennæ more than 45-jointed, the extremity broken, third joint long, at least as long as the third joint of the maxillary palpi, more than half as long again as the scape. Face broad, finely punctured; eyes parallel; posterior ocelli separated from the eyes by a distance distinctly greater than their diameter. Mesonotum smooth and shining; notauli deep and crenulate; the depressed portion of the mesonotum behind the median lobe irregularly transversely striated. Scutellum sparsely punctured; median segment rugose-reticulate; pleuræ shining, sparsely punctured. Abdomen slender, longer than the head, thorax, and median segment combined, inserted higher than the hind coxæ; the three basal tergites very finely and closely longitudinally striated; the third at the apex and the following segments very distinctly and rather closely punctured, and sparsely clothed with short grey hairs; first tergite about half as long again as the second, very little broader at the apex than at the base; second tergite twice as long as broad; third longer than broad; fourth broader than long. Valvulæ clothed sparsely with short black hairs. Second abscissa of the radius twice as long as the first; second transverse cubital nervure scarcely more than half as long as the first abscissa of the radius. Nervulus slightly postfurcal.

Hab. Xieng Khouang, Laos, April 19, 1919.

Superfamily VESPOIDEA.

Family Psammocharidæ.

Cryptochilus auranticornis, sp. n.

♀. Nigra; nigro-pilosa; antennis aurantiacis; tibiis tarsisque brunneo-ferrugineis; mandibulis in medio, clypeo macula basali, orbitisque fusco-ferrugineis; alis flavis, basi ad nervulam basalem infuscatis, apice extremo leviter infuscatis; venis fulvis, basi nigris.

Long. 32 mm.

♀. Clypeus finely shagreened, with a few large setigerous punctures, broadly truncate at the apex. Antennal tubercles

prominent, rounded; antennæ long, slender at the apex, second joint of the flagellum more than twice as long as the scape. Front finely transversely rugulose, with a shallow median sulcus reaching to the anterior ocellus, vertex microscopically punctured. Head and thorax clothed with black hairs; pronotum widely arched posteriorly, the arch not angled in the middle; scutellum rather strongly convex. Median segment transversely striate; the striæ moderately coarse, but not much elevated, a low blunt tubercle on each side near the basal angles; the posterior slope gradual, not sharply divided from the dorsal surface. Abdomen shining, clothed with minute, close-lying, black hairs; the apical tergite densely clothed with long, stout, dark hairs. Legs long, length of hind tibia 11 mm., of hind metatarsus 8 mm.; hind tibia serrate, tarsal unguis unidentate. Second abscissa of the radius nearly as long as the third; first recurrent nervure received very distinctly before the second transverse cubital nervure; second just beyond one-third from the base of the third cubital cell.

Hab. Than Moi, Tonkin, June 20, 1917; 1 ♀.

This closely resembles superficially *Hemipepsis sycophanta*, Grib., but is a more slender insect and belongs to a different genus. Throughout the larger Psammocharidæ these superficial resemblances between species of different genera from the same locality are common. Whether the tarsal unguis of the male of this species are unidentate or bifid remains to be seen.

Cryptochilus fulvus, sp. n.

♀. Nigra; capite, prothorace, mesonoto, scutello, postscutello, abdomine segmentis tertio apice, quarto, quinto, sextoque, pedibusque aurantiacis; coxis intermediis posticisque nigris; alis flavis, margine apicali anguste fuscis; unguiculis unidentatis.

♂. Feminæ similis; fronte, coxis anticis, trochanteribus, femoribusque intermediis posticisque basi nigris; unguiculis bifidis.

Long., ♀ 15-20, ♂ 13 mm.

♀. Clypeus broadly subtruncate at the apex; labrum broadly truncate. Frontal prominence well developed, forming a bilobed projection between the antennæ; second joint of the flagellum about half as long again as the scape. Pronotum with an indistinct longitudinal sulcus in the middle, broadly and shallowly arched posteriorly; the head and dorsal surface of the thorax rather sparsely clothed with short close-lying golden hairs. Median segment very closely transversely rugose-striate, truncate posteriorly, the posterior

truncation not sharply divided from the dorsal surface. Abdomen shining, very finely coriaceous, with scattered punctures; the apical segment densely clothed with coarse golden hairs. The transverse groove near the base of the second sternite is almost straight. Hind tibiae strongly serrate. Second abscissa of the radius longer than the third, the first and fourth about equal. First recurrent nervure received at about four-fifths from the base of the second cubital cell, second distinctly before the middle of the third cubital cell. Cubitus of the hind wing originating distinctly beyond the transverse median nervure.

♂. Clypeus narrower than in the female, the eyes converging below, not parallel as in the female. Hind tibiae spined, not serrate. Seventh tergite broadly subtruncate at the apex.

Hab. Vien Than, May and June 1915; also from Mergui and Middle Tenasserim (*Bingham*).

This is the species figured by Bingham (*Journ. Bombay Nat. Hist. Soc.* 1895) as *Sphex flava* of Fabricius; but it does not correspond to the description, several of the apical segments being fulvous in this species, only one in *flava*. I feel confident that Dahlbom was right in his identification of *flava* after consulting the Fabrician collection. Probably the type was in that collection, as Fabricius makes no statement to the contrary. But Fabricius evidently had a very confused idea of his own species, as a specimen identified by him as *flava* in the Banksian collection is a female with bifid tarsal unguis, and from his description of a variety in *Ent. Syst.* I suspect that he has also confused *Batozonus unifasciatus*, Sm., with *flava*. Bingham, in 'Fauna of British India' (1897), after examining the specimen labelled *flava* in the Banksian Collection, still regarded this species as an extreme variety of *flava*. But he cannot have noticed the tarsal unguis. In the same work Bingham rightly sinks *Priocnemis humbertianus*, Sauss., as a synonym of *flava*, though it is undoubtedly distinct from the specimen in the Banksian Collection. As the matter stands, I consider we have three species which have been confused by Bingham under *flava*:—

1. *Cryptochilus flavus*, Fabr.

Sphex flava, Fabr. *Syst. Ent.* p. 352 (1775).

Priocnemis flavus, Dahlb. *Hym. Europ.* i. p. 457 (1845).

Priocnemis humbertianus, Sauss. *Reise de Novara, Zool.* ii. p. 63 (1867).

♀ ♂.

In this species the tarsal unguis are unidentate in both sexes.

2. *Cryptochilus falsus*, sp. n.

Described above. Tarsal unguis unidentate in the female, bifid in the male.

3. *Cyphononyx peregrinus*, Sm, ab. *disjunctus*, n.

♀ ♂. Differs from the typical *peregrinus* in the colour of the wings, which are yellow, with a narrow apical fuscous margin, not fusco-violaceous entirely as in the typical form. The tarsal unguis are bifid in both sexes. This is the prevalent form in Western India, but occurs with the typical form in Sikkim. I have taken it in Ceylon, and its range also extends to China and Pegu, though in Further India and the Indo-Malayan region the dark-winged form is dominant. The genitalia of a Western yellow-winged male differ slightly from those of a Burmese dark-winged male, but the difference is so slight that I do not think it would be justifiable to treat it as a separate species. This is the *Sphex flava* of the Banksian Collection.

Cryptosalius tonkinensis, sp. n.

♀. Nigra; femoribus posticis ferrugineis, apice nigris; tergitis 4 basalibus fasciis utrinque apicalibus argenteo-sericeis; alis fusco-hyalinis, venis fuscis.

Long. 15 mm.

♀. Clypeus short and broad, truncate at the apex; labrum exposed, broadly truncate at the apex. Antennæ stout, about as long as the head, thorax, and median segment combined, not tapering much to the apex, the second and third joints of the flagellum subequal. Front feebly convex, with a short impressed longitudinal line, which does not reach halfway to the anterior ocellus; the frontal prominence above the antennæ rather narrowly rounded at the apex. Eyes reaching to the base of the mandibles, temples obsolete. Head and thorax opaque, rather sparsely punctured, with very minute close punctures between the larger punctures. Pronotum short, no longer than the scutellum, rounded at the anterior angles, the posterior margin very broadly and feebly arched. Median segment broader than long, obliquely sloped posteriorly, the apical half of the dorsal surface strongly transversely striate, a deep sulcus from base to apex, the basal half delicately transversely rugulose. Tarsal unguis bifid; hind tibiæ almost smooth, with a few minute spines. Second and third abscissæ of the radius subequal in one specimen, in another the third distinctly the longer; second

recurrent nervure joining the cubitus at right angles at the middle of the third cubital cell.

Hab. Chapa, Tonkin, May and June 1916.

This has the third cubital cell longer than in *C. rava*, Bingham, and the pronotum distinctly shorter, but is certainly congeneric. The genus is very near *Lissocnemis*, Kohl., but differs in the absence of the mark at the base of the discoidal cell which is present in *Lissocnemis* as in *Hemipepsis*. To *Lissocnemis* must be assigned the Indian *Salius brevipennis*, Cameron.

VIII.—*Sur quelques Trechinæ [Coleoptera, Carabidæ] du British Museum.* Par R. JEANNEL.

I. ESPÈCES AMÉRICAINES.

Genre CNIDES, Motschoulsky.

Cnides, Motschoulsky, 1862, Études entom. xi. p. 38 (génotype: *C. rostratus*, Motsch.).

Dans la diagnose du genre *Cnides* par Motschoulsky, se trouvent des erreurs grossières concernant la forme du labre et du menton. Mais malgré cela, les caractères assez extraordinaires du genre sont suffisamment indiqués pour permettre de conserver le nom donné par Motschoulsky. Putzeys, dans sa "Monographie" (Stett. ent. Zeit. 1870), range d'abord *Cnides* parmi les sous-genres de *Trechus*, Clairv. (p. 9), mais plus loin, à propos de l'espèce *T. rostratus*, Motsch., il paraît plutôt rejeter entièrement cette coupe (p. 189).

En réalité, comme l'avait observé Motschoulsky, *Cnides* se rapproche davantage des *Perileptus* que des *Trechus*. Comme chez les premiers la strie suturale n'est pas récurrente et le quatrième article des tarses porte une expansion lamelleuse ventrale; mais chez *Cnides* les palpes ne sont pas subulés.

Diagnose.—Tête avec des sillons frontaux arqués, complets; yeux glabres. Labre transverse, échancré; labium non soudé, avec sa dent médiane saillante, bifide. Dernier article des palpes conique, mais un peu plus grêle que le précédent. Pronotum à angles postérieurs saillants. Élytres sans bourrelet basal; strie suturale toujours entière, souvent seule indiquée, très rapprochée de la suture à la base, s'en écartant fortement au milieu. À l'apex il n'existe pas de bourrelet apical, la strie suturale se continue par la gouttière



Turner, Rowland E. 1920. "On Indo-Chinese Hymenoptera collected by R. Vitalis de Salvaza. IV." *The Annals and magazine of natural history; zoology, botany, and geology* 5, 84–98.

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