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OF THE

ASIATIC SOCIETY OF BENGAL.

VOL. LVII.

PART II. (NATURAL HISTORY, &C.)

(Nos. I. to V.—1888.)

EDITED BY

J. WOOD-MASON, Esq.,

VICE-PRESIDENT.

"It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science in different parts of Asia will commit their observations to writing, and send them to the Asiatic Society at Calcutta. It will languish, if such communications shall be long intermitted; and it will die away, if they shall entirely cease." SIR WM. JONES.

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XIII.—New or little known Indian Rhynchota.—By E. T. Atkinson, B.A.

[Received May 15th, 1888;—Read June 6th, 1888.]

(With Plate XV.)

COSMOSCARTA NIGROFASCIATA, n. sp., Pl. XV, lower left hand figure.

Orange yellow: two broad transverse bands on each tegmen, the one before, the other in the middle, black; apex of tegmina finely reticulated blackish: pectus (except the lateral margins), and fine margin of the base of the segments of the abdomen above and beneath, black: feet yellow-ochreous: wings fuscous hyaline. Long, 15: exp. teg. 39 mill.

Hab. Mungphu (Sikkim). Through some misconception the figures in Plate XV. have not been numbered.

COSMOSCARTA TAPROBANENSIS, n. sp.

Above black: face, broad median longitudinal band on vertex, a regularly undulating transverse line across the middle of the pronotum, antero-lateral margins of the pronotum, basal third of each tegmen, and a transverse line at base of apical third which is slightly interrupted towards the posterior margin, also the scutellum and the genitalia in \mathcal{Q} , red: the red basal third of the tegmina contains two oblique irregular bands, the basal formed by three black spots of which the largest is at the costal margin, and the second comprising 3-4 irregular black spots, of which the largest is at the posterior margin: abdomen above reddish, a broad black transverse band at the base, interrupted by the scutellum, which has a small round black dot in the middle of the disc; apical half of abdomen fuscous: beneath and feet, red; pectus and a row of spots on each side of the ventral segments, black. Long, 9: exp. teg. 21 mill

Hab. Pundaloya (Ceylon): from Mr. E. E. Green,

COSMOSCARTA UNDATA, Walker.

J. A. S. B. pt. ii, p. 10 (1885).

Var. tripunctata n., Pl. XV, upper left hand figure.

- affinis n.

The ordinary forms of this species have the markings on the tegmina broadly suffused with reddish-testaceous, and vary chiefly in the depth of the croceous band on the thorax, and in having the apical band on the tegmina continuous or formed of three spots. I have since received two specimens which I regard as varieties of this species, though at first sight appearing to be distinct.

a:—Var. affinis, in which the rufous-testaceous bands at the base and in the middle are reduced to narrow lines, and the apical band to three somewhat distant spots arranged in a triangle. Long, 11: exp teg. 30 mill.

b:—Var. tripunctata, mihi, in which the basal and median bands on the tegmina are entirely absent and the three apical spots are small and semi-oval and arranged triangularly: base of wings not rufescent. Long, 12: exp. teg. 30 mill.

Hab. Var. a, Dibrugarh (Assam); Var. b, Dam-Dim (Bhután Duárs).

COSMOSCARTA OCTOPUNCTATA, Am. & Serv. Pl. XV, lower right hand figure.

Cercopis octopunctata, Hist. Nat. Ins. Hém., p. 559, t. 10, f. 6 (1843): Walker List Hom., iii, p. 656 (1851).

Cercopis dorsalis, Walker ((n. b. l.), J. Linn. S. Zool. x, p. 283 (1867). Cosmoscarta octopunctata, Butler, Cist. Ent. i, p. 262 (1874).

A very distinct species: orange-yellow: five black spots on each tegmen of which two before, and two behind, the middle, the fifth on the posterior margin about the middle, and which, when the tegmina are closed, becomes confluent with the similar spot on the other tegmen, so as to make both appear one: there is sometimes another black spot before the reticulated part on the costal margin: pectus, except the lateral margins, and base of the segments of the abdomen above and beneath, black: antero-lateral borders of the pronotum much amplified and flattened out at the margin. Long, 17: exp. teg. 42 mill.

Hitherto only known from Java and Sumatra, now found at Mungphu in Sikkim. A second example has the thorax more amplified, shining, and only eight black spots on the tegmina.

COSMOSCARTA GREENI, n. sp.

Head and eyes deep black, the head yellow-pilose: ocelli yellowish with red reflections: pronotum sordid orange-yellow, pilose, with two small impressions near the anterior margin, darker; metanotum black, margined ochreous: tegmina black, basal fourth of the posterior margin, basal third of the costal margin and therefrom a transverse band proceeding somewhat obliquely towards the posterior streak and almost meeting it, also three spots arranged in a triangle in the apical third, and of which the cordiform apical is largest, red: wings semihyaline, basal third reddish orange, rest fuscous: abdomen above black, with a narrow transverse basal band, reddish-ochreous: pectus, venter and feet black;

venter with a reddish-ochreous band towards the base; last tibiæ sometimes sordid yellow. Long 10: exp. teg. 26 mill.

Hab. Pundaloya (Ceylon): Mr. E. E. Green. Allied to C. undata,

Walker, from which it differs in coloration and the smaller size-

Cosmoscarta nigra, n. sp.

Body and feet deep black; abdomen and venter deep metallic bluish-black, shining: tegmina brownish-black; wings fuscous. Long, 12: exp. teg. 34 mill.

Hab. Sikkim.

COSMOSCARTA LURIDA, n. sp.

Head, pronotum, pectus and feet, also band along basal two-thirds of costal margin of tegmina, lurid: abdomen above and beneath black, with a bronzy tinge: tegmina (except the costal limbus), luteous: wings fuscous-hyaline. Long, 15: exp. teg. 36 mill.

Hab. Singapore.

Cosmoscarta sikkimensis, n. sp.

Frons and feet fuscous: vertex and thorax black, densely yellow pilose, the latter with a band along the anterior margin, narrow anterior lateral limbus and posteriorly, sordid fuscous: tegmina black, a short basal streak briefly produced along costal and posterior margins, a transverse band at the base and apex of the middle third, and the apical limbus indistinctly, red: wings fuscous-hyaline, red at the base and for a short distance along the anterior margin: abdomen purplish-black, shining, with a deep castaneous, narrow, basal, transverse streak, Long, 14: exp. teg. 33 mill.

Hab. Sikkim.

COSMOSCARTA MINOR, n. sp.

Head and thorax metallic bluish-black, shining, the latter finely impressly punctured: base and apex of abdomen reddish, a broad transverse median band, brownish-black: tegmina blackish with a basal streak giving off a short sub-costal branch and two transverse bands, one at the base and the other at the apex of the middle third, red: wings fuscous-hyaline: feet brown; posterior coxæ and femora often more or less croceous or reddish. A small species, allied to the C. decisa, Walker, group. Long, 7 exp. teg. 21 mill.

Hab. Sikkim: Dam Dim (Bhután Duárs).

COSMOSCARTA DECISA, Walker (Pl. XV: upper right hand figure).

A local variety of this species, described in Journal Pt. II, p. 9 (1885), is figured here from Dam Dim in the Bhután Duárs.

CALLITETTIX AFFINIS, n. sp.

Black with a greenish tinge: head beneath, scutellum, anal segment of abdomen above and beneath, tegmina and feet, testaceous-red: apex of tegmina with a narrow black limbus: wings fuscous-hyaline: abdomen above and beneath (except the red anal segment), and the pectus, black. Long, 9: exp. teg. 23 mill. Differs from C. producta, Stål, in the colour of the abdomen and scutellum and its larger size.

Hab. Pundaloya (Ceylon): Mr. E. E. Green. C. melanochra, Stål, has been procured in Sikkim.

Genus Machærota, Burm.

J. A. S. B. pt. II, p. 23 (1885); p. 196 (1886).

I have already noticed four species of this genus, a fifth (M. pugionata, Stål) has been described from N. Australia, and a sixth (M. guttigera) by Professor Westwood from Ceylon (Trans. Ent. Soc., p. 329, 1886). I have had one specimen from Nagpur, but too much mutilated for description, also several specimens of the larvæ from Sikkim, and of the curious tubular home formed by these insects in the larval state, I have procured several specimens on the common jujube (Zizyphus) in Calcutta. These tubes are serpuliform and resemble the letter J without the transverse bar at the top; the foot, too, is curved over to embrace the twig on which they rest, and the length varies from half to two-thirds of an inch.

Professor Westwood's paper contains an interesting account of the formation of this tube by Mr. S. Green of Colombo, the substance of which I reproduce here. Mr. Green writes:—The larva resides in a tube which is fixed on a twig or leaf-stalk of the Suriya tulip-tree (Adansonia digitata) on the end of the branches, and appears to be commenced and finished by the insect whilst in the larval state. The newly hatched larva is a little tiny creature of an orange colour in the midst of a spot of froth in which it moves about and, in this state, commences to form the tube. When the foundations have once been laid, the larva, in a horizontal position, encloses, with a wall, a space sufficient to contain itself in a perpendicular position, with its head downwards. It is then seen continually working its anus against and round about the inside of the tube near its orifice, at intervals, both day and night; the anus discharges a clear water-like fluid which falls drop by drop from the tube. The

insect has a life of some weeks in the larval state and never shows itself outside the tube until it is ready to assume the perfect state. Then the pupa comes out tail first, and takes up a position on the top of the tube (transversely like the letter T) and in the middle of the bubbles. In about ten minutes it completely extricates itself from its old skin and the curved horn on its thorax seems to uncurl.

The & appears to be considerably smaller and of a darker colour.

The full sized larva-tubes are about half an inch long and about a line in diameter. They are about the thickness of writing-paper, of a dirty whitish colour, with the surface finely transversely wrinkled. The basal portion is dilated and curved so as partially to clasp the twig on which it is fixed. In this manner the bottom of the tube is closed and, as the iusect resides in it with the head downwards, Mr. Westwood remarks: "I do not understand how it can obtain nourishment from the plant through its delicate rostrum, unless it occasionally emerges from its abode which, of course, is stationary." The immature insect differs from the imago in the usual manner, having the wings only visible in a rudimental condition in the pupa state, in which the only appearance of the large curved dorsal horn is seen in a very small dorsal protuberance in the middle of the hind part of the thorax.

Mr. Westwood observes that the water expelled by these insects is of the same nature as the 'cuckoo-spit' of the English Aphrophora spumaria, being the fluid excrement of the larva, consisting of the juices of the plant on which it subsisted, and which, being discharged, with very little alteration in its nature, drop by drop, from the anus of the insect, forms an accumulated moistened mass which keeps the body of the insect in a moist condition until it is ready to assume the perfect state. The insect does no injury to the tree or to the branch on which it feeds.

Mr. F. Ratte (in Proc. Linn. Soc. N. S. Wales, ix, p. 1164, 1885) describes the occurrence of similar larva-cases in Australia. He shows that these cases contain three-fourths of carbonate of lime, some being helicoidal and others conical, resembling some fossil and recent Serpulæ. The conical are usually found on Eucalyptus, the opening turned upwards and the larva being placed in it with the head downwards. In the helicoidal shells, the insect lies horizontally for the greatest part of its larval life. In both instances, it follows that the larva presents its tail to the opening, instead of its head. It introduces its rostrum through a longitudinal slit into the bark of the stem on which the case is fixed [but in the cases before me I have not been able to discover the slit] and emits at intervals from its anus a drop of clear water at the entrance of the shell.

Specimens of the Ceylon and Indian tubes are deposited in the Indian Museum.

THAMNOTETTIX NIGRO-PICTA, Stål, Ofvers. K. V. A. Förh. p. 740 (1870).

Q. Yellow-virescent, smooth, shining: with the face, anterior subimpressed, transverse line on the vertex, anterior margin of the pronotum, scutellary and commissural margins of the clavus, a spot before the
middle extended to the claval suture and there acutely produced hindwards, and third apical part of corium, pectus, abdomen, greatest part of
the femora, anterior tibiæ and the tarsi, black: the last tibiæ at the source
of the spines spotted black: ventral incisures flavescent. Closely allied
to T. bipunctata, Fabr. (J. A. S. B. Pt. II, p. 111, 1885), differs in having
the head shorter, more obtuse, anteriorly obtusely rounded, and in the
marking. Head as broad as the thorax, but somewhat shorter; vertex
a little longer in the middle than at the eyes, hardly twice as broad as
the eyes, anteriorly within the margin transversely sub-impressed. Long,
5; broad, 1½ mill.

This species was described by Stål from the Philippines. It has since been procured from Borneo, Sumatra, Ceylon (mihi) and various parts of India (mihi) and will easily be recognised as one of the small green insects that suddenly appear towards the end of the rains (September usually) in Calcutta. During the few days that they occur they may be found at night in considerable heaps beneath the lamps in the public streets, and they disappear as abruptly as they come. T. bipunctata, Fabr, appears at the same time. M. Lethierry of Lille has been good enough to identify this species for me.

Fulgora connectens, Atkinson (Pl. XV; middle figure and head to left.)

This beautiful species has already been described by me (J. Pt. II, p, 130, 1885), and I am now enabled to give a figure drawn by Babu B. L. Das. (Type in Indian Museum.)

FULGORA AMPLECTENS, Atkinson (Pl. XV; lower middle figure and head.)

This species has also been described (l. c. p. 133) and the figure has been drawn by the same artist. (Type in Indian Museum.)

Fulgora and and and Ensis, Distant. (Pl. XV: upper middle figure and head to left).

This species has been described (l. c. p. 135) and the present figure represents the interesting variety from the Nicobar islands referred to in the description already given (l. c. p. 136). There is little doubt that in this genus, the shape and size of the cephalic process must, in many cases, be looked to for specific characters rather than the markings on

the tegmina, and for this reason a side view of the cephalic process in these three species is given. (Variety in Indian Museum.)

J. A. S. B. Pt. II, p. 200, 1885:—Pyrops nobilis Westw., includes Pyrops servillei, Spinola (A. S. E. F. viii, p. 237, t. 2, f. 1, 1839) from Java. I have seen a specimen of the former from Malacca which differs in no respect from Spinola's description and figure, except perhaps in the lighter colour of the thorax and cephalic process, and this difference may be due to the action of preservatives. P. javanensis, Dist. has also been procured from Singapore.

POLYDICTYA AFFINIS, n. sp.

Frons, vertex and thorax, dark tawny: abdomen above sanguineous, apical half above and beneath more ochreous and with blackish patches; a white irised black dot on each side of the anterior segments: tegmina bluish-virescent from the base nearly to the middle, the bluish colour more distinctly seen beneath; brownish towards the apex, veins brown; wings vermillion at the base, thence semihyaline, veins brown: venter and feet dark tawny; first tibiæ darker; last tibiæ 4-spinose: tegmina nearly equally broad throughout, scarcely amplified towards the apex. Long, 19: exp. teg., 58 mill.

Hab. Sikkim.

Messena sinuata, n. sp.

Frons tawny, levigate, shining, with a blackish limbus at the vertex marked by two rows of very minute yellow-brown dots: vertex and pro- and meso-notum darker, with several irregular, minute, black dots: metanotum and the abdomen above and mesostethium sanguineous, apex of abdomen and the genitalia covered with a white flocculent substance: tegmina with a broad reddish patch reaching the posterior margin for two-thirds the length from the base, and the costal margin for one-third, marked by numerous, irrregular, transverse black streaks, and bounded, towards the apex, by a nebulous interrupted band of brown marks, between which and the apex is a broadish transverse patch and some small spots, brown and black; apical part semi-hyaline closely reticulated, veins brown: wings white, semi-hyaline, with a fuscous patch along the anterior margin becoming broader and darker from the base to about two-thirds the length where it abruptly ceases; also three large black spots towards the apex and between them and the apical margin some minute black dots: first femora (except the apex internally) and the intermediate pair of feet, tawny: first femora at the apex internally and last pair of feet dark brown, first tibiæ thickly spotted dark 340

brown: venter with transverse bands and marginal row of spots, black.

Frons very broad, broader than the pronotum which is about as long as the vertex: head prominulous before the eyes which are spinose beneath: tegmina slightly sinuate on the costal margin behind the middle, apical margin anteriorly broadly rounded, posteriorly subquadrate, posterior margin somewhat straight: first femora gradually amplified from base to apex; first tibiæ dilated throughout, last tibiæ 6-spinose. Long, 15: exp. teg., 46 mill.

Hab. Trivandrum (S. India): Mr. H. Ferguson; May.

MESSENA BURMANICA, n. sp.

Frons, vertex and thorax dark reddish-tawny: eyes darker, spinose beneath; antennæ truncate with a rather long filiform process at the apex: abdomen above sordid ochreous, basal third darker: tegmina with the basal fourth tawny, varied virescent and with a quadrate, black spot on the disc, apical three-fourths whitish, veins tawny, an irregular black patch near the commissure, and an irregular row of somewhat quadrate black spots and dots close to the apical margin of which the largest is on the posterior margin: wings with three large, oblong, transverse black spots towards the apex: abdomen beneath reddish tawny, the margin tinted orange: first femora and intermediate pair of feet, blackish-brown. Closely allied to M. pulverosa, Hope, differs in the markings on the tegmina which are also not so broad, and in the colour of the abdomen. Long with anal appendages, 17; exp. teg., 50 mill.

Hab. Palone (Burma): Captain Bingham (August).

CERYNIA VIRIDULA, n. sp.

Head and thorax above light green, in faded specimens, sordid yellow: tegmina light green; wings milky-white, immaculate: apical half of antennæ, eyes, two small lines on tegmina, one oblique in the middle towards the posterior margin, the other smaller, straight, at the beginning of the apical fourth and nearer the anterior margin, also a very narrow apical limbus reaching also to one-third of the posterior margin, deep black: abdomen covered with a white flocculent substance: feet greenish-yellow, tarsi black. Body long, 17: exp. teg. 49 mill.

Hab. Puna (Bombay): type in Indian Museum.

The type of the Genus Cerynia (J. Pt. II, p. 64, 1885) is Flata albata, Stål, already described (J. l. c. p. 73) and of which I have recently procured specimens of the white and pale green varieties from Malacca. In the first line of the description of that species for 'within,' read

'with.' In the description of *Phromnia* (J. l. c., p. 64) for 'thorax concealed' in line 2, read 'concealed by thorax.' The chief points of difference between the two genera are that in *Cerynia*, the first joint of the antennæ is scarcely shorter than the second and the membrane of the costa is narrowed at the base; whilst in *Phromnia*, the second joint of the antennæ is twice, or scarcely twice, as long as the first and the costal membrane is equally broad throughout. These are apparently small differences on which to found genera, but the result seems natural and the genera at present may be allowed to stand separate.

J. A. S. B. Pt. II, p. 52 (1885):—Ricania obscura, Fabr., is the type of Stål's genus Mindura (l. c. p. 62) of which I have seen a specimen, locality unknown.

CENESTRA AFFINIS, n. sp.

Body subsordid yellow: from highly carinate on the sides, with a black line running parallel to each of the lateral ridges; eyes black: antennæ black, second joint longer than the first: pronotum with two median longitudinal black lines; mesonotum anteriorly with a lateral sagittate mark and two longitudinal lines on the anterior portion of the disc, black, its posterior margin with four small cuneate black spots: abdomen spotted and streaked black: femora more or less sordid yellow, tibiæ and tarsi black, tegmina rounded at the apex, bluish-brown, spotted and clouded with white farinose matter above, beneath brown with a slight bluish tinge; the very narrow costal limbus to two-thirds the length, and thence broadening into a band which turns inwards to nearly the disc, sordid whitish; this band is barely traceable above through the farinose covering: wings ample, semilyaline fuscous, veins of a deeper colour. In C. circulata, Guérin, the tegmina are yellow-whitish with black bands; in C. matutina, Walker, they are of a rosy colour, and in C. aurora, Guérin, they are sub-orange and the wings are white. Long, body 9-10; with teg. closed, 16; exp. teg., 35 mill.

Hab. Singapore.

BRACHYPLATYS CAROLINÆ, n. sp.

Brassy-black, shining: antennæ ochraceous, finely pilose, apical halves of last three joints more or less blackish-brown: anterior half of eyes yellowish-white, posterior part with a roseate tinge: head above with six yellow spots arranged in a semicircle: very fine anterior and lateral (anteriorly double) margins of pronotum, also lateral and posterior margins of scutellum, reddish yellow: pectus and venter, black, the latter with a yellow band along the margin and proceeding therefrom

to the disc on each side, eleven long yellow rays, an irregular large blackish-brown spot at the junction of the anterior part of the base of each ray with the marginal yellow band and partly on both, also a small round black dot on each alternate ray, towards the base: legs ochraceous-yellow, thickly and finely spotted brown, especially the femora: one of the largest species of this genus hitherto recorded. Long, 10: greatest breadth of abdomen, 8 mill.

Hab. Mungphu (Sikkim): 3,800 feet.

BRACHYPLATYS NIGER, n. sp.

Above and beneath shining black: femora and tibiæ with a brownish tinge, posterior tarsi sordid ochraceous: eyes bright light yellow: parts about the rostrum in repose sordid yellow. Long, 8: broad, 6 mill.

Hab. Malacca.

COPTOSOMA BRUNNEA, n. sp.

Deep castaneous-brown, shining: juga, spot in middle of frons, anterior margin of the pronotum (interrupted in the middle), lateral margins of the same (inclosing anteriorly a longitudinal deep-brown streak), lateral and posterior margins of the scutellum, genitalia for the most part, ventral limbus and feet, subsordid yellow-ochraceous: tylus, two transverse streaks before the transverse impression on pronotum, lateral angles slightly, also two spots towards the base of the scutellum more deeply reddish: ocelli bright red: eyes deep brown: pectus and venter darker: anterior margin of pronotum slightly refiexed. Long, 3½ mill.

Hab. Pundaloya (Ceylon): Mr. E. E. Green.

COPTOSOMA MINIMA, n. sp.

Brassy-black, shining: juga, lateral margins of pronotum (inclosing anteriorly a longitudinal brown streak), lateral and posterior margins of scutellum, two small round spots on each side towards the anterior margin of the pronotum, and a spot on each posterior lateral angle, also a larger transverse spot at each side of the base of the scutellum, and the legs, yellow: venter brassy-black, margin of each segment with an oblong longitudinal yellow patch inclosing in the middle a longitudinal brown streak: one of the smallest species of this genus recorded. Long, 1½ mill.

Hab. Pundaloya (Ceylon): Mr. E. E. Green.

COPTOSOMA NAZIRÆ, n. sp.

Above and beneath, brassy-black, shining: juga, lateral margins of the pronotum (inclosing anteriorly a black longitudinal streak), lateral and posterior margins of scutellum, also a spot on each side towards the base, ventral limbus, and the legs, yellowish: eyes castaneous. Long, 3 mill.

Hab. Nazira (Assam); Mungphu (Sikkim); Mr. R. Pantling.

CHRYSOCORIS SIMPLEX, n. sp.

Light metallic-green, shining, turning into purplish after death; traces of the light colour remaining on the tylus, posterior part of pronotum and posterior part of the scutellum, but varying much: a small transverse, oval, elevated space on each side of the pronotum towards the anterior margin; anterior and antero-lateral margins slightly sinnate, extreme edge very slightly reflexed; posterior lateral angles very slightly obtusely prominulous; posterior margin almost straightly truncate: scutellum with three small round black spots on each side, sometimes obsolete: rostrum and antennæ brownish black: coxæ yellowish; femora and tibiæ metallic-green varied with purplish; tarsi brownishblack, ochraceous pilose: pectus golden-green with red reflections, turning to purplish: venter yellow, a larger subconical basal patch and another similar at the apex, black; two rows of lateral black spots, one submarginal, formed of round spots, the other inwards, formed of triangular spots, between the rows a band, and the extreme margin and apex, metallic-green turning into purplish: sometimes the basal and apical black patches on the venter are so approached that the discal yellow is reduced to a small transverse band. Long, 11-13 mill.

Hab. Kotagiri (Nilgiris): April: Mr. Henderson.

CHRYSOCORIS NILGIRIENSIS, n. sp.

When alive, above and pectus bright greenish-golden with red reflections which turns into deep purplish after death: antennæ and rostrum black; eyes deep brown: head golden with a median longitudinal line chalybeous green: pronotum with eleven black spots, three small, transverse, sub-quadrate, close to the anterior margin; three rounded, arranged triangularly towards each lateral angle, and two elongate, linear, in the middle of the posterior portion of the disc: scutellum with eight spots, of which one median longitudinal near the base, three ovate transverse on each side, and one rounded subapical: pectus entirely golden and metallic green with scattered red reflections: disc of venter pale yellow, shining; extreme margin purplish-red, bordered in-

wardly by a broad golden greenish band which has a round black spot in the middle of each segment next the external purplish-red margin, and, inwardly, a triangular black patch, the base of which rests on the base of each segment; these spots often coalesce to form an oblong black transverse patch with metallic-green reflections: base and apex of the venter with a black patch; anus golden: femora cinnabar, apices and tibiæ externally metallic-blue, shining; tarsi black. Very close to C. marginellus, Westwd., but longer, stouter, and varying in markings beneath. Long, 16 mill.

Hab. Conoor (April).

COMPASTES MINOR, n. sp.

Above ochraceous, very closely impressly punctured brownish-black, somewhat closer on the lateral angles of the pronotum: beneath lighter ochraceous very sparingly punctured brown on the venter: juga longer than the tylus, not approached in front thereof: antennæ black, last joint pilose, with basal half ochraceous, apical half brown: rostrum ochraceous, last joint brown, reaching the last coxæ: pronotum moderately declined forwards, with two oval, transverse, outlined reddish-brown marks towards the anterior margin; lateral angles produced, somewhat obtusely rounded at the apex: membrane brown, transparent; legs ochraceous, femora streaked or spotted brown, granulated; tibiæ finely spinose. Long, 12: breadth angles pron., 6 mill.

Hab. Chakráta (Jaunsár-Báwar, N. W. Provinces).

Sastragala Affinis, n. sp.

Sastragala uniguttata Am. & Serv. (nec. Don.) Hist. Nat. Ins. Hém., p. 155 1843)?

Amyot & Serville's description does not agree with Donovan's figure and appears to me to belong to the following species received from Madras. 'Yellowish greenish-testaceous, punctured coarsely and densely above: lateral angles of pronotum produced in short subacute spines black, and the line between them more or less black: scutellum black, with a broad ovate transverse reddish ochraceous spot in the middle: apex of corium with a black linear C-shaped spot, open towards the external margin; membrane transparent, nearly the colour of the hemelytra: disc and apex of the abdomen black, reddish towards the sides and on the genitalia; the lateral limbus pale greenish-testaceous: beneath paler yellow-greenish with a reddish tinge on the disc of the basal half of the venter: feet pale greenish-yellow: antennæ dull ochreous-testaceous. Long 81; exp. ang. pron. 4 mill.

Hab. Utakamand, Kotagiri (7000 feet): April: Mr. Henderson.

Mononyx indicus, n. sp.

Ochraceous-brunneous: head and pronotum irregularly tuberculate; lateral margins of the pronotum much roundly dilated, the dilated part semitransparent: scutellum subconvex, with a tubercle at each basal angle and at the apex: hemelytra with a few darker streaks here and there, and some semiacute small spinous tubercles on the coriaceous part; membrane concolorous: connexivum with the posterior margin of each segment, black: coxæ and femora yellow-testaceous; tibiæ and tarsi dark brown inclined to black. Long, 10; abd. broad, 7 mill.

Hab. Sikkim: rather common.