

XXIII.—*List of Coleoptera received from Old Calabar, on the West Coast of Africa.* By ANDREW MURRAY, Edinburgh.

[Continued from p. 161.]

[With a Plate.]

Lebiidæ.

LEBIA, Lat.

1. *L. bicolor*, Dej. 5. 366.

Rufa; elytris subsulcatis, viridi-cyaneis; geniculis nigris.
Long. $4\frac{1}{4}$ lin., lat. $1\frac{3}{4}$ lin.

2. *L. bis-binotata*, mihi.

Rufo-testacea; elytris striatis, nigris vel nigro-brunneis, margine reflexo, puncto humerali, et quatuor maculis dorsalibus, duabus anterioribus magnis, duabus posterioribus minoribus, luteis.

Long. $4\frac{1}{2}$ lin., lat. $1\frac{3}{4}$ lin.

Nearly of the same form as *bicolor*. Rufo-testaceous; the elytra black, or very dark umber, with the reflexed margin, a humeral spot connected with the margin, two large roundish spots on the anterior portion of the disk, and two smaller roundish spots placed closer together, one on each side of the suture near the apex, pale testaceous. Antennæ filiform, with the three basal joints testaceous, the third darker at the base, the remaining joints dusky and pubescent, the last joint paler at the apex. Head ferruginous, longitudinally strigose in the middle; the strigations tending obliquely to the centre; two faint depressions in front; clypeus smooth; mouth rufo-testaceous; tips of mandibles darker; eyes prominent (though not quite so much so as in *bicolor*). Labrum moderate, broader than long, slightly rounded in front. Mentum toothed*. Thorax rufous in the middle, the margins pale and transparent, broadly reflexed; mesial longitudi-

* As is observed by Lacordaire (Genera des Coléoptères, i. 127), there is considerable difference of opinion among authors, whether in the genus *Lebia* the mentum has a middle tooth or not; Bonelli, Chaudoir, and others maintaining that it has; while Schiödt, Schmidt-Goebel, and Lacordaire himself are of opinion that it has not,—viewing the piece which is supposed by the former to be a tooth, as a semi-corneous plate which forms the central base of the ligula, and, in dissecting the head, is often taken off attached to the mentum, but is separable from it. That it is so in some instances, there is no doubt; as, for instance, in *Lebia crux minor*. In other cases there is no appearance of a tooth at all, either as forming part of the mentum or the base of the ligula. *Lebia scapularis*, and other

nal line distinct, but not deep nor sharply defined; disk transversely wrinkled, a transverse depression along the produced part of the base. Scutellum testaceous, elongate-triangular, with a semilunar depression. Elytra broad, truncate and emarginate at the apex, deeply striate, with faint traces of punctures in the striæ, most easily seen in the pale spots, with two larger punctures in or alongside of the third stria, one occurring in the larger pale spot, the anterior margin of which is distant from the base about a fourth of the length of the elytra, the other in the posterior small pale spot, the posterior margin of which is distant from the apex about an eighth of the length of the elytra; a row of larger circular punctures, with a slight elevation in the middle of each, runs along or between the two striæ next the margin; the third and fourth, and the fifth and sixth striæ show a tendency to unite at the apex, and the seventh turns in at the apex and runs towards the suture, terminating opposite the third stria in a large circular puncture with a central elevation; the eighth and ninth striæ also turn towards the suture at the apex, but are speedily effaced. The suture is testaceous at the base, and slightly so along its edge the whole way. The testaceous spot on the shoulder does not encroach on the elytra so far as the point of the scutellum; the testaceous reflexed margin does not reach to the apex; the larger testaceous spot extends across four interstices, commencing at the second stria; the smaller spot extends across three interstices, commencing at the first stria. The under side is pale testaceous yellow, shining, with a few scattered punctures on the segments of the abdomen, from which spring hairs; the legs are of the same colour; claws pectinate.

3. *L. clavicornis*, mihi. Pl. XII. fig. 1.

Convexa, tumida, læte carnea, semitranslucens; antennis compressis, incrassatis versus apicem, nigris, ferrugineis ad basin; elytris leviter striato-punctatis; pedibus concoloribus; geniculis, apicibus tibiarum atque tarsis nigris.

Long. $5\frac{1}{4}$ lin., lat. $2\frac{1}{2}$ lin.

Semitransparent; body shining, and, when fresh, of a beautiful bright flesh tint, both above and below; after being kept

North American species, are examples of this. On the other hand, in others, as in the present species, the tooth appears distinctly to form part of the mentum, although it thins off and becomes semitransparent at the edges, the harder texture running up its middle continuously from the rest of the mentum. The truth is, that there are several forms of the mentum among the species which at present are ranked in this genus, and it should probably be broken up into two or three sections. In that case, the present and the following species would fall under different heads.

some time it loses its colour, and fades into a clear ferrugineo-testaceous or pale fawn-colour. The antennæ have the first three joints, the base of the fourth, and the tip of the last of the same colour and semitransparency, the remainder deep black, opaque, and pubescent; the first three joints are slender and nearly cylindrical; the fourth increases in breadth as far as the ferruginous colour extends, it then suddenly becomes straight and compressed, and the two sides run parallel to each other; the remaining joints are in like manner compressed, and the sides parallel; they increase in breadth very slightly and gradually, but the slender joints at the base, compared with the broader 4-11, give the antennæ a decidedly claviform appearance; a groove runs up the middle on each side of the flat joints; the two last joints of the maxillary palpi and the apex of the mandibles are a little deeper in colour than the rest of the body. The head is smooth, with a very slight depression on each side in front. Clypeus rather projecting. Labrum moderate, broader than long, straight in front. Mentum without a middle tooth. Thorax with sides strongly reflexed, and with a dorsal channel and some slight wrinkles across the disk; the production of the posterior margin in the middle not so prominent as in some species. Elytra very convex and swollen, having much the form of the elytra in *Lia*, smooth and shining, and with nine rows of slender striæ, besides the commencement of a short sutural stria at the base, all slightly but distinctly punctate; interstices impunctate, but with two large and deep impressions on the inner side of the third stria, the one a little more than a fourth of the length of the elytra from the base, and the other about a similar distance from the apex, and near the margin a row of round impressions running along the interstice between the eighth and ninth stria, and one opposite the end of the third stria, each impression having a raised point in the centre; the apex of the elytra is broadly truncate, the truncation sinuate. From the semitransparency of the elytra, the impression of the folding of the wings below is seen, giving the appearance of something like a device on the elytra, but in reality they are concolorous. The scutellum is elongate-triangular; the under side is smooth and shining; the legs a little darker in colour than the body, with the apex of the thighs, the apex of the tibiæ and the whole of the tarsi black or piceous black; penultimate joint of tarsi deeply lobed; claws pectinate.

The much-swollen elytra and the almost claviform antennæ of this species at first induced me to think that it might properly be made the type of a new genus; but as in all other respects it agrees with *Lebia*, as at present defined—unless perhaps that the terminal joint of the palpi is almost ovular, while in *Lebia*

it is truncate, I have not been able to justify to myself such a separation, these being points on which we find gradations existing in a greater or less degree among the different species of *Lebia*.

Pericalidæ.

RHAPHIDOGNATHA, mihi (ῥαφὶς and γνάθος).

Corpus depressum. Thorax postice obtuse-truncatum. Mandibulæ projicientes. Labrum porrectum. Maxillæ apice subuliformes. Antennæ breves, filiformes, leviter compressæ, articulo secundo vix tertio brevior. Mentum sine dente medio. Paraglossæ ad ligulam junctæ. Oculi prominentes. Tarsi articulo quarto simplici. Ungues non pectinati. Elytra basi quadrata, vix thorace latiora, lateribus parallelis.

1. *R. trimaculata*, mihi. Pl. XII. fig. 2.

Brunnea, nitida; elytris striatis, striis leviter punctatis, singulis macula testacea basali, conjunctis macula testacea apicali communi.

Long. $3\frac{3}{4}$ –4 lin., lat. $1\frac{1}{2}$ lin.

Flattish and depressed. Chestnut-brown, shining; base of antennæ, mandibles and other parts of the mouth, margins of thorax and elytra, tibiæ and tarsi, somewhat paler; clypeus large and smooth; labrum smooth and projecting, emarginate, fringed with hairs; upper side of mandibles longitudinally striated alongside of labrum. Head deeply and longitudinally wrinkled on each side in front; vertex also somewhat wrinkled; not wrinkled behind the eyes. Antennæ not so long as head and thorax; all the joints very nearly of the same length, except the second, which is a little, but not much, shorter than the others; also all nearly of the same thickness, except the first, which is a little thicker; the fourth and following joints are slightly compressed; and, viewed on the flat side, the antennæ appear slightly thickest about the middle. Thorax transverse, rounded on the sides, widest a little before the middle, narrowest behind; anterior angles prominent and rounded; posterior angles obtuse, except at the extremity, which is very slightly excised on the exterior side; the base is obtusely truncate; margins broadly reflexed, most so behind, and rugosely punctate; a slight, narrow, but distinct dorsal line, not reaching to the anterior margin, but stopping at the anterior circular depression. Elytra flat, about three times the length of the thorax, and a little broader than it; base straight, and sides nearly parallel, widening very slightly before the apex, which is sinuate-trun-

cate; punctate-striate, the punctures on the striæ small and feeble; interstices impunctate, but appearing somewhat silky from excessively fine transverse strigations, which are only visible under a powerful lens; the striæ are eight in number, besides the short scutellar stria and the marginal stria; the latter is irregularly interspersed with deep, large punctures; there are two large punctures in the interstice between the second and third striæ, the one about a third from the base, and the other almost at the very apex. A large testaceous patch occurs at the base of each elytron, stretching obliquely from the shoulder towards the suture, not quite reaching the first stria; a third testaceous patch near the apex common to both elytra, reaching to the fourth stria. The upper side of the last abdominal segment has a number of distinct punctures on it. Under side same colour as upper, centre rather paler. Legs slight, moderate in length; the tarsi slender, fourth joint simple (not bilobed); claws not pectinate.

NYCTEIS, Casteln.

Under this and the following genus (*Belonognatha*, Chaud.) I include all those insects which have the characters of *Cop-todera*, excepting that the mentum has not a middle tooth. Castelnau and Chaudoir have added other characters to the diagnosis of their respective genera, which would exclude from them the species which I am going to describe under each; but as these characters are not of essential value, I consider I do rightly in retrenching them, and thus opening the genera for the reception of species which agree with them in all essential points. For instance, the only particulars in which the species which follows (*N. Championi*) differs from the diagnosis of Castelnau is—1. that in his genus the last joint of the palpi is said to be “obtuse at the end,” while mine is “subacuminate,” a difference which may perhaps principally lie in the mode of expression; and 2. that in his the external and sutural angles at the apex of the elytra are more or less spined, while mine, although toothed at the external angle, are not spined.

The distinctions between this genus and *Belonognatha*, as the characters are now adjusted by me, are the greater projection of the mandibles and greater convexity of the body in the latter, which has also the external angles of the apex of the elytra rounded instead of toothed; but this is a character which I do not think of generic value. Indeed, I am by no means satisfied that it would not be better to unite the two genera, and only use the above distinctive characters for sectional subdivision. If we were to adopt this course, and treat characters of similar value

in the same way throughout the group, it would be much simplified. We should then throw *Agonocheila*, *Stenoglossa* and *Coptodera* together, characterized as *Coptodera* with a middle tooth to the mentum, and *Nycteis* and *Belonognatha* together as *Coptodera* without a middle tooth,—the former almost exclusively inhabiting South America, the latter exclusively Africa (reckoning Madagascar as part of Africa). Indeed, I am strongly inclined to believe that the mistake I have already referred to as having been committed in the genus *Lebia*, of confounding the central base of the ligula with the middle tooth of the mentum, has been repeated here; and that if these parts were more carefully examined, it would be found that the species having a true tooth to the mentum are confined to America, while those without the tooth are restricted to the Old World. I do not think that the structure of these parts has been sufficiently minutely attended to by those authors who have described species of *Coptodera* as inhabiting the East Indies and Africa. There are six species described from each, and if these are analysed, there seems very insufficient evidence for holding that they are furnished with a tooth to the mentum. Of the six Eastern species, one is described by Dejean, four by Schmidt-Goebel, and one by Hope. As to Dejean's species (*C. gilvipes*), we may put it out of view, because he takes no notice of the mentum, and he himself says, "Je ne suis pas bien certain que cette espèce appartienne à ce genre." Of Schmidt-Goebel's species I have only had the opportunity of examining one (*C. flexuosa*), and I find that it most certainly has no tooth to the mentum; and if this mistake has happened to one of his species, it is none the less likely to have been repeated in the others. I have also examined Hope's *C. bicincta*, and there the same mistake or oversight has occurred. The so-called six African species are described, one by Dejean, four by Boheman, and one by Chaudoir. As Dejean habitually disregards the form of the mentum, his placing his species (*C. crucifera*) in the genus *Coptodera* goes for nothing, either one way or the other. As to Prof. Boheman, he says nothing about the mentum either; and he may either have overlooked it altogether, or fallen into the same error as Schmidt-Goebel and Hope. I have not seen any of his species, but the system of coloration and general description shows a great resemblance to my Old Calabar species, *Nycteis Championi* and *Belonognatha rugiceps*. There only remains the *figurata* of Chaudoir, and although it is not likely that he has overlooked the mentum (as he was fully alive to its importance), still it is not impossible that he may have fallen into the error regarding it of which I have been speaking. In my specimens of *Nycteis* from Old Calabar, the central base of the ligula between the roots of the

palpi forms a sort of triangular raised space, which on a cursory view might easily be mistaken for a tooth in the middle of the mentum, although more careful examination under a sufficiently high power shows that it may be separated from it, and, in point of fact, does not belong to it at all; so that it is not difficult to see how authors even of such standing and acknowledged accuracy as those referred to, should have fallen into this misconception.

1. *N. Championi*, mihi.

Parum depressus, nitidus, fuscus vel piceus; ore, antennis, thoracis lateribus, elytrorum marginibus, macula basali et fascia irregulari apicali atque pedibus, testaceis; capite fere lævi, mandibulis non valde prominentibus; thorace late marginato; elytris striato-punctatis, interstitiis convexis et impunctatis, apice oblique truncato et exciso, angulo exteriori apicali acuto; unguiculis pectinatis.

Long. 4 lin., lat. $1\frac{3}{4}$ lin.

Slightly depressed, shining, brown, with the mouth and antennæ, the margins of the thorax and elytra, a patch towards the base and a jagged irregular band towards the apex of the latter, and also the legs, testaceous. Head equally broad in front and behind, nearly smooth, with some faint wrinkles upon it, and two considerable depressions on each side, one on the inside of the eye, and the other larger before it; clypeus transverse, depressed in front; labrum rather broad, and not tapering, rounded at the anterior angles, slightly emarginate, and with a shallow longitudinal groove in the middle in front; mandibles slightly rounded exteriorly, not much projecting; antennæ darker towards the apex, slightly flattened and thickened from the end of the fourth joint to the apex; eyes large and prominent. Thorax broad, short, transverse, and somewhat cordiform, with very broad, shallow, semitransparent, reflexed margins, marked in the bottom with faint transverse depressions or foveæ; disk slightly convex, with a longitudinal dorsal line reaching from the front to the base, and a semicircular impression in front; faintly marked with transverse wrinkles; posterior angles somewhat obtuse. Scutellum impunctate. Elytra broader than thorax, slightly expanded posteriorly, punctate-striate, interstices convex and impunctate; a fovea on the second stria near the apex, another about a third of the length of the elytra from the apex, and another on the third stria, about the same distance from the base; the exterior interstice with a series of round flat-bottomed foveæ; margin inflexed, both the inflexed portion and the raised edge of margin testaceous; an oblique irregular

testaceous patch near the base of each elytron, on the fifth, fourth, third, second, and part of the first interstices, parallel to the side of the scutellum, though at some distance from it; the mark on the third interstice reaches farthest back, that on the fourth farthest forward; an irregular, jagged, testaceous band near the apex also runs across the whole elytra, but indistinct at the suture and on the exterior interstice; the space on the first two interstices reaching nearest to the apex, the two next farthest from it, and the three last again approaching it. The apex is obliquely truncate and excised, the exterior angle sharp, the sutural angle prominent, but scarcely toothed; the last segment of the abdomen punctate on the upper surface; under side of body smooth, shining, impunctate. Legs slender; tarsi simple; claws pectinate.

I have named this species in memory of my lamented friend Col. Champion, who fell at Inkermann, a naturalist whose loss will be long felt.

BELONOGNATHA, De Chaud.

As mentioned under the last genus, I have slightly relaxed Chaudoir's characters to allow admission to the following species. He describes the labrum as "very long, canaliculated at its extremity, strongly rounded and emarginate in the middle." I retrench the latter half of these characters. In my species the labrum is "very long and canaliculated at its extremity," but it is not "strongly rounded and emarginate in the middle." The only other character in which mine differs is, that he gives as a character that the anterior tibiae are furnished with a single terminal spine, the intermediate and the posterior with the two usual spines, and that the third and fourth joints of the anterior tarsi are subcordiform. In my species the external spine of the anterior tibiae is small, but still is not wanting, and the joints of the anterior tarsi are not subcordiform. In all other respects the characters agree.

1. *B. rugiceps*, mihi.

Parum convexa, nitida, picea; capite creberrime rugoso; thorace late marginato, marginibus reflexis et testaceis; elytris piceo-virescentibus, striato-punctatis, interstitiis convexis, apice oblique-truncato, fortiter sinuato, marginibus testaceis, singulis macula basali irregulari, et fascia interrupta apicali testaceis ornatis; antennis, ore, pedibusque testaceis.

Long. 4 lin., lat. $1\frac{3}{4}$ lin.

In coloration and general appearance very similar to *Nycteis Championi*; slightly convex, piceous; the elytra fuscous, with a

slight virescent reflexion in certain lights, each with an irregular basal patch and an interrupted apical fascia testaceous. The antennæ, the parts of the mouth, the margins of the thorax and elytra, and the legs pale ferruginous. Head dark brown or piceous, about the same breadth before as behind the eyes, upper surface exceedingly densely and pretty deeply corrugated all over, so much so as to appear almost opaque; clypeus transverse, narrowest in front, wrinkled, separated from front by a marked straight line; labrum about the same length as the clypeus, narrowest in front, truncate, with a longitudinal groove in the middle in front, and a puncture on the margin near the apex; mandibles sharp and projecting, but not so much so as in the next species; terminal joint of palpi subcylindric and subacuminate. Antennæ about the length of head and thorax, the end of the fourth, the fifth and remaining joints flattened. Eyes very large. Thorax considerably broader than head, cordiform, gently convex in the middle, and with very broad and deeply reflexed margins, which have here and there a few large punctures scattered in the bottom of the hollow; the disk very faintly wrinkled across, and with a dorsal longitudinal stria, fuscous, but paler than head, in some lights faintly virescent; margins semitransparent and broadly testaceous; posterior angles nearly right-angled; base truncate. Scutellum testaceous, impunctate. Elytra shining, broader than thorax, but not twice as broad, somewhat convex; base nearly straight; sides very slightly expanded; pitchy-black when looked at from in front backwards, virescent when looked at from behind forwards, deeply punctate-striate; eight striæ, besides scutellar and marginal striæ; the interstices convex and apparently impunctate; but with a very powerful lens, a few punctures of the faintest description may be traced, disposed in a row along each interstice; a fovea on the inner side of the second interstice near the apex, and another about one-third from it; another on the third stria about the same distance from the base; a series of round, flat-bottomed foveæ on the marginal interstice; apex obliquely truncate and excised, the exterior apical angle flattened and rounded; the seventh stria sweeps round at the apex, enclosing those nearer the suture; margin inflexed, inflexed portion and raised edge of margin testaceous; a transverse testaceous patch about one-fourth from the base is disposed as a series of longitudinal stripes occupying five interstices between the striæ as follows:—the longest stripe on the space between the third and fourth striæ, the second longest between the second and third, the shortest between the fourth and fifth, and the remaining two, on the spaces between the fifth and seventh striæ, are next shortest, and of about equal length; a transverse, interrupted,

testaceous fascia runs irregularly across near the apex thus :—a short stripe near the apex on the space between the first and second striæ; one, a little longer, extends farther towards the apex on the next space; another, about the same length, occupies the next space, extending towards the base from the anterior part of the last; the next lies alongside of it, but is not quite so long; three short ones, each successively becoming smaller, start from the posterior corner of the last, and stretch across to the margin. Upper side of last segment of abdomen smooth and sparingly punctate. Under side shining, impunctate, piceous, paler in the middle; breast, mouth and legs testaceous; claws pectinate.

2. *B. obesa*, mihi.

Convexa, nitida, supra fusco-viridis; thorace late marginato; elytris quatuor maculis testaceis irregularibus ornatis, punctato-striatis, interstitiis elevatis et convexis.

Long. 6 lin., lat. $2\frac{3}{4}$ lin.

Convex, shining, above green, or brown with green reflections; elytra, when looked at from in front, brown (except at the very base), when from behind, green; each with two testaceous marks of irregular shape on the disk, one about a third of the length of the elytra from the base, the other about the same distance from the apex; below brown, with legs ferruginous. Head above green, rather depressed; eyes prominent, space next the eyes irregularly rugose, inclination of rugosity longitudinal; vertex rather elongate, smooth; clypeus quadrangular, narrower in front, brown; labrum brown, long, narrower in front, margins very slightly reflexed, emarginate in front, and with a slight groove in the middle for a short space, and an indentation on each margin near the front. Mandibles brown, long, fine, sharp-pointed, and projecting almost immediately straight from the eyes, so that the head has a very long narrow triangular muzzle; other parts of the mouth pale ferruginous; palpi filiform; ligula very prominent; paraglossæ attached to it, and embracing it, but not quite meeting in front; mentum without a middle tooth. Antennæ a little longer than head and thorax, brown, three first joints paler, first joint most robust, second joint shortest, remainder nearly of equal length and thickness, but, if anything, each becoming a very little longer and thicker than the preceding. Thorax cordiform, bronzy-green, with the edges semitranslucent and semitestaceous; margins broadly reflexed, most so at the posterior angles, which are obtuse; base truncate, straight in the middle, sloping obtusely to the posterior angles, a broad margin intervening between the base and disk; anterior angles projecting and rounded; dorsal channel and

rounded groove in front distinct; disk convex, impunctate, with transverse wrinkles across it. Scutellum black, impunctate, with two depressions at its base. Elytra very convex, nearly twice as broad as the thorax, gradually expanding behind till they reach about a third from the apex, when they round in, and become sinuate and obliquely truncate; they are deeply punctate-striate, the punctures on the striæ small and close to each other; the striæ (with the exception of the two next the suture) do not reach the base, a narrow smooth space intervening; the interstices between the striæ are ridged, convex, shining, and appear impunctate when viewed by the naked eye or a weak lens; when viewed with a more powerful lens, a row of very minute punctures is seen on the top of each interstice; towards the margin these punctures become more frequent and irregular; one or two foveæ occur on some of the striæ, but they are not constant; the most constant seem to be one on the third stria very near the base, and two on the second stria, one quite at the apex, the other near it; a series of large circular foveæ occurs on the exterior interstice. The anterior testaceous blotch runs in a narrow line across the second, third, fourth and fifth interstices (not reckoning the space between the first stria and the suture as an interstice), and on the third interstice becomes nearly twice as broad, extending itself both up and down; the posterior testaceous mark is arranged transversely, somewhat checker-wise, as follows:—a small spot on the first interstice not far from the apex; another on the second interstice, a little larger, joining the posterior external angle of the first; another rather larger transverse spot on the third and fourth interstices commences at the anterior external angle of the second; and another transverse spot, of the same size as the last, on the fifth and sixth interstices, commences at the posterior external angle of the fourth. The terminal segment of the abdomen projects prominently; it is truncate; the centre alone is of solid texture, black, sparingly punctate, with a slight ridge in the middle. Underside dark brown, polished and impunctate, except the metasternum, which has its exterior margins slightly punctate. Legs ferruginous; anterior tibiæ emarginate; all the tibiæ with both internal and external spines at the apex. Claws pectinate.

3. *B. quadrinotata*, mihi. Pl. XII. fig. 3.

Præcedenti valde affinis, sed minor; thorace minus marginato; elytrorum maculis minoribus.

Long. $4\frac{1}{4}$ lin., lat. $2\frac{1}{4}$ lin.

Exceedingly like *B. obesa*, but smaller. The same description will answer for it, with the following differences:—The thorax is

comparatively smaller, and not so broadly margined, and the anterior rounded angles are rather less prominent. The testaceous spots on the elytra are much smaller, being limited to small points; the basal spot scarcely extends beyond the third interstice, although, on close examination, it is seen to encroach a little on each of the adjoining interstices, and the apical spot is almost confined to the third and fourth interstices.

This may be merely a variety of the preceding. If there had been nothing to distinguish them but the markings on the elytra, I should never have thought of separating them; but the less-margined thorax induces me to keep them separate, at least until a larger series of specimens shall enable us to come to a different conclusion.

THYREOPTERUS, Dej.

1. *T. flavosignatus*, Dej. 5. 446.

Nigro-piceus, subpubescens; thorace quadrato; elytris tenue striatis, punctatis, singulis macula basali sinuata, conjunctis macula apicali sinuata communi, femoribusque flavis.

Long. 4-4½ lin., lat. 2-2½ lin.

CATASCOPIUS, Kirby.

1. *C. Senegalensis*, Dej. 5. 453.

Supra capite thoraceque viridibus; elytris viridi-cyaneis, profunde striato-punctatis, interstitiis subæqualibus, margine laterali viridi; pectore, abdomine pedibusque piceis.

Long. 5 lin., lat. 1¾ lin.

2. *C. Beauvoisii*, Casteln. Et. Ent. 60.

Statura et colore *C. Senegalensi* simillimus, parum grandior et latior; elytris viridibus vix viridi-cyaneis, margine laterali viridi-cupreo; subtus niger, leviter virescens; pedibus piceis, femoribus ferrugineis.

Long. 7 lin., lat. 2½ lin.

3. *C. rufipes*, Gory, Ann. Soc. Ent. Fr. ii. 204.

Supra viridi-cyaneus, margine elytrorum concolore, capite et thorace leviter rugosis; subtus piceus, pedibus rufis.

Long. 4¼ lin., lat. 1½ lin.

Var. *rugifrons*, mihi.

Supra cupreo-viridis, capite crebre aciculato, thorace sat fortiter transverse aciculato.

Long. $4\frac{1}{4}$ lin., lat. $1\frac{1}{2}$ lin.

The following are the points in which this variety differs from the typical specimens :—

The head, instead of being almost smooth in the middle and towards the back, and only faintly furrowed on the sides, is covered closely all over with distinct fine wrinkles, mostly longitudinal, with a few punctures scattered among them behind. The thorax also is much more coarsely transversely wrinkled, and the colour is yellowish-green instead of bluish-green.

I have not thought these distinctions sufficient to constitute this a different species, but they are sufficiently well marked to justify me in noting it as a variety.

4. *C. compressus*, mihi.

Depressus, supra viridi-æneus, nitidus; capite antice, antennis pedibusque brunneis; thorace angulato; elytris viridibus leviter æneo-marginatis, fortiter striatis; subtus brunneus vel nigro-piceus.

Long. $2\frac{3}{4}$ –3 lin., lat. $1\frac{1}{4}$ lin.

Smaller, flatter, and more depressed than any species of *Catascopus* yet described; having the compressed form of an insect living under bark; shining, above brassy-green; the elytra greenest, the thorax less so, the head only with a faint reflexion of green on the back part; the rest of the body blackish-brown or piceous. The labrum much produced, opaque; the clypeus shining, very slightly emarginate in front, with a fovea on each side. Head slightly rugose on the sides, with an oblique depression inclined towards the vertex; behind smooth. Antennæ brown, first joint paler. Thorax somewhat convex, smooth and impunctate, with a deep dorsal line, the sides and base slightly reflexed and margined; the base obtusely truncate; the posterior angles excised, so as to be nearly right-angled; after leaving the excision which forms the right angle at the base, the sides widen out gradually till about a third from the front, where they form a pretty sharp prominent angle*, and then gradually become narrower till they reach the anterior angles, which are rounded; the slight projection or angle alluded to, causes the sides of the thorax, instead of appearing rounded, to appear as if an-

* This is a character peculiar to all the true *Catascopi* which I have seen.

gular; there is a fovea at the base on each side of the dorsal line, about midway between it and the angle; the reflexed margin at the base is broader than at the sides; there is a slight tendency to transverse wrinkling across the disk, more particularly behind. Scutellum black and opaque, and scarcely reaching beyond the interspace between the thorax and elytra. Elytra rather broader than thorax, with base nearly straight, but sloping slightly from the shoulders (which are rather prominent) inwards to the scutellum; their sides are nearly parallel; they are shining, greenish, with a tinge of brassy on the margins, becoming slightly coppery at the very apex, deeply striate, and with faint indications of punctures at the bottom of the striae; the interstices impunctate, but under a powerful lens they show fine transverse strigations, which give them a somewhat silky appearance. There are eight striae, besides the scutellar stria and the outer marginal one, which, with that next it, is the deepest. A number of deep punctures or foveae occur on the marginal stria, or on the interstice between it and the next one. A deep puncture also occurs on the inner side of the third stria, not quite half-way from the base, and another on the outer side of the second stria, almost at the apex. The apex is sinuate-truncate. The upper side of the last abdominal segment is silky-opaque, with a number of distinct punctures. Under-side and legs shining brownish-black, or piceous, impunctate. Legs moderate in length and slender; tarsi slender, fourth joint simple; claws not pectinate.

Errata in February Number.

After *Cincindela cincta*, Fab., p. 156, add—

5. *C. interstincta*, Schön., Dej. 1. 42.

Supra fusco-ænea, elytrorum puncto baseos, fasciis tribus interruptis, lineolaque apicis albidis.

Long. $7\frac{1}{2}$ lin., lat. $2\frac{1}{4}$ lin.

For *Drypta pectoralis*, p. 157, read—

Dendrocellus pectoralis (the claws of the tarsi being pectinated).



Murray, Andrew. 1857. "XXIII.—List of Coleoptera received from Old Calabar, on the West Coast of Africa." *The Annals and magazine of natural history; zoology, botany, and geology* 19, 313–326.

<https://doi.org/10.1080/00222935708693932>.

View This Item Online: <https://www.biodiversitylibrary.org/item/19414>

DOI: <https://doi.org/10.1080/00222935708693932>

Permalink: <https://www.biodiversitylibrary.org/partpdf/26001>

Holding Institution

Natural History Museum Library, London

Sponsored by

Natural History Museum Library, London

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.