and white; throat, cheeks, breast, and belly dirty white, tipped with very pale brown; sides, flanks, and vent greyish brown, barred and spotted with white; legs, toes, and claws pale brown.

Length  $5\frac{1}{4}$  inches, wing  $2\frac{3}{4}$ .

This interesting little Rail I submitted to Mr. R. B. Sharpe, who kindly pronounced it to be a new species; therefore I have much pleasure in naming it after the collector, Mr. T. Waters.

- 21. Podiceps pelzelni, Hartl.
- S.W. interior of Madagascar.
- 22. Fulmarus giganteus, Gm.
- S.W. coast of Madagascar.
- 23. PLOTUS LEVAILLANTII, Licht.
- S.E. Madagascar.
- 3. Descriptions of new Species of Phytophagous Coleoptera.
  By Martin Jacoby.

[Received November 24, 1879.]

#### Genus LEMA.

1. Lema Championi, sp. nov.

Elongate, subparallel, fulvous. Head and breast black; antennæ piceous, their base and apex fulvous; elytra punctate-striate, dark violaceous blue, shining, a slightly curved median transverse band and the apex fulvous.

Length  $3\frac{2}{3}$  lines.

Hab. Zapote, Guatemala.

Head not constricted behind the eyes, impunctate; lateral grooves very deep; eyes deeply emarginate, large, the space surrounding them distinctly punctured; epistome impunctate, shining black; antennæ rather robust, of half the length of the body, the second joint very short, third joint double the length, the basal as well as the fourth to the seventh joints piceous, or black, the rest light fulvous; thorax slightly longer than broad, moderately constricted in the middle at each side, base scarcely perceptibly impressed, surface impunctate, fulvous. Scutellum black. Elytra much broader than the thorax, rather convex and parallel, narrowly transversely depressed below the base, deeply punctate-striate at their anterior half, the punctuation gradually diminishing, and almost obsolete towards the apex, where the interstices are slightly convex, the latter also minutely punctate, of a dark violaceous blue, the middle is occupied by a slightly convex fulvous band extending to the lateral margins, while the entire apex is of the same colour. Abdomen and legs also fulvous.

Collected by Mr. Champion.

This species may be distinguished from L. bicincta, Lac., and others similarly marked, by the colour of the antennæ and the distinct basal depression of the elytra.

## 2. LEMA NICARAGUENSIS, sp. nov.

Elongate, parallel. Head and thorax ferruginous; antennæ (base excepted), breast, tibiæ, and tarsi black; elytra bluish black, the lateral margins, a transverse median band, and the apex flavous; femora and abdomen testaceous.

Length 3 lines.

Hab. Chontales, Nicaragua.

Head not constricted behind the eyes, with a transverse and a median groove at the vertex, entirely impunctate, shining ferruginous, epistome black; palpi and the two basal joints of the antennæ ferruginous, the other joints piceous, the apex of each joint fulvous. Thorax subquadrate, the sides moderately constricted behind the middle; surface distinctly transversely grooved near the base, with two rows of small punctures placed longitudinally on the disk, rest of the surface smooth, shining ferruginous. Elytra deeply punctatestriate anteriorly, the punctuation gradually diminishing, but remaining distinct to the apex, the interspaces near the latter slightly costate; a rather obsolete transverse depression is placed below the base; the colour is a dark bluish black, the lateral margins, a transverse median band not quite touching the suture, and the apex flavous. Abdomen and the femora testaceous; breast, tibiæ, and tarsi black.

This species bears a close resemblance to several others described by Lacordaire and Clark, from all of which, however, it differs in the coloration of one or other parts. It is most nearly allied to *L. placida*, Lac., and *L. violaceo-fasciata*, Clark. The colour of the femora and of the apex of the elytra distinguishes it from the first species, while it differs from the last by the red head and the colour of the antennæ; it may, however, turn out to be a variety of one or the other.

## 3. LEMA ANTENNALIS, sp. nov.

Elongate, parallel; chestnut-coloured, variegated with piceous. Antennæ short, the joints transverse, black; elytra piceous, margined with brown, punctate-striate, intervals finely rugose.

Length 3 lines.

Hab. Zapote, Guatemala.

Head impunctate, lower part of face sparingly fulvous-pubescent; eyes deeply emarginate: antennæ short and robust, only reaching to the base of the elytra; three basal joints brown, shining; the rest black, closely pubescent; first joint swollen, round; second of the same shape, shorter; third half as long again as the second; the following joints gradually widened, transverse, broader than long. Thorax without transverse basal depression, subquadrate, brown, shining, obsoletely streaked with piceous, surface minutely punctured. Elytra deeply punctate-striate anteriorly, the punctuation diminishing

in depth towards the apex, interspaces also minutely punctate, and from below the base to the apex closely and finely transversely wrinkled; there is also an indistinct transverse depression below the base; the ground-colour is a dark chestnut-brown; the disk, however, is almost entirely occupied by a broad piceous band, commencing below the base and extending to the apex, leaving only the sutural and lateral margins brown. Underside and legs of the same colour, abdominal segments margined with piceous, claws entirely of that colour. The hinder femora very short.

This interesting Lema, of which I have at present only one specimen before me, will be easily recognized by the curiously shaped antennæ and the sculpture of the elytra, although it is doubtless

subject to variation in colouring.

## Genus URODERA, Lac.

4. URODERA GODMANI, sp. nov.

Oblong-ovate, black, shining, beneath closely pubescent. Head and thorax finely punctured. Elytra finely punctate-striate, black, a transverse band at the base, not touching the suture and the apex, rufous.

Length 3-4 lines.

Hab. Dueñas, Capetillo (Guatemala).

Head with an obsolete transverse semicrescent groove between the eyes, distinctly but finely punctured. Antennæ short, black, the second and third joints rufous, dentate from the commencement of the fourth joint. Thorax transversely convex, about twice as broad as long, its sides moderately rounded and greatly deflexed anteriorly, the lateral margins flattened and divided from the convex part by an oblique depression; the flattened portion distinctly punctured and subrugose, rest of the surface very finely punctate, posterior margin oblique at each side, its middle lobe straight. Scutellum with a few extremely minute punctures. Elytra not wider at the base than the thorax; each elytron with nine rows of punctures and a short double row near the suture black; a transverse band, sinuate below the humeral callus and interrupted at a little distance from the suture, and an oblong apical spot rufous; the latter spot does not quite touch the lateral margin or the suture. Underside closely covered with greyish pubescence; anterior legs longitudinally sulcate at their inside; prosternum very narrow.

The punctured head and thorax will distinguish this speecis from others similarly marked, while the design of the elytra separates it from *U. chevrolatii*, to which it bears some resemblance; the thorax is also much more transverse than in the latter species. None of the specimens before me differ except in size from each other.

## Genus Chlamys, Knoch.

5. CHLAMYS SEX-TUBERCULATA, sp. nov.

Quadrate-ovate. Head, body below, and legs fulvous, spotted with violaceous; above violaceous blue, clothed with white pubescence,

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thorax finely. Elytra strongly punctured, each elytron with three small tubercles placed triangularly.

Length  $1\frac{3}{4}$  line.

Hab. Capetillo, Dueñas, Guatemala.

Head flat, distinctly punctured, fulvous, eyes deeply emarginate. Antennæ as long as the thorax; the joints from the fifth to the apex transverse, broader than long; the four basal joints fulvous, the rest black. Thorax regularly narrowed from base to apex, its sides straight, surface regularly convex, finely punctate and pubescent, violaceous blue. Scutellum large, darker blue, opaque. Elytra narrowed posteriorly, their apex broadly rounded, closely covered with deep oblong punctures, their sutural margins denticulate through their entire length, each elytron with a short transverse tubercle placed in the middle near the sutural margin, while another small round tubercle is situated above and one below it, the three forming together a triangle. Pygidium fulvous, with a central blue patch. Underside violaceous blue, broadly bordered with fulvous. Legs fulvous, the middle and posterior tibiæ, as well as the posterior femora, with a blue spot.

This species ought to follow *C. cinerea*, Lac., to which it bears a close resemblance; it may, however, be distinguished by the coarser punctuation of the elytra and the three tubercles on the latter.

## Genus Lamprosoma, Kirby.

## 6. Lamprosoma nicaraguense, sp. nov.

Broadly ovate, very convex. Above dark violaceous; body beneath, the head, sides of the thorax, and a short lateral stripe near the apex of the elytra cupreo-aureous.

Length  $3\frac{1}{4}$  lines.

Hab. Chontales, Nicaragua.

Head finely granulose, distinctly but not closely punctured; middle impressed with a small round fovea; anterior margin of clypeus concave; labrum and apex of mandibulæ black; first joint of the antennæ cupreous, second joint fulvous, the rest more or less metallic greenish black. Thorax twice as broad as long, sides rounded, moderately converging from base to apex; posterior margin rather deeply sinuate on either side, and obsoletely depressed on each side of the middle lobe; surface transversely convex, impunctate at the sides, distinctly but not closely punctured on the disk, more deeply towards the base, violaceous blue with a distinct tint of greenish olive, and a broad band of bright reddish copper-colour parallel with the lateral margins. Elytra very convex at the base, thence to the apex greatly deflexed, slightly longer than broad, each elytron covered with ten rows of very deep punctures, the interstices smooth and impunctate, of the same colour as the thorax, with a short lateral band of bright aureous near the apex. Entire underside and legs metallic aureous.

From L. pretiosum, Lac., distinguished by the punctures of the thorax and the colour of the antennæ and the elytra. From L. dives,

Lac., equally different by its coloration and the deep punctures of the elytra; while L. hypochryseum, Baly, is devoid of the metallic elytral band.

## Genus CHALCOPLACIS, Chevr.

## 7. CHALCOPLACIS INSTABILIS, sp. nov.

Subrotundate-ovate. Above cupreous or dark blue, shining, head cupreous or violaceous blue; antennæ black, their six basal joints fulvous; thorax finely, elytra more deeply punctate; below and the legs black.

Length 2 lines.

Hab. Zapote, Guatemala.

Head rather deeply punctured, lower part of face more closely punctate than the vertex, clypeus not separated; jaws very prominent; antennæ subfiliform, third and fourth joints of equal length, seventh and the following joints thickened, black, six basal joints fulvous, the first stained with piceous above. Thorax transversely convex, narrowed from base to apex, anterior angles acute; surface minutely punctured. Scutellum broad, impunctate. Elytra slightly wider at the base than the thorax, convex, the extreme apex rather acutely produced, surface much more strongly punctured than the thorax, the puncturing arranged in irregular rows, the sutural margin accompanied at its posterior third by an impressed line. The colour varying from purplish cupreous to dark greenish blue. All the latter-coloured specimens have the head igneous or cupreous, while the reverse is the case with the cupreous ones, whose head is violaceous. Underside black, legs with a coppery hue.

## Genus Noda, Chapuis.

## 8. Noda tasmanica, sp. nov.

Oblong-ovate. Æneous; antennæ piceous, their base and the legs entirely fulvous; head and thorax coarsely punctate, elytra each with four smooth longitudinal costæ, their interstices deeply punctate.

Length 2 lines. Hab. Tasmania.

Head with a deep longitudinal groove in middle, deeply and closely punctured; labrum fulvous, its base piceous; palpi testaceous, their apex as well as the mandibles piceous; antennæ about half the length of the body, second and third joints short, of nearly equal length, the seventh to the eleventh joint thickened and cylindrical, piceous or black, five or six basal joints fulvous. Thorax transversely convex, its sides rounded and widened in the middle, posterior margin broadly produced in middle, surface deeply and closely punctured, interrupted here and there by some smooth semielevated spaces, brownish or greenish æneous. Scutellum as broad as long, in one specimen broader than long, impunctate. Elytra scarcely wider at the base than the thorax, about three times as long, punctured like the thorax, the punctures sometimes confluent and interrupted by four

longitudinal smooth costæ which unite near the apex, the outer one being placed close to a longitudinal sulcation which runs parallel with the lateral margin; the interstices are more or less distinctly transversely rugose. Underside closely silvery pubescent, legs fulvous, last joint of tarsi piceous.

## Genus PRIONODERA, Chapuis.

## 9. PRIONODERA GODMANI, sp. nov.

Elongate. Testaceous; antennæ with joints 5-7 and 10-12 black; elytra coarsely punctate and subrugulose, each elytron with a spot at the base and one near the apex metallic green.

Length  $4\frac{1}{2}$  lines.

Hab. Zapote, Guatemala.

Head deeply but not closely punctured, with a shallow fovea between the eyes; antennæ two thirds the length of the body, testaceous, from the fifth to the seventh and the three apical joints black. Thorax nearly twice as broad as long, its sides tridentate, the posterior tooth obsolete and more rounded, the anterior ones acute and distinct; surface rather convex, closely but not more deeply punctured than the head. Scutellum smooth. Elytra wider at the base than the thorax, deeply and coarsely but irregularly punctured, the puncturing near the suture, however, more regularly striate; the interstices coarsely rugose and transversely wrinkled at the base and near the apex, the latter also distinctly costate, each elytron with two large metallic green patches, one of which, situated at the base, is of a semitriangular shape with its inner margin obliquely cut; the other patch is placed below the middle, of a more rounded shape; neither of them extends to either the lateral or sutural margin. The entire underside and the legs testaceous.

Several similarly coloured species have been described, from all of which the present one is distinguished by the colour of the antennæ, which is constant in all the specimens before me, as well as by the shape and margination of the thorax and the colour of the elytral

spots.

Collected by Mr. G. Champion.

## Genus Fidia, Baly.

## 10. FIDIA GUATEMALENSIS, sp. nov.

Subcylindric, elongate. Bronze-coloured, closely covered with white pubescence; thorax deeply punctate; elytra coarsely punctate-striate, the interstices costate.

Length 2-3 lines.

Hab. Dueñas, Capetillo (Guatemala).

Head strongly punctate, with a short longitudinal groove in the middle; eyes entire, convex; antennæ longer than half the body, black, with a greenish hue on the surface of the basal joints, the latter fulvous below; the first six joints (with the exception of the short second joint) slender, filiform, and of nearly equal length, the rest much thicker. Thorax cylindric, slightly contracted at the

base and apex; surface rather more deeply punctured than the head. Scutellum elongate, pubescent. Elytra much wider than the thorax, parallel, convex, the space below the base very slightly transversely depressed; humeral callus prominent, smooth; surface very deeply punctate-striate, the interstices costate and partly, especially towards the sides, transversely wrinkled, here and there covered with more minute punctures, and covered with long whitish stiff hairs. Base of the femora and tibiæ fulvous, apex of latter and the tarsi piceous.

This species, which was sent over by Mr. Champion in numerous specimens, may be readily known from others by its metallic bronze

colour and the deep punctured striæ on the elytra.

## Genus Colaspoides, Castlenau.

## 11. Colaspoides batesi, sp. nov.

Broadly ovate, convex; shining metallic green, base of antennæ and palpi fulvous; head and thorax obsoletely punctured, elytra distinctly punctate-striate.

Length  $2\frac{1}{2}$ -3 lines. Hab. Costa Rica.

Head impunctate on the vertex, with a distinct fovea in the middle, clypeus bounded on either side by a deep depression, punctured and obsoletely transversely wrinkled; labrum æneous; antennæ longer than half the length of the body, the four basal joints fulvous, the rest black; apical joint of palpi piceous. Thorax transverse, nearly three times as broad as long, narrowly margined, surface convex, obsoletely punctured. Scutellum large, oblong, impunctate. Elytra slightly wider at the base than the thorax, convex, and obsoletely obliquely depressed below the humeral callus; surface covered with numerous irregular rows of distinct but not deep punctures; interspaces smooth, impunctate. Underside, legs, and tarsi metallic green, the latter rather darker.

To be distinguished from C. smaragdula, Lefèv., and other allied species by its uniform coloration of the legs and tarsi and the obsolete punctuation of the thorax, as well as by the colour of the

labrum.

## 12. COLASPOIDES PERUANA, sp. nov.

Oblong, convex. Dark violaceous blue, shining; palpi, base of antennæ, and the legs fulvous; thorax distantly, elytra closely punctate-striate.

Length 4 lines.

Hab. Chanchomayo, Peru.

Head deeply but distantly punctate, front impressed in the middle with a longitudinal groove; labrum fulvous; mandibulæ black: antennæ rather more than half the length of the body, filiform; the third and fifth joints of equal length; second joint small, ovate; the four basal joints fulvous, the rest black. Thorax more than three times as broad as long, very convex, the sides and the posterior margin much rounded, the latter broadly produced in the middle, all the angles acute, the anterior ones slightly produced; surface remotely but distinctly punctured. Elytra broadly oblong, rather convex posteriorly, rather closely and regularly punctate-striate, more distinctly near the base than towards the apex, where the punctures diminish greatly in size. Entirely dark violaceous blue; underside of the same colour, the legs and tarsi fulvous. Thighs unarmed.

Distinguished from C. alcyonea, Erichs., by its greater size, the colour of the antennæ and the underside; from C. tibialis, Lefèv., by

the uniform coloration of its legs.

## 13. Colaspoides australis, sp. nov.

Oblong-ovate, broad. Bluish æneous beneath, cupreous or violaceous above; base of antennæ, labrum, and legs fulvous; thorax coarsely, elytra substriate-punctate.

Length 3 lines.

Hab. Australia, Queensland.

Upper portion of the head finely, lower portion coarsely punctate; the apex of the clypeus, labrum, and palpi fulvo-testaceous; antennæ filiform, the first six or seven joints fulvous, the rest black. Thorax twice as broad as long, sides nearly straight at the base, rounded and narrowed towards the apex, the posterior margin being in consequence double as wide as the anterior one; surface convex, not very closely impressed with deep oblong punctures, which are more crowded at the sides than on the disk. Scutellum very broad, smooth, metallic green or cupreous. Elytra slightly depressed below the basilar space, the depression not quite extending to the suture, rather deeply and regularly punctate-striate, the interspaces smooth, but transversely wrinkled below the base near the lateral margins; the latter are also impressed through their entire length with deep punctures; the first two rows of punctures unite before the middle and form one row of closely approached punctures which runs parallel with the suture to the apex, the latter obsoletely costate. Underside piceous with a metallic bluish gloss, legs piceous or dark fulvous, thighs not armed with a tooth.

## 14. Colaspoides unicolor, sp. nov.

Ovate, very convex. Dark violaceous, base of antennæ and palpitestaceous; head and thorax distantly, elytra closely punctured.

Length 3 lines.

Hab. Chontales, Nicaragua.

Head deeply but not closely punctured, with a longitudinal groove in the middle of the vertex; clypeus more closely punctured, labrum metallic green; basal joints of palpi fulvous, the apical joint piceous; antennæ filiform, the third joint very slender and the longest, the fourth half the length, the three or four basal joints testaceous, the rest black with a greenish gloss. Thorax very narrow, at least three times as wide as long, sides evenly rounded, posterior margin much produced towards the middle, anterior one much deflected towards the sides, surface very distinctly punctured on the disk, more closely

towards the sides. Scutellum broad, oblong, impunctate. Elytra convex, the humeral callus but slightly produced, surface very distinctly punctate, the puncturing arranged in irregular rows, dark violaceous blue, shining; innerside of the same colour but with a metallic green tint, particularly visible on the tibiæ and tarsi.

I add here the diagnosis of two well-marked species contained in my collection, but whose habitat is not known to me at present:-

# 15. Colaspoides decemmaculata, sp. nov.

Oblong-ovate. Ferruginous; head closely puuctate, substrigose at the vertex; thorax less closely, moderately strongly punctate, with four transversely placed small black spots; elytra wider than the thorax at the base, minutely granulate, closely and irregularly punctured, each elytron with five large yellow spots margined with piceous, of which two are placed transversely at the base, two at the middle, and one near the apex.

Length 4 lines.

# 16. Colaspoides variabilis, sp. nov.

Ovate, convex. Fulvous; lower part of head sparingly punctate, the anterior margin with two or three piceous spots; thorax obsoletely punctured, four transversely placed patches and the margins piceous; elytra closely and distinctly semipunctate-striate, each elytron with two longitudinal spots at the base, two other larger ones at the middle, transversely placed, and a large transverse patch near the apex, as well as the suture, ferruginous.

Var. a. Thorax and underside black.

Var. b. Thorax unspotted, elytra with black spots, the basal ones united or normal.

Var. c. The patches on the elytra reduced to five or six small black spots, underside piceous, base of thighs and the tibiæ fulvous.

## Genus Zygogramma, Chevr.

## 17. Zygogramma Championi.

Oblong-ovate. Dark æneous, shining, antennæ and tarsi fulvous; elytra irregularly punctured, their lateral margins light flavous. Length 3 lines.

Hab. Capetillo, Guatemala.

Head deeply but not closely punctured; labrum, palpi, and antennæ fulvous, the latter with their joints gradually thickened and reaching to the base of the thorax, the third joint about double as long as the second. Thorax narrowly transverse, the anterior margins but little concave behind the eyes and almost straight, sides widened and rounded before the middle, parallel thence to the base; surface rather deeply punctured on the disk, intermixed with smaller punctures, very strongly and deeply punctate at the sides; there is also a deep irregular-shaped fovea at each side near the anterior margin. Scutellum large, impunctate. Elytra narrowed towards the apex, deeply and irregularly punctured, with the exception of a regular row accompanying the sutural margin; dark æneous, their lateral margins broadly flavous; this band is slightly narrowed and sinuate below the shoulders. There is also in one specimen before me a short stripe of flavous between the margin and the scutellum at the base of each elytron. Underside and legs greenish æneous, extreme apex of tibiæ and the tarsi fulvous.

Collected by Mr. G. Champion.

## Genus STILODES, Chevr.

18. STILODES BELTI, sp. nov.

Ovate-rotundate. Obscure brownish æneous, submetallic; elytra geminate-punctate-striate, flavous, the suture (widened before and behind the middle) and three longitudinal rows of elongate spots dark brown.

Length  $4\frac{1}{2}$ -5 lines.

Hab. Chontales, Nicaragua.

Head distinctly and moderately closely punctured, labrum brown, apex of mandibles and the antennæ obscure piceous; the latter gradually thickened, with their apical joints longer than broad. Thorax transverse, anterior margin straight in middle, posterior one produced, sides rounded, the anterior angles slightly produced; surface coarsely punctured near the sides, more finely on the disk, with a small but deep round fovea at each side, of the same brownish æneous colour, as the head. Scutellum smooth. Elytra convex, geminate-punctatestriate on the disk, more irregularly punctured near the sides, the first sutural stria very short, flavous, with three parallel rows of irregular-shaped dark brown spots placed as follows—the first row on the disk (consisting of four spots of increasing size), the second and third row (of three spots each) placed towards the lateral margin without, however, touching the latter, their two anterior spots joined at the shoulder into an elongate A-shaped mark: two other short stripes are connected with the suture anteriorly and posteriorly. Outer limb, underside, and legs brownish æneous.

## 19. STILODES FLAVO-MARGINATA, sp. nov.

Ovate, convex. Dark violaceous blue; elytra punctate-striate, each elytron margined with a broad crescent-shaped yellow band from the base towards the apex.

Length 4 lines. Hab. Brazil.

Vertex rather convex, with an indistinct middle line; head rather sparingly but distinctly punctured; three lower joints of the antennæ light brown, the rest piceous and gradually increasing in width. Thorax transverse, its sides parallel at the base, rounded towards the apex and finely margined; surface sparingly impressed with punctures like those of the head, almost impunctate towards the sides. Scutellum smooth, trigonate. Elytra slightly wider at the base than the thorax, narrowed and rounded towards the apex; surface of each elytron impressed with ten rows of rather deep punctures, the first

of which is very short, their interstices also extremely minutely punctate, dark violaceous blue, with a bright yellow band of crescent-shape, which, commencing at the base and running parallel with the lateral margin (without, however, quite touching it), turns inwards at a little distance from the apex, towards the suture, which, in the one specimen before me, it does not quite reach. Underside and legs rather darker blue than the upperside.

#### HALTICINÆ.

20. CRIMISSA NIGRO-ORNATA, sp. nov.

Broadly oblong-ovate. Black, base of antennæ and the femora fulvous; above testaceous. Thorax with three transversely placed black spots. Elytra irregularly punctured, each elytron with a black longitudinal spot on the shoulder.

Length  $5\frac{1}{2}$ -6 lines. Hab. Columbia.

Head swollen, impunctate, with an elongate triangular black spot at the vertex; the space immediately above the insertion of the antennæ but slightly raised and divided by a broad triangular groove, black; apex of jaws and palpi black; antennæ shorter than half the length of the body, with the basal joint slender, curved, and the longest, the fifth joint slightly longer than the rest, first joint entirely testaceous, the second to the fifth spotted with piceous on each side, the remaining joints black with only the extreme base Thorax transverse, about three times as broad as long, the anterior and posterior margins produced in the middle, sides nearly straight and widened towards the base; all the angles acute, the anterior ones much produced and pointed; surface slightly convex, smooth, shining, and impunctate, with a round spot at each side and a short longitudinal streak in the middle near the base black. Scutellum pentagonal, obsoletely edged with piceous. Elytra convex, scarcely broader at the base than the thorax, distinctly and rather closely punctured, of the same colour as the thorax, or a little lighter testaceous, with a longitudinal black spot on the humeral callus. Underside black, the femora fulvous, the posterior ones with a black spot; the tibiæ and tarsi also more or less stained with black.

In one specimen, which may prove to be the female, of rather larger size, the black colour predominates beneath, the spots on the thorax are much enlarged, especially the middle one, and the elytral spots extend in the shape of longitudinal pointed vittæ from the shoulder to nearly the apex.

## 21. Homammatus clarki, sp. nov.

Oval, convex, robust. Dark chestnut-coloured, subpubescent. Antennæ dilated towards the apex, fulvous, the sixth to the ninth joint black; elytra with a small black spot before the middle.

Length 2\frac{3}{4} lines.

Head with the usual transverse depression, light brown, deeply punctate at the base, leaving, however, a space in the middle of the vertex smooth; anterior part testaceous; maxillary palpi filiform; antennæ reaching to about one third of the length of the elytra, the first joint much thickened, as long as the third, the second short, rounded, joints sixth to ninth thickened and widened, the rest a little more elongate, closely pubescent. Thorax about twice as broad as long; the anterior angles pointed and slightly produced outwards; sides sinuate near the base, but not angulate; surface with a shallow depression on each side, and a short, raised, longitudinal, smooth space in the middle, not touching either the anterior or posterior margin; the disk covered with punctures as deep as those of the head, more curved near the base and sides than at the anterior portion, and covered sparingly with golden-yellow hair; an obscure spot of fuscous is visible at each side and on the disk. Elytra much wider than the thorax, convex and subcylindrical, finely punctate striate, more obsolete near the apex, covered also sparingly with silky vellow pubescence; they are slightly depressed before the middle, of a dark chestnut colour, rather shining, and have each an obscure, round black spot placed in the hollow of the depression. Underside and legs lighter-coloured, the posterior thigh with a rather large black patch on the outside; posterior tibiæ near the apex with comb-like teeth and one spur; claws appendiculate.

Hab. Amazons.

The dilated antennæ, antemedian depression of the elytra, together with the spur at the posterior tibiæ, show this species to belong to Clark's genus *Homammatus*, although it might perhaps have been placed, with equal right, amongst the genus *Homotyphus* or allied genera. Von Harold, in the 'Coleopt. Hefte,' has already pointed out the artificial construction of many of Clark's genera, founded very often on doubtful and variable structures of different organs; and it is very possible that the student may often be puzzled as to the genus to which an insect of this family belongs.

## 22. ALLOCHROMA BIMACULATA, sp. nov.

Oblong, ovate, robust. Light fulvous, glabrous; antennæ, the four anterior legs, and a spot on each elytron before the middle black.

Length 3 lines.

Head with a few fine punctures, a round fovea in the middle of the vertex, and a transverse groove between the eyes; another deep longitudinal fovea is situated between the antennæ; the latter are short and robust, entirely black, the first joint is claviform, the second short and rounded, the third nearly as long as the first, the fourth and fifth joints shorter and of equal length, the sixth joint dilated and much more robust than the others, the rest rather short and slightly widened; maxillary palpi robust, the penultimate joint transverse, the last joint conical and pointed. Thorax transverse, all the angles acute and rather produced, the sides distinctly angulated before the middle, thence to the base concave, not straight; surface rather convex, with two shallow foveæ at each side near

the base, the space between them also obsoletely depressed; the entire disk very distinctly but widely punctured, uniformly fulvous. Scutellum impunctate. Elytra wider than the thorax at the base, gradually narrowed posteriorly, with a distinct transverse depression below the base; each elytron with ten rows of deep punctures, which diminish in depth towards the apex; they are of the same colour as the other parts, and have a black round spot exactly at the end of the basilar depression, between the margin and the suture. Underside of a little deeper tint than the upper one. The four anterior legs black; the claws, however, and the posterior ones fulvous. Posterior thighs reaching beyond the apex of the elytra; claws appendiculate; posterior tibiæ with two distinct spurs.

One specimen in my collection from Nicaragua.

The glabrous elytra, shape of the palpi, as well as the organization of the hinder tibiæ, which are armed with two spurs, place this insect in the genus Allochroma as defined by Clark, while the coloration will distinguish it from the other species of this genus.

## GALERUCINÆ.

## Genus CŒLOMERA.

23. CŒLOMERA NIGRICOLLIS, sp. nov.

Elongate, subparallel. Flavous; head and thorax piceous or black, finely pubescent; elytra dark purplish-red, finely punctate and pubescent.

Length 6 lines.

Hab. Mountain of Irazu, Costa Rica.

Head deeply foveolate in the middle, obsoletely punctured, black; clypeus flavous; antennæ black, covered with yellowish hairs. Thorax deeply transversely depressed in the middle, with a few other smaller depressions near the sides and base; surface covered with minute punctures and thin yellowish hairs, piceous or black, the margins narrowly fulvous. Scutellum piceous. Elytra convex, widened from the middle to the apex, very closely and minutely punctured, covered thinly with yellowish pubescence of a reddishpurple colour. Underside flavous; tibiæ and tarsi black.

Nearly allied to C. submetallica, Clark, but separated from that species by the black thorax and the fine punctuation of the elytra, as well as by the almost entirely black head. I have more than half a dozen specimens before me, all of which agree exactly with each other.

Collected by Mr. Rogers.

## 24. CŒLOMERA GODMANI, sp. nov.

Elongate, parallel. Flavous; head and thorax with two large spots; elytra finely punctate and pubescent, fuscous; tibiæ, tarsi, and antennæ black.

Length 6 lines.

Hab. Chontales, Nicaragua.

Head very minutely punctured, with an indistinct median and a

more distinct transverse groove between the eyes; apex of the mandibulæ piceous; base of the head occupied at each side by a large elongate black spot; antennæ short, black, pubescent. Thorax nearly three times as broad as long, transversely impressed across the entire disk, minutely punctured, flavous or rufous, with a large round black patch at each side near the posterior margin, where the puncturing is a little more distinct. Scutellum flavous, pubescent. Elytra a little wider than the thorax, parallel or very little widened posteriorly, exceedingly close and minutely punctured, of a dark fuscous colour, and covered with thin whitish pubescence. Underside and the femora flavous; knees, tibiæ, and tarsi black.

To be distinguished from *C. maculicollis*, Clark, by the larger size, the two-spotted thorax, and by the minute punctuation of the latter and of the elytra, while it differs from *C. binotata*, Dej., in

the coloration as well as the sculpture of the elytra.

## Genus CHTHONEIS, Baly.

25. CHTHONEIS JANSONI, sp. nov.

Elongate, parallel. Black; head and thorax flavous; four apical joints of the antennæ testaceous; elytra violaceous, closely punctured, and transversely rugose.

Length 3 lines.

Hab. Chontales, Nicaragua.

Head impunctate, deeply transversely grooved between the eyes; labrum and palpi piceous; antennæ as long as the body, closely pubescent, with the exception of the first joint, second and third joints short, black, the last four joints testaceous or flavous. Thorax transverse, about twice as broad as long, anterior margin slightly concave in the middle, sides narrowed at the base; surface moderately convex, impunctate, shining flavous. Scutellum black. Elytra wider at the base than the thorax, closely and distinctly punctured; the interstices transversely wrinkled or semireticulate; entirely dark violaceous, semiopaque. Underside and legs black, covered with whitish pubescence.

The colour of the head and thorax principally distinguishes this

species from C. apicicornis, Baly.

Collected by Mr. Janson.

26. CHTHONEIS SMARAGDIPENNIS, Sp. nov.

Elongate, parallel. Flavous; antennæ, tibiæ, and tarsi black; thorax transversely foveolate; elytra bright metallic green, closely rugose punctate.

Length  $3-3\frac{1}{2}$  lines.

Hab. Capetillo, Guatemala.

Head not longer than broad, vertex with a few minute punctures, carina and encarpæ ill-defined; antennæ as long as the body in the male, shorter in the female, second and third joint very small, moniliform, fourth joint longer than the first three joints together. Thorax subquadrate, its sides widened in the middle and contracted

near the base; surface impunctate, very shining, flavous, the disk near the base deeply but irregularly transversely foveolate. Scutellum flavous. Elytra wider than the thorax, very bright metallic green, closely and rather coarsely rugose-punctate; tibiæ and tarsi black, first joint of latter longer than the following joints together. Claws

appendiculate.

This species seems to form a connecting link between the genus Scelida of Chapuis and the present one; it may with equal right be classed amongst the first on account of the unarmed tibiæ and other characters; but as in Scelida the third joint of the antennæ is much longer than the second, while here it is as short, I have included it in the present genus, although it differs from the typical species in not having the joints of the antennæ dilated.

## Genus Scelida, Chapuis.

27. Scelida viridis, sp. nov.

Elongate, parallel. Metallic green, pubescent below; head, thorax, antennæ, and legs flavous; elytra closely rugose-punctate, metallic green.

Length 6 lines. Hab. Mexico.

Head elongate, vertex swollen, with a deep fovea in the middle, apex of jaws piceous; antennæ half the length of the body, the second joint short, the fourth slightly longer than the third. Thorax nearly square, its sides, from the middle to the base, nearly parallel; surface impunctate, with a deep oblique fovea at either side. Scutellum flavous. Elytra much wider than the thorax, parallel, closely rugose-punctate. Underside metallic green, the sides of the breast and the posterior margins of the abdominal segments closely covered with long white hairs. Legs entirely flavous.

Of the two other described species, S. elegans, Chapuis, and S. balyi, Jacoby, the present one will be easily recognized by its green under-

side and the entirely flavous antennæ and legs.

## Genus Monotia, Le Conte.

28. Monotia viridis, sp. nov.

Oblong-ovate, convex. Obscure flavous beneath; above dark olive-green, opaque, finely punctate and pubescent.

Length 4 lines.

Hab. Zapote, Guatemala.

Head with a longitudinal middle groove, rather deeply and closely punctured, clypeus narrow, transverse; labrum obscure piceous: antennæ about half the length of the body, the basal joint olivegreen, the following joints testaceous, the last three piceous or black; the first and fourth joints are of equal length, the second half the size of the third. Thorax transverse, sides slightly angulate before the middle; surface obsoletely impressed near the anterior and lateral margins, finely and not distinctly punctured.

Scutellum large, its apex rounded, flavous, impunctate. Elytra slightly widened posteriorly, convex, minutely punctured, and covered with yellowish pubescence, which, however, is only visible in a certain light; the dark green colour is like that of the thorax, here and there stained with purplish patches, but without possessing any gloss. Underside, as well as the inside of the posterior femora, flavous; legs olive-green, shining; tibiæ simple, unarmed, claws bifid.

Collected by Mr. Champion.

#### Genus OIDES, Weber.

#### 29. OIDES ALBERTISI.

Oblong-ovate, convex. Testaceous; elytra closely punctate, fulvous, a large square patch at the base and another semitriangular one near the apex black.

Length 5 lines.

Hab. Somerset, Australia.

Vertex convex, smooth, with a fine longitudinal groove, and a deep transverse depression in front of the antennæ; the latter entirely testaceous, the second joint half the size of the first, third and fifth of equal length, fourth longer than either. Thorax nearly three times as broad as long, surface obsoletely punctured, with two or three obscure shallow depressions, testaceous, shining. Scutellum testaceous. Elytra slightly widened behind the middle, closely and distinctly punctured, fulvous, shining; each elytron with a large square patch at the base, neither reaching the sutural nor lateral margin, and another equally broad but more triangularly-shaped patch near the apex, black; the latter spot is also interrupted narrowly by the suture, and more broadly by the lateral margin. Entire underside and the legs testaceous.

This species is closely allied to O. rubrum and O. ornatum, Baly, but differs from the first in the colour of the antennæ and the basal markings of the elytra (which in the present insect do not reach to the lateral margin), and from the second by the pale coloration of the

underside and also of the antennæ.

Collected by M. D'Albertis.

## Genus AGETOCERA, Hope.

## 30. AGETOCERA FLAVIVENTRIS, sp. nov.

Elongate, robust, convex. Black, shining; antennæ flavous, their apex piceous; elytra violaceous, abdomen flavous.

Length 5 lines. Hab. India.

Head elongate, with a deep groove between the eyes; base and apex of labrum fulvous; antennæ (2) filiform, basal joint thickened, second short, third to the seventh joints equal, the eighth and following the longest, the joints increasing in thickness from the fourth to the ninth. Thorax transversely subquadrate, sides narrowly margined, dilated anteriorly; surface smooth, impunctate, deeply impressed behind the middle with a transverse short groove,

black, shining. Scutellum black, trigonate. Elytra dilated posteriorly, with a shallow depression below the basilar space, and several others near the lateral margins; another longitudinal sulcation runs parallel with the latter, but finishes at some distance before the apex; surface minutely and closely punctate, dark violaceous blue. Underside and legs black; abdomen flavous.

I unfortunately possess only one specimen, and that a female, of this distinctly-coloured species; the antennæ in the male will probably show the same dilatation as in the other species belonging to

this genus.

## Genus NESTINUS, Clark.

31. NESTINUS FLAVO-MARGINATUS, Sp. nov.

Elongate, parallel, rugose-punctate; finely pubescent. Flavous; base of the head, three transversely-placed spots on the thorax, antennæ, tibiæ, and tarsi black; elytra metallic cupreous, the margin flavous.

Length  $5-5\frac{1}{2}$  lines.

Hab. Mexico.

Head rugose-punctate, with a fine longitudinal median groove at the vertex extending to the clypeus, flavous, with an elongate black spot from the middle of the base to almost the anterior margin of the eyes; apex of labrum and the palpi black; antennæ about half the length of the body, black, basal joint thickened, robust, second short, third of double the length, fourth joint longer than the third and the longest. Thorax transverse, sides nearly parallel, all the angles slightly thickened, the posterior ones oblique; surface obliquely depressed at each side, longitudinally grooved in the middle, irregularly rugose-punctate, flavous, a spot at each side near the lateral margin, and another in the middle, a little distance from the base, black. Scutellum black, finely punctate and pubescent. Elytra closely rugose-punctate, finely flavous-pubescent near the margin, metallic cupreous, the lateral margins and apex flavous. Tibiæ and tarsi black. Claws bifid.

The flavous margination of the elytra will distinguish this species from those described by Clark.

#### Genus DIABROTICA.

32. DIABROTICA MARGINELLA, sp. nov.

Subelongate, widened behind. Flavous; antennæ (joints seventh and eighth excepted), base of head, and two spots on the thorax greenish black. Elytra strongly punctate, broadly margined, metallic green, lateral and sutural margins, as well as the apex, flavous. Upper surface of femora and the tibiæ and tarsi black.

Length  $3-4\frac{1}{2}$  lines. Hab. Costa Rica.

Head longer than broad, swollen, impunctate, front impressed with a small fovea; encarpæ obsolete; carina not visible; lower part of face flavous, labrum and vertex blackish green; antennæ two thirds the length of the body, filiform, the second joint short, the rest of

nearly equal length, black, the seventh and eighth joints light flavous. Thorax transverse, sinuate behind the middle, anterior angles slightly prominent; surface impunctate, flavous, with a large black spot at either side. Scutellum black. Elytra dilated posteriorly, broadly margined at the middle; surface strongly and closely punctured, metallic green, the margins and suture narrowly, the apex broadly flavous.

## 33. DIABROTICA FOVEIPENNIS, sp. nov.

Oblong. Flavous; thorax bifoveolate, minutely punctate; elytra finely but distinctly punctured, flavous, the suture (narrowly) and four very obsolete spots on the disk ferruginous, lateral margins interrupted in the middle by a deep fovea.

Length  $3\frac{1}{2}$  lines.

Hab. Dueñas, Guatemala.

Head very finely punctured, as long as broad; front with a small fovea; encarpæ and carina distinct; antennæ filiform, longer than half the body, second joint short, third of double the length, entirely flavous. Thorax transverse, subquadrate, sides finely margined, strongly contracted behind the middle, anterior angles not pointed, posterior ones slightly thickened, surface minutely punctured, bifoveolate on the disk, the foveæ closely approached. Scutellum smooth. Elytra slightly widened at the middle, closely and more deeply punctured than the thorax, each elytron with a deep fovea, situated immediately before the middle of the lateral margin, the latter itself being produced at that place into a triangular tooth, while the interior of the fovea contains another still more pointed triangular elevation; two indistinct spots, one before the other behind the middle, on the disk of each elytron, as well as the suture narrowly, ferruginous. Underside and legs entirely Claws appendiculate.

Collected by Mr. Champion.

This and the following species I rather reluctantly describe under the generic name of *Diabrotica*, on account of their appendiculated claws and the curious elytral foveæ. The latter character, I think, is peculiar to the male insect; but as in all other particulars the species agree with *Diabrotica*, I have placed them there for the present.

## 34. DIABROTICA TRIPUNCTATA, sp. nov.

Elongate. Obscure fulvous, base of femora and the antennæ black; vertex ferruginous; above yellowish or light testaceous, opaque. Scutellum, three triangularly placed spots on each elytron, and the suture black.

of (?). Elytra with a deep fovea near the lateral margin, before the middle.

Length 4 lines.

Hab. Capetillo, Dueñas (Guatemala).

Head not longer than broad, longitudinally and transversely grooved between the eyes; vertex ferruginous, lower part of face light testaceous; antennæ of the same shape and length as the pre-

ceding species, black. Thorax transverse, widened in the middle, the base contracted; surface minutely punctured, yellowish white, with an indistinct longitudinal fuscous line in the middle, sometimes entirely absent. Elytra rather convex, almost subcylindrical, scarcely more distinctly punctured than the thorax; two small spots, one of which is placed before, the other behind the middle, near the sutural, and a third spot between the two, near the lateral margin of each elytron, black. Underside fuscous or dark ferruginous, more or less stained with black. Legs flavous, base of the femora as well as the apex of the tibiæ and tarsi more or less black. In the specimens which I take to be male, there is the same deep fovea near the lateral margin; but the latter itself is not interrupted as in the preceding species, and the internal tooth is not isolated, but connected with the sides of the fovea in the shape of a convex ridge. Claws appendiculate.

#### 35. DIABROTICA IMITANS, sp. nov.

Oblong-ovate, dilated posteriorly. Black, base of head and the thorax fulvous; antennæ (their apex excepted), legs, and elytra bright flavous, the latter with four basal spots and two broad transverse bands black.

Var. The basal spots on the elytra united in the form of a third transverse band.

Length 3 lines, Hab. Venezuela.

Lower part of face deeply excavated (3), shining black, vertex and sides of face fulvous, the former with a few small punctures; basal joint of the antennæ very long and slender, as long as the fourth, second joint less than half the size of the third, first five or six joints flavous, the rest piceous. Thorax subquadrate, the hinder angles oblique, sides armed with a small tubercle at each side below the anterior angles; surface obsoletely transversely depressed, minutely punctured. Scutellum black. Elytra wider than the thorax, much dilated behind the middle, convex, deeply punctured, the interstices obsoletely rugose; flavous, two elongate spots at the base of each elytron (in the variety united into a band), a transverse regular band at the middle not touching the lateral margin, and another wider one near the apex black.

In the female the deep excavation of the head is wanting, and the fulvous colour extends much lower down. This species is at once distinguished from *D. ventricosa*, Jacoby (to which it is nearly allied

in colouring), by the flavous margination of the elytra.

## 36. Diabrotica fenestralis, sp. nov.

Elongate, subparallel. Flavous; head, legs, and breast black; elytra flavous or testaceous, with the lateral and sutural margins and three transverse narrow bands, the first of which is connected with the second by a short lateral stripe, piceous.

Length 3 lines.

Hab. Chontales, Nicaragua, and Costa Rica.

ROC. ZOOL. Soc.-1879, No. LI.

Head impunctate, with a fovea between the eyes, black, the latter very convex and large; antennæ two thirds the length of the body, second and third joints very short, light piceous, two basal joints and the ninth and tenth light flavous. Thorax a little broader than long, the sides narrowly margined, the angles not produced, surface smooth, slightly convex, impunctate, light flavous, shining. Scutellum black. Elytra very closely and distinctly punctate, the margins and apex, as well as the base, a narrow transverse band immediately before and a second behind the middle, piceous; an oblique thin streak commencing at the humeral callus connects the basal with the first band; all these bands are sometimes more or less interrupted. Legs and breast black, abdomen flavous.

### Genus CEROTOMA, Erichs.

37. CEROTOMA ATRO-FASCIATA, sp. nov.

Elongate. Black; thorax flavous, impunctate; elytra pale testaceous, a narrow transverse band at the base, dilated at the suture, and two small spots near the apex, black.

Length  $2-2\frac{1}{2}$  lines. *Hab*. Guatemala.

Head black, shining, vertex distinctly but finely punctured, with a fovea in the middle; epistome coarsely punctured, its anterior margin concave; antennæ black or dark piceous, the base of the second and third joints paler, joints first and third long, of equal length, the rest short, pubescent. Thorax transversely quadrate, its sides narrowly margined; surface slightly convex, impunctate, flavous, this colour, however, often broken and obscure along the anterior and posterior margin. Scutellum black. Elytra gradually widened posteriorly, rather closely and distinctly punctate-striate, of a pale testaceous colour, with a more or less distinct longitudinal patch of fuscous on the disk below the middle; a narrow transverse black band, common to both elytra, is placed at the base, it commences at the shoulder, and is triangularly dilated below the scutellum at the sutural margin, where its point reaches to about one third of the length of the elytra; a small black spot is also placed near the apex of each elytron, at a little distance from the sutural angle. Underside black; femora and the anterior tibiæ flavous, each with a black dorsal streak; rest of the tibiæ and tarsi and the apex of the posterior femora black.

Collected by Mr. O. Salvin.

Genus ÆNIDEA, Baly.

38. ÆNIDEA BIPARTITA, sp. nov.

Elongate. Flavous; antennæ with the second to the fifth joint black, the third excavated near the apex; thorax transversely depressed. Elytra minutely punctured, the basal half black, the posterior one fulvous.

Length  $4\frac{1}{2}$  lines. Hab. Sumatra.

Head very wide, vertex impunctate, encarpæ divided by a deep groove; face deeply excavated immediately below the antennæ, the anterior part of which is bounded at either side by a rounded lobe, while the latter are covered at their outer edge with long bristlelike hairs; penultimate joint of the maxillary palpi greatly swollen and dilated, the apical joint being almost buried in it; antennæ as long as the body, the first joint very slender and curved, the second very short, third joint as long as the first, dilated at the apex and deeply excavated, fourth and fifth joints nearly equal in length and as long as the first, covered, as well as the rest of the joints, with fringes of short hairs. Thorax transverse, sides greatly diverging from the base to the middle, from there to the apex produced and rounded; surface foveolate, either side near the base impunctate. Scutellum flavous, broad. Elytra convex, transversely depressed below the base, scarcely visibly punctured, from base to middle black, thence to the apex fulvous. Tibiæ and tarsi black.

Only a single specimen, a male, is known to me.

4. Note on a Specimen of Charybdea haplonema. By Prof. J. Reay Greene, B.A., M.D., F.L.S., F.Z.S., &c.

[Received November 29, 1879.]

Dr. Pye-Smith, now Assistant Physician to Guy's Hospital, found, some years since, in the Museum of that institution, a nameless Medusa of strange appearance, from an unknown locality. Noting its exceptional form, he made a drawing of it, and at the same time observed such of its structural peculiarities as could be studied with due regard to the conservation of the single sample at his disposal. He also took the trouble of bringing the specimen to the meeting of the British Association at Belfast; but no one there could tell him to what group of jelly-fishes it should be referred. Hearing of this failure, I applied during the spring of the present year to Dr. Pye-Smith, who most kindly gave me every opportunity of examining this remarkable Medusa at my leisure.

I soon found that I had not to deal with an undiscovered species, but with none other than the Tamoya haplonema of Fritz Müller. It belongs to Gegenbaur's Charybdeidæ, a group not represented

among the Medusæ of the British coasts.

Tamoya haplonema was described and figured twenty years ago by its discoverer, who found it on the shores of Santa Catharina (Brazil)—"am Strande der Praia de fora bei Desterro." It was not uncommon, more than a dozen specimens being sometimes procurable during one day. Occasionally it was accompanied by the much rarer T. quadrumana. No other naturalist appears to have met with these acalephs.

Our Medusa, however, is very closely allied to Charybdea marsupialis, the common marsupial Medusa of the Mediterranean. This species, the first discovered and best-known member of its group, is

51\*



Jacoby, Martin. 1879. "Descriptions of new species of Phtytophaga (Coleoptera)." *Proceedings of the Zoological Society of London* 1879, 773–793.

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