BIOLOGIA
CENTRALI-AMERICANA.

INSECTA.

COLEOPTERA. Vol. VI. Part 2.

PHYTOPHAGA (part).

HISPIDÆ
BY
J. S. BALY,

With an Appendix by G. C. Champion, F.Z.S.

CASSIDIDÆ
BY
G. C. CHAMPION, F.Z.S.

1885-1894.
INTRODUCTION.

This volume is devoted to two families of the Phytophagous Coleoptera, the Hispidæ and Cassidæ. The Hispidæ, with the exception of a short appendix, have been wholly dealt with by the late J. S. Baly, the Cassidæ by myself. Baly has already contributed some general remarks upon the Hispidæ, so that, as regards this family, it is necessary to add only some particulars as to the number of genera and species represented within our limits. Altogether, for the two families, 453 species are enumerated, the numbers being almost evenly apportioned—Hispidæ 226, Cassidæ 227. In the Hispidæ 169 new species and two new genera, and in the Cassidæ 55 new species and two new genera, have been described. The total number of species of Hispidæ for the whole world is given as 496 in the Munich Catalogue (1874), and for the Cassidæ 1795. This disproportion in the numbers of the two families, as compared with those for Central America, is, however, partly due to the fact that the Cassidæ have been exhaustively monographed by Boheman (1850–62), while no monograph of the Hispidæ has yet appeared. Nevertheless, Central America contains but a limited number of Cassidæ, as compared with Tropical South America: for example, Mesomphalia with 227 species (1874) has nineteen only within our limits; and many other South-American genera are represented by a very small number of species, as Desmonota, Tauroma, Dolichotoma, Calaspidea, and Omoplata, or are altogether absent, as Calliaspis, Spilophora, Canistra, and Pecilaspis. Mexico and Guatemala, however, possess a number of peculiar species of Cassidæ, especially in the genera Chelymorpha, Physonota, Coptocycla, and Ctenochira, very few of which reach our northern frontier. Panama or Costa Rica appears to be the northern limit of such genera as Delocrania, Desmonota, Calaspidea, and Omaspides. America north of Mexico (Henshaw's Catalogue, 1885) has thirty-five species of Hispidæ and twenty species of Cassidæ (three of which are doubtful)—North America, for some, at present, inexplicable reason, possessing exceedingly few Cassidæ. Cassida, the only European genus of the family, and with upwards of 200 species in the Old World, is represented by very few species in North or Central America, it there being replaced by Coptocycla.
BIOLOGIA CENTRALI-AMERICANA.

ZOOLOGIA.

Class INSECTA.

Order COLEOPTERA.

Tribe PHYTOPHAGA (continued).

Fam. HISPIDÆ.

A large number of the Hispidæ contained in the present work are now described for the first time; but although so many of the species are new to science, all, with but two exceptions, belong to known generic groups; two new genera, Exxema and Parachalepus, are characterized in the following pages. The New-World genera Cladispa, Octocladiscus, Melanispa, Hispoleptis, Metaxyccra, Stethispa, Acentroptera, and Stenopodius* are as yet unrepresented in Central America; the last-named genus, however, recently established by Dr. Horn for the reception of a species from California and Arizona, will probably be found in Northern Mexico.

Little is known of the habits of the exotic species of the family; but Mr. Champion, who during his residence in Central America paid great attention to the group, tells me that the smooth flattened species (Cephaloleia and its allies) are usually found in the rolled-up unopened leaves of Musaceæ (Heliconia, sp.), the inner surfaces of the leaves being eroded or eaten through (often for five or six thicknesses of the rolled-up leaves) to a considerable extent: he took a long series of Stenispa attenuata, a smooth metallic insect, by sweeping undergrowth (Bambuseæ), at a high elevation in the virgin forest; he also states that he captured, both in the forests and in the more open savanna country, the brightly coloured species of Arescus on the upper surfaces of leaves, basking in the full sunshine. Mr. Bates, who made a large collection of these interesting insects in the Amazon region, used to find numerous species of Cephaloleia hidden at the bases of bamboo-canies, lying between the leaves and the stem.

As a rule, the New-World Hispidæ are more brilliantly coloured than those of the

* Stenopodius flavidus, Horn (Trans. Amer. Ent. Soc. 1888, p. 201, t. 9, f. 8), a remarkable species, possessing a similarly shaped thorax to Exxema; but judging from the structure of its antennæ, and from the slight description given of its labium, it should belong to the second section of the family, and be placed near Uroplata.
Old World. Many of the Central-American species are large and conspicuous, and being abundant in the various localities in which they occur, are doubtless (as Mr. Wallace states) protected from the attacks of birds and other enemies by the possession of some noxious smell or taste. The coloration and markings of the different species are (with some remarkable exceptions) constant, and show little tendency to variation; in some groups a uniform pattern runs, with but little change, through a series of specific forms, in many cases belonging to separate genera.

It will be seen that I have, as formerly, used the modifications in size and shape of the labium in the arrangement of the generic groups.

The labium is large and exposed, and is thus readily examined in situ by an ordinary microscope without risk of injury to the specimens; it is divided into two segments, the mentum and ligula.

I. The mentum, or basal segment, is connected by its lower edge with the margin of the skull, and is attached on either side to the maxilla; at first small, and forming a single piece with the ligula, it gradually increases in size until ultimately it forms the larger portion of the whole labium.

II. The ligula: this segment is placed in one division of the family at the apex, in the other on the dorsal surface of the mentum; it consists of two subsegments, the basilar and apical, which are separated from each other by well-defined sutural lines; the basilar portion, from the anterior surface of which spring the labial palpi, varies greatly in size and shape; in the earlier genera of the family it is large and prominent, but gradually dwindles away in exact ratio to the increase of the mentum, until at length (Chondrina) it, together with its appendages, the labial palpi, entirely disappears; the apical subsegment is corneous, and sometimes placed at the apex, sometimes on the dorsal surface of the preceding subsegment; in the latter case it is hidden from view.

I should not have thought it necessary to make these remarks had not the late Dr. Chapuis (Gen. Col. t. xi. p. 252) questioned the accuracy of my nomenclature of these parts, and in so doing fallen into a singular error, which, if not corrected, might tend to mislead future students of the group.

After having stated (l. c. p. 255) that the maxillae are attached, one on either side, to the base of the mentum, he proceeds to say that there is often an additional segment, the sous-menton, placed between the true mentum and the margin of the head, referring to Cat. Hisp. tab. i. A a, and fig. 8 f as illustrating the part in question. He thus divides the labium into three segments:—1, a basal one, or sous-menton; 2, an intermediate, or menton; and 3, the languelette, which, according to his statement, carries the labial palpi.

Had he, however, examined the parts in nature, for example, in Alurnna, to which figure he refers, he would have seen that the maxillae are attached to the short transverse segment (his sous-menton), showing it, even according to his own views, to be the true mentum; had he carried his investigations further, and examined the second segment, which he terms the menton, he would have found that the labial palpi spring,
one on either side, from its anterior margin, proving it without doubt to be the basilar subsegment of the ligula, from which these organs always arise. His third segment, or *languette*, to which he has erroneously assigned them, never bears these organs; it answers to the apical subsegment of the ligula and is placed sometimes on the anterior, sometimes on the dorsal surface of the basilar subsegment.

The Hispidae are separable into two primary sections, dependent on the relative positions of the mentum and ligula; in the first the ligula is placed at the apex of the mentum, in the second on its dorsal surface.

Section I. *Ligula placed at the apex of the mentum.*

Subsection 1. *Natural line between the two segments obsolete.*

This subsection will include the new genus described below; the other genera belonging to it are Old-World forms.

**EUXEMA.**


One species from the State of Panama will constitute this genus.

1. **Euxema insignis.** (Tab. I, fig. 1.)

*Subglobosum*, modice convexum, dorso depressum, metallico-carulea, nitida: *antennis* nigris apece extremini pedis. *Tibis* tarsisque piceo-fulvis: *thorace* transverso-convesso: *lateribus* reflexis, a basi apicem verae oblique convergentibus: margine apicali medio in lobum obtusum producere, utrinque sinuato, nec non prae angulum lateralem tuberculo brevi setisere instructo; disco brevi, basi punctato, utrinque infra marginem excavato; *clytris* oblongis, regulariter punctato-striatis.

*Mas.* Abdominis segmento anale obtuso rotundato, leviter bisinuato.

*Fem.* Abdominis segmento anali rotundato, integro.

Long., 3 lin.

*Hab.* PANAMA. Volcan de Chiriqui 8000 feet (*Champion*).

Antenne filiforme, nearly half the length of the body, the third joint longer than the first and second united, black, the last three joints piceous. Thorax transversely convex; sides reflexed, obliquely converging from base to apex, more quickly rounded near the anterior angles, the latter obtuse; anterior margin deeply sinuate on either side and armed near the outer angle with a small setiferous tubercle, visible only under a strong lens; medial portion produced anteriorly into a strong subangulate lobe, which extends over and partially covers the head; upper surface excavated just within the outer margin, finely punctured at the base; disc smooth, impunctate. *Scutellum* pentangular, its apex acute. *Elytra* oblonga, broader than the thorax; sides subparallel; apex broadly rounded, apical margin minutely serrulate; disc distinctly punctate-striate.
Subsection 2. *Natural line between the mentum and ligula distinct.*

**STENISPA.**

*Stenispa*, Baly, Cat. Hispide, p. 13 (1858).

Three species, including one described below, are known from Central America, two from Mexico, and one from the State of Panama.

1. *Stenispa sallaei.* (Tab. I. fig. 2.)

*Stenispa sallaei*, Baly, Cat. Hispide, p. 164.

*Mae.?* Abdominis segmento anali modice subangulato-emarginato; pygidio subitus forca magna lavi sat profunde impresso.

*Hab.?* Mexico, Orizaba; Texpam (type, *coll. Sallé*).

The female of this species is unknown to me.

2. *Stenispa attenuata.*

*Stenispa attenuata*, Baly, Cist. Ent. i. p. 185.

*Mae.?* Abdominis segmento anali late angulato-emarginato; pygidio subitus forca magna lavi impresso.

*Font.?* Abdominis segmento anali utrinque sinuato.

*Hab.?* Guatemala, Chiacam (*Champion*); Panama (?type, *coll. Baly*), Volcan de Chiriqui alt. 8000 feet (*Champion*).

Larger and more brightly coloured than *S. sallaei*, the emargination of the anal segment of the abdomen in the male deeper and more distinctly angulate. Taken abundantly by sweeping undergrowth (Bambusaceae) in the virgin forest at a high elevation.

3. *Stenispa brevicornis.*

Angustata, elongata, postice attenuata, subclylintrica, nigro-crupera, nitida; thorace quam lato paullo longiori, interitibus rectis; disco subremote punctato; elybris elongatis, parallelis, ad apicem attenuatis; regulariter punctato-striatis; antennis ad caput cum thorace aquilongis.

*Mae.?* Abdominis segmento anali modice concavo; pygidio subitus forca lavi magna impresso.

*Font.?* Abdominis segmento anali apice truncato.

Long. 24 lin.

*Hab.?* Mexico (*coll. Degrolle*).

Antenne moderately robust, equal in length to the head and thorax. Front concave, rather closely punctured. Thorax rather longer than broad; sides straight and parallel, incurred at the extreme apex; hinder angles acute, anterior ones produced anteriorly into an acute tooth; disc transversely convex, faintly impressed transversely in front of the scutellum; surface minutely granulose, subremotely punctured. Elytra elongate, rather broader than the thorax; sides straight and parallel before their middle, thence gradually attenuated to the apex, the apical margin obsolesly serrulate; disc regularly punctate-striate, the puncturing nearly obsolete near the apex; interspaces minutely granulose.
This species is very closely allied to *S. attenuata*, but is separated by its smaller size, more robust and shorter antenna, and (in the male) by the less deeply concave apex of the anal segment of the abdomen.

**AMPLIPALPA.**


*Eediopala*, Baly, Cat. Hispidae, p. 16.

All the species of this genus have the joints of the palpi more or less compressed and dilated. One species only is known as yet from Central America, the rest occurring in various localities in South America from Colombia to Brazil.

1. *Amphilalpa guerini*. (Tab. I. fig. 3.)

*Amphilalpa guerini*, Baly, loc. cit. p. 20.

_Hab._ **MEXICO**, Pátzcuaro (Sallé); **PANAMA** (Boucard), Bugaba (Champion), Matachin (Thiéne).—**COLOMBIA**, Bogotá (coll. Baly, type); **UPPER AMAZONS** (Bates).

This insect, although having an extensive range, and apparently not uncommon, appears to have been but very rarely met with by Mr. Champion, only two specimens, from the State of Panama, having been sent by him.

**ALURNUS.**

*Alurnus*, Fabricius, Ent. Syst. ii. p. 51, no. 54.

The species of *Alurnus* are all large and conspicuous insects, with the exception of *A. marginatus*, the coloration of each (within certain limits) tolerably constant; the range of the genus is from Mexico to Southern Brazil. Mr. Champion tells me that these insects are found upon the broad-leaved Musaceae in the virgin forest of the low country.

1. *Alurnus ornatus*. (Tab. I. fig. 4.)

*Alurnus ornatus*, Baly, Trans. Ent. Soc. 1869, p. 87.

_Hab._ **NICARAGUA**, Chontales (Janson, Belt, Sallé); **COSTA RICA** (Van Patten).

2. *Alurnus salvini*. (Tab. I. fig. 5.)

*Anthurum oblongus*, niger, nitidus: elytris flavis, utrinque asperis maculisque tribus, 2-1 dispositis, nigritis. (Tab. I. fig. 6.)

_Long._ 7-9 mm.

_Hab._ **COSTA RICA** (Sallé); **PANAMA**, Chiriquí (Ribbe), Bugaba (Champion).

Vertex and front rugose-punctate, medial line impressed with a longitudinal groove. Antenna half the length of the body, third joint twice the length of the basal two united. Thorax broader at the base than long; sides converging from base to apex, obtusely angulate; upper surface convex, finely punctured, the puncturing crowded on
the sides and at the base, remote on the medial disc. Elytra oblong, acutely rounded
at the apex, convex, distinctly punctured, flavous; each with the apical fourth and
three large patches, placed two obliquely below the base, one on the humeral callus,
the other on the inner disc, and a third transverse, obliquely placed near the middle,
black. Extreme apex of abdomen fulvous.

This insect differs from *A. ornatus* in the less coarsely punctured and entirely black
thorax: in all other respects the two species closely agree. Its coloration is constant,
so that I have considered it as distinct from the preceding insect.

Mr. Champion found this species upon the leaves of Musaceae in the virgin forest of
the low country.

3. Alurnus cassideus. (Tab. I. fig. 7.)


*Hab. Mexico* (coll. Melly).—Upper Amazons⁴. Pebras (Bates); Ecuador (Buckley).

The variety with black elytra from Ecuador, described by Mr. C. O. Waterhouse
[Proc. Zool. Soc. 1881. p. 265], is much narrower than the typical form, and probably
belongs to another species.

XANTHISPA.

*Xanthispa*, Baly, Cat. Hispide, p. 31.

Although the insect here described differs from the original diagnosis of *Xanthispa*
(1. c. p. 32) in having the second joint of the antennæ short, it agrees so completely
in the formation of the parts of the mouth with the typical species [*X. cimicoides*, Guérin,
from Cayenne], that I do not hesitate to place it in the same genus.

1. Xanthispa cæruleipennis. (Tab. I. fig. 8.)

*Ovata, subdepressa, rufo-testacea, nitida*; antennis, articulo basali excepto, ocellis scutelleisque nigris; antennarum
articulis basalibus duobus brevibus equalibus, tergo elongato; thorace transverse, levius, lateribus reflexis,
a basi ad apicem convergentibus; elytris late ovatis, metallico-cæruleis, sat fortiter punctato-striatis,
internatis ad latera convexus, his silicis costatis.

*Long. 2.5* in.

*Hab. Nicaragua, Chontales (Beťt)*. A single specimen.

Antennæ half the length of the body; two lower joints very short, equal, the basal
one not thickened; third joint longer than the preceding two united. Thorax transverse;
sides regularly rounded, and converging from base to apex; the anterior angles
obtuse; apical margin concave; disc impunctate; the lateral margin reflexed. Scutellum
pentagonal. Elytra broadly ovate, rounded on the sides, more broadly rounded at the
apex, outer margin minutely serrulate; disc slightly convex, flattened along the suture,
broadly excavated laterally before the middle; rather strongly punctate-striate; striae on
the outer disc sulcate, their interspaces thickened, here and there distinctly costate; outer limb reflexed, its surface concave, impunctate.

In coloration this species strongly resembles many species of Homalispa.

HOMALISPA.

_Homalispa_, Baly, Cat. Hispide, p. 33.

The present genus, apart from the structural differences of the mouth and antennae, may be known from _Cephaloleia_ by the broader and more ovate form. With the exception of the two described here the species inhabit the warmer parts of South America; about a dozen species are known.

1. _Homalispa variabilis_. (Tab. I. fig. 9.)

_Maculara oblongo-ovata, depressa, nitida; subae nigra, pectoris medio nigro-piceo, thorace inferiori capitoque flavo; supra flavo, antennis, capitis vertice suntolleaque nigris; thorace levis, auriculae late excavatae, vitta lata discoidalis nigra; elytris oblongis, distincte punctato-striatis, dimidio postico vittae late suturali nigris.

_Fig. A._ Elytris flavis, vitta suturali postica medium obsolenta.

_Long. 2 1/2 lin._

_Hab._ PANAMA, Volcan de Chiriqui 3000 feet (Champion).

Lower face excavated, concave; vertex impressed with a few fine punctures. Antennae more than half the length of the body, filiform, very slightly attenuated at the base and apex; joints cylindrical, the second half the length of the basal one, the third as long again as the second. Thorax twice as broad as long at the base; sides very oblique, quickly converging from base to apex, straight behind the middle, slightly rounded anteriorly, apical angle produced. Subae, the basal one very acute; basal margin broadly concave, emarginate on either side, its medial portion very obtusely rounded and slightly reflexed; upper surface smooth and shining, remotely impressed with very fine punctures, only visible under a strong lens; medial disc covered with a broad black vitta, which extends from base to apex; surface between this discoidal vitta and the lateral margin excavated, the lateral margin itself reflexed. Elytra rather broader than the base of the thorax; sides straight, nearly parallel, apical margin (conjointly) obtusely rounded; the outer border very finely serrulate, serratures distant on the sides, closer at the apex; each elytron with eleven rows of distinct punctures, the first row short; outer strie subsulcate, their interspaces slightly convex.

This species, of which I have seen five specimens, all collected by Mr. Champion, is very variable in pattern, and in the extent of the black coloration of the elytra.

2. _Homalispa limbifera._

_Laevis crana, depressa, flavo, nitida; scutellum antennique nigris, abdominal pallide picea; thorace levis, ad latera sparse foveolato-punctato, discum plaga manna ultra, coniformi; a basi ad apicem producta instructa; elytris set fortior punctato-striatis; picea-nigris, limbo exteriori late flavo.

_Long. 2 lin._

_Hab._ GUATEMALA. Cubilguitz, San Juan in Vera Paz (Champion).
Head smooth; antennæ nearly three fourths the length of the body, filiform, first and second joints short, nearly equal in length. Thorax nearly twice as broad as long at the apex; sides broadly reflexed, straight, and obliquely converging from the base to beyond the middle, thence rounded and converging towards the apex; disc impunctate, sides at the base impressed with a few large foveolate punctures. Elytra much broader than the thorax, quadrate-ovate, flattened on the disc, transversely depressed below the base, outer limb broadly reflexed; coarsely punctate-striate, interspaces obsoletely wrinkled; outer limb impunctate.

"Found sitting on the leaves of Musaceæ in the virgin forest" (Champion).

3. **Homalispa gracilis**.

*Elongato-ovata, rufo-testacea, nitida; antennæ, basi excepta, acinis scutelloque nigris; thorace transverso, interibus anguste reflexis, a basi ad ultra medium fore rectis, line ad apicem rotundato-angustatis; disco hævi, basi his illis punctato; elytris viridi-ansulis, oblongis, apice obtuse rotundatis, punctato-striatis.*

Long. 2 in.

*Hab. Panama, Bugaba (Champion).* A single specimen.

Antennæ half the length of the body, filiform, attenuated at base and apex; joints cylindrical, the basal one rufo-testaceo, the rest black. Thorax transversely convex; sides nearly straight, scarcely converging from the base to beyond the middle, thence rounded and converging to the apex; anterior angle produced, obtuse; apical margin truncate; disc smooth and shining, impunctate, impressed at the base with a few distinct punctures. Elytra oblong, regularly punctate-striate.

**CEPHALOLEIA.**

*Cephaloleia*, Blanchard, Hist. des Insectes, ii. p. 182; Baly, Cat. Hispidæ, p. 39.

With the exception of six, all the species described below are new to science; many of these are closely allied to Colombian forms, but are separated by good structural characters. *Cephaloleia* is one of the few genera in the family in which important characters can be drawn in both sexes from the emargination of the anal segments of the abdomen.

Mr. Champion informs me that the Central-American species of this genus are, with one or two exceptions, found in the rolled-up unopened leaves of Musaceæ in damp places in the forests, often in company with species of Carabidæ (*Calophana*). In fine weather these insects are to be seen sunning themselves on the leaves; many of the species are gregarious; the young tender juicy leaves of these plants form their principal food.

1. **Cephaloleia gratiosa.** (Tab. I, fig. 10.)

*Cephaloleia gratiosa*, Baly, Cat. Hispidæ, p. 104.

**Par. A.** Elytris nigris.

**Par. B.** Elytris nigris, apice rufo-faunis.
CEPHALOLEIA.

Hab. Mexico¹, Cordova, Toxpan (type and vars. A and B) (coll. Sallé), Juquila (Höge, var. A); GUATEMALA, Cerro Zunil 4000 feet (Champion).

The metropolis of the present species appears to be Mexico, a single specimen only having been sent from Guatemala by Mr. Champion.

2. Cephaloleia championi. (Tab. I. fig. 11.)

Elongata, parallela, dorso subdepressa, flava, nitida; ocellis, antennis extorsum, articulo ultimo apice excepto, scutelloque nigris; thorace quaeque minus vix latiori; lateribus rectis, ad apicem abrupte convergentibus, angulo antico acuto; dorso sparse punctato, lateribus anguste nigre marginitis; scutello elongato, acuto; elytris tenuiori punctato-striatis, limbo exteriori vittae lata suture, haec vix pone medium ampliata, deinque ad apicem abrupte angustata, nigris.

Mas. Antennarum articulis basilaribus quatuor compressis, primo subelavato, sequentibus tribus trigonatis; abdominis segmento anali leviter sinuate.

Fem. Antennarum articulis cylindricis; abdominis segmento anali obtuso.

Long. 4 lin.

Hab. PANAMA, Bugaba (Champion).

Head smooth and shining, finely and remotely punctured. Antennae less than half the length of the body; basal joint thickened, twice the length of the second; the second, third, and fourth joints equal in length, compressed and trigonate in the male, the basal joint in the same sex subelavate; in the female the second to the fourth joints are cylindrical, the third being rather longer than either of the preceding: the two to four lower joints, together with the apex of the eleventh, flavous. Thorax scarcely broader than long: sides straight and nearly parallel, rounded and converging at the extreme apex; anterior angles acute; upper surface very sparingly punctured: extreme lateral margin narrowly edged with black or dark piceous. Scutellum pentagonal, nearly twice as long as broad, its apex very acute. Elytra broader than the thorax, parallel, their apices rounded, conjointly sinuate at the suture angle, the latter armed with a small acute tooth; upper surface smooth, finely punctate-striate.

Nearly allied to C. whitei, distinguished by the narrower and more parallel form, together with the straighter sides and acute anterior angles of the thorax, the latter in C. whitei being obtusely rounded: the last segment of the abdomen in the male of the latter species (the only sex known to me) is more deeply sinuate.

Taken in plenty by Mr. Champion in the rolled-up unopened leaves of Musaceae in the virgin forest of the “tierra caliente.”

3. Cephaloleia ornata. (Tab. I. fig. 12.)

Elongata, dorso subdepressa, nitida, suturis nigro-piceis; thorace abdomine pice fulvo, humeribus, apice exceptis, flavis; supra humer. facie interiori pisce-fulvo; thorace fulvo, basi plagiato piscei trigonata, nigro-piceis; elytris tenuiori punctato-striatis, striae vittae humerali, a basi fere ad medium extensa, postice ampliata, facieque lati subapicalii, flavis.

Long. 3 1/2 lin.

Hab. NICARAGUA, Chontales (Belt). A single specimen.
BIOL. CENTR.-AMER., Coleopt., Vol. VI. Pt. 2. January 1885. bb
Head sparingly punctured. Basal joint of the antennae compressed, subclavate; the second scarcely more than half the length of the first (the remaining joints in the single specimen before me broken off). Thorax slightly broader than long; sides straight and parallel, incurved at the apex. Apical angles rounded, distinctly produced; hinder angles slightly produced, acute; disc smooth and shining, sparingly impressed on either side with large, round punctures. Scutellum trigonate, slightly longer than broad. Elytra parallel, obtusely truncate at the apex, flattened along the suture, finely punctate-striate, the striae on the inner side obsoletely sulcate.

4. Cephaloleia nigropicta. (Tab. I. fig. 13.)
Austrolea elongata, pallide flavo, nitida; antennis, basi exceptis, scutellisque nigris; thorace subquadrato, levii, fore impunctato, plaga magna pentagonata, apicis fore ad basim extensa, nigra; elytris set forterior punctato-striatis, punctis pallide pellibus; urisquo plaga magna humerali fasciisque vix ponente medium, communi, nigris.

Max. Abdominis segmento anali apice leviter concavo.

Fem. Abdominis segmento anali obtuso, leviter bisinuato.

Long. 23½ lin.

_Hab._ PANAMA, Volcan de Chiriqui 2500 to 6000 feet (Champion).

Head smooth and shining, vertex and front impressed with a longitudinal groove. Antennæ filiform, less than half the body in length, the two lower joints fulvous, more or less stained with piceous, the rest black. Thorax subquadrat, scarcely broader than long; sides nearly straight and parallel; the anterior angles not produced, obtuse; disc smooth and shining, impunctate; a large pentagonal discoidal patch attached by its base to the apical margin, its apex extending backwards nearly to the base, black. Scutellum longer than broad. Elytra broader than the thorax; sides parallel, very slightly dilated near the apex, the latter obtusely rounded; upper surface moderately convex, slightly flattened anteriorly along the suture, regularly and rather strongly punctate-striate, the striae faintly sulcate.

5. Cephaloleia distincta. (Tab. I. fig. 15.)
Elongata, fulva, nitida; pectore abdomineae micro-pellibus, pedibus (femoris basi coxisque exceptis) antennisque nigris; thorace sparse punctato; elytris parallellis, apice obtuso roundatis; set forterior punctato-striatis, punctis pellibus.

Max. Antennarum articulis basibusque sparsius compressis; abdominis segmento anali late concavo-emarginato.

_Fem._ Antennarum articulis cylindricis; abdominis segmento anali leviter bisinuato.

Long. 3½ lin.

_Hab._ PANAMA, Volcan de Chiriqui 2500 to 4000 feet, Bugaba (Champion).

Head nitidous, very finely and sparingly punctured; face between the antennae with a strongly raised longitudinal ridge. Antennæ less than half the length of the body, joints from the second to the apical one cylindrical in the female, the basal one thickened, obliquely compressed at the base; four lower joints in the male compressed and dilated, the basal one thickened and subclavate, the following three joints trigonate; the second short, broader than long; the third and fourth less dilated, each longer than