

New South American Saw-flies (Hym. Tenth.).

By

RENÉ MALAISE.

Stockholm 50.

With 11 Text-figures.

This paper was originally intended as a revision of certain South American genera, but the difficulty of having larger works printed during present conditions, made it necessary to abandon this plan. The revisional work was accordingly discontinued, and the author had only to pick out and describe some odd species of special interest. Most of these species are types of new genera, but also species belonging to rarely found known genera have been chosen. The most interesting of these is from a zoo-geographical point of view, a *Pristiphora* described as new under the name *P. brasiliensis* n. sp. The genus *Pristiphora* belongs to the *Nematinae* and its distribution is almost entirely Holarctic. It occurs in numerous species from Spitsbergen, Novaya Zemlya, and Alaska in the north over the entire Northern Hemisphere to Upper Burma in the south, but with a single species described from Mt. Kinabalu in Borneo. The species are most abundant in countries with a summer temperature of 10—20° C., but when this temperature rises, they swiftly become rare. No species has been recorded from America south of the United States, and the occurrence of a true *Pristiphora* in Southern Brazil is rather unexpected. This find of 2 ♂♂ and one ♀ is a solitary one, and still it is most tempting to hazard a conjecture as to the original home of the species. The colour is rather unusual for the genus, and it can hardly be an introduced species, at least not from Europe. That the genus *Pristiphora* originally developed outside South America in either the Palaearctic or the Nearctic region is almost certain, the large number of species there indicates as much, and that the Brazilian species has entered the continent from the north is also most probable. The multiformity of the genus, and the fact that many of the Holarctic species are rather critical, points not to any greater geological antiquity of the genus, which can hardly be older than the Tertiary. Geologists¹ state that South America has mostly been separated from North America, and connections were

¹ Kossmat, Paläogeographie und Tektonik, Berlin 1936. Arldt, Die Entwicklung der Kontinente und Ihrer Lebewelt, Leipzig 1907 und 1936.

established only during the Turonian, Senonian, and Cenomanian epochs of the Cretaceous system, and then again not before the Pliocene at the end of the Tertiary. This testimony makes it possible to fix the time of the immigration of our species into South America most probably to one of the colder periods at the end of the Pliocene or during the Pleistocene eras. Nothing is known as to the immature stages of our species, but one may be allowed to guess that its food-plant in Brazil belongs not to a family endemic to South America, but to one widely spread in the Holarctic region. Several *Nematinae* and some *Pristiphora* among them feed on *Salix*. The only *Salix* indigenous in South America, *Salix humboldtiana*, is widely spread throughout almost the entire continent and occurs also in the island of Cuba. It is common on soft mud-banks along backwaters of the Amazon and other rivers, and it is very likely, that this *Salix* should prove to be the food-plant of our *Pristiphora*. If this should be the case, then other related *Pristiphoras* may be found in South America, especially as the multiformity of *S. humboldtiana* makes it not improbable that also the saw-flies, possibly feeding on it, should have been split up into related forms.

Strombocerina n. n.

(*Stromboceros* Konow, nom. praeocc.).

Schoenherr (Genera et Spec. Curculionidum IV.2, p. 814, 1838) erected a new genus *Stromboscerus* for a coleopter from Madagascar. Dr. Gemminger and B. de Harold (Cat. Coleopt. VIII, p. 2654, 1871) emended the name according to Latin transcription of Greek words into *Strombocerus*, that also is incorrect and should be *Stromboceras* or *Stromboceros*. 14 years later Konow used the name *Stromboceros* (Wien. Ent. Zeit. IV, p. 19, 1885) for a saw-fly genus. Now Schoenherr has positively stated that his name was transcribed from the two Greek words *strombos* (στρόμβος) and *keras* (κερας), whereas Konow's *keros* (κερως) is transcribed from an Attic dialect word for *keras* without other meaning (comp. the word *rhinoceros*).¹ The three authors have transcribed their names from the same Greek words, and Konow's name must as a homonyme be changed.

Type: *Tenthredo delicatula* Fallén.

The *Strombocerina* Group.

The *Selandriini* constitute in South America an extremely multiform group, and in most of the collections from there a good third or even half of all specimens belong to it. They are easily recognized by the anal cell of the front wings, which is without cross-vein and closed

¹ Comp. also: Kretschmer, Sprachregeln für die Bildung etc. zoologischer Namen, (Berlin) 1899, p. 21 § 40.

to the base of the wing. Only a minor part of the actual species are as yet described. Most of these descriptions are based on colour or other variable characters, and the group is accordingly badly in need of a revision. The species described have mainly been referred to the genera *Selandria* (Kirby), *Strongylogaster* (Cameron, Norton, Enderlein), and *Stromboceros* (Konow, Jörgensen), but some authors have also erected new ones mainly on a convergence of the basal and the 1st recurrent veins. Unfortunately this character, which was used by Konow for distinguishing between his tribus *Hoplocampides*, is not a stable one and has in South America only specific but not generic value. The same applies also to such a character as the length of the hind basitarsus, and to a certain extent also to the direction of the inner margins of the eyes. Very good specific characters, but unfortunately ones which are hard to describe in detail, may on the other hand be found in the form of the postocellar area and of its lateral furrows.

The first and only attempt to subdivide the group was made by Rohwer in 1911, but in a rather awkward fashion, and as in the case of the new genera of Strand and Jörgensen based on single and ill-chosen characters. The genera *Tioloma* Strand 1910, *Neoanapeptamena* Strand 1910, *Stromboceridea* Rohwer 1911, *Proselandria* Rohwer 1912, and *Peterseniana* Jörgensen 1913 cannot be interpreted with any certainty, and have, therefore, been left out of consideration. It is possible, that future studies of the types of these genera will reduce names used by the present author to synonyms. South America is, on the other hand, only very superficially known and full of unexpected and surprising forms, and these genera may well be different from those treated below. The types of *Adiaclema* Enderlein, *Dochmioglene* Enderlein, and *Romaniola* Forsius have been studied and likewise specimens of *Prostromboceros leucostomus* Rohwer and *Eustromboceros* sp.

The genus *Tioloma* Strand may possibly be recognized by the following characters:—Clypeus emarginate; head almost enlarged behind the eyes; claws cleft; pedicellus as long as it is broad. *Neoanapeptamena* has the clypeus truncate and the pedicellus somewhat broader than it is long. Both *Proselandria* and *Peterseniana* have simple tarsal claws. *Stromboceridea* has: »Clypeus convex, apex nearly truncate; pedicellum much longer than broad; hind basitarsus slightly longer than the following; claws cleft, the inner tooth shorter.»

Key to the South American Genera.

1. Both mandibles simple without any subapical tooth (Fig. 1 A, 3 A, 3 B). Claws cleft without basal lobe, the two teeth almost equally long and placed apically of the middle (Fig. 6 E). Labrum strongly convex. Pedicellus (2nd antennal joint) longer than it is broad at the apex; flagellum of the antennae long and gradually tapering towards the apex, more rarely very faintly incrassated in the middle. Head not carinated behind the eyes.

- General direction of the inner margins of the eyes faintly converging downwards. Praesterna of the mesopleura not convex and sometimes separated only by a very fine or even indistinct furrow..... 2
- Mandibles with a subapical tooth (Fig. 1 B, 1 C, 1 D, 1 E)..... 3

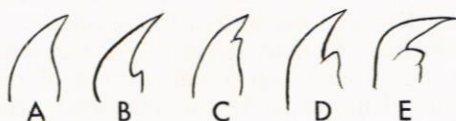


Fig. 1. Mandible of: A. *Adiaclema pilicornis* (Cam.), B. *Bolivius absonus* (Knw.), C. *Dochmioglene soleatus* (Knw.), D. *Romaniola* sp., E. *Plaumanniana aemulus* (Knw) (ochreithorax [Enderlein]).

2. Anterior margin of the clypeus roundly protruding more or less broadly, and seems mostly to be somewhat incrassated owing to a faint deflexion downwards (Fig. 3 A). Anterior margin of the labrum rounded and hardly or not at all deflexed. The cubital bend mostly incrassated and frequently with a short spurious stump directed basally. (*A. calvescens* Enderlein.) Panama, Guiana, Amazonas, South Brazil.

Genus *Adiaclema* Enderlein 1919.

- a) Labrum roundly incised in the middle, with broad and rounded lateral teeth. (*Stromboceros tarsalis* Konow.) South Brazil. Subgenus *Clemina* n. subgen.

- Clypeus truncate anteriorly, hardly or not at all deflexed. Anterior margin of the labrum emarginate and strongly deflexed downwards (Fig. 3 B). (*L. plaumanni* n. sp.) South Brazil, Paraguay. Genus *Labrina* n. gen.

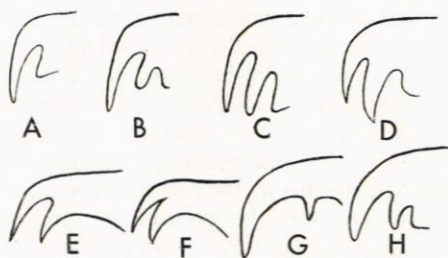


Fig. 2. Tarsal claws of: A. *Goniocerus albilabris* (Knw), B. *Prostromboceros leucostomus* (Rhw.), C. *Caribia picticornis* (Cam.), D. *Plaumanniana trigemmis* (Knw), E. *Adiaclema maculipennis* (Cam.), F. *Belea nigripennis* (Knw.), G. *Romaniola* sp. H. *Inea pucilla* n. sp.

3. Mandibles roundly bent at almost a right angle and with a large subapical tooth near the base (Fig. 1 E; 4). Clypeus mostly transversally convex medially and then the anterior margin distinctly emarginate (mostly somewhat angulately) and running out close to the labrum (Fig. 4 A). Pedicellus longer than it is broad..... 4
- Mandibles roundly bent, but less than at a right angle (Fig. 1 B, 1 C, 1 D). Clypeus subconvex, but more rarely transversally so; the anterior margin truncate or subemarginate..... 8

4. Head distinctly carinated behind the eyes. Tarsal claws sturdy, shorter than the slender end-tooth, this latter tooth much longer than the subapical one (Fig. 2 A, 2 B). Basalis and the 1st recurrent vein distinctly converging. The anellan cell in the hind wings mostly sessile. Praesterna strongly convex and separated from the mesopleura by deep furrows (Fig. 5 C)..... 5
- Hind orbits not carinated even below. Subapical tooth of the claws long and slender. Hind metatarsus mostly longer than the following tarsal joints combined. Basalis and the 1st recurrent vein almost parallel..... 6

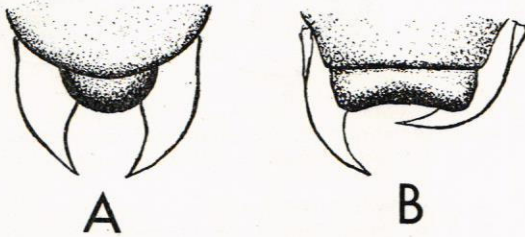


Fig. 3. Clypeus and labrum of: A. *Adiaclema nigripectus* (Enderlein),
B. *Labrina plaumanni* n. sp.

5. The subapical tooth of the claws replaced by a triangular basal lobe (Fig. 2 A). (*Stromboceros albilabris* Konow.)
Bolivia, Ecuador, Columbia, Costa Rica, Mexico.

Genus *Gonioceros* n. gen.

- Claws with an erect subapical tooth before the base, and this subapical tooth much shorter than the apical one (Fig. 2 B). (*Stromboceros* [*Eustromboceros*] *leucostomus* Rohwer.)¹
Mexico, Costa Rica.

Genus *Prostromboceros* Rohwer 1912.

6. Clypeus transversally convex; the anterior margin edged and emarginated (Fig. 4 A). Praesterna mostly strongly convex and separated from the mesopleura by deep furrows (Fig. 5 C). Pedicellus at least twice as long as it is broad at the apex. Antennae long and slender. Anellan cell in the hind wings petiolate. Cubitus only slightly bent at the base and without spurious stump.

- a) Claws short with indistinct basal lobe and the subapical tooth mostly longer than the apical one (Fig. 2 D). Flagellum of the antennae without whitish markings. (*Stromboceros trigenmis* Konow.)
South Brazil, Paraguay, Bolivia, Amazonas.

Genus *Plaumanniana* n. gen.

- b) Claws short with a rather acute basal lobe, the two teeth mostly subequal (Fig. 2 C). Flagellum frequently partly white. (*Strongylogaster picticornis* Cameron.)
Mexico, Central America, Peru.

Subgenus *Caribia* n. subgen.

¹ In the original description of *Prostromboceros* (Proc. U. S. Nat. Mus. 43, p. 235, 1912) *Stromboceros* [*Eustromboceros*] *melanopterus* Rohwer is given as type, but this is obviously a misprint for *Stromb.* [*Eustr.*] *leucostomus* (cf. Malaise, Ent. Tidskr. 1933, p. 57). The generic description fits the description of *leucostomus*, but is contradictory to that of *melanopterus*.

- Clypeus not transversally convex, the anterior margin incised and not edged (Fig. 4 B, 4 C). Praesterna hardly or not at all convex, and separated from the mesopleura by very fine furrows (Fig. 5 B). Pedicellus as long as, or only a little longer than it is broad; flagellum somewhat incrassated in the middle. Claws cleft, elongated, without basal lobe, and the subapical tooth apically of the middle. Anellan cell sessile. The cubital bend mostly with a spurious stump directed basally..... 7

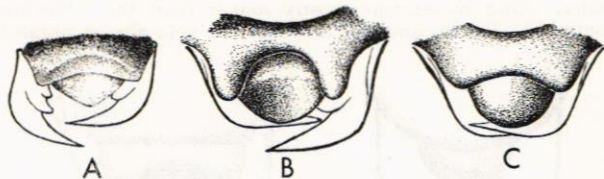


Fig. 4. Clypeus and labrum of: A. *Plaumanniana trigemmis* (Knw), B. *Arcoclypea opiparus* (Knw). C. *Liliacina carinifrons* n. sp.

7. Clypeus very deeply and broadly, semicircularly incised and with protruding lateral teeth (Fig. 4 B). Apical half of the labrum concave, the basal half with a bent transversal convexity. Subapical tooth of the claws longer than the apical one (Fig. 2 F). Malar space shorter than half the diameter of an ocellus. The pale markings not lilac-coloured. (*Stromboceros opiparus* Konow.)

South Brazil.

Genus *Arcoclypea* n. gen.

- Clypeus only shallowly incised without protruding lateral teeth (Fig. 4 C). Labrum convex. The subapical tooth of the claws somewhat shorter than the apical one. Malar space as long as or longer than half the diameter of an ocellus. The pale markings partly lilac-coloured, but may turn entirely into sordid whitish. (*Stromboceros carinifrons* n. sp.)

Mexico, Costa Rica, Peru, Bolivia, South Brazil.

Genus *Liliacina* n. gen.

8. Pedicellus almost disk-like, at least twice as broad as it is long. Flagellum of the antennae extremely stout, almost uniformly thick, and not compressed, the middle joints only twice as long as they are broad. Claws without basal lobe, with a long and slender apical tooth and a minute subapical one closely basal to the middle (Fig. 2 G). Praesterna rather indistinctly separated from the mesopleura by a very fine and almost furrow-like seam (Fig. 5 B). Clypeus flat with truncate anterior margin. Malar space shorter than half the diameter of an ocellus. Cubitus and the 1st recurrent vein converging. (*Stromboceros melanopterus* Rohwer.)

Mexico, Arizona.

Genus *Eustromboceros* Rohwer 1911.

- Pedicellus longer, mostly longer than it is broad. Flagellum slender..... 9
9. The subapical tooth of the mandibles placed near to the apex (Fig. 1 C). Frontal area rather sharply defined and mostly elevated somewhat above a hypothetical line (tangent) above it touching both eyes. Convergence of the basalis and the 1st recurrent vein variable and only of specific value. 11
- The subapical tooth of the mandibles removed from the apex (Fig. 1 B, 1 D). The inner margins of the eyes converging downwards. Pedicellus as long as the main part of the scapus and $1\frac{1}{2}$ times as long as it is broad at the apex. Claws slender without basal lobe..... 10
10. Praesterna of an almost equilateral triangular form and completely fused together with the mesopleura without any separating furrow visible on

the surface, subcutaneously the limit visible especially if these parts are pale; the mesopleura seem accordingly to be deeply triangularly incised anteriorly, and the incision membranous and only partly chitinized (Fig. 5 A). Mandibles with large subapical tooth near the middle (Fig. 1 D). Inner margin of the eyes strongly converging downwards. Flagellum of the antennae stout and distinctly incrassated towards the middle. Claws slender without basal lobe, but with a short, erect tooth near the base (Fig. 2 G). Basalis and the 1st recurrent vein converging. Anellan cell mostly sessile. (*R. amazonica* Forsius.)
Amazonas, Peru, South Brazil, Paraguay.

Genus *Romaniola* Forsius 1925.

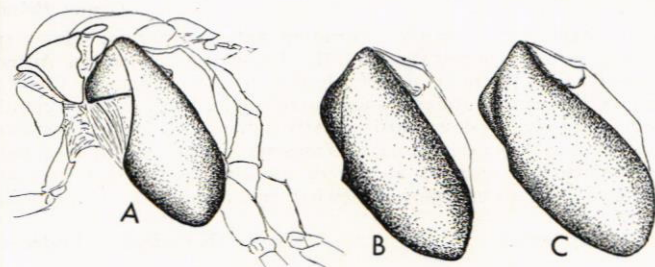


Fig. 5. Mesopleural episterna with praesterna of: A. *Romaniola*, B. *Bolivius*, C. *Plaumanniana*.

- Mesopleura not triangularly incised anteriorly; praesterna of an elongated triangular form and rather indistinctly separated (Fig. 5 B). Mandibles with the subapical tooth near the base (Fig. 1 B, 1 D). Antennae filiform or incrassated in the middle. Convergence of the basalis and the 1st recurrent vein variable and only of specific value 11
- 11. Claws slender, simple or with an erect subapical tooth near the base but without basal lobe (Fig. 2 G). Anellan cell petiolate. Furrow between the scutellum and its appendage distinct. (*Stromboceros absonus* Konow.)
Bolivia, South Brazil. Genus *Bolivius* n. gen.
- Claws with an angulate basal lobe in addition to the subapical tooth (Fig. 2 H), this lobe sometimes difficult to observe. Anellan cell mostly sessile. Scutellum fused together with its appendage without separating furrow in the middle, the furrow distinct only laterally. Length of the pedicellus variable and only of specific value, in the type species as long as it is broad at the apex, otherwise longer. (*I. pucilla* n. sp.)
Costa Rica, Brazil (Esp. Santo). Genus *Inea* n. gen.
- 12. Claws cleft, the subapical tooth as long as, or even somewhat longer than the apical one (Fig. 2 E, 2 F). Head strongly narrowing behind the eyes. Antennae slender, gradually tapering or very faintly subincrassated towards the middle. 13
- Claws slender, with an erect subapical tooth much shorter than the apical one and removed from it (Fig. 2 G). Head only very faintly narrowing behind the eyes, almost subincrassated. Antennae as long as the abdomen or longer with the flagellum mostly faintly subincrassated in the middle; pedicellus only a little longer than it is broad. Praesternal furrow faint and rather indistinct. Clypeus with a faint indication of a transversal con-

vexity, the anterior margin truncate. Inner margins of the eyes faintly S-formed, the main direction converging downwards, strongly in the ♂♂. (*Stromboceros farctus* Konow [andeana Cameron].) Ecuador, Peru, South Brazil.

Genus *Andeana* n. gen.

13. Labrum triangularly pointed. Malar space longer than the diameter of an ocellus. Antennae as long as the body proper, gradually tapering. The subapical tooth of the claws longer than the apical one (Fig. 2 F). Inner margin of the eyes straight and parallel. Praesterna distinctly convex and separated from the mesopleura by deep furrows. Clypeus hardly subconvex, the anterior margin truncate. (*Stromboceros nigripennis* Konow [giganteus Enderlein].) Ecuador.

Genus *Belea* n. gen.

- Labrum convex with roundly protruding anterior margin. Malar space linear, mostly much shorter than half the diameter of an ocellus. Antennae much shorter than the body, usually shorter than the abdomen. Claws cleft the two teeth generally almost equally long (Fig. 2 E). Inner margin of the eyes faintly converging downwards, mostly somewhat S-formed. Praesterna not convex and separated from the mesopleura by fine and sometimes indistinct furrows. Anterior margin of the clypeus truncate or roundly protruding, for the most part somewhat subincrassated. (*D. albisignata* Enderlein.)

South Brazil, Peru.

Genus *Dochmioglene* Enderlein 1919.

Labrina n. gen.

L. plaumanni n. sp. Black with dark fulvous markings. Pale are:— Clypeus, labrum, pronotum, tegulae, base of the wings, scutellum with appendage, postscutellum, broad longitudinal seam between the mesonotal lateral lobes, metanotum more or less, the three basal abdominal tergites above, mostly the next two in the middle, and legs except the entire hind tarsi, the apex of the hind tibiae, and the apex of the remaining tarsi more or less. Mesopleura sometimes partly pale. Wings distinctly and almost uniformly infumated; venation blackish except at the extreme base of the wings. — Head very strongly narrowing behind the eyes, as the entire body impunctate and very strongly shining. Face above the antennae almost flat, the frontal area almost obsolete. Two round and deep pits above the antennae (remnants of the antennal furrows) hardly above the much broader supra-antennal pit, which has a tubercle raised from the bottom anteriorly. Postocellar area subconvex, broader than it is long, as 3:2 (as $\frac{3}{4}$:1 when counted to the posterior terminal of the lateral furrows). These furrows sharp, triangular in outline, broadest anteriorly, and disappearing rather suddenly about half-way to the posterior surface of the head, the lateral brims more abruptly sunken than the medial ones. Malar space as long as half the diameter of an ocellus in the ♂, longer in the ♀. Antennae rather stout, about as long as the abdomen, subincrassated in the middle, and not compressed; the main part of the scapus oval in outline and longer than the entire pedicellus, the main part

of the latter conical and hardly longer than it is broad; the 3rd antennal joint longer than the 4th, as 5:4. Maxillar palpa slender. Praesterna elongated triangular in outline and indistinctly separated from the mesopleura. Hind basitarsus subequal to the following tarsal joints combined. Saw-sheath broadly triangular and with constricted base (elongated heart-shaped) from above. The basalis variable, faintly converging with the 1st recurrent vein, sometimes short, distinctly bent, and joining the subcosta removed from the base of the cubitus a distance as long as the length of the 1st cubital cross-vein, but mostly it is longer, almost straight, and removed only half as far from the cubitus. The 3rd cubital cross-vein curved, and the 3rd cell concave at the apex with the cubital corner more acute than the radial. The length of the cubital cells variable. Nervulus distinctly distal to the middle. Anellan cell in the hind wings sessile. Length 7—8 mm. (12 ♂♂, 7 ♀♀).

Santa Catharina (Nova Teutonia), Aug., Sept. 1933 (Fr. Plaumann); Paraguay (Villarica, Tebicuary), Oct. 1937 (1 ♀, F. Schade).

Clemina n. subgen.

If only considering the form of the labrum the *Stromboceros tarsalis* Konow could with some hesitation be referred to the new genus *Labrina*, but the entire insect gives the picture of an *Adiaclema* with a different labrum. The anterior margin of the labrum is roundly incised in the middle with broad, rounded lateral teeth, but it is hardly or not at all deflexed; the subtruncate clypeus has the lateral corners rounded, and the antennae are longer than the abdomen, not incrasated, gradually and extremely faintly tapering; the hind basitarsus distinctly longer than the following tarsal joints combined. For the present the author thinks it better to place *Stromboceros tarsalis* Knw as type of a new subgenus *Clemina* rather than of a new genus. *Clemina* may thus remain a subgenus of *Adiaclema* Enderlein until it can be proved that more species belong to it without intermediate forms.

Enderlein (Sitzungsber. Ges. Naturf. Freunde, 1919) referred his new genus *Adiaclema* to the *Hoplocampinae*, certainly on account of a convergence between the basalis and the 1st recurrent vein. His *Strongylogaster nigripectus*, *ochreus*, and *blandulus* have all three roundly protruding clypeus, not incised labrum, and cleft claws, and all probably belong to the genus *Adiaclema*; the mandibles have been studied only on *nigripectus*. To *Adiaclema* belong further: *S. batesi* Kirby (foveiceps Cam.), *S. maculipennis* Cam., *S. pilicornis* Cam., *S. sagmarius* Knw, *S. tetricus* Knw, and probably also *S. discrepans* Knw, and *marcidus* Knw.

Arcoclypea n. gen.

The species of the new genus *Arcoclypea* are rather similar in sculpture and size, and we have to depend largely on colour for distinguishing between the different species. The following characters are common to all hitherto known species:

Head with the antennae black, as the entire body impunctate and strongly shining, strongly narrowing and not carinated behind the eyes, inner margins of the eyes faintly converging downwards. Post-ocellar area large, convex, narrowing anteriorly, and twice as broad as it is long anteriorly ($2\frac{1}{2}$ times as broad at the posterior terminal of the lateral furrows). These furrows very and uniformly deep, sharp, mostly faintly curved, and reaching hardly more than half-way to the posterior side of the head. Frontal area sharply defined, oval in outline, open anteriorly, and gradually sinking from the brims towards an elongated depression in the middle. Supra-antennal pit distinctly shallower than the lateral pits. Pedicellus conical, only a little longer than it is broad. Praesterna elongated triangular, and almost entirely fused together with the mesopleura. Hind basitarsus subequal to the following tarsal joints combined. Wings fulvous hyaline, at least basally of the pale stigma; venation brown to blackish. Length 11—12 mm.

South Brazil (Santa Catharina).

Key to the Species of *Arcoclypea* n. gen.

1. Apex of all wings very strongly and strikingly infuscated, the infuscation in the front wings limited by a sharp line approximately running from the apex of the stigma over the apical $\frac{1}{3}$ rd of the 1st radial cell, and along the 2nd cubital cross-vein and the 2nd recurrent vein. The 3rd and 4th antennal joints subequal in length. Length of the clypeus from the supra-clypeal furrow to the deepest point of the incision $\frac{1}{3}$ rd of the entire length from the same furrow to the apex of the lateral teeth (Fig. 4 B) 2
- Apex of the wings only faintly and indistinctly subinfumated, the infumation gradually fading basally without sharp limit; costa and stigma fulvous. Antennae subincrassated in the middle, and the 3rd joint distinctly longer than the 4th one. Pronotum, tegulae, lateral stripes on the mesonotal lobes, scutellum, stripes or spots on the mesopleura above, tibiae, and trochanters fulvous. Abdomen black with indistinct pale brownish markings, the 2nd and apical tergites entirely black. Hind femora blackish with a broad pale longitudinal stripe below, remaining femora subinfuscated; base of the coxae more or less blackish 3
2. Antennae as long as or longer than the abdomen, hardly subincrassated at all. Thorax entirely black. Abdomen red with black apex from the 7th or 8th segment. Legs reddish or fulvous, all tibiae and tarsi entirely black, only the anterior tibiae paler. Stigma infuscated along the anterior margin. The costal cell and the extreme base of the front wings infuscated. (2 ♀♀.) Nova Bremen, 12.XII. 32 (Fr. Hoffmann); Hansa Humbolt, Nov. 1939 (Anton Maller). *A. opipara* (Knw).
- Antennae subincrassated in the middle, distinctly shorter than the abdomen. Stigma blazing unicoloured yellow; wings without infuscation except

at the apex. Thorax and abdomen black; fulvous are: pronotum, tegulae, a V-shaped marking on the mesonotal middle lobe, a stripe along the oblique deflexed corner of each mesonotal lateral lobe, scutelli with appendage, praesterna, a stripe along the upper and hind margins of the mesopleura, most of the metathorax, medial dots on the 1st and 3rd—6th tergites, extremely narrow hind margin of all tergites and sternites in the middle, and legs except the hind tarsi entirely and the remaining tarsi more or less. (2 ♀♀.)

Nova Teutonia (Fr. Plaumann) (Type); Joinville, Humbolt (W. Ehrhardt) (Paratype in Mus. Hamb.).

A. laternistigma n. sp.

3. The hind tarsi entirely black. Length of the clypeus from the supraclypeal furrow to the middle of the incision equal to the length of the lateral teeth, these stout and rather blunt. The apical tooth of the claws curved and reaching only about half as far as the subapical one. Apex of the wings hardly subinfumated at all. The 1st and 3rd—6th tergites with broad brownish basal band. Most of the middle tarsi black; the anterior ones blackish at the apex. The anellan cell truncate at the apex (individual ab.?). (1 ♀.)

Nova Teutonia, 9.II. 39 (Fr. Plaumann).

A. tumididens n. sp.

- All tarsi pale with the last two joints black. Length of the clypeus to the end of the rather slender lateral teeth almost four times longer than it is in the middle. The apical tooth of the claws only a little shorter than the subapical one. Apex of the wings distinctly infumated. The 3rd tergite almost entirely pale above; the 1st one sometimes pale at the base; the 4th—7th tergites with nebulous pale spots, especially laterally. Anellan cell not truncate. (2 ♀♀.)

Nova Teutonia, 2.VIII. 36 and 16.III. 39 (Fr. Plaumann).

A. biultima n. sp.

The same striking form of the clypeus as in the genus *Arcoclypea* occurs in South America only in the genus *Probleta* Knw. This latter genus may easily be recognized by its anal cell, which is divided by an oblique cross-vein.

Liliacina n. gen.

L. carinifrons n. sp. Black; pale are:—labrum; anterior margin of the clypeus, interrupted in the middle more or less; margins of the pronotum; tegulae; mesothorax except the middle of all three mesonotal lobes, scutellar appendage, the mesosternum, and the lower part of the mesopleura; surrounding dots of the cenchri; all tibiae except at the apex; the 4 anterior knees; the hind femora, and parts of all trochanters. Wings rather strongly infuscated, the entire medial cell almost clear and the discoidal cell partly so. The pale colour of the labrum and of the legs white, that of the remaining parts reddish lilac or sordid whitish. — Impunctate and strongly shining. Frontal area including the middle supra-antennal pit oval in outline but narrowing anteriorly, and surrounded by blunt and roundly elevated ridges. The frontal depression deep, and with an elongated, roundly elevated ridge or elevation along the middle starting from the middle ocellus to or

towards a more or less distinct and elevated cross-ridge separating the frontal depression from the supra-antennal pit. This latter pit subequal to the lateral ones and almost on a straight line with them. The postocellar area large, convex, faintly narrowing anteriorly, angulately protruding between the ocelli without furrow, and broader than it is long, as 3:2 at the posterior terminal of the uniformly and very deep, faintly curved lateral furrows (the angulate projection not counted). Malar space somewhat longer than half the diameter of an ocellus. Hind orbits roundly narrowing behind the eyes, and only $\frac{1}{3}$ rd as broad as an eye. Inner margins of the eyes subparallel in the middle, and distinctly converging below. Antennae as long as the abdomen; the 3rd joint hardly longer than the 4th, almost subequal in length. The 3rd cubital cell as long as the first two combined, and hardly broader distally than basally. Nervulus at the middle of the cell or just distal to the middle. Saw-sheath heart-shaped from above; roundly triangular in cross-section. Length ♀ 10 mm. (2 ♀♀.)

Brazil, Nova Teutonia, 19.8.33 and 29.3.38. (Fr. Plaumann.)

This new species *carinifrons* is very closely related indeed to *Stromboceros albarius* Knw from Peru, but quite distinct. On a comparison between the types of both species only the following differences were noted. *Liliacina albaria* (Knw) has:— the frontal depression without elevated middle ridge, the saw-sheath narrower in lateral view, and the sides of the abdomen white. To the genus *Liliacina* belong further *Selandria diversipes* Kirby, and, although the anterior margin of the clypeus is edged, also *Stromboceros lemniscatus* Knw.

Inea n. gen.

I. pusilla n. sp. Fulvous; black are:— head with the antennae except the clypeus, labrum, and the palpi, which are pale; mesosternum; the entire mesonotum except the tegulae in the ♂, and, in the ♀, the mesonotum with the tegulae, the scutellum, and the appendage, but a large middle spot on the middle lobe is black, and large elongated spots on the lateral lobes above are reddish brown and other ones laterally are black; metanotum except lateral spots surrounding the cenchri; and the saw-sheath proper. Legs pale; the hind tarsi black in both sexes, the remaining tarsi and the hind tibiae brownly infuscated towards the apex in the ♂, but all femora black except at the extreme apex in the ♀, and likewise the tarsi almost entirely infuscated, only the anterior ones paling towards the base. Wings uniformly and dilutely infuscated; venation and stigma black. — Impunctate and strongly shining. Head very strongly narrowing behind the eyes and not carinated there. Inner margins of the eyes somewhat S-formed and distinctly converging downwards. Face between the eyes not depressed. Frontal

area oval in outline, and surrounded by continuous, bluntly and strongly elevated carinas. The supra-antennal pit transverse, and with a minute, punctiform, and round depression in the middle of the posterior slope; the lateral pits large and deep. Postocellar area convex, broader than it is long, as 2:1 (to the posterior end of the extremely deep and elongated pit-like lateral furrows broader than it is long, as 4:1); postocellar furrow deep, sharp, and roundly curved; interocellar furrow deep and sharp. Clypeus convex, the anterior margin truncate. Mandibles as Fig. 1 D. Palpi rather slender. Malar space quite linear. Antennae longer than the abdomen, stoutly filiform; scapus roundly conical, the main part distinctly longer than it is broad at the apex; pedicellus likewise, but hardly longer than it is broad; the 4 basal flagellar joints gradually decreasing in length, the remaining ones almost subequal. Praesternal suture extremely fine, almost wanting externally. Scutellum fused together with its appendage without interruption in the middle above. Hind basitarsus subequal to the following tarsal joints combined. Claws with a large subapical tooth and a basal lobe (Fig. 2 H). Length 5 mm. (2 ♂♂, 1 ♀).

Costa Rica (S. José). The ♂♂ from the Mus. Hamburg; the ♀ leg. F. Nevermann.

Condeia Malaise.

Condeia Malaise; Ent. Tidskr. Vol. 56, p. 168 (1935).

The genus *Condeia* mihi was erected on a single ♂. The most remarkable character of the new genus was the 3-toothed claws of the hind legs. Similar 3-toothed claws on the hind legs have been noted in the Japanese *Hemibeleses* Tak., but are there confined to the ♂♂ only, the ♀♀ having all claws alike. In the original description of the genus *Condeia* the hypothesis was, therefore, advanced that this claw-character might likewise be confined to the ♂♂ and be wanting in the ♀♀. This theory happened to be the right one, as the author was recently able to prove on obtaining 3 ♀♀ of *Condeia malleri* from Nova Teutonia captured by Fr. Plaumann on the 3rd Feb., 15th March, and 1st April, 1939. All the claws are alike in these ♀♀ and similar to the claws of the 4 anterior legs in the holotype ♂, viz. almost parallelly split and with an acute and broad basal lobe. The hitherto unknown ♀ of *Condeia malleri* mihi is otherwise quite similar to the known ♂, but the 2nd cubital cross-vein and the 2nd recurrent vein are apt to be interstitial.

Bensoniana n. n.

(*Bensonia* Malaise nec Grey 1847.)

The generic name *Bensonia* mihi (Ent. Tidskr. 1935, p. 165) is preocc. and is, therefore, changed into *Bensoniana* n. n.

Pristiphora Latreille.*Pristiphora* Latreille; Consid. Générales, p. 294 (1810).

P. brasiliensis n. sp. Back; reddish are:— the posterior apex of the mesonotal middle lobe; the lateral lobes entirely, and, in the ♂, scutellum except the appendage and the adjacent extreme apex of the scutellum itself. Whitish are:— legs, except all tarsi and the apical half or two thirds of all tibiae (the basal half of all coxae and parts of the femora infuscated in the ♀); propleura; pronotum, entirely in the ♀, but only the lower half in the ♂; spots on and around the metapleura, and, in the ♀, clypeus, labrum, supraclypeal area, and large spots on

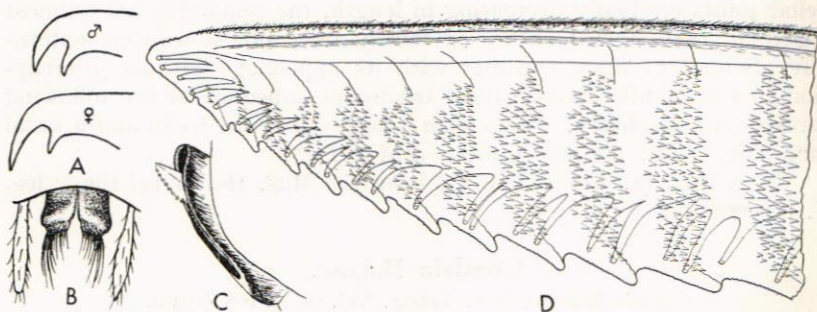


Fig. 6. *Pristiphora brasiliensis* n. sp. A. Claws; B. Saw-sheath and cerci seen from above; C. Saw-sheath in lateral view; D. Saw.

the deflexed parts of the 7 basal tergites confluent as lateral longitudinal bands. Wings dilutely infumated; venation and stigma black, the margin of the latter dark sordid whitish. — Strongly shining and almost impunctate. Head narrowing behind the eyes, roundly and distinctly in the ♀, strongly in the ♂. Hind orbits not carinated. Inner margins of the eyes parallel; face between them subconvex. Frontal area obsolete in the 2 ♂♂, oval in outline, and surrounded by bluntly elevated carinas in the ♀. Supra-antennal pit very large and rather deep, with strongly and almost sharply raised anterior margin, the posterior brim obsolete in the ♂♂, but distinct and with a very faint indication of a narrow incision in the middle in the ♀. The lateral pits minute and confluent with the depression of each antennal socket; antennal furrows wanting. Postocellar area convex, broader than it is long, as 5 : 3 in the ♀, and as 5 : 2 in the ♂♂. Postocellar furrow wanting in the ♀, but distinct and transverse in the ♂♂ owing to the sudden rise of the area itself. Lateral furrows deep and sharp in the ♀, but shorter and much less distinct in the ♂♂. Malar space longer than the diameter of an ocellus. Supraclypeal area convex, the clypeal furrow

sharp. Clypeus truncate, much shorter than the anteriorly rounded labrum. Antennae hairy, longer than the abdomen, and gradually tapering towards the apex in the ♀, hardly so but compressed from the 5th or 6th joint in the ♂♂; scapus and pedicellus broadly and roundly conical and distinctly longer than they are broad, the flagellar joints gradually decreasing in length. Praesternal furrow fine and distinct in the ♀, wanting in the ♂♂. The 1st cubital cross-vein wanting. Hind basitarsus subequal to the following tarsal joints combined. Claws with a large subapical tooth, larger in the ♀ than in the ♂♂ (Fig. 6 A). Saw-sheath less than half as long as the cerci, with a middle keel, and large lateral lobes as common in the genus, but the lateral lobes drawn together on the upper side and the saw-sheath appears, therefore, almost collar-like from above (Fig. 6 B and C). Saw (Fig. 6 D). Length 6 mm. (2 ♂♂, 1 ♀.)

Brazil (Nova Teutonia), both ♂♂ captured 28.3.38, the ♀ 12.9.38 (Fr. Plaumann).

This is the first *Nematidae* found in South America and in the Southern Hemisphere.

Mallerina n. gen.¹

Belongs to the *Arginae* and is related to the genera *Topotrita* Kirby, *Digelasinus* Malaise, and *Dielocerus* Curtis.

Front wings with appendiculate radial cell; 4 cubital cells, the 2nd of these with both the recurrent veins; intercostal cross-vein long but not very distinct; anal cell petiolate, and the closed part with a short spurious stump directed backwards from the middle (close to the hind margin of the wing). Hind wings with the radial cell open at the apex; three closed middle cells (cubital, medial, and brachial); and the anellan cell large, long petiolate, and likewise with a short spur at the apex. Both the front and the hind wings with distinct brachial cross-vein (prenervellus), as in the otherwise very different genus *Eriglenum* Konow. Head behind the eyes almost enlarged; elongated above, but with rather short hind orbita; these latter bluntly carinated only close to the mandibles. Inner margins of the eyes submarginate, above parallel, downwards very faintly converging; the distance between the eyes below longer than the length of an eye, as 7:6. Postocellar area large, convex, and with broad middle and deep lateral furrows. The frontal depression, combined with the supra-antennal pit, romboid in out-

¹ Compare: Ent. Tidskr. 62, p. 134 (1941). The manuscript of this article, together with that of »Gattungstabelle der Blattwespen der Welt», were both sent to the Editor of this journal for publication in December 1939, but this one could not be accepted before 1942. The only species of the genus *Mallerina* (*tricolor*) was thus first published as a *nomen nudum*, and the genus *Mallerina* has accordingly no standing in nomenclature before this year.

line, steeply sunken, enclosing the middle ocellus, and reaching angularly between the lateral ocelli to the postocellar area, thus dividing the broad, deep, and abruptly sunken postocellar furrow into two pits not communicating with the frontal depression. Antennal furrows deep and complete, in front of each lateral ocellus with a short, perpendicularly branching furrow. Interantennal ridge broadly truncate. Malar space a little shorter than half the diameter of an ocellus. Clypeus

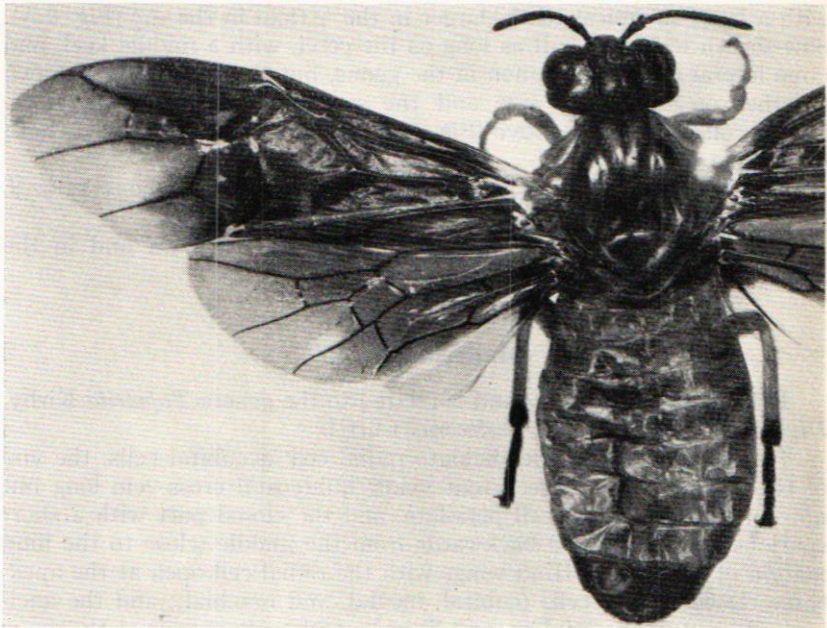


Fig. 7. *Mallerina tricolor*, n. gen., n. sp.

flat, as the flattened semilunar supra-clypeal area with scattered punctures; the anterior margin of the clypeus very shallowly emarginate. Antennae as long as the head is broad, stoutly filiform in the ♀. Palpi short and stout, the labial ones apparently with 4 joints, the maxillar with 3. Body plump, impunctate. Legs normal, all the tibiae with apical, but without supra-apical spurs; hind basitarsus shorter than the following tarsal joints combined, as 9:10. Claws simple.

M. tricolor n. sp. (Fig. 7). Yellow; meso- and metathorax dark fulvous; black are:— antennae; head, except the yellow mouth-parts below the mandibles including the palpi; the 8th and 9th abdominal segments with the saw-sheath; apex of the hind tibiae, and the hind tarsi. The black of the head and abdomen with bluish tinge. All claw-

joints more or less fulvous. Front wings bluish black with paler apex; the hind wings strongly infuscated towards the base and likewise with paler apex; all four wings with a clear spot around the basal vein near the hind corner of each wing. Saw-sheath, Fig. 8 c. Length 16 mm. (1 ♀.)

Brazil, Santa Catharina, Hansa Humboldt at 60 m. altitude, Oct. 1932. (A. Maller.)

This species must apparently be a rare one, as such a large and strikingly coloured insect could otherwise hardly have escaped so long being captured and described. The genus is named in honour of the first collector, Herr Anton Maller of Hansa Humboldt.

Duckeana Malaise 1941.¹

Belongs to the *Sterictiphorinae* and is related to the genus *Sofus* mihi (Leston Ross) new syn.

Both wings with the radial cell open at the apex. Front wings with four cubital cells, the 3rd one longer on the radius than on the cubitus; the 2nd cubital cross-vein and the 2nd recurrent vein almost interstitial. Intercostal cross-vein wanting. Basal vein far removed from the origin of the cubitus. Anal cell broadly contracted with a distinct basal cell, and the closed apical part of the cell with a very short spurious stump basally. Hind wings with two closed middle cells, but without closed anellan cell. Head not narrowed behind the eyes. Postocellar area subconvex, large, and sharply outlined. Inner margins of the eyes rather strongly converging downwards; the distance between the eyes below only a little longer than the length of an eye. In the type species each ocellus surrounded by a separate circumocellar furrow interrupted anteriorly, and the supra-antennal pit large and shallow. Interantennal carina broad and blunt, but elevated above an imaginary line (tangent) touching both eyes. Supraclypeal area strongly slanting and distinctly flattened. Clypeus half as long as the labrum, the thick anterior margin emarginate in the middle and laterally just reaching to the base of the labrum; labrum as broad as the clypeus, the anterior margin likewise emarginate. Malar space linear. Antennae stout; flagellum compressed and shorter than the width of the head. Hind tibiae without supra-apical spurs. Type: *Ptenus prodigus* Knw.

Adura Malaise 1941.

(*Ardua* Malaise 1937 nec Giebel 1872.)

The name *Ardua* mihi (Ent. Tidskr. 1937) is preocc. and has to be replaced by *Adura*.

¹ Ent. Tidskr. 62, p. 137. Named in honour of the first collector of the type species, A. Ducke of Para.

Acrogymnia Malaise 1941.*(Hemigymnia* Malaise 1937 nec Arnaud 1898.)

The name *Hemigymnia* mihi (Ent. Tidskr. 1937) is preocc. and has to be replaced by *Acrogymnia*. This new name alludes to a character not mentioned in the original description, *viz.* the shape of the scutellum. This is quite flat above with the upper surface extending laterally beyond the sides of the scutellum as a sharp corner or carina (as in the genus *Loboceras*). The temples at the upper corner of each eye with the marginal setting of the eye widened to a deep pit. This latter character occurs also, more or less distinctly, in some other South American genera.

A. scutimacula n. sp. Head and antennae black, the anterior margin of the clypeus, and the mandibles except the extreme base brown. Palpi, thorax, abdomen, and legs pale yellow; black are:—mesonotum, the vertically slanting part of the lateral lobes mostly pale; mesosternum, and the episterna proper of the mesopleura, but not the mesopleural presterna and epimera; a large spot anteriorly on the scutellum leaving a pale margin along the sharp margin above; the apex of the abdomen from the 7th segment; the remaining tergites with lateral black spots together joining as broad, longitudinal, and basally disappearing lateral bands on the abdomen above; the extreme apices of the four hind tibiae; all tarsi, brownish towards the base; a small spot at the base of the hind coxae, and another one at the upper part of the propleura. Wings uniformly and dilutely infumated; venation and stigma brown, costa sordid yellow with darker apex. — Impunctate and strongly shining. Head extremely short behind the eyes, almost disappearing. Postocellar area very short and poorly defined. Frontal area roundly elevated, entirely flat above, and anteriorly squeezed between two angulately diverging, very high and edge-sharp carinas emerging from the likewise high and sharp interantennal carina; this latter carina prolonged over the elevated supraclypeal area to the clypeus. Supra-antennal pit wanting. Clypeus depressed and slanting from above, the anterior margin subemarginate and barely overlapping the base of the labrum; supraclypeal furrow wanting. Labrum semicircular in outline, roundly depressed anteriorly in the middle. Palpi long and slender; the maxillar ones 6-jointed, the length of the joints from the base as 1:1:2:2:2:3; labial palpi 4-jointed. Hind tibiae somewhat swollen in comparison to the tarsi, but not broader than the femora; hind basitarsus longer than the following joints combined. Claws simple. Saw-sheath compressed from the sides, with a very narrow double groove along the apical margin. Length 4—5 mm.

13 ♂♂, 5 ♀♀ from Santa Catharina, Nova Teutonia; Feb. and Aug. (Fr. Plaumann).

Atomacera Say.

Atomacera Say; Boston Journ. Nat. Hist., Vol. I, p. 212 (1836).

Micrarge Ashmead; Canad. Ent., Vol. 30, p. 213 (1898).

Braunsiola Konow; Ent. Nachr., Vol. 25, p. 312 (1899).

Spegazziniella Jörgensen; An. Mus. Nac. Buenos Aires, Vol. 24, p. 260 (1913).

Argina Forsius (nec Huebner 1819, nec Gray 1840); Ark. Zool., Vol. 17 A, Nr. 27, p. 2 (1925).

Arginella n. n. Forsius; Notulae Ent., Vol. 5, p. 107 (1926).

The genus *Atomacera* Say was originally described from North America, but more species are known from the Neotropic region, where it probably originates, and whence it has later spread to the north during some comparatively late period. Owing to the minute size of most of the species these insects have mostly been overlooked by collectors, and it is most probable that we know only a small portion of the actual number of species belonging to the genus.

Owing to a number of characters the genus *Atomacera* occupies a rather isolated position among the other genera of the *Arginae*. The most important of these characters are: front wings with long intercostal cross-vein; the anal cell petiolate (sometimes with a small spurious stump directed backwards from the closed part of the cell); both wings with the radial and radiellan cells open at the apex without an appendiculate cell; hind wings without anellan cell, but with two closed middle cells, the cubital of these like the 3rd cubital cell of the front wings very large, and longer on the radius than on the cubitus. Antennae simple in both sexes; flagellum comprimate in the ♂. Head strongly narrowing behind the eyes, with short and ill-defined postocellar area, roundly elevated frontal area, large supra-antennal pit, long underface, and long malar space. The under-face is conically elevated between the antennae, and it is continued by the truncate or submarginate clypeus almost without interruption; the supraclypeal furrow wanting or distinguishable only as a very fine furrow between two deep, large lateral pits, which are always present. The mesonotal middle lobe without longitudinal middle furrow. Scutellum normal. Hind tibiae swollen, and without supra-apical spur. Claws simple, but with a large, acutely angulate basal lobe. Saw-sheath long and compressed from the sides. Type: *A. debilis* Say.

To distinguish between the Neotropic species known at present the following key may be helpful. Some of the new species are named in honour of the collectors, *viz.* F. Plaumann of Nova Teutonia, Brazil; A. Maller of Hansa Humboldt, Brazil; Dr. Douglas Melin of Uppsala, Sweden, and Dr. A. Roman of Stockholm. The types of the new species are kept in the Swedish Museum of Natural History, Stockholm, mostly in the author's private collection.

Key to the Neotropic Species.

1. Black; thorax partly reddish..... 2
 —. Thorax like the rest of the body black..... 9
2. In addition to the tegulae and the pro- and mesonotum the pro- and mesopleura also reddish; scutellum reddish with a large black middle spot. Flagellum of the antennae with reddish tinge, more or less distinct. Comparatively large insects 5 mm. in length..... 3
 —. Mesopleura and the antennae entirely black..... 4
3. Pro- and mesosternum, and all the legs entirely black. Interantennal carina not conically elevated between the antennae and not reaching to the base of the clypeus, but from the large supra-antennal pit a faint longitudinal fissure extending downwards to exactly between the antennae and dividing the carina there into two. Supraclypeal furrow wanting. Antennae as long as the head is broad in the ♀. Front wings with 4 cubital cells, the length of the 2nd and 3rd cross-veins as 1 : 3. Basal vein distinctly setiform, and longer than the distance from it on the subcosta to the base of the cubitus, as 4 : 3. Anal cell without spurious stump. (1 ♀.)
 Santa Catharina (Nova Teutonia). *A. plaumanni* n. sp.
- . Black; pro- and mesothorax, the anterior coxae, trochanters, and femora reddish. The interantennal carina conically elevated between the antennae, and the carina reaching downwards to the anterior margin of the clypeus. (After Jörgensen.)
 Argentina (Misiones). *A. ovata* (Jörgensen)
4. Mesonotal lateral lobes entirely reddish..... 6
 —. Pronotum and tegulae with the adjacent parts of the lateral lobes reddish; thorax otherwise entirely black, sometimes with a very faint suggestion of reddish breaking through at the junction of the three lobes. The interantennal area conically elevated. The supra-antennal pit large, deep, triangularly rounded in outline, and surrounded only by bluntly rounded borders. Supraclypeal furrow sharp; clypeus truncate. The 3rd cubital cross-vein only faintly setiform and three times longer than the 2nd one. Nervulus inconsiderably basal to the middle of the cell. Scapus and pedicellus about equal in length and width..... 5
5. Antennae black, as long as the head is broad in the ♀; flagellum strongly bent close to the base. Interantennal area with a short but distinct carina exactly between the antennae. The 1st cubital cross-vein distinct. The closed part of the anal cell with a rather long spurious stump directed backwards. Length ♀ 4.5 mm. (3 ♀♀.)
 Santa Catharina (Nova Teutonia). *A. humeralis* n. sp.
- . Antennae one and a half times longer than the width of the head in the ♀; black with the pedicellus reddish. Interantennal area roundly elevated into an elongated conus but without carina. The 1st cubital cross-vein almost obliterate. The anal cell with only a faint suggestion of a spurious stump. Length ♀ 4 mm. (1 ♀.)
 Santa Catharina (The Mafra Highland at 800 m.). *A. malleri* n. sp.
6. Pronotum black; scutellum and the lateral mesonotal lobes entirely reddish
 —. The broad pronotal angles reddish; likewise reddish are:— tegulae, mesonotal lateral lobes entirely, the extreme posterior apex of the middle lobe, and the lateral margins of the scutellum. Antennae as long as the abdomen in the ♀. Supra-antennal pit distinctly sunken. The 1st cubital cross-vein wanting. The distance between the basal and the cubital veins on the subcosta equal to the length of the basalis itself. Postocellar area not falling away immediately behind the ocelli, but the area and the ocelli on the same level. Length ♀ 3 mm. (After Konow.)
 Upper or Peruvian Amazonas (Iquitos). *A. hallex* (Knw)

7. Mesonotal middle lobe entirely reddish; tegulae black. The distance between the basal and the cubital veins on the subcosta short, hardly as long as half the length of the 1st recurrent vein. Antennae much longer than the abdomen in the ♂; ♀ unknown. Length 4 mm. (After Konow.)
Costa Rica (Belize). *A. lepidula* (Knw)
- Only the extreme posterior apex of the mesonotal middle lobe reddish. The anal cell mostly without distinct spurious stump. 8
8. Length 3 mm. Antennae only as long as the thorax in the ♀. The 1st cubital cross-vein wanting; the length of the 2nd and 3rd ones as 1:2. The length of the ordinary 3rd cubital cell on the radius and on the cubitus as 5:4; the latter length subdivided by the 2nd recurrent as 1:5. The distance between the basal and the cubital veins on the subcosta equal to the length of the basalis itself. Postocellar area falling away immediately behind the ocelli. Supraclypeal furrow almost wanting. Interantennal area roundly elevated without any carina. The infuscation of the front wings distinctly paler from the apex of the stigma. Tegulae almost black. (1 ♀.)
N. Amazonas (Rio Uaupés, Taracua). *A. romani* n. sp.
- Length 4—5 mm. Antennae as long as the abdomen in the ♀; much longer in the ♂. Front wings with 4 cubital cells; the 1st cubital cross-vein interstitial with the 1st recurrent; the 3rd one setiform, its general direction strongly converging with the 2nd cross-vein, and its length compared to this latter as 5:2. Nervulus at the basal 3rd of the discoidal cell. The distance on the subcosta between the basalis and the base of the cubitus shorter than the basalis itself. The interantennal carina almost wanting, only faintly suggested exactly between the antennae. Supraclypeal furrow ill-defined. Front wings gradually paling towards the apex. Tegulae reddish. (After the type of Forsius, and incomplete notes from Fabricius' type).
British Guiana (Essequibo); Amazonas (Teffé, Obidos, and Rio Branco).
A. pubicornis (Fabr.)
[*duckei* (Konow); *nubilipennis* (Forsius)]
9. At least the interantennal elevation itself carinated. Nervulus closely basal to the middle of the cell. Hind trochanters not whitish. 10
- Face not carinated. Supraclypeal furrow wanting. Hind trochanters whitish. Antennae as long as the head and thorax combined in the ♀. Supra-antennal pit hardly sunken. Front wings with 4 cubital cells. Length ♀ 4 mm. (After Konow.)
Brazil (Santos). *A. truculenta* (Knw)
10. The interantennal carina extending edge-sharp to the fine and comparatively deep supraclypeal furrow, and the carina distinguishable even down on the clypeus itself; the same carina forked above, and thus angulately bordering the deep triangular supra-antennal pit from below. Antennae gradually tapering, longer than the abdomen in the ♂. Front wings with 4 cubital cells; the 2nd and 3rd cross-veins almost subparallel, and their length as 1:3. The anal cell without spurious stump. General colour black with faint bluish or purplish tinge. Length ♂ 4.5 mm. (4 ♂♂).
Santa Catharina (Nova Teutonia). *A. caerulescens* n. sp.
- The interantennal carina becoming obliterate before it reaches the sometimes indistinct supraclypeal furrow. The antennae shorter than the abdomen in the ♀, longer than the latter in the ♂. The anal cell with distinct spurious stump. 11
11. The 3rd cubital cross-vein very long, setiform, and strongly converging with the 2nd one. The 3rd cubital cell almost twice as long on the radius as on the cubitus. 12

- The 2nd and 3rd cubital cross-veins subparallel, the latter almost straight. The 3rd cubital cell almost equally long on the cubitus as on the radius; this cubital part angularly broken at the joining-point with the 2nd recurrent, and the length of the subdivided parts as 1:2. The basalis removed from the base of the cubitus on the subcosta a distance equal to its own length. The interantennal carina edge-sharp from the supra-antennal pit to more than half-way down to the rather indistinct supraclypeal furrow. Antennae filiform in the ♀. Black; anterior tibiae sordid whitish. Length ♂♀ 3—4 mm. (2 ♂♂, 1 ♀.)
Santa Catharina (Nova Teutonia). *A. recta* (Enderlein)
12. Length ♀ 5.5 mm. The interantennal carina reaching from the elongate supra-antennal pit more than half-way down towards the distinct supraclypeal furrow. The 1st cubital cell subquadrate, and as long as the distance between the much longer basalis and the base of the cubitus on the subcosta. Black with a faint purplish tinge. (1 ♀.)
Peru (Roque, 45 km. SSE of Moyobamba, 1000 m.).
A. melini n. sp.
- Length ♀ 3.5 mm. The interantennal carina almost wanting, only faintly suggested exactly between the antennae. The supraclypeal furrow wanting. The supra-antennal pit rounded in outline. The 1st cubital cell almost twice as broad as it is long. The distance between the basalis and the base of the cubitus on the subcosta hardly longer than the basalis itself. Black; the anterior tibiae and the extreme knees of at least the four anterior femora sordid whitish. (1 ♀.)
Santa Catharina (Nova Teutonia). *A. pumila* n. sp.

Lagideus Konow.

Lagideus Konow; Zeitschr. Hym. Dipt. Vol. 5, p. 160 (1905).

L. albitarsis n. sp. Black; fulvous are:—labrum, clypeus, an adjacent triangular supraclypeal dot, tegulae, mesonotal middle lobe except an ill-defined black middle spot, the extreme hind apex of the scutellum, and the four anterior legs except the black base of the coxae and parts of the trochanters; whitish are:—the middle tibiae and tarsi, the hind trochanters, and the apical half of the hind tarsi including the extreme apex of the basitarsus. Wings clear, subinfuscated towards the apex from the stigma. — Head extremely short behind the eyes, lower half of the hind orbits wanting. Face between the eyes semi-opaque owing to coarse, ill-defined, shallow, and setigeous punctures; the scattered hairs pale, and longer than the scape. Inner margins of the eyes very faintly converging downwards, almost subparallel, the distance between the eyes below subequal to the length of an eye. Postocellar area six times as broad as it is long, with shallow lateral furrows, and excavate, *viz.* depressed anteriorly and elevated into a high and sharp carina behind. Frontal area not defined, and the antennal furrows lateral to it obsolete. The lateral ocelli much larger than the middle one. Median fovea broad and sharp, and reaching to the middle ocellus. Antennal sockets extremely large, and bordered above and medially by an elevated brim; these brims are fused together me-

dially and compressed into an interantennal carina. Malar space short but distinct. Clypeus flat, coarsely rugose, narrowly semilunar in outline, and with the anterior margin truncate or subemarginate. Labrum broadly pentagonal in outline and longer than the clypeus. Palpi short and stout, the maxillar ones with 3 and the labial with 2 joints. Antennae 8-jointed, with the flagellar joints pectinate (Fig. 8 B). Venation of the wings as in Fig. 8 A. Scutellum flat, almost semicircular in outline, and with sharply horizontally carinated brims. Propodeum

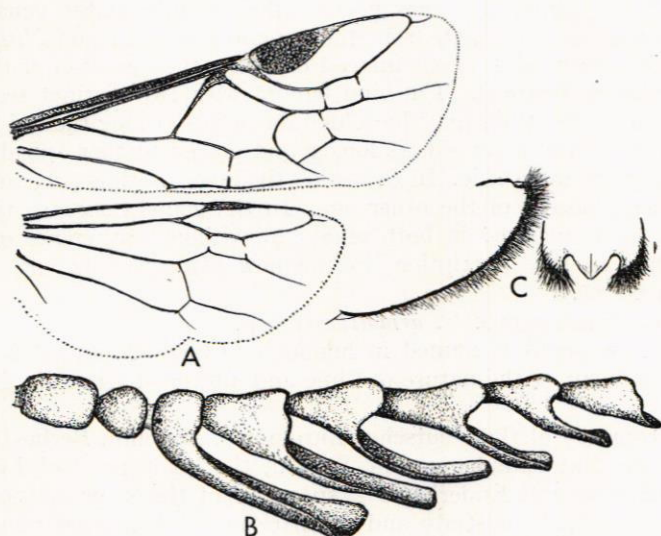


Fig. 8. *Lagideus albitarsis* n. sp. A. Wings. B. Antenna of the ♂.
C. *Mallerina tricolor* n. gen., n. sp. Saw-sheath.

neither divided nor emarginated in the middle. Hind coxae elongated, and the femora just reaching the apex of the abdomen. The four hind tibiae with supra-apical thorns; all thorns very long. The hind basitarsus as long as the longer of the apical tibial thorns, and longer than the remaining tarsal joints, as 3:2. Claws simple. Length ♂ 5.5 mm. (1 ♂.)

Brazil, Santa Catharina, Nova Teutonia, 14.XII. 37. (F. Plau-
mann).

The genus *Lagideus* was described by Konow (l. c) probably from a single ♀ from Argentina. This ♀ belongs to a species other than the ♂ described above. No further specimen and no ♂ of the genus has, to the author's knowledge, been found. The antennae of the ♀ are described by Konow as: »Antennae 8-articulatae, apice compressae et subdilatae, pilosulae». The ♀ of the genus *Lagideus* have accordingly

the antennae not pectinate, but in most cases where pectinate antennae occur in the ♂ the corresponding ♀ have simple ones. In all other characters this new ♂ agrees quite well with the generic description of *Lagideus*.

Gayana n. gen.

Closely related to the genera *Lycosceles* Konow and *Conocoxa* Rohwer, but also to the genus *Nithulea* Rohwer, all of them described from Chile or Patagonia. The new genus differs mainly in the venation of the front wings (Fig. 9 D) from the genera *Lycosceles* and *Nithulea* in that it has four cubital cells instead of three; the venation of the hind wings almost identical. The hind femora with two distinct teeth, between which the tibia may be folded down into a longitudinal furrow. The tooth on the inner side is longer and placed further apically than the one on the outer side. In *Lycosceles* the inner tooth is only suggested and placed basally of the other one. In the genus *Conocoxa* the hind femora much enlarged in both sexes but without any spines on them mentioned in the description; in the new genus the femora swollen only in the ♂.

Type of the genus: *G. armatipes* n. sp.

The new genus is named in honour of Claude (Claudio) Gay, the famous student of the nature of Chile and author of »Historia de Chile, 1844—54».

By courtesy of the Deutsches Entomolog. Museum, Berlin-Dahlem, and of the Naturkundemuseum, Stettin, the holotype ♀ of *Lycosceles herbsti* Konow and Enderlein's ♂ specimen of the same species could both be obtained for study and comparison. It is a most remarkable fact that Enderlein's ♂ (Sitzungsber. Ges. Naturforsch. Freunde, Berlin 1919, p. 125) also proved to be a ♀ and almost identical with Konow's type specimen. The specimen is marked as a ♂ in Enderlein's own handwriting, and no other specimen of this species is kept in Stettin.

G. armatipes n. sp. Black; abdomen pale brown laterally and beneath; all tibiae, the four anterior femora apically, and the hind femora entirely likewise pale brown; the apex of the saw-sheath black. Wings dilutely and uniformly infumated. — Shining and impunctate. Head strongly narrowing behind the eyes. Inner margins of the eyes sub-parallel. Postocellar area subconvex, twice as broad behind as it is long, the lateral furrows sharp, deep, straight, and only faintly diverging posteriorly; the postocellar furrow rather ill-defined, broad, and shallow. Frontal area subconvex, rounded in outline. Supra-antennal pit deep, punctiform, and the more or less distinct median fovea reaching from it to the middle ocellus. Malar space as long as the diameter of an ocellus. Clypeus slightly elevated close to the fine and sharp supra-clypeal furrow, then slanting absolutely evenly to the