

20.

Tettigellidae and Gyponidae (Homoptera) of Kartabo,
Bartica District, British Guiana.¹

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(Text-figures 1-8).

[This contribution is a result of various expeditions of the Department of Tropical Research of the New York Zoological Society to British Guiana during the years 1917, 1919, 1920, 1921, 1922 and 1924, under the direction of Dr. William Beebe. For maps and ecological data refer to *Zoologica*, Vol. VI, 1925, pp. 1-193.]

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INTRODUCTION.

In 1945 the writer (Metcalf, 1945b) reviewed the Fulgoroidea from Kartabo collected by Dr. William Beebe and his associates. Included with these were a small number of leafhoppers belonging to the groups Tettigellidae (formerly Cicadellinae) and Gyponidae. While the number of species in the present collection is not large, they are of sufficient interest to be worth reporting. A number apparently belong to species previ-

ously described and in these cases I have attempted to redescribe and illustrate these so as to bring them into line with modern taxonomic practices. A disproportionate number of species are apparently new. This number, however, does not seem to be out of line with the apparent number of new species from other parts of the world where, likewise, only incidental collections of these small and often inconspicuous insects have been made. No species has been described as new, nevertheless, until a thorough search has been made of the literature and careful comparisons made with the original descriptions of these species. As is well known to the students of these groups, the older descriptions are often totally inadequate. The writer is under no delusions as to his ability to place these older species accurately from the descriptions. However, since so many of these types are not readily available, the best the modern taxonomist can do is to try to correlate these older described species with the material at hand.

For the present the writer proposes to treat these two groups, Tettigellidae and Gyponidae, along with some other groups of leafhoppers, as families. Whether they are coordinate with other families of Homoptera or with families in other orders has not as yet been determined. But until the groups of the Homoptera have been studied more thoroughly, it is deemed best to treat them as distinct families of the superfamily Iasoidea.

Family TETTIGELLIDAE.

Most of the species of this family are large or medium sized leafhoppers, very few are small. The body is cylindrical or more or less fusiform. The head is usually large and in a few species is produced into a definite cephalic process. The anteclypeus is large. The lora conspicuous. The postclypeus large, sometimes inflated, definitely projected onto the crown, facial portion usually with distinct transverse ridges. The lateral postclypeal sutures usually extending to the crown. Crown large, usually distinctly triangular in outline. Cephalic process sometimes distinct, short, triangular or elongate

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terete. Paired ocelli on the crown remote from the anterior border of crown. Pronotum usually large, flat, more or less quadrangular in outline; anterior margin usually broadly curved; posterior margin usually broadly incised; lateral margins usually distinct. Mesonotum small, triangular. Tegmina elongate, usually narrow, coriaceous; venation usually distinct, sometimes strongly reticulate apically. Radius with two distinct branches; media unbranched; cubitus 1 unbranched, joined to the claval suture (cubitus 2) by a short but usually distinct cross vein. Usually two, (sometimes three or more) radial-medial cross veins and one (sometimes two) medial-cubital cross vein. Thus there is formed usually two (sometimes three) basal cells, two or three ante-apical cells and four or five apical cells, with the ante-apical and apical cells sometimes strongly reticulate. Wings transparent with a distinct submarginal vein which is incomplete on the costal margin. Radius with two branches, the first incomplete. Media with two branches. Media 1 plus 2 with a distinct radial cross vein and media 3 plus 4 with a distinct cubital cross vein. Cubitus 1 unbranched.

Subfamily TETTIGELLINAE.

Head, including compound eyes, usually narrower than the pronotum. Antennal ledges indistinct, not conspicuously separated from the coronal portion of the postclypeus. Lateral margins of the pronotum divergent caudad; or rounding, not distinctly separated from posterior lateral margins. Anterior tibiae not sulcate or expanded. Tegmina broader, usually covering the lateral margins of the abdomen.

Erythrogonia Melichar, 1926a:373.

Orthotype *Erythrogonia laeta* Fabr.

The species of this genus are generally small slender tettigellids with the head including the eyes wider than the pronotum. The tegmina elongate, narrow with nearly parallel sides.

Crown shorter than the greatest width between the eyes; the ocelli usually on the posterior half; face somewhat angled to the crown, strongly impressed. Pronotum usually about as long as the crown, width usually greater than the median length. Mesonotum large. Legs slender. Tegmina elongate, rounded at the apex with three elongate ante-apical cells and three shorter apical cells.

Erythrogonia bicolor n. sp.

Text-fig. 1 A-E.

This species closely resembles *Tettigonia rutilans* Walker (*Tettigonia carminata* Signoret) in general coloration but differs as follows: the apical margin of the tegmina translucent, not blackish, and the head, more elongate. Since neither the male nor female genitalia of *rutilans* have been described and since the head characters of the present species are decidedly different, together with

the fact that *rutilans* has been recorded only from Brazil, it is believed to be better to describe this as a new species.

Crown about as long as broad, slightly impressed from the posterior lateral margins around the anterior margin, leaving the anterior margin as a broad slightly elevated border; ocelli on a line with the anterior margin of the compound eyes; face strongly produced, longer than its greatest width. Pronotum as long as crown, about one and a half times as broad as the median length; the anterior margin broadly curved; the posterior margin nearly straight; mesonotum large, nearly as long as pronotum.

Female last ventral segment four times as long as the penultimate, longer than broad, curvingly acuminate to the obtuse apex with a distinct median carina. The male genitalia with the genital plates with a broad base, slender, triangular acuminate apex about half as long as the pygofer; the pygofer when viewed ventrad, elongate, triangular, gradually acuminate from the base to the apex, not as long as the anal segment; when viewed laterad, broad with the apex broadly rounded; genital styles short, acuminate, broadly curved outward. Aedeagus shorter than pygofer with a strongly developed dorsal lobe and two elongate acuminate spines at the apex.

This is a small slender species with the head including the compound eyes, the pro- and mesonotum, and the basal angle of the tegmina blackish fuscous. Beneath, including the legs and abdomen, blackish fuscous. Tegmina bright red with the venation brown. Wings transparent with scarlet red veins. Crown black, almost as long as its width between the compound eyes.

Length to apex of tegmina: 9.75 mm.

Holotype: ♂ Kartabo, Bartica District; May 10, 1924. Allotype: ♀ Kartabo, Bartica District; July 4, 1922. Paratypes: 1 ♂ July 4, 1922; 1 ♂ May 10, 1924; 3 ♀♀ May 10, 1924.

Amblyscarta Stål, 1869a:71.

Logotype *Amblyscarta modesta* Fabr.

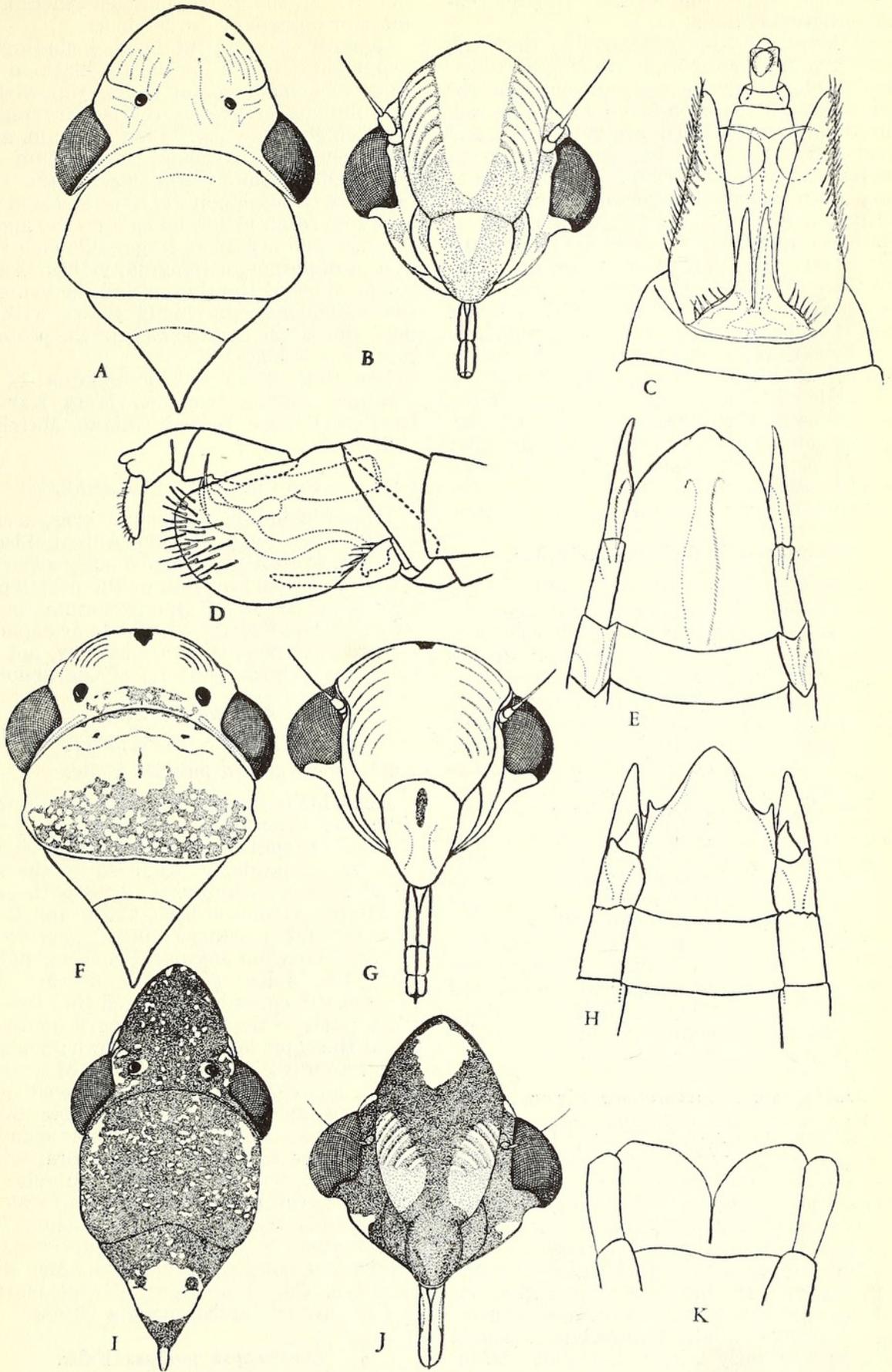
In this genus the head is broader than the pronotum. The crown is short and broad, length on the median line more than half the width between the eyes, broadly rounded to the face; face somewhat elongate. Pronotum about twice as long as the crown. Mesonotum large, almost as broad as the pronotum. Tegmina elongate, apical margin somewhat obtuse; anterior tibiae with a distinctly ciliated inner margin.

Amblyscarta aurulenta Fabr.

(*Cicadella aurulenta* Osborn, 1926b:199).

(Text-fig. 1 F-H).

This common and well-known species is apparently widely distributed in South America, having been previously recorded from British, French and Dutch Guiana, Bolivia and Matto Grosso and Rio de Janeiro, Brazil. There are numerous specimens in the



TEXT-FIG. 1. *Erythrogonia bicolor*: A, head thorax; B, face; C, male genitalia ventral; D, male genitalia lateral; E, female genitalia. *Amblyscarta aurulenta*: F, head thorax; G, face; H, female genitalia. *Orectogonia flavoscutellata*: I, head thorax; J, face; K, female genitalia.

present collection from Kartabo, Bartica District, British Guiana.

While the color is quite variable, the head, pronotum and mesonotum are chiefly ochraceous orange with the legs and venter bright yellowish, the abdomen usually carmine red. The tegmina vary considerably in color and color markings. More typical specimens in the present collection have the basal third of the tegmina velvety brown with numerous irregular light bluish spots, the apex testaceous brown, the posterior border of the crown irregularly irrorate with brownish and the posterior third of the pronotum usually marked like the tegmina with a broad brownish band more or less irregularly spotted with light bluish. The brown spot at the apex of the head usually distinctive.

Female with the last genital segment more than twice as long as the penultimate, projecting caudad in a broad triangular lobe; the lateral margins usually projecting as a pair of small lateral teeth.

Length to apex of tegmina: 9.5-11.0 mm.

***Orectogonia* Melichar, 1926a:345.**

Logotype *Orectogonia sparsuta* Sign.

This is one of the genera established by Melichar in his key that has never been fully described. It may be characterized as follows: head including the compound eyes broader than the pronotum; crown elongate, conical, flat with the disc distinctly impressed with a very faint longitudinal furrow on the median line. Face somewhat inflated. Pronotum large, lateral margins parallel; anterior margin broadly curved; posterior margin triangularly incised. Mesonotum large, nearly as broad as pronotum. Caudal area distinctly produced. Tegmina translucent; venation distinct with three ante-apical and four apical cells, the fourth apical cell elongate. Legs short and slender, posterior tibiae with about six short stout spines on the outer margin; the anterior margin with numerous slender hairs, those on basal half short, those on apical half elongate, posterior margin with numerous short hairs.

***Orectogonia flavoscutellata* Signoret.**

(*Tettigonia flavoscutellata* Signoret, 1855c:509).

(Text-fig. 1 I-K.)

This species is apparently very close to *Orectogonia sparsuta* Sign., but it differs decidedly in coloration and in size.

Crown longer than the width between the eyes, the median impressed line rather indistinct. Ocelli large, close to compound eyes. Face strongly inflated; anteclypeus small. Pronotum slightly wider than long. Mesonotum large, distinctly bi-impressed behind the middle. Tegmina elongate, rather narrow; venation distinct, the ante-apical cells nearly three times as long as the apical cells. Claval veins distinct. Legs short and slender.

Female genitalia with the last ventral segment elongate, deeply incised on the poste-

rior border, the incision almost reaching the anterior margin of the segment.

General color of the head, including the compound eyes and the thorax, blackish with numerous small round spots, yellowish or pale bluish-green, with a few larger irregular spots on the crown and the pronotum, and a large central area on the mesonotum, pale yellowish. Tegmina translucent, the veins blackish. Beneath general color blackish with a large median yellowish spot on the apex of the face and a pair of large yellowish spots at base of antennae, irregular yellowish spots on the sides of the thorax and the venter of the abdomen. Legs chiefly yellow with the posterior tibiae and the base of the posterior tarsi chiefly blackish.

Length to the apex of the tegmina: 11 mm.

Single female specimen from Kartabo, Bartica District, British Guiana, March 18, 1922.

Subfamily PROCONIINAE.

Head, including compound eyes, usually broader than the pronotum. Antennal ledges distinct, projecting, conspicuously separated from the coronal portion of the postclypeus. Lateral margins of the pronotum usually parallel. Anterior tibiae sulcate or expanded toward the apex. Tegmina narrow, not covering the lateral margins of the abdomen.

***Acrocampsia* Stål.**

(Melichar, 1925a:337).

Haplotype *Fulgora pallipes* Fabr.

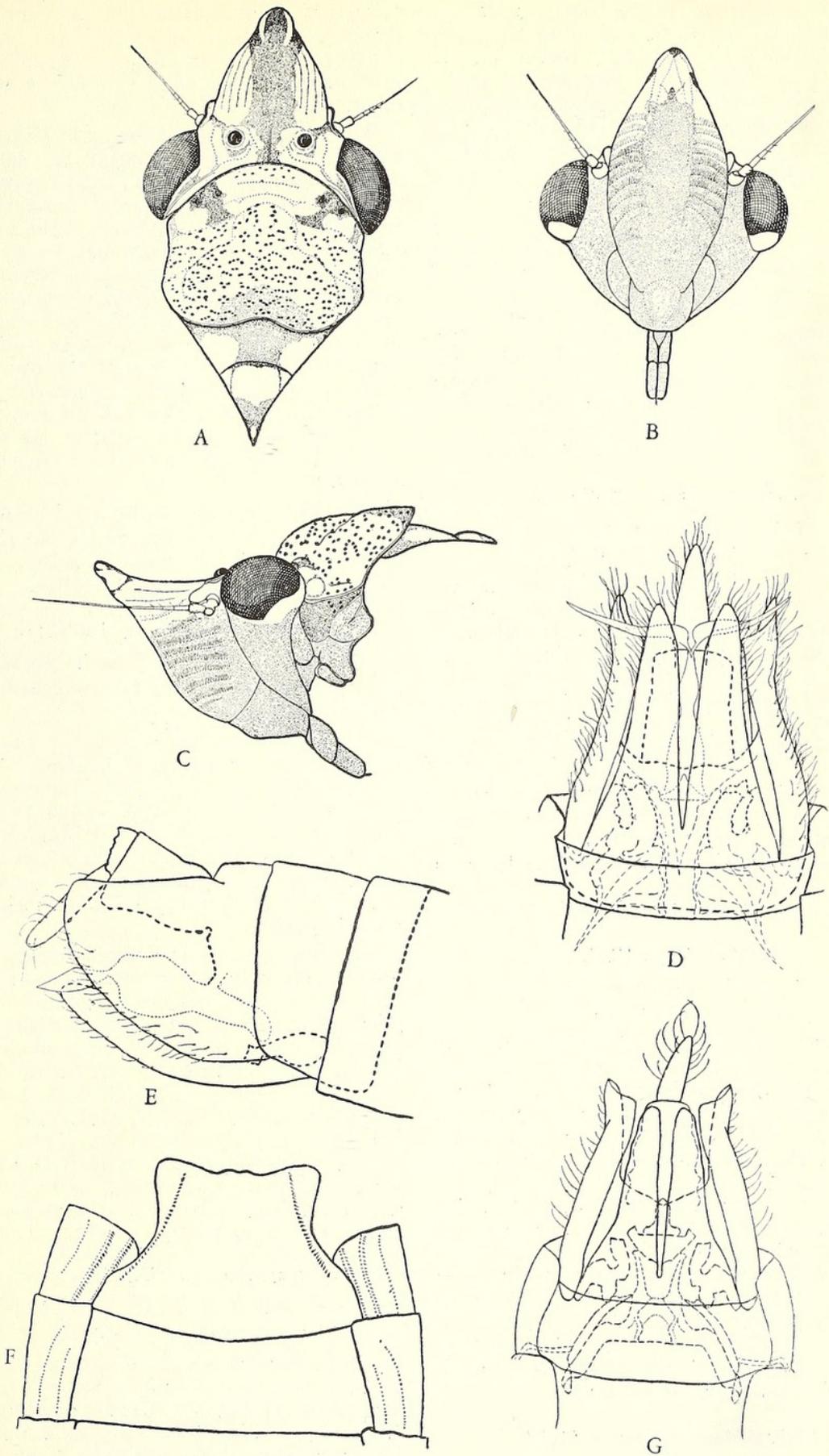
Head including the compound eyes wider than the pronotum; crown suddenly constricted in front of the compound eyes, then broadly triangularly produced to the apex which is slightly upturned. Apex with a deep longitudinal furrow both above and below. Face strongly produced; anteclypeus viewed laterad somewhat angular. Pronotum narrow with the sides parallel; anterior margin broadly curved; separated into two distinct parts—the anterior part depressed, about the same level as the crown; posterior part strongly elevated, trilobed. Mesonotum broad, not very long; apex produced into a rather slender process. Anterior tibiae broadened at the apex; posterior tibiae elongate, nearly twice as long as the femora, with a few rather stout spines on the anterior and posterior ventral margins; basitarsi not longer than the two apical segments. Tegmina rather narrow, coriaceous; venation not very distinct; the whole surface finely rugulose. Costal and commisural margins nearly parallel; apical margin obtuse.

***Acrocampsia pallipes* Fabr.**

(*Fulgora pallipes* Fabricius, 1787a:261).

(Text-fig. 2 A-F).

This species may be readily distinguished from *Catorthorrhinus resimus* by the following combination of characteristics and distinctive coloration:



TEXT-FIG. 2. *Acrocampsas pallipes*: A, head thorax; B, face; C, lateral head thorax; D, male genitalia ventral; E, male genitalia lateral; F, female genitalia. *Acrocampsas rufa*: G, male genitalia ventral.

Crown somewhat longer than greatest width between the eyes, equalling the pronotum in length; cephalic process short, broadly rounded, deeply impressed, semi-erect; ocelli large, projecting; compound eyes large; face elongate, nearly twice as long as greatest width; postclypeus nearly elliptical in outline; median impression on face deep.

Female last ventral segment broad, not quite twice as broad as median length; caudal area nearly quadrangular; posterior margin shallowly incised with a median third broadly produced with a median incision at the apex. Male genitalia last ventral segment short and broad, nearly four times as broad as its median length; genital plates nearly as long as pygofer; aedeagus elongate with pair of elongate, slender, acute apical processes.

Length to apex of tegmina: 13.5 mm.

***Acrocampa rufa* Melichar.**

(Melichar, 1925a:339).

(Text-fig. 2 G).

This species may be recognized by the following points: crown, pronotum and mesonotum chiefly yellowish, more or less clouded with light brown. Tegmina chiefly bright reddish-brown, base usually greenish-fuscous; apex transparent bordered with blackish basad. Beneath, including the legs and venter of the abdomen, chiefly pale ochraceous.

Male genitalia last ventral segment about three times as broad as its median length; genital plates slightly shorter than pygofers, obtuse; aedeagus less than half as long as genital plates.

Length to apex of tegmina: 13.5 mm.

***Dichrophleps* Stål.**

(Melichar, 1925a:327).

Haplotype *Cicada aurea* Fabr.

This genus has recently been reviewed by Melichar. He describes this genus and gives a key to the species including *aurea* Fabr. The species of this genus are quite variable in color markings and it is by no means certain that there is more than one species in Central and South America.

Head, including compound eyes, broader than pronotum; crown flat. Anterior margin acutely parabolic; face fairly flat. Pronotum rather cylindrical, lateral margins impressed; mesonotum large, triangular; tegmina transparent; venation distinct; three ante-apical and four apical cells, inner apical cell rather large. Legs rather slender, hind tibiae elongate, twice as long as the femora.

***Dichrophleps despecta* Mel.**

(Melichar, 1925a:330).

(Text-fig. 3 A-E).

I place the series of specimens in the present collection under this name because they resemble more closely the color markings described by Melichar for this species

than they do the other species from British Guiana. Melichar describes the head as shorter than the pronotum, whereas in the present series the crown is longer than the pronotum.

The genital plates of the male when viewed ventrad are short, triangular, somewhat asymmetrical at the apex; the pygofers elongate, narrow, nearly as long as the anal segment, somewhat truncate at the apex, the whole surface set with short stout spines; the aedeagus elongate, stout, somewhat membranous with a pair of ventral spines which are asymmetrical, the right spine being almost as long as the pygofer, the left spine shorter than the aedeagus; the apical area of the aedeagus is thin, irregularly broken into lobes. When viewed laterad the pygofer is about half again as long as its greatest width, thickly set with short, fairly stout spines.

Length to apex of tegmina: 16.3 mm.

Redescribed from 5 males from Kartabo, Bartica District, British Guiana. Dec. 5, 1920; April 4, 1924; April 6, 1924.

***Poeciloscarta* Stål, 1869a:73.**

(*Cardioscarta* Melichar, 1932a:285).

Logotype *Tettigoniella* (*Poeciloscarta*) *cardinalis* Fabr.

Stål established this genus as a subgenus of *Tettigonia* as indicated above, for thirteen species from South America. Melichar established the new genus *Cardioscarta* for species from America and assigned Stål's genus to species from Madagascar and Africa. On what basis this was made has never been revealed as Melichar did not finish his work on this group.

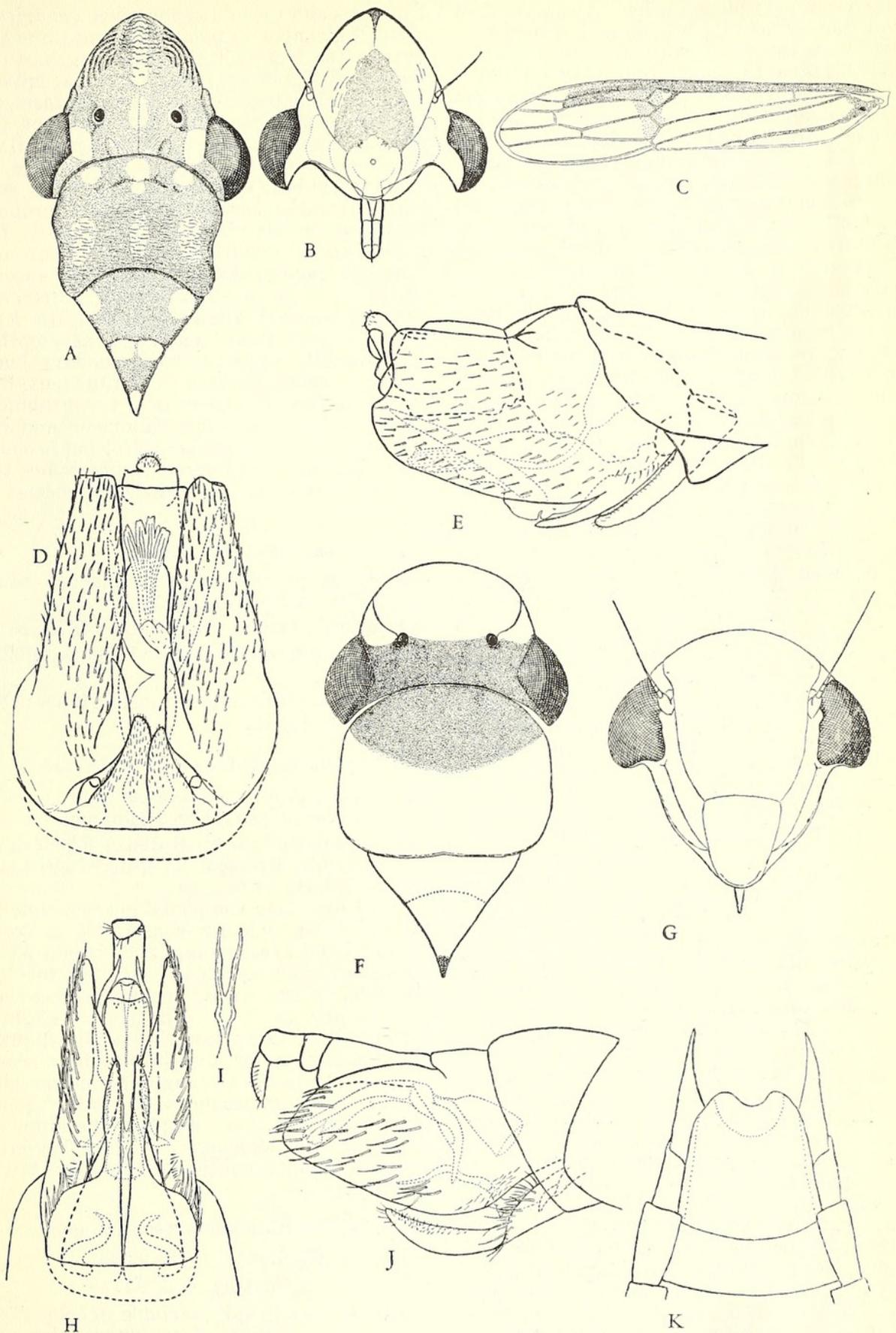
The genus may be defined briefly as follows: head including compound eyes broader than the pronotum; crown somewhat elongate, usually distinctly broader than long; anterior margin broadly parabolic; face elongate, not impressed. Pronotum broader than long, longer than the crown; anterior margin broadly curved; posterior margin nearly straight. Mesonotum large, shorter than the pronotum. Tegmina with the basal area of the corium and the clavus coriaceous with the venation indistinct; apex beyond the clavus translucent.

***Poeciloscarta quadrifasciata* Linnaeus.**

(*Cardioscarta fasciata* Melichar, 1932a:300).

(Text-fig. 3 F-K).

There has been a great deal of confusion in the nomenclature of this species. It was described originally as *Cicada quadrifasciata* Linnaeus, 1767a:706. In this he was followed by the earlier subsequent writers who merely repeated his short but distinctive description and added the reference to the original description. Goeze, 1778a:130; Fabricius, 1781a:329, 1787a:274, 1794a:51 and 1803a:72; de Tigny, 1802a:152; Donovan, 1820a:[6]; and Stoll, 1788a:82; pl. XXI, fig. 114A



TEXT-FIG. 3. *Dichrophleps despecta*: A, head thorax; B, face; C, tegmen; D, male genitalia ventral; E, male genitalia lateral. *Poeciloscarta quadrifasciata*: F, head thorax; G, face; H, male genitalia ventral; I, aedeagus ventral view; J, male genitalia lateral; K, female genitalia.

and 1792a:64; pl. XXI, fig. 114A described and illustrated this species as *fasciata* Linnaeus. In this they were followed by Blanchard, 1840a:190, and again in 1850a:190.

This species varies somewhat in color from light yellow to brilliant orange. Marked dorsad with four broad blackish fasciae, the first across the compound eyes, the posterior margin of the crown and the anterior margin of the pronotum; the second across the basal part of the tegmina beyond the sutural angle; the third across the apex of the clavus; and the fourth at the apex of the tegmina. The dark bands on the tegmina are quite variable in width and in color. The band at the apex of the tegmina is especially variable and is in some specimens reduced to a small fuscous spot with the apex of the tegmina translucent fuscous. The wings are translucent smoky with two blackish fuscous bands similar to the middle and the apical bands of the tegmina. The dorsal part of the abdomen is more or less marked with black; the venter and legs usually pale yellowish.

Crown broader than long, distinctly impressed in front of the compound eyes, broadly rounded to the face; the anterior margin parabolic; the posterior margin broadly sinuate. Pronotum quadrate; the anterior margin broadly rounded, the posterior margin nearly straight; face narrow, the anteclypeus large and protuberant.

Female genitalia with the last ventral segment elongate, nearly three times as long as the penultimate, the posterior border deeply and roundly emarginate; the male genitalia with the anal segment longer than the pygofer; the pygofer elongate, when viewed ventrad, broadened from the base to the middle and then constricted to the narrow apices; genital plates nearly as broad at the base as the last ventral segment, suddenly constricted at the middle and continued as a biramose process for half the length of the pygofer; the aedeagus elongate, stout with a biramose process, ventrally at the apex of the basal third, and a pair of elongate acute spines at the base of the apical third.

Length to apex of tegmina: 9.5 mm.

Described from numerous specimens from Kartabo, Bartica District, British Guiana.

Melichar distinguishes another species under the name of *Cardioscarta quadrifasciata* Fabr. under the assumption that *Cercopis quadrifasciata* Fabr. was a distinct species from Linnaeus's *Cicada quadrifasciata*. This cannot be true, however, as Fabricius, 1781a:329, merely copies Linnaeus's description and cites *Cicada quadrifasciata* as a synonym. Melichar distinguishes the two species in his key on the basis that *fasciata* Linnaeus (*quadrifasciata* Linnaeus) has two narrow bands on the tegmina, *quadrifasciata* Fabr. has three broad bands. This cannot be correct, however, as all of the descriptions and illustrations of the true *quadrifasciata* Linnaeus show three broad bands on the tegmina. As shown above *quadrifasciata* Fabr. is the same as *quadrifasciata*

Linnaeus and I would synonymize *quadrifasciata* Melichar with *quadrifasciata* Linnaeus but for the fact that Melichar describes the male genitalia of the latter species as having the genital plates short; whereas in *fasciata*, that is, the true *quadrifasciata* Linnaeus, the genital plates are described as long. Until we can know more about these two species, it would seem best to give a new name to Melichar's *quadrifasciata* Fabr. and I propose *Poeciloscarta nigrofasciata* nom. nov. for *Cardioscarta quadrifasciata* Melichar nec *Cercopis quadrifasciata* Fabr. This species should not be confused with *Tettigonia fabricii* which Signoret proposed for *Fulgora fasciata* Fabr. under the assumption that *fasciata* Fabr. was a secondary homonym of *Cicada fasciata* [sic] Linnaeus. But since *fasciata* Linnaeus is a typographical error for *quadrifasciata* Linnaeus and belongs to the genus *Poeciloscarta*, and *fasciata* Fabr. belongs to the genus *Raphirhinus*, the correct synonymy for Fabricius' species is as follows:

Raphirhinus fasciatus Fabr.

Fulgora flammea [nec Linnaeus] Stoll, 1781a:28; pl. VI, fig. 29.

Fulgora fasciata Fabricius, 1787a:261.

Raphirhinus obliquatus de Laporte, 1832d:415.

Tettigonia fabricii Signoret, 1855c:521; pl. 21, fig. 12.

Raphirhinus de Laporte, 1832d:413.

Orthotype *Fulgora abscendens* Fabr.

i.e., *Fulgora phosphorea* Linnaeus.

This is one of the most distinct genera of the subfamily Proconinae. It may be characterized briefly as follows:

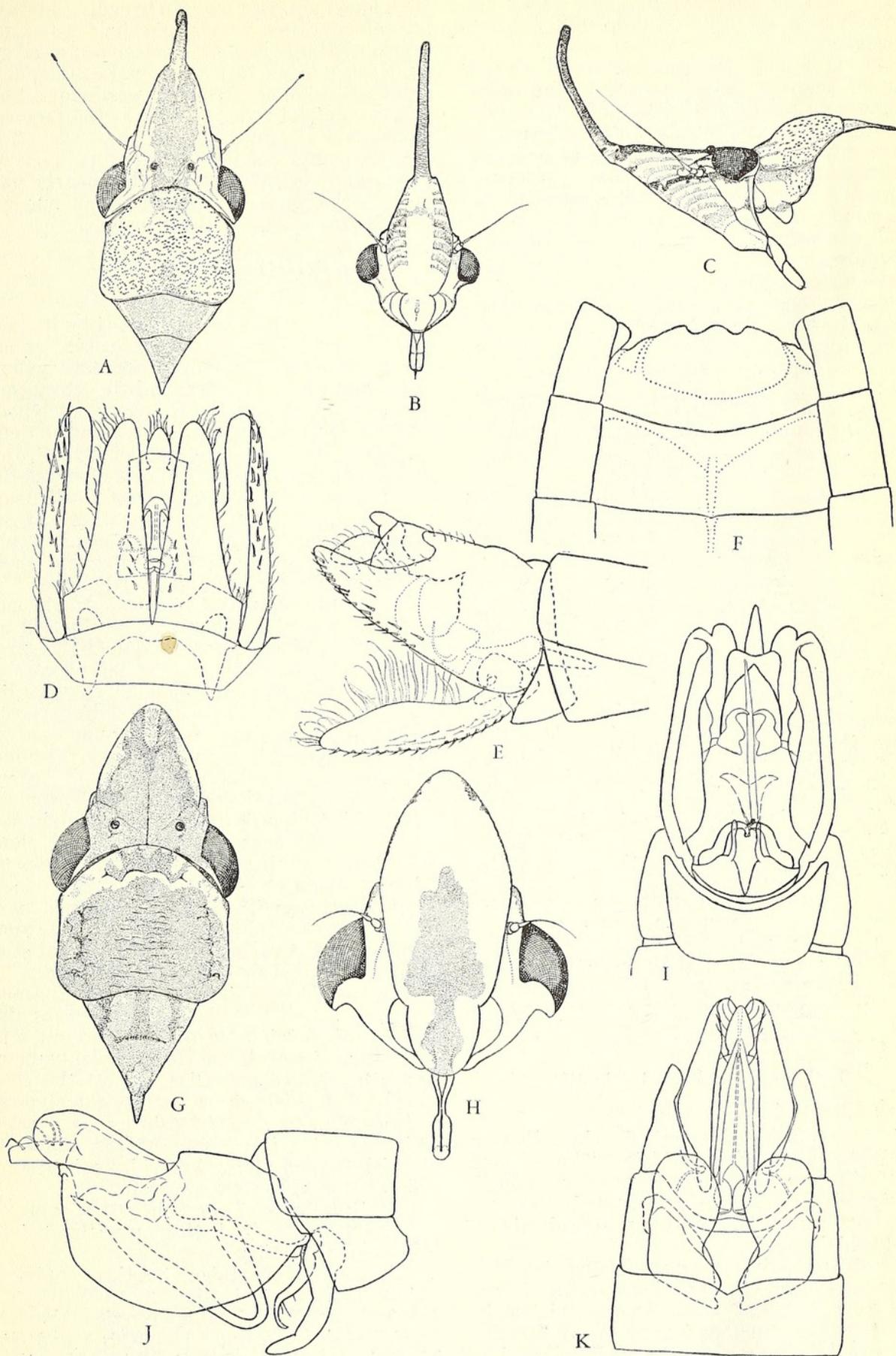
Head including compound eyes as wide as the pronotum suddenly constricted in front of compound eyes, triangularly produced to the obtuse apex which is continued into an elongate, terete, erect, somewhat recurved slender process. Pronotum usually slightly broader than long; lateral margin slightly divergent; anterior margin broadly curved, the posterior margin triangularly incised, sinuate. Mesonotum nearly as long as the pronotum, triangular. Legs slender; the anterior tibiae broadly expanded apically. Tegmina elongate, slender, coriaceous; venation fairly distinct.

Raphirhinus phosphoreus Linnaeus.

(Melichar, 1925a:354).

(Text-fig. 4 A-F).

This species is very variable in color. The females are chiefly ferruginous, heavily speckled with light yellow dots dorsad. Ventrals chiefly ochraceous. Males chiefly blackish fuscous, dorsad with the median area of cephalic process, lateral margins of crown, and pronotum yellowish testaceous. Beneath chiefly light testaceous yellow with postclypeus pro- and meso-plura twice banded



TEXT-FIG. 4. *Raphirhinus phosphoreus*: A, head thorax; B, face; C, lateral head thorax; D, male genitalia ventral; E, male genitalia lateral; F, female genitalia. *Capinota virescens*: G, head thorax; H, face; I, male genitalia ventral; J, male genitalia lateral; K, female genitalia.

with blackish fuscous; the fore tibiae and middle tarsi and hind tarsi apically blackish fuscous.

Female last ventral segment slightly longer than preceding segment; the apical margin on the median third shallowly bisinuate with a broad obtuse tooth. Male genitalia with pygofer, genital plates and anal segments all approximately the same length. The genital plates elongate, somewhat triangular, obtuse at the apex. The aedeagus capitate with the lateral margins strongly produced.

Length to apex of tegmina: 13.7-18.5 mm.

British Guiana, French Guiana and Surinam. Kartabo, Bartica District.

***Raphirhinus fasciatus* Fabr.**

(*Fulgora fasciatus* Fabricius, 1787a: 261).

This common and well-known species has been recorded previously from Surinam, French Guiana, Peru, Bolivia and in Brazil from Amazonas, Para and Bahia. It may be recognized by its large size and its characteristic color and markings. The dorsal surface is chiefly testaceous brown with a central vitta on the cephalic process, lateral margins of the crown, most of the pronotum, the basal area of the tegmina, a narrow fascia beyond the apex of the mesonotum, a broader fascia covering the apex of the clavus and an irregular fascia just before the apical cells, grayish or greenish-yellow. Beneath, the color is pale yellow with two narrow brownish vittae extending across the face, the lateral margins of the head, the pro- and meso-pleura to the base of the tegmina. The dorsal vitta extends just below the compound eyes and the lateral margins of the pronotum; the ventral vitta just above the clypeal suture and then curved upward to the base of the tegmina. The tips of all the tarsi and tibiae blackish fuscous.

The female last ventral segment is longer than the penultimate with the lateral margins broadly sinuate; the median area broadly and shallowly sinuate, with a broad obtuse tooth on the median line.

***Capinota* Melichar, 1926a:319.**

Orthotype *Capinota fowleri* Mel.

This genus was described originally for a single species from Mexico. The present collection contains a single species which I assigned to this genus with some hesitation, but apparently the present species should be included here.

Head including compound eyes broader than pronotum. Crown elongate, produced, suddenly but not strongly constricted in front of the compound eyes. Apex broadly upturned, impressed on the median line; lateral margins of the impression slightly carinate; a fine median carina from the base to the indented apex. Ocelli behind the anterior margin of the compound eyes. Face strongly inflated. Anteclypeus rather large, strongly inflated. Pronotum slightly broader

than long; anterior margin broadly rounded; lateral margins nearly parallel; posterior margin slightly indented. Mesonotum large, nearly as long as the pronotum. Legs slender; anterior tibiae not grooved; posterior tibiae elongate, about twice as long as the femora; basitarsus elongate, longer than the other two segments combined. Tegmina narrow; costal and commissural margins nearly parallel, coriaceous; venation regular but not very distinct; claval veins parallel.

***Capinota virescens* n. sp.**

(Text-fig. 4 G-K).

This species may be recognized by its general fuscous color above with a decided greenish cast; beneath chiefly ochraceous yellow with the tibiae of the legs chiefly ochraceous orange; ventral portion of the postclypeus clouded with blackish; anteclypeus chiefly blackish fuscous on the median line. Crown nearly one and one-half times as long as the width between the compound eyes. Ocelli nearly three times as far from each other as from the compound eyes. Pronotum slightly broader than long; sides nearly parallel; the whole surface finely but irregularly rugulose.

Male genitalia with the genital plate broadly triangular at the base, deeply incised on the median line. Inner caudal angles produced into two elongate, slender processes. Genital styles elongate, slender, curving inward, hooked at the apex. Pygofer large with a distinct ridge on the inner ventral margin. Aedeagal strut elongate, slender, acuminate and recurved at the apex. Aedeagus elongate, needle-like, sharply elbowed on basal third: basal area broadly Y-shaped when viewed ventrad. Anal segments elongate, terete, with a pair of ventral hooks at the base. Anal style elongate, slender, somewhat sagittate with a pair of distinct leaf-like processes arising at the base of the anal segment and covering most of the anal segment and anal style laterad and dorsad.

General color of the male above fuscous with a greenish cast; lateral margins of the crown, anterior border of the pronotum, and costal margin of the male greenish-yellow. Beneath ochraceous yellow except the conspicuous blackish cloud on the anteclypeus and postclypeus and the ochraceous orange tibiae and tarsi. Dorsum of the abdomen blackish fuscous; lateral margins ochraceous yellow; tips of tegmina translucent.

Length to apex of tegmina: 10.52 mm.

Holotype ♂: British Guiana without definite date or locality.

Allotype ♀: Kartabo, Bartica District, British Guiana, September 20, 1922.

Paratypes: 1 ♂: Kartabo, Bartica District, British Guiana, August 13, 1920; 1 ♀: British Guiana without definite date or locality.

***Rhopalogonia* Mel.**

(Melichar, 1926a:341).

Logotype *Rhopalogonia scita* Walk.

Head broad, including compound eyes

broader than pronotum; crown much broader than long, broadly rounded to face. Ocelli placed near the posterior border of the crown and near the compound eyes. Pronotum broad, nearly twice as broad as the median length. Mesonotum broad, not as long as the pronotum. Tegmina coriaceous, elongate, narrow; apical margin broadly rounded; venation indistinct, regular with four apical and three ante-apical cells, claval veins nearly parallel, complete. Legs elongate, slender; all tibiae more or less quadrangular; fore tibiae slightly longer than femora, middle tibiae more elongate and hind tibiae nearly twice as long as the femora.

Rhopalogonia purpurata Germ.

(*Tettigonia purpurata* Germar, 1821a:63).

(*Tettigonia purpurata* Signoret, 1853b:325, Pl. 8, Fig. 2).

(*Tetigonia purpurata* Osborn, 1926b:200).

(Text-fig. 5 A-E).

There is a small series in the present collection which I believe represents this species as described by Germar and described and illustrated by Signoret, despite the differences in coloration.

Head short and broad, crown nearly three times as broad as the median length, distinctly bi-impressed. Impressions including the large ocelli connected by a broad transverse groove; posterior border broadly carinate; anterior border broadly curved; posterior margin nearly straight. Face inflated, the postclypeus distinctly angulate near the middle. Pronotum about half again as broad as the median length, anterior margin broadly rounded, posterior margin nearly straight; mesonotum large, broader than long.

Female last ventral segment longer than broad, more than three times as long as the penultimate with a broad triangular median tooth and a pair of small lateral triangular teeth at the apex. Male genitalia with the genital plates, anal segment and pygofer all about the same length. Genital plates elongate, slender, obtuse at the apex; pygofer elongate, slender, very obtuse at the apex; aedeagus about half as long as the genital plates, broadened into two distinct lobes apically, with the outer posterior angle broadly produced; genital styles elongate, slender, curving outward; apices reflexed.

General color chestnut brown, usually distinctly lighter on the head, with a distinct round spot at the apex of the crown, blackish fuscous. Pronotum chiefly chestnut brown with a broad fascia across the middle, grayish-white. Tegmina crossed by two bluish-white fascia, one immediately posterior to the apex of mesonotum and the other near the apex of the clavus. Venter including legs chiefly chestnut brown.

Length to apex of tegmina: 11.0-11.5 mm.

Redescribed from a series of four specimens, two from Georgetown, British Guiana, and two from Bartica District, British Guiana.

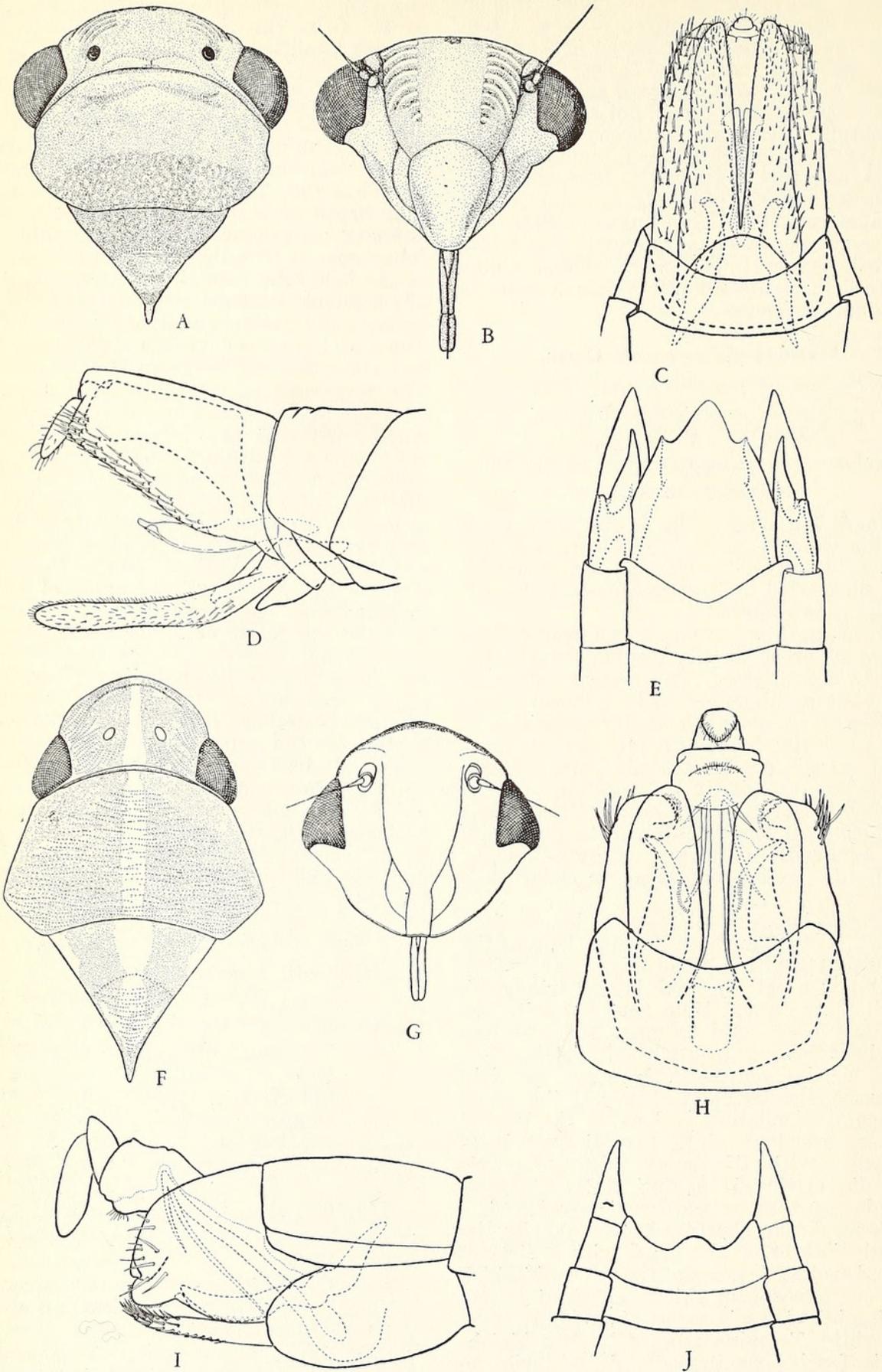
This species has previously been recorded from Surinam, French Guiana, and various localities in Brazil.

Family GYPONIDAE.

In this family the body is elongate, depressed. The head is usually broad but narrower than the pronotum at the posterior lateral angles. The crown is usually longer than broad with the ocelli on the disc. The anterior margin of the crown is thin and foliaceous, or broadly thickened or rounded to the face. The face is usually broad, usually suddenly widened at the level of the antennae and forming a distinct antennal ledge. The postclypeus is narrow and elongate. The lora conspicuous. The genae broad and flat. The pronotum is large with the anterior lateral margins rounding into the anterior margin with the anterior lateral angles inconspicuous. Posterior lateral angles usually conspicuous. The posterior lateral margins distinct. The posterior margin usually broadly incised. Mesonotum large, nearly as broad as long. Anterior and intermediate femora and tibiae with distinct spines. Posterior tibiae with the internal and external dorsal margins and the external ventral margin with several fairly close set heavy spines; the internal ventral margins fringed with numerous more or less hair-like spines. Tegmina coriaceous or translucent; venation distinct, sometimes reticulate over the whole surface or the apical third only; radius 2 branched; media unbranched; cubitus 1 with two branches; cubitus 2 unbranched; first and second anal veins distinct. There are typically a single cross vein between the radial sectors; two radio-medial cross veins; and two medio-cubital cross veins thus forming three ante-apical and four apical cells.

KEY TO GENERA OF GYPONIDAE.

- A. Head with a cephalic process.
 - Ohausia* Schmidt, 1911b:299
- AA. Head without a cephalic process.
 - B. Tegmina uniformly deeply pitted, body dorsoventrally wedge-shaped anteriorly, transversely wedge-shaped posteriorly, tegmina vertical, laterally compressed at apex.
 - Dragonana* Ball and Reeves, 1927a:489
 - BB. Tegmina not pitted except along veins, tegmina not appressed at apex.
 - C. Tegmina with numerous reticulate veins, at least on apical portion.
 - 1. Tegmina rugose or roughened, often with white mottling, crown and pronotum usually rugose, two round black spots on pronotum.
 - Rugosana* DeLong, 1942a:64
 - 1. Tegmina with venation often prominent but not rugose or



TEXT-FIG. 5. *Rhopalogonia purpurata*: A, head thorax; B, face; C, male genitalia ventral; D, male genitalia lateral; E, female genitalia. *Gypona thoracica*: F, head thorax; G, face; H, male genitalia ventral; I, male genitalia lateral. *Gypona bigemmis*: J, female genitalia.

- roughened, crown and pronotum never rugose.
Gyponana Ball, 1920a:85
- CC. Tegmina without reticulate veins, typically with four apical and three subapical cells.
1. Face narrow, deeply excavate; pronotum and tegmina coarsely rugose.
Rhogosana Osborn, 1938a:14
 1. Face not deeply excavated, flat or inflated2
 2. Crown acutely angled with front, margin thin, sharp, or foliaceous3
 2. Crown with thick margin or broadly rounding to front. 6
 3. Crown flat with longitudinal furrows, ocelli on furrow each side of median line. Tegmina usually marked with brownish dots or lines in areoles.
Prairiana Ball, 1920a:90
 3. Crown without longitudinal furrows, tegmina usually without brownish markings in areoles, or if present without small brown punctate spots on vertex.....4
 4. Body usually dorsoventrally thickened, pronotum and crown depressed anteriorly, strongly sloping to anterior foliaceous margin5
 4. Body usually dorsoventrally flattened, pronotum and crown almost flat or gently sloping to foliaceous margin.
Acusana DeLong, 1942d :57
 5. Color black, green, or orange-yellow; crown with narrow longitudinal stripes, or two round black spots on pronotum, or both.
 Male styles short, blunt, or truncate at apex.
Gypona Germar, 1821a:73
 5. Color green or brown, without stripes on crown or round black spots on pronotum. Male styles long, slender, apex with curved, pointed tips.
Hamana DeLong, 1942d:85
 6. Crown with distinct thick margin7
 6. Crown without definite margin, broadly and evenly rounded to front as viewed laterad11
 7. Face strongly inflated or bulbous8
 7. Face not inflated, almost straight in profile, color some shade of yellow or brown usually with distinct dark markings9
 8. Crown elongate, ocelli near anterior margin. Mesonotum not longer than pronotum.
Bulbana DeLong, 1942d:107
 8. Crown short and broad. Ocelli about equi-distant from anterior and posterior margins. Mesonotum longer than the pronotum.
Scaris LeP. and Serv.
 9. Pronotum conspicuously wider than crown, ocelli large, located almost half the length of crown from anterior border.
Ponana Ball, 1920a:93
 9. Pronotum scarcely wider than crown, ocelli anterior to middle in the depression above margin10
 10. Anterior margin of crown quadricarinate.
Marganalana Metcalf
 10. Anterior margin of crown not quadricarinate.
Marganana DeLong, 1948b:101
 [Margana DeLong, 1942d:109]
 11. Ocelli on anterior border of crown.
Polana DeLong, 1942d:110
 11. Ocelli on disc.....12
 12. Head including compound eyes nearly as broad as pronotum.
Scaroidana Osborn, 1938a:49
 12. Head including compound eyes decidedly narrower than pronotum13
 13. Crown short and broad, usually more than three times as broad as its median length14
 13. Crown and pronotum longer, usually not more than twice as broad as their median lengths.
Scarisana Metcalf
 14. Pronotum short and broad, more than three times as broad as median length; humeri prominent; the anterior lateral and posterior lateral margins about the same length.
Clinonana Osborn, 1938a:13
 14. Pronotum not more than twice as broad as long; humeri not prominent; anterior lateral margins longer than the posterior lateral margins.
Clinonaria Metcalf

Gypona Germar, 1821a:73.

Haplotype *Cercopis glauca* Fabr.

This is a large genus of about 153 species, widely distributed from Canada, the United States, to Mexico, Central and South America as far south as Argentina and Chile. The genus formerly contained many species which are now distributed in other genera of the family Gyponidae. Many species now included in the genus *Gypona* undoubtedly belong to other genera which have been proposed recently. The correct disposition of many of the species described by Spangberg and earlier students has not been determined.

There are in the present small collection no less than 10 species of which 8 seem to be new. The genus may be described briefly as follows: body usually dorsoventrally thickened; pronotum and vertex depressed anteriorly, strongly sloping from the posterior margin of the pronotum to the anterior foliaceous margin of the crown which may be slightly upturned. Head narrower than the pronotum; crown usually elongate, sometimes almost as long as the width between the eyes. Ocelli variously placed on the crown; the anterior margin of the crown thin and foliaceous; face flat. Pronotum usually large with the anterior margin about as wide as the greatest width of the eyes; lateral margins strongly divergent, usually distinctly carinate; anterior and posterior margins strongly curved; mesonotum large; venation of the tegmina simple, the veins not punctate, with three ante-apical and four apical cells. Anterior and intermediate legs slender, short; posterior tibiae elongate with stout, close-set spines on the lateral and ventral borders. Male styles usually short and blunt at the apex. In color the species are usually decidedly variable with considerable sexual dimorphism. The females are usually light green or orange yellow, frequently unmarked, sometimes with narrow vittae on the crown or two black spots on the anterior border of the pronotum or both. Males are frequently black above, with or without pale vittae.

Gypona fusiformis Walker, 1858b:257.

There is a single female specimen in the present collection which agrees with Walker's short description. It may be described briefly as follows: head distinctly narrower than the pronotum; crown elongate, more than half as long as the pronotum; the anterior margins nearly parallel for a short distance in front of the compound eyes, then broadly and obtusely angulate. Ocelli behind the middle about as far from each other as from the compound eyes. Pronotum large, the lateral margins strongly divergent, anterior margin broadly rounded. Mesonotum large.

Tegmina translucent with the median apical cell clouded with blackish fuscous. Head, pronotum and mesonotum ochraceous tawny, the anterior margin of the crown

narrowly blackish, veins of the tegmina, except the concolorous subcostal vein, blackish fuscous; wings translucent, the narrow apical margin blackish fuscous; beneath, ochraceous yellow, the claws of the anterior and middle legs blackish; tips of posterior tibiae and the tarsi blackish.

Female last ventral segment slightly longer on the median line than the penultimate. Lateral posterior angles broadly rounded; the posterior margin broadly, triangularly incised for nearly half the length of the segment.

Length to apex of tegmina: 14.5 mm.

Gypona thoracica Fabr.

(Osborn, 1938a:21).

(Text-fig. 5 F-I).

This species was described from South America without definite locality and has been recorded from various states in Brazil. There is a good series in the present collection from Bartica District, British Guiana, collected from March through May but none later in the year.

All specimens in the present collection are males. Most of them are black in color, dorsad, with a narrow longitudinal median vitta from the apex of the crown to the apex of the mesonotum. One specimen has the posterior half of the pronotum bright orange yellow; another specimen has the entire pronotum and mesonotum bright orange yellow, with the crown with a narrow median vitta and two large pale comma-shaped marks curving between the ocelli and the compound eyes. Beneath, all the specimens are pale yellow with the posterior tibiae and tarsi and the anterior margins of the segments black.

Crown elongate, more than half as long as the pronotum, about two-thirds as long as the greatest width between the eyes. Ocelli behind the middle about as far from each other as from the compound eyes. The anterior margin of crown broadly parabolic, slightly concave. Pronotum nearly twice as broad as median length, the anterior margin broadly curved, the posterior margin broadly sinuate.

Male genitalia with the pygofer and genital plates about the same length, shorter than the anal segment. The genital plates with parallel sides, obtuse at the apex. Pygofer when viewed laterad about as long as broad with a distinct ventral apical lobe. Genital styles elongate, acuminate and diverging caudad. Aedeagus elongate, slender with two pairs of spines at the apex, the ventral pair short, strongly divergent, the apical pair elongate, slightly divergent at the apex, about half as long as the aedeagus.

Length to apex of tegmina: 13.8-14.5 mm.

Gypona bigemmis Spangb.

(Osborn, 1938a:25)

(Text-fig. 5 J).

This species has been reported previously

from Rio de Janeiro, Colombia and Guatemala. It may be recognized by its small size, uniform pale greenish color, and distinctive female genitalia. Head broad and short; crown broadly rounded before, slightly more than twice as broad as the median length; ocelli slightly before the middle as remote from each other as from the compound eyes. Pronotum more than twice as long as the crown, more than twice as broad as its median length. Female last ventral segment slightly longer than the penultimate, deeply excavated with a broad, round median lobe.

Length to apex of tegmina: 6.5-7.5 mm.

There is a single female in the present collection from Kartabo, Bartica District, British Guiana, March 6, 1924.

***Gypona flavolimbata* n. sp.**

(Text-fig. 6 A-E).

This is a medium large species closely resembling *Gypona glauca* Fabr. in general coloration but differing decidedly in female genitalia.

Head broad, only slightly narrower than the pronotum; crown twice as broad as its median length; ocelli just behind the middle as far from each other as from the compound eyes. Pronotum twice as broad as its median length; anterior margin broadly rounded; anterior lateral margins nearly straight, slightly divergent; posterior margin shallowly rounded almost parallel to the anterior margin. Mesonotum large.

Female with the last ventral segment only slightly longer on the median line than the penultimate; the posterior margin shallowly incised with a broad median tooth with a small triangular notch at the apex; the posterior lateral angles only slightly produced. Male genitalia when viewed ventrad with the pygofer narrow, distinctly appendiculate. Genital plates shorter than the pygofer with the apex obtuse; genital styles elongate, acute at the apex, as long as the pygofer; aedeagus as long as the pygofer, the apex with two elongate slender spines. The pygofer when viewed laterad about as broad as long with the posterior dorsal angle distinctly produced.

Length ♂: 9.75 mm.-10 mm. Length ♀: 10.75-11 mm.

Holotype ♂: British Guiana without definite date or locality.

Allotype ♀: Kartabo, Bartica District, British Guiana, March 25, 1922.

Paratypes 1 ♂: British Guiana without definite date or locality; 1 ♀: Kartabo, Bartica District, British Guiana.

***Gypona translucens* n. sp.**

(Text-fig. 7 A-C).

This species resembles *Gypona fusiformis* Walk. very closely. Head narrow, broadly triangularly produced, the crown more than half as long as the pronotum. The ocelli behind the middle, about as far from each other as from the compound eyes. Pronotum large,

the lateral margins strongly divergent, the whole surface coarsely rugulose; tegmina semitransparent.

Female last ventral segment about as long on the median line as the penultimate segment; lateral posterior angles strongly produced, the posterior margin broadly, parabolically incised with the incision slightly produced either side of the median line in short, blunt lobes.

General color tawny; the tegmina translucent; the anterior border of the crown narrowly blackish; the veins of the tegmina blackish fuscous except subcosta, which is chiefly yellowish-brown; beneath, including the legs, pale ochraceous yellow; the claws and some of the spines blackish fuscous.

Length to apex of tegmina: 17.0 mm.

Holotype ♀: Kartabo, Bartica District, British Guiana, August 18, 1920.

Paratype ♀: Kartabo, Bartica District, British Guiana, August 9, 1920.

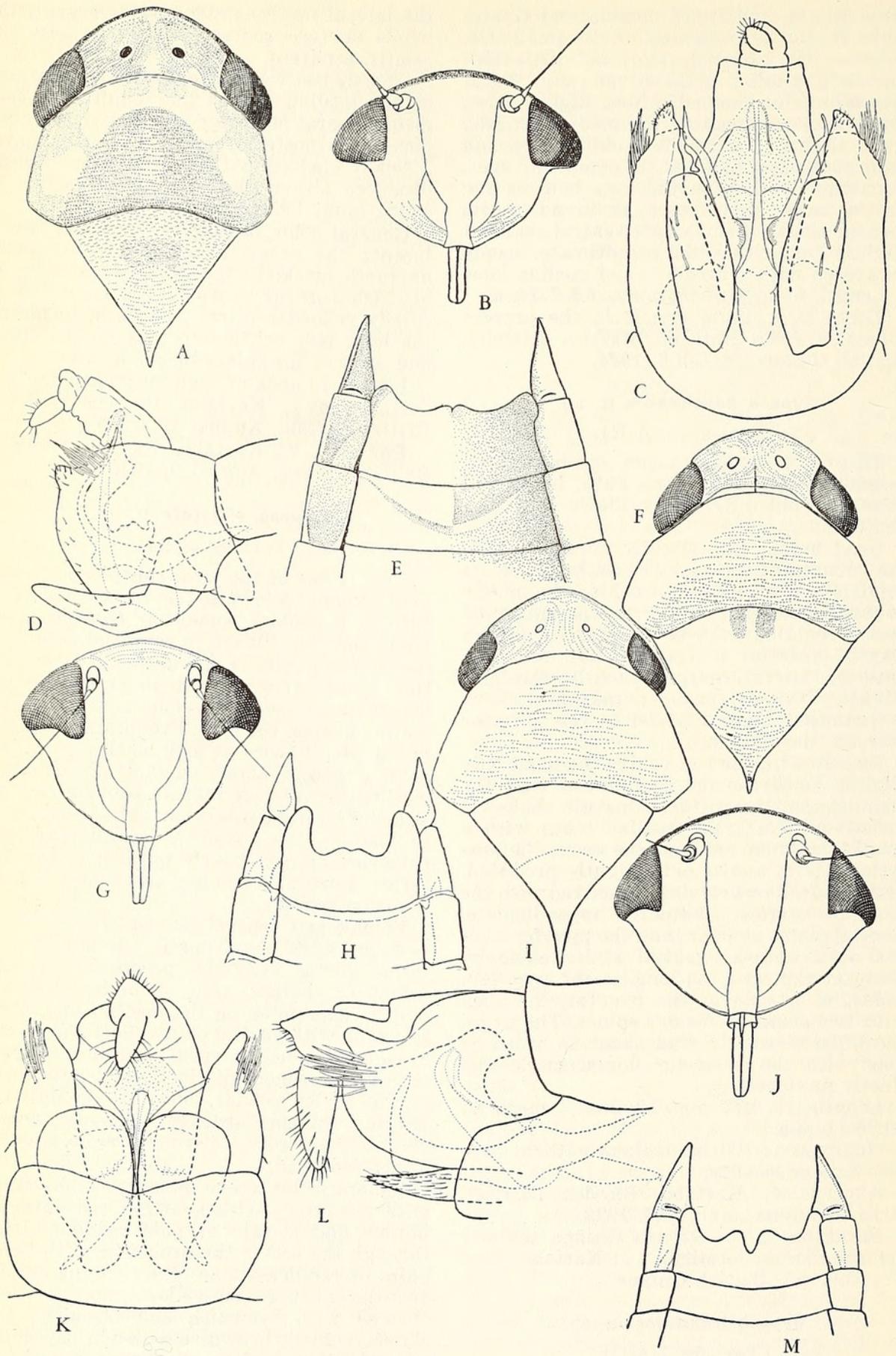
***Gypona picturata* n. sp.**

(Text-fig. 6 I-M).

This is one of the most conspicuously colored *Gyponas* known to me. In general structure it resembles somewhat *Gypona peruviana* Osb. but differs in essential details of the female genitalia and decidedly in coloration. Head narrow, crown short and median length about one-half as long as the greatest width between the eyes. Pronotum short and broad, about twice as long as the crown, its median length about one-half its greatest width; the anterior margin broadly curved, anterior lateral borders carinate, about twice as long as the posterior lateral margins; posterior margin nearly parallel to the anterior margin. Tegmina short and broad; venation regular.

Female last ventral segment nearly twice as long as the penultimate; the lateral posterior angle strongly produced, broadly rounded. Median area strongly produced with a deep notch on the median line. Male genitalia with genital plates short and broad, broadly rounded at apex; pygofer shorter than anal segment distinctly appendiculate; genital styles slender, elongate, strongly diverging caudad; aedeagus elongate, somewhat bulbous with a distinct process apically directed dorsad.

General color above, pale greenish-yellow with the crown with a bright red anterior border and a pair of pale reddish vittae through the ocelli; the pronotum with three pairs of reddish vittae; the tegmina chiefly translucent greenish-yellow, more or less clouded with brownish and blackish; the clavus is chiefly brownish with a broad saddle of white just before the apex; the claval border and the sutural border and the veins chiefly blackish; some of the veins on the corium are blackish or brownish and the apex is narrowly bordered with blackish fuscous with a cloud of blackish or brownish fuscous across the apical cross-veins. Be-



TEXT-FIG. 6. *Gypona flavolimbata*: A, head thorax; B, face; C, male genitalia ventral; D, male genitalia lateral; E, female genitalia. *Gypona castanea*: F, head thorax; G, face; H, female genitalia. *Gypona picturata*: I, head thorax; J, face; K, male genitalia ventral; L, male genitalia lateral; M, female genitalia.

neath, pale ochraceous yellow with all the tibiae and tarsi brownish fuscous.

Length ♀ to apex of tegmina: 13.5 mm.; ♂: 11.5 mm.

Holotype ♀: Kartabo, Bartica District, British Guiana, March 17, 1922.

Allotype ♂: Georgetown, November 15, 1933.

Paratype ♀: Kartabo, Bartica District, British Guiana, March 17, 1922.

***Gypona opaca* n. sp.**

This is another large species somewhat similar in coloration to *Gypona fusiformis* Walk. and *Gypona translucens* Metc. in that the head and pronotum are generally lighter than the tegmina. It differs, however, in that the crown is very much shorter, the tegmina are opaque and variegated, and the anterior margin of the crown is without the narrow black border.

Head narrow; crown broad and short, about half as long as the short pronotum; the anterior margin broadly parabolic; the ocelli slightly behind the middle, about as far from each other as from the compound eyes; the anterior margin thin and foliaceous. Pronotum short and broad, nearly twice as broad as the median length; the lateral margins short, strongly carinate, slightly divergent; the posterior lateral margins about half as long as the anterior lateral margins; anterior margin broadly curved with posterior border nearly parallel. Tegmina opaque, somewhat rugulose. Face very flat; the dorsal margin distinctly impressed with a nearly quadrate impressed point.

Female last ventral segment somewhat longer than the penultimate on the median line. The lateral posterior angles broadly produced, somewhat obtuse. The posterior margin broadly, roundly incised either side of a strongly produced, rounded tooth.

General color of the head and thorax above, yellowish-tawny; the ocelli and compound eyes black; tegmina generally reddish-brown, variegated with pale yellowish over most of the surface; the costal margin with the reddish-brown and yellowish spots rather regularly distributed. The whole area of the tegmina somewhat rugulose but the venation regular. General color beneath, yellowish-tawny with the dorsal margin of the face infuscated; legs chiefly reddish-brown with the spines of the hind tibiae blackish fuscous.

Length to apex of tegmina: 15 mm.

Holotype ♀: Kartabo, Bartica District, British Guiana, April 4, 1922.

***Gypona castanea* n. sp.**

(Text-fig. 6 F-H).

This is an almost uniformly castaneous brown species of fairly large size with the venter of the abdomen a little paler and two conspicuous black spots on the anterior border of the mesonotum.

Head narrower than the pronotum; the crown about twice as broad as its median

length; the ocelli almost equidistant from each other and the eyes, placed near the middle of crown; the anterior margin strongly curved. Pronotum twice as long as the crown, more than twice as broad as its median length; anterior margin broadly curved; anterior lateral margins nearly straight, not quite twice as long as the posterior lateral margins; posterior margin deeply incised; surface of pronotum strongly rugulose.

Last ventral segment of the female longer than the penultimate, deeply, almost quadrately incised with a broad median tooth which is notched at the apex; posterior lateral angles strongly produced, distinctly rounded at the apex.

Color almost uniformly castaneous above and beneath, except the basal segments of the abdomen which are slightly paler. Mesonotum with two conspicuous black spots on the anterior border. Tegmina with a row of inconspicuous brownish-yellow spots in the costal cell and a few irregular scattered spots on the corium and the clavus; apex of the tegmina infuscate.

Length to apex of tegmina: 11.7 mm.

Holotype ♀: British Guiana without definite date.

***Ponana* Ball.**

Gypona (Ponana) Ball, 1920a:93.

Orthotype *Gypona scarlatina* Fitch.

This genus may be recognized by its narrow head, narrower than the posterior angles of the pronotum, crown short with a distinct thick margin separating it from the face. Face flat, distinctly impressed beneath the broad border. Mesonotum large. Tegmina coriaceous, venation regular. Pronotum broad; anterior margin broadly curved, almost continuous with anterior lateral margin; posterior margin nearly straight. Whole surface finely rugulose.

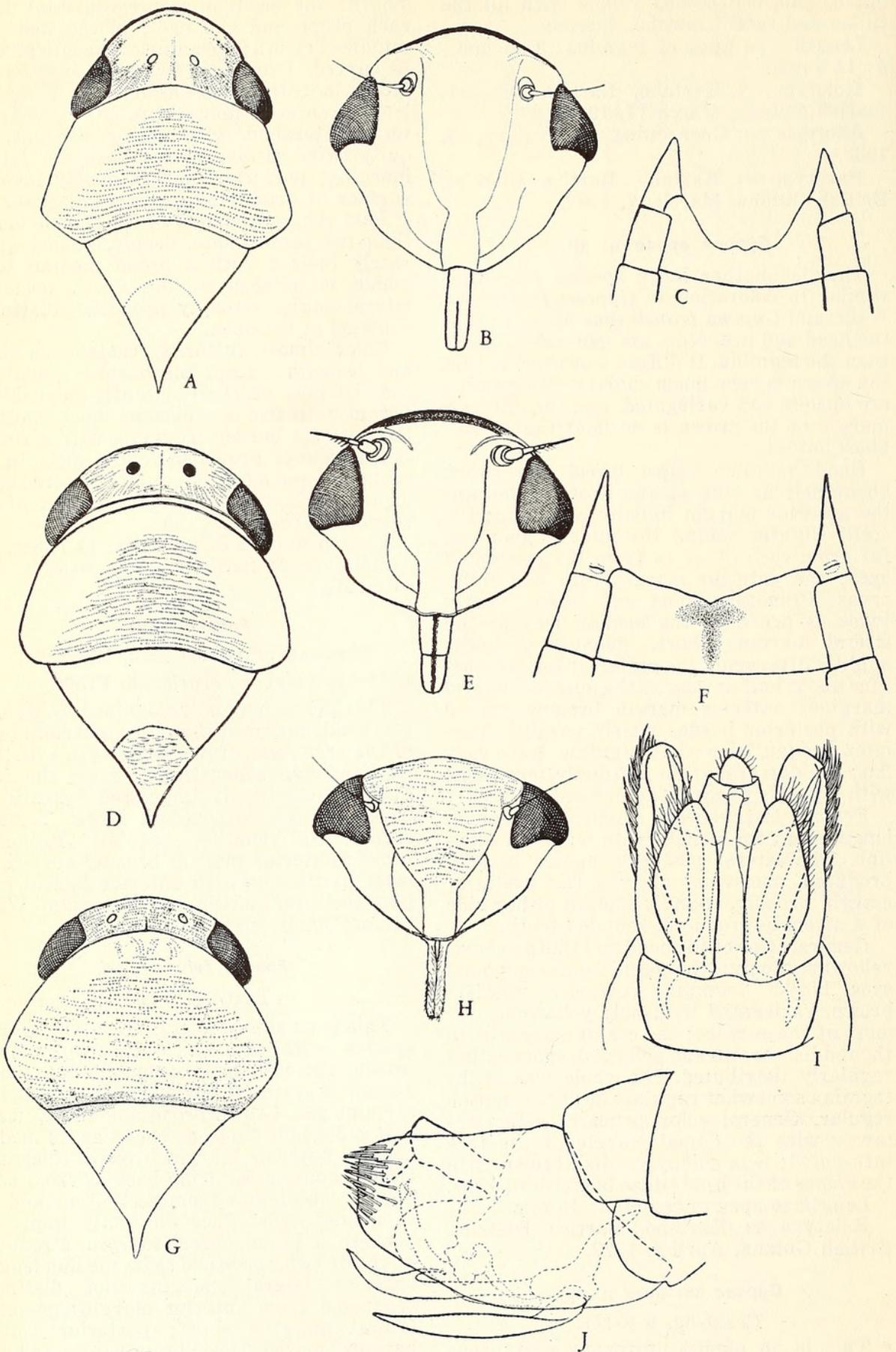
***Ponana fulva* n. sp.**

(Text-fig. 7 D-F).

This is an almost uniformly tawny-colored species with the thick anterior margin brown, the ocelli and compound eyes black. Dorsal margin of abdomen chiefly bright carmine red. Crown broad and short, nearly two and a half times as broad as its median length; anterior margin broadly thickened. Ocelli about as far from base as from apex, almost equidistant from each other and the compound eyes. Face distinctly impressed beneath a broad dorsal margin. Pronotum not quite twice as broad as its median length; anterior lateral margins not distinctly separated from anterior margin; posterior lateral margins short; posterior margin broadly incised. Mesonotum nearly as broad as the head, broader than long.

Female last ventral segment about as long as penultimate; posterior margin broadly V-shaped; posterior lateral angles not produced.

Length to apex of tegmina: 9.50 mm.



TEXT-FIG. 7. *Gypona translucens*: A, head thorax; B, face; C, female genitalia. *Ponana fulva*: D, head thorax; E, face; F, female genitalia. *Clinonaria bicolor*: G, head thorax; H, face; I, male genitalia ventral; J, male genitalia lateral.

Holotype ♀: British Guiana without definite date or locality.

***Clinonaria* gen. n.**

Orthotype *Clinonaria bicolor* n. sp.

This genus may be recognized by its narrow head with short broad crown. The pronotum is not especially broad and the humeri are not very prominent. When viewed laterad the pronotum is strongly declivous and the crown is broadly rounded to the face. Tegmina somewhat rugulose but the venation is distinct.

***Clinonaria bicolor* n. sp.**

(Text-fig. 7 G-J).

This species resembles *Clinonana declivata* Osb. but differs in detail and decidedly in color. Head narrow; crown very short and broad with the ocelli near the anterior margin. Anterior margin broadly rounded to the face. Pronotum short, not very broad; mesonotum large.

Male genitalia with the pygofer rather broad, obtuse at the apex. Genital plates shorter than pygofer, narrow at the base, broadly curved on the lateral margins; apices obtuse; genital styles elongate, as long as the pygofer with an obtuse basal expansion; aedeagus large on the basal half, gradually narrow to the apical third with two short spines at the apex.

General color of the crown and pronotum ochraceous orange; compound eyes and ocelli black; narrow posterior border of the pronotum brown, margined anteriorly with pale green; mesonotum and tegmina auburn brown; tegmina with irregular blackish fuscous spots along the costal margin and on the basal and apical thirds; face chiefly ochraceous orange. General color beneath yellowish ochraceous with the apex of the fore, middle and hind femora with a large blackish spot near the apex; spines on the middle and hind tibiae with large black spots at their bases; apex of the hind tibiae black.

Length to apex of tegmina: ♂ 11.75 mm.; ♀ 13.0 mm.

Allotype ♀: British Guiana without definite locality or date.

Holotype ♂: Kartabo, Bartica District, British Guiana, July 20, 1922.

***Marganalana* n. gen.**

Orthotype *Marganalana testacea* n. sp.

This genus is close to *Marganana* DeLong (*Margana* DeLong) but differs in several respects. Head narrower than the pronotum; crown twice as broad as long; anterior margin parabolic; ocelli nearly equidistant from the anterior and posterior margin. Anterior margin of the head conspicuously thickened, quinquecarinate, not distinctly impressed above or below. Face flat, narrow; pronotum slightly more than twice as long as the crown, not quite twice as broad as long; anterior lateral margins elongate; posterior lateral margins short; anterior margin broadly

curved in an almost continuous line from the humeri; posterior margin nearly straight. Mesonotum large. Tegmina with the venation regular. The main veins of the corium and clavus with a few indistinct punctures.

***Marganalana testacea* n. sp.**

(Tex-fig. 8 A-D).

Crown distinctly broader than long; anterior margin broadly curved; median length greater than length next to compound eyes. Ocelli conspicuous, about as far from each other as from the compound eyes. Pronotum not twice as broad as long, scarcely longer than mesonotum. Female last ventral segment nearly twice as long as the penultimate with a broad V-shaped shallow notch on the posterior border; posterior lateral angles not produced.

General color above and below tawny, with anterior margin of crown, compound eyes and ocelli black. The apex of the tegmina infuscate. Dorsal segments of the abdomen chiefly scarlet red.

Length to apex of tegmina: 8.5 mm.

Holotype ♀: British Guiana without definite date or locality.

***Scarisana* n. gen.**

Orthotype *Scarisana variabilis* n. sp.

This genus may be recognized by the long broad head which is nearly as broad as the pronotum. Crown long and broad; anterior margin broadly parabolic; pronotum short and broad; anterior lateral and anterior borders making a continuous broad circle from the shoulders; posterior lateral borders short; posterior border straight. Mesonotum large. Face strongly inflated. Tegmina coriaceous, venation fairly regular, rather indistinct with three ante-apical and four apical cells; claval veins nearly straight and parallel. Legs rather short and stout; anterior tibiae with numerous rather long stout spines on the posterior border. Hind tibiae half again as long as the posterior femora.

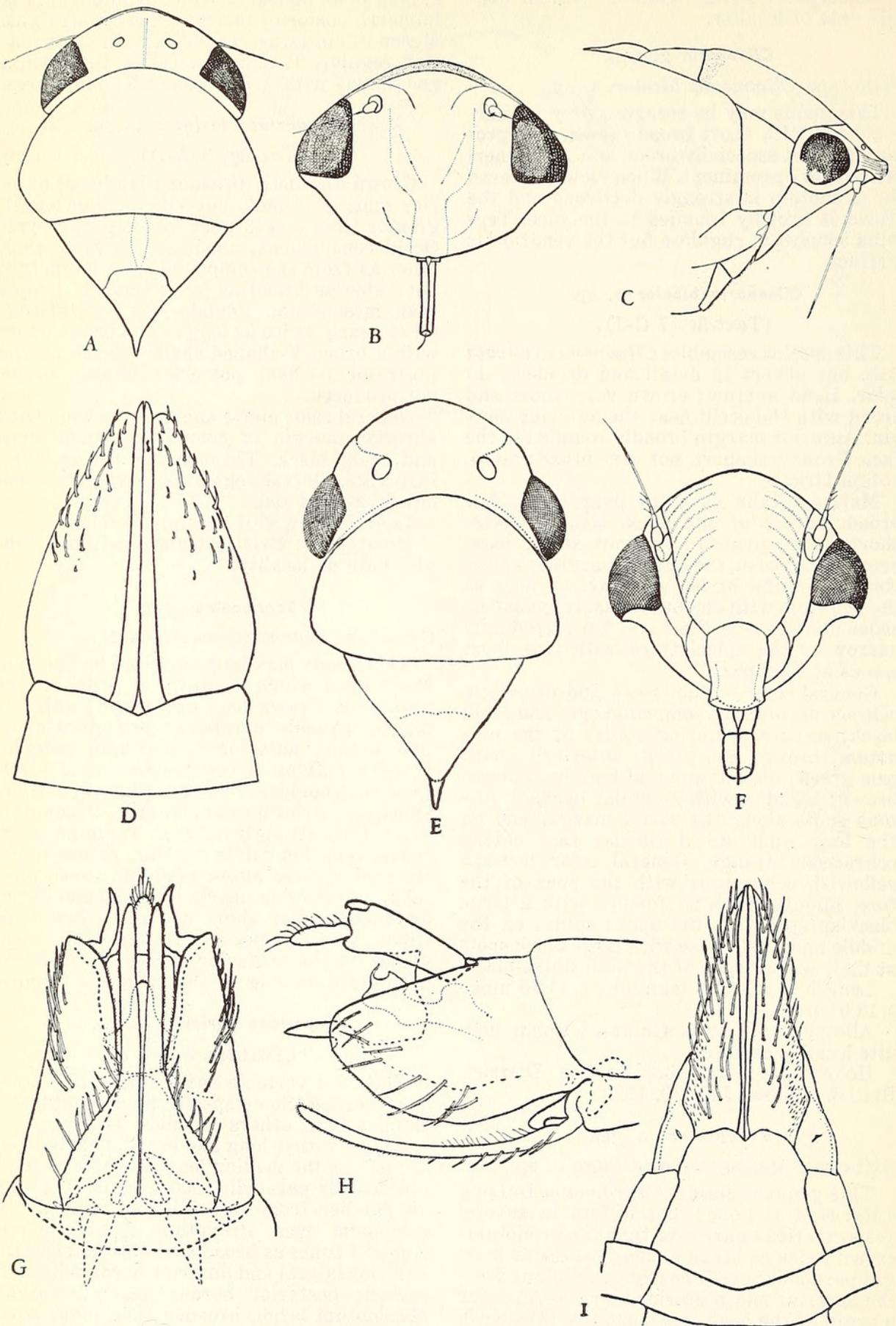
***Scarisana variabilis* n. sp.**

(Text-fig. 8 E-I).

This is a variable species as far as color is concerned. Some specimens are light ochraceous buff, others are deep tawny.

Crown rather long and broad, nearly twice as wide as the median length; anterior margin broadly parabolic. Ocelli behind the middle farther from each other than from the compound eyes. Pronotum about one and one-half times as broad as its median length; anterior lateral and anterior borders broadly curved; posterior border nearly straight. Mesonotum large, broader than long. Apex produced into a distinct spine-like process.

Female last ventral segment about four times as long as the penultimate with a distinct V-shaped notch on the posterior border. Male genitalia with genital plates broad at the base, gradually restricted to near the



TEXT-FIG. 8. *Marganalana testacea*: A, head thorax; B, face; C, head thorax lateral; D, female genitalia. *Scarisana variabilis*: E, head thorax; F, face; G, male genitalia ventral; H, male genitalia lateral; I, female genitalia.

middle then nearly parallel to the apex. Pygofers with a distinct apical process.

Length to apex of tegmina: 11.25 mm.

Holotype ♂: British Guiana.

Allotype ♀: Kartabo, Bartica District, British Guiana.

Paratypes 3 ♂♂, Kartabo, Bartica District, British Guiana, various dates. 4 ♀♀ Kartabo, Bartica District, British Guiana, various dates.

Scaris Le Peletier and Serville, 1825a:609.

Haplotype *Iassus ferrugineus* Fabr.

This genus is unknown to me. I repeat below the more essential portions of the original description, as there is no modern description. Germar, 1833a:179, separated it from his new genus *Gypona* as having the ocelli remote from each other, whereas in *Gypona* the ocelli are approximate. Subsequent authors added but little. Evans, 1947a:215; fig. 30 G, has an excellent illustration of the head and thorax of the species *Scaris ferruginea* Fabr.

Body somewhat triangular. Crown short, transverse, much narrower than the pronotum

but of the same width as the anterior margin of the pronotum, with anterior border of the head thick, rounded. Ocelli remote from each other. Pronotum not dilated laterad, transverse, rather long, narrowed anteriorly and also a little posteriorly, truncate on posterior margin. Mesonotum triangular, prolonged caudad into an elongate sharp process.

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All references to the literature in this paper are cited by author and date according to the references in the author's *Bibliography of the Homoptera* (1942) except the articles which have been published since that time.

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