

NEW AND LITTLE-KNOWN HETEROPTEROUS HEMIPTERA IN THE UNITED STATES NATIONAL MUSEUM.

BY E. BERGROTH.

Of Jamsa, Finland.

The following notes and descriptions of new genera and species present the results of my studies of a miscellaneous collection of exotic Hemiptera Heteroptera kindly forwarded to me for examination by the authorities of the United States National Museum.

Family PENTATOMIDAE.

Subfamily HALYINAE.

SPUDAEUS GLAUCUS, new species.

Glabrous, glaucous-green, dorsum of abdomen bluish black, venter straw-yellow with a sharply defined sublateral longitudinal black band including the stigmata and reaching from the base of the venter to near the apical margin of the last segment. Body above, underside of head, and pleurae remotely and irregularly punctured with black, still more remotely so toward base of head and in the triangular basal area of the scutellum; pronotum with four subtriangular pale brownish more thickly punctured basal spots, and scutellum with a similar oval thickly punctured brown spot at the lateral margins not far from the base; corium more finely and more irregularly punctate than the rest of the upper side; connexival segments more strongly and subconfluently punctate near their base; venter smooth, very slightly strigulose toward the lateral margins. Head as long as pronotum in the middle, with a strongly punctured, partly cupreous, partly brassy-green spot between ocelli and eyes; ocelli three times more distant from each other than from eyes; rostrum reaching base of fifth ventral segment, apical half of its last joint blackish; first two antennal joints streaked with brown on the outer side, the first slightly passing apex of head, third half as long again as second, black except at base (last two joints wanting). Pronotum

with the lateral margins sinuate a little behind the middle and slightly rounded between the sinuosity and the apical angles, lateral angles produced into a moderately long acute spine directed straight outward and black above except the anterior margin. Scutellum with an obovate black impresison at the basal angles. Propleurae and mesopleurae with a punctured aeneous-green spot at the base of the acetabula. Hemelytra slightly passing apex of abdomen, corium reaching apical margin of penultimate connexival segment, membrane pale grayish testaceous with the interior basal area black and a curved brownish fascia behind the middle, veins piceous. Abdomen with the black sublateral ventral bands brassy at the base, fifth male ventral segment in the middle scarcely half the length of the fourth, sixth segment a little shorter than the three preceding ones taken together. Legs pale glaucous, femora dotted with black toward apex, tibiae with the keels of the upper side and the apex black (fore legs and all tarsi wanting in type).

Length.—Male, 16 mm.

Type.—Cat. No. 20141, U.S.N.M.

British New Guinea (Moroka, 3,500 feet, A. S. Anthony). Allied to *S. variabilis* Tryon, but smaller, not pubescent (except very slightly on the venter), differently colored, much more sparingly punctured, and with longer rostrum.

COENOMORPHA AMPLA, new species.

Dull ochraceous, rather densely but irregularly punctured with fuscous black. Head as long as the pronotum in the middle, longer than broad, subparallel between the eyes and the anteapical angle of the juga; basal part above, as far as a little beyond the eyes, with six subimpressed longitudinal lines, the outermost on each side being broader, inclosing the ocellus, and emitting a branch to the eyes; clypeus and its basal continuation bordered with a black punctulate line; each jugum with two rather broad subimpressed lines; all impressed lines of the head black and thickly punctulate, their inter-spaces and the clypeus impunctate and a little elevated; apical angles of juga approximated over the tip of the clypeus; under side of head thickly punctulate with black, except the bucculae and a vitta between the inferior margin of the eyes and the base of the antennae; rostrum somewhat passing base of fifth ventral segment, fuscous beneath except at apex of third joint, last joint piceous; antennae pale castaneous, base of the first three joints narrowly ochraceous, second and third joints of equal length (last two joints missing). Pronotum two and one-half times broader than its median length, anteriorly depressed between the somewhat elevated cicatrical areas; immediately within the medially very slightly sinuate lateral margins

with a densely punctate black vitta, the posterior half of which is interiorly bordered with a callose almost impunctate ridge having on its interior side a thickly punctate apically broadened impression within which there is an oblong rather broad almost impunctate area; the teeth of the lateral margins ochraceous, posterior lateral margins a little notched behind the slightly prominent lateral angles. Scutellum with an elongate impunctate callus near the basal angles and a small transverse median basal callus. Propleurae close to the lateral margin with a thickly punctate black vitta. Hemelytra (female) nearly reaching apex of abdomen; corium reaching base of ultimate connexival segment, the punctuation partially condensed and confluent, forming a blackish C on the right corium and an inverted C (O) on the left one; membrane subopaque, whitish, blackish at the interior basal angle and very slightly suffused with brownish in the middle, veins pale brownish. Abdomen rather strongly rounded on the sides, apical angles of the segments obtusely prominent, the densely punctate connexival segments with a much less thickly punctate rounded spot in the middle and with the impunctate narrow lateral margin fuscous at the base and apex of the segments; venter suffused with brownish, all segments with the stigmata and an oblong inwardly rounded lateral spot pale ochraceous; median furrow deep, reaching apex of fifth segment; basal lobes of female genital segment black, rugulose, and somewhat tumid. Legs ochraceous, femora streaked and mottled with brown; tibiae, except a broad ring nearer to the base than to the apex, and last tarsal joint pitchy black.

Length.—Female, 22.5 mm.; breadth, 13.5 mm..

Type.—Cat. No. 20142, U.S.N.M. Angola (Kuhiriri River, Mr. Penrice).

The largest species in the genus and very distinct by the sculpture of the pronotum and head, apparently coming nearest to *C. implexa* Distant.

Subfamily PENTATOMINAE.

EURYMENIDA,¹ new genus.

Body broadly oval. Head much broader than long, antecocular part very short, narrowing toward the broad apex, scarcely sinuate before the eyes. Scutellum reaching far beyond the middle of the abdomen, the postfrenal part much broader than long, apex very broadly rounded. Frena scarcely reaching the middle of the scutellum. Other characters as in *Menida* Motschulsky.

Type of the genus.—*Eurymenida vallicola*, new species.

¹ευρύς=broad; Menida.

EURYMEMIDA VALLICOLA, new species.

Polished, black, finely and rather sparingly punctate; an oblong anteapical area to the brownish-black corium and the middle of the venter impunctate; an interrupted line on the clypeus, a vitta on the juga, a round dot at the interior margin of the eyes, three or four spots on vertex; the bucculae, a dot between them and the antenniferous tubercles; numerous small irregular spots on the pronotum (particularly its anterior half), apical and lateral margins of pronotum (very narrowly), an oval, smooth callose spot near the basal angles of the scutellum, a few transverse irregular spots behind these; the apex of scutellum (rather broadly), lateral margin of corium, an oblong lateral spot to connexival segments, a spot at anterior and posterior margin of propleurae, a curved vitta inside the apical half of their lateral margin, posterior angle of mesopleurae, lateral border of metapleurae, orificial prolongation, all acetabula, basal spine of venter, a double row of discal spots to venter (one on each segment) not far from the medium line, an oblong spot to ventral segments, two smaller rounded spots inside each lateral spot, and the sides of the male genital segment (inclosing a fuscous subapical spot) yellow or reddish yellow; antennae yellowish testaceous, apex of third joint, the fourth (except base) and the fifth fuscous; membrane hyaline with a large rounded fuscous subbasal spot; legs yellowish testaceous, femora very finely dotted with brown and with a piceous ring (interrupted above) somewhat before apex. Head rather strongly declivous, the anteocular part a little longer than the longitudinal diameter of the rather large transverse eyes; ocelli placed very near the eyes; rostrum reaching hind coxae; first antennal joint not reaching apex of head, second joint at least twice the length of first, the following joints gradually increasing in length, each being a little longer than the preceding one. Pronotum not quite two and a half times broader than head and almost three times broader than its median length, the smooth elevated apical margin not interrupted behind the eyes but with a few small impressed points at this place; lateral margins distinctly rounded; humeral angles rounded, not prominent. Scutellum a little shorter than corium. Hemelytra (male) passing apex of abdomen by half the length of the membrane, apical margin of corium a little rounded, exocorium with two rows of punctures which are subconfluent at base and confused at apex. Basal spine of venter a little passing hind coxae, last male ventral segment in the middle slightly shorter than the three preceding segments taken together; male genital segment rather large, trisinuate at apex, the median notch much deeper than the lateral ones.

Length (without membrane).—Male 5 mm., breadth 4.5 mm.

Type—Cat. No. 20143, U.S.N.M. Kashmir (Goorais Valley).

Judging from the description, the African *Menida parrulu* Signoret, which was placed by Stål in a distinct division of that genus, belongs to *Eurymenida*.

Subfamily ACANTHOSOMATINAE.

LANOPIS ALGESCENS, new species.

Ochraceous, above and on the pleurae punctured with fuscous; posterior part of pronotum and the corium dark brownish olivaceous; scutellum brownish ochraceous; membrane fuscous, the veins not darker; mesosternum in the middle, a small metapleural spot at the apex of the orificial ridge, a lateral line at the basal angles of the abdominal segments (visible from above and from beneath), and a dot at the apical angles of the ochraceous connexival segments black; dorsum of abdomen also black, but the three last segments (except apical half of the last one) sanguineous, a more or less distinct basal fascia to the connexival segments brownish; venter usually and sometimes pleurae densely sprinkled with purplish or dark ferruginous; antennae brownish ochraceous, a stripe to the interior side of the basal joint and the two (rarely three) last joints fuscous; rostrum ochraceous, last joint (except base) pitch black; legs ochraceous, femora fulvous sprinkled with purplish, apex of tibiae, first tarsal joint, and apex of second joint fuscous. Head as long as broad, sparsely punctate; juga scarcely longer than clypeus but a little convergent at apex, making the clypeus narrower at apex than a little behind it, from which point the clypeus gradually narrows to the acute base; first antennal joint very distinctly passing apex of head, second joint about twice the length of first, third as long as first, fourth one-half longer than third, fifth a little longer than fourth; rostrum reaching hind coxae, second joint a little longer than third, and this a little longer than fourth. Pronotum somewhat rugose, more coarsely and densely punctured than the head, and with an oblique impression somewhat inside the posterior half of the anterolateral margins, the anterior ends of these impressions united by a more or less distinct transverse impression which sometimes is interrupted by two irregular flattened tubercles; anterolateral margins sinuate behind the apical angles, then rounded, the rounded part being longer than the sinuate one; lateral angles broadly prominent outward, subangularly rounded at apex, posterior lateral margins roundedly angular at the costal margin of the corium, more or less distinctly sinuate behind the lateral angles. Scutellum strongly and sparsely punctate, the apical half with a median keel, the apex spatulate. Pleurae strongly and rather thinly punctate; the opaque

evaporative area extremely small, hardly visible, forming a very narrow stripe bordering the anterior and posterior margins of the orificial prolongation which is a little curved behind and distinctly shorter than the distance between its tip and the lateral margin of the metapeura. Hemelytra (male) slightly passing apex of abdomen; corium rather finely and thickly punctate, its costal margin roundedly angular a little before the middle, its apical margin slightly rounded or almost straight. Abdomen (male) beneath roof-shaped but not carinate in the middle, very superficially and remotely concolorously punctate, the apical angles of the segments slightly and obtusely prominent, not distinctly tuberculate, apical angles of the last segment rounded; first male genital segment with the broad apical margin slightly sinuate in the middle, second genital segment broader than the first but only half its length, the apical margin rounded and trisinuate.

Length.—Male, 8—8.5 mm.

Type.—Cat. No. 20144, U.S.N.M. Patagonia (Chubut). I have seen numerous males but no female of this species which is smaller than *L. rugosus* Signoret, and differs from it by the longer basal joint to the antennae. The more strongly rounded posterior part of the anterolateral pronotal margins, the shorter orificial prolongation, the less prominent and less tumid apical angles to the ventral segments, the darker, more uniformly colored corium, the differently colored legs, and the smoother, red-speckled venter, the segments of which are black at the basal angles, not at the apical angles as in *rugosus*. From *L. chubuti* Distant it differs by the much longer second joint of the quite differently colored antennae by darker membrane, and smaller size.

As Distant says that *L. chubuti* is larger than *rugosus*, I suppose he has not seen the true *rugosus* from Chile, which is of the same size as *chubuti*. Distant and some other British authors treat Chubut as the name of a collector, but it is the name of the central province of the Patagonian part of Argentina, between the Rio Negro territory in the north and the Santa Cruz territory (Patagonia proper) in the south.

EA AUSTRALIS Distant.

Distant's descriptions of this genus and species, and of his other South American Acanthosomatinae, are generally good, yet a few additions and corrections to his description of this insect are necessary. The veins of the membrane are very few in number and more or less anastomosing near base. The rostrum scarcely passes the middle coxae. The oricia are only as long as the trochanters, not "as long as coxae and trochanters together." The venter is concolorously punctate, the fifth and sixth segments in the female on

each side somewhat within the lateral margin with a rather large transverse dull impunctate impression, that of the fifth segment situated at the apical margin, that of the sixth segment less distinct and placed at the basal margin. The sixth ventral segment of the male is in the middle distinctly longer than the two preceding segments together, that of the female slightly shorter than these. The male genital segment is as long as the sixth ventral segment, transversely impressed before the apical margin, which is rounded, in the middle slightly sinuate and thickly fringed with pale ferruginous hairs. The basal lobes of the female genital segment are about as long as broad, rounded exteriorly and a little narrower there than interiorly; the median lobes are narrow, transverse; the apical lobes transverse, separated interiorly by a triangular incision. After death the olivaceous green color of the upper side of the body sometimes fades into pale brownish. The black spots of the connexivum occupy more than the apical half of the segments.

Patagonia (Chubut).

Numerous specimens of both sexes have been examined.

This genus is not "to be placed near *Hellica* Stål," with which it has no resemblance, but is allied to *Sinopla* Signoret.

ACROPHYMA,¹ new genus.

Body oval. Head shorter than pronotum, rather strongly narrowing from the eyes to the apex, anteocular part broader than long, lateral margins slightly sinuate, clypeus gradually widening from base to apex, juga as long as clypeus, ocelli over two times more distant from each other than from eyes; bucculae low, not reaching base of head; rostrum reaching hind coxae, first joint as long as bucculae, second longer than third; first joint of antennae much shorter than head, but passing its apex; second joint longer than first and third. Pronotum moderately declivous, apical margin sinuate, obliquely truncate behind eyes, apical angles narrowly rounded, lateral margins slightly rounded, not elevated, lateral angles rounded, not prominent, basal angles very obtuse, basal margin straight. Scutellum equilaterally triangular, not reaching middle of abdomen, with a small callose spot at basal angles, apex subacute and very shortly spatulate. Mesosternum with a median carina. Orificia extended in a straight parallel sulcated fold, which is half as long as the distance between its tip and the lateral margin of the metapleura. Corium with rounded costal margin and straight apical margin; membrane with five simple veins, the three median ones united not far from the base by an oblique cross-vein, forming two median basal cells. Abdomen scarcely broader than

¹ *ακρος* = acute; *φυμα* = tubercle.

the hemelytra and almost entirely covered by them, beneath at the base with a pointed tubercle, the point of which is directed obliquely upward toward the depressed metasternum, apical angles of the segments not at all prominent, apical margin of sixth dorsal segment sinuated; the male with two genital segments visible on the underside, the second segment consisting of the underside of the protruding dorsal genital segment. Tibiae cylindrical.

This genus is intermediate in structure between Stål's divisions 1 (12) and 12 (1). It differs from *Ditomotarsus* Spinola and *Hyperbius* Stål by the keeled mesosternum, the structure of the base of the venter, and somewhat shorter scutellum; from the former, moreover, by having the ocelli placed nearer to the eyes, from the latter by less convex head and pronotum, and not at all callose pronotal lateral margins. From *Sinopla* Signoret it is distinguished by the position of the ocelli; more rounded, not elevated pronotal lateral margins, more rounded, not prominent humeral angles, shorter scutellum, straight apical margin to corium, and by having the straight spine of the second ventral segment replaced by an acute tubercle curved upward, with its apex touching the surface of the metasternum.

*Type of the genus.—*Acrophyma frigidula*, new species.*

ACROPHYMA FRIGIDULA, new species.

Opaque, whitish or pale ochraceous; above thickly, beneath less thickly and more finely punctured with black; dorsum of abdomen blackish, shining, impunctate, dark ferruginous in the middle, connivum impunctate, black, segments 2-5 with an obliquely triangular ochraceous basal spot, sixth (and sometimes fifth) segment with the whole basal half ochraceous, abdomen beneath with an oblong rectangular black spot at the apical angles of the segments and in the male with a median fuscous vitta or a series of fuscous spots not continued through the genital segments, metapleurae with a black spot at the end of the orificial fold; antennae, rostrum, and legs pale yellowish testaceous, first antennal joint with a fuscous streak on the inside, last three joints fuscous black, excepting base of these joints and apex of third joint; last joint of rostrum piceous; femora dotted with fuscous and with an incomplete subapical fuscous ring, a superior basal dot to tibiae and their extreme tip, and apex of tarsal joints fuscous. Head a little broader than long, a streak on the underside of juga and another shorter streak before the eyes piceous; second joint of antennae half as long again as first, third subequal to first or a little shorter, fourth and fifth each a little longer than second and more incrassated. Pronotum two and a third times broader than long in the middle. Scutellum with an impunctate slightly raised median line in the apical half. Mem-

brane infuscated with a broad sinuous hyaline fascia immediately before the middle, and two dark brown triangular basal spot, one at the inner basal angle, the other at the middle of the basal margin and occupying the outer one of the two median basal cells, the outer half of the basal margin also narrowly fuscous, the posterior border of the hyaline fascia of a darker fuscous color than the rest of the apical part. Posterior tibiae slightly curved.

Length.—Male 6.5 mm., female 7 mm.

Male.—Abdomen beneath bluntly roof-shaped, the segments contracted in the middle, sixth segment as long in the middle as the three preceding ones together, its apical angles rounded; first genital segment subtriangular, in the middle as long as the segments 4–6 together, the broad apical margin sinuated in the middle; second genital segment (=underside of dorsal genital segment) much shorter and a little broader than first, strongly transverse, its apical margin subtruncate; dorsal genital segment large and broad, protruding, wide open above, covered only by the membrane, not by the last dorsal segment, fuscous, the apical half (except the sides) pale ochraceous, the basal angles with a brush of hairs protruding from under the last dorsal segment, the apical margin subtruncate and reflexed with a small recurved hook at the angles; interior appendages acutely pointed at tip.

Female.—Abdomen beneath moderately and evenly convex, the segments not contracted, sixth segment in the middle as long as the two preceding ones together, its apical angles obtuse, its apical margin on each side broadly triangularly produced; basal lobes of genital segment subtriangular, about as long as broad; median lobes very strongly converging, placed almost transversally, narrow from the base to the middle, then triangularly dilated; the transversal apical lobes confluent interiorly, consisting of the apical underside of the dorsal genital segment, which is about half the length of the sixth dorsal segment, with the apical margin broadly rounded.

Type.—Cat. No. 20145, U.S.N.M. Patagonia (Chubut).

Three males and three females have been examined. The sexes are constant in size and color. This insect differs from all other Chilean and Patagonian Acanthosomatinae by the color markings of the membrane, but these are clearly visible only when the hemelytra are outspread.

Judging from the débris adhering to the bodies of many specimens of Patagonian Acanthosomatinae, they live under the bark of rotten stubs.

Note.—Considerable confusion prevails in the nomenclature of some Chilean Acanthosomatinae, and this is chiefly due to the fact that most authors in determining them have used Signoret's redescriptions instead of Spinola's and Blanchard's original descriptions

in Gay's "Historia fisica de Chili." Signoret united *Ditomotarsus punctiventris* Spinola with *gayi* Spinola, apparently because he had seen a specimen of *punctiventris* wrongly labeled *gayi* and without comparing Spinola's descriptions. These two species are even generically distinct. The figure 8a on plate 1, which represents *gayi* in profile, clearly shows that it is a *Planois*, and this is the only Chilean genus tallying with the statement in the specific diagnosis and description of *gayi*: "Antennarum articulo primo secundum longitudine aequante—primero y segundo articulos de las antenas de igual longitud." It seems uncertain, however, whether *gayi* is the same species as *Planois bimaculatus* Signoret. *D. punctiventris* is the species standing in almost all collections under the name *gayi*, but the figure 9 on plate 1, said in Gay's work to be that of *punctiventris*, has been wrongly numbered, and has nothing to do with *punctiventris*; this is quite evident if it is compared with the description. There is fortunately no reason to change the generic nomenclature as now standing in our catalogues; *D. punctiventris* must be considered the type of *Ditomotarsus*, and the following synonymy will result:

<i>Ditomotarsus</i> Spinola.	<i>impluriatus</i> Blanchard.
(<i>Ruscoba</i> Stål).	<i>Planois</i> Signoret.
<i>punctiventris</i> Spinola.	(<i>Diaomotarsus</i> Spinola, ex p.)
<i>sanguineiventris</i> Stål.	<i>bimaculatus</i> Signoret.
<i>gayi</i> Signoret (not Spinola).	<i>gayi</i> Spinola.

Subfamily UROLABIDINAE.

UROSTYLLIS BLATTIFORMIS, new species.

Above depressed and hairless, grass-green; dorsum of abdomen, connexivum and underside of body yellow or greenish testaceous; corium with several tortuous vermicular partly confluent ochraceous bands mostly placed longitudinally; two small spots before middle of pronotum, a lateral spot near apical angles of the connexival and ventral segments, a sharply defined sublateral vitta to propleurae, a lateral spot to metapleurea, and a series of spots, one in each segment, on either side of the venter between its middle and the lateral margins, black. Head impunctate, very finely and superficially transversely wrinkled, smooth within the eyes, and with a very fine and narrow curved impressed line before each ocellus; antennae fuscous black, first joint and basal fourth of second ferruginous, first with or without a fuscous vitta on the outer side, base of third joint narrowly, base of fourth and fifth joints broadly pale testaceous, first joint as long as pronotum, second as long as first, third half the length of second, fourth distinctly shorter than second, fifth shorter than fourth; rostrum reaching a little beyond anterior coxae, third

joint constricted near base, somewhat dilated toward apex. Pronotum sparsely punctured with fuscous, apical margin neither smooth nor elevated, lateral margins narrowly reflexed, very slightly sinuate or almost straight, lateral angles very narrowly rounded. Scutellum very distinctly longer than broad, punctured the same as the pronotum. Breast impunctate, except a few colorless punctures on the posterior part of the propleurae. Hemelytra considerably passing apex of abdomen, corium more than twice the length of scutellum, costal margin reflexed from base to beyond middle, apical angle very acute, apical margin slightly bisinuate, exocorium rather sparingly punctured with fuscous, mesocorium sparsely and extremely finely concolorously punctulate, but with a series of much larger close-set pale fuscous punctures along the interior margin, endocorium with a similar row of punctures along the exterior and interior margins; membrane narrowly rounded at apex, transparent, tinged with fuscous, more so at apex. Wings iridescent, hyaline, rather broadly infuscated at apex. Abdomen impunctate, apical angles of the segments not at all prominent. Legs greenish testaceous

Length (without membrane).—Male 10.8 mm., female 12.5 mm.

Males.—First genital segment subtriangular, transversely strongly convex, apical margin a little sinuate in the middle; second genital segment beneath in the middle with a rather long straight process directed backward and a little upward, constricted near base and somewhat dilated toward the truncate end, at the upper basal angles of the segment with a tubercle and immediately behind this with a spine-like process directed obliquely backward, upward, and a little outward, the interior margin of this process, the apical margin of the segment, and the margins of the median process fringed with pale hairs; the interior appendages bifid at tip.

Female.—Dorsal genital segment a little shorter and narrower than sixth dorsal segment, apical margin slightly sinuate, the lateral parts visible from beneath in the form of a curved triangular lobe; ventral genital lobes triangular, much broader than long, the posterior ones apically produced in a triangular lobe visible also from above, between these lobes two smaller triangular lobules protruding from the interior.

Type.—Cat. No. 20146, U.S.N.M., China (Foo-chow, H. R. Caldwell).

Very distinct from all previously described species. It has a peculiar facies, different from that of the other species I have seen, and reminding one of a green blattid. After death the green color of the head, and partly also of the pronotum and scutellum, more or less fades into testaceous. The male genital segment is not unlike

that of *U. virescens* Reuter¹ but the lateral processes are much more acute and divergent.

Family COREIDAE.

TYPHLOCOLPURA VULCANALIS, new species.

Grayish fuscous (including antennae and rostrum), punctate, the whole body strewn with short narrowly scale-like decumbent yellowish bristles; a broad, ochraceous, posteriorly paler vitta running through the whole connexivum and immediately within the lateral margin of the venter. Head a little longer than broad and scarcely longer than pronotum, transversely somewhat convex, with two short oblique denuded streaks between the eyes, the callose tubercle behind the eyes rather large; antennae inserted somewhat farther from eyes than from apex of head, first joint a little shorter than head, second somewhat longer than first (last two joints wanting); rostrum reaching base of fourth abdominal segment. Pronotum distinctly transverse, almost two-thirds broader than long in the middle, basal half slightly declivous, apical half horizontal but with the cicatrical areas a little convex, lateral margins rather deeply sinuate in the middle, before and behind the sinuosity straight, those of the basal half scarcely raised, those of the apical half distinctly elevated, very slightly convergent toward apex, ending behind and outside the collar in a subacutely prominent triangular lobelet directed straight ahead, the distance between the tips of these subapical lobelets considerably broader than the width of the depressed apical collar, humeral angles rounded, basal margin straight before the base of the scutellum, which is very slightly longer than broad. Hemelytra twice the length of the scutellum, not quite reaching middle of third (=Breddin's fourth) abdominal tergite; corium with scarcely raised indistinct veins, claval part more distinctly punctured than the rest, exterior apical angle of corium and outer half of apical margin broadly rounded, claval commissure half the length of the scutellum; membrane grayish luteous, very short, forming only a narrow, broadly rounded border to apical margin of corium. Abdomen (male) about three-fifths broader than pronotum; last tergite (male) twice the length of the preceding segment, its apical part transversely convex, apical margin rounded; apical angles of third segment slightly, those of fourth and especially fifth segment more distinctly prominent; venter with a deep median furrow reaching from its base to apical margin of fourth segment, the intralateral glandular spots of the three last segments very distinct, subequal in size, round, opaque, velvet-black, their distance from the lateral margin much greater than their diameter; male genital segment

¹ Figured in Revue d'Entom., 1888, p. 202.

apically produced in a broad process which is deeply angularly incised in the middle. Legs fuscous, tinged with testaceous, femora unarmed, toward the base, especially the third pair, pale testaceous, tibiae not sulcated above.

Length.—Male, 10 mm.

Type.—Cat. No. 20147, U.S.N.M. Philippine Islands (Mount Apo, Mindanao, E. A. Mearns).

Very distinct in several structural characters from the three known species of this interesting genus, two of which are from Java and one from Celebes.

Family REDUVIIDAE.

Subfamily REDUVIINAE.

HETEROPINUS CORTICALIS, new species.

Above sparingly shortly erectly setose, the hairs on the head longer; head, pronotum, and scutellum pitchy ferruginous, shining; scutellar keels, clavus, and corium buffy ochraceous, apex of clavus infuscated, exocorium with a rusty tinge; membrane black, its interior basal part (as far as to the exterior margin of the outer basal cell) buffy ochraceous but including an oblong fuscous spot at the base of the inner basal cell; connexivum and body beneath luteous; antennae dark testaceous; rostrum and legs luteous (hind legs wanting). Head (excluding the neck) broader than long, with a long hair before each ocellus and at the inner margin of the eyes, the few other hairs being somewhat shorter, the space between the eyes about four times broader than an eye; ocelli very wide apart; the throat with a few rigid hairs arising from very small granules; rostrum pubescent; antennae pilose, first joint somewhat passing apex of head, second as long as the head's breadth, the adventitious jointlet interposed between the two first joints very short, not longer than broad, third and fourth joints capillary, subequal in length, each a little shorter than second, fourth still finer and more hairlike than third. Pronotum a trifle over two times broader than head; apical angles very broadly rounded, effaced, with no trace of a tubercle, the transverse impression (except its middle part) crenulated; anterior lobe with the median impression impunctate; disk a little convex, smooth but with a small fovea on each side; the lateral margins studded with a row of small acute tubercles, each of which bears a short hair easily coming off; posterior lobe scarcely longer than anterior lobe with the median impression punctate, the lateral angles rounded, somewhat gibbous, not prominent. Scutellum with a sharply defined three-branched Y-shaped carination. Prosternum with stiff fuscous hairs at the middle of the apical margin; acetabula moderately tumid, not visible from above. Mesosternum with a broad

median impression longitudinally divided by a keel. Metasternum with the pleurae divided by two longitudinal keels, inner keel somewhat curved, inner area of pleurae transversely rugose. Hemelytra reaching apex of abdomen, opaque, corium besides the hairs with narrow ochraceous scales arranged in two or three longitudinal rows, the epipleura with similar scales, apical angle of corium truncate, inner basal cell of membrane scarcely reaching middle of outer basal cell. Abdomen somewhat broader than pronotum, connexivum near outer margin with decumbent hairs and with a long semierect hair at the somewhat prominent apical angle of the segments, venter with the flat discal area much narrower than the rather strongly ascending lateral areas, basal margin of the segments strongly crenulate within the flattened area, sixth segment of female in the middle a little longer than the two preceding segments united. Fore legs with the trochanters setose, femora rather strongly incrassated. Middle legs more separated from each other than the hind legs.

Length.—Female 7 mm.

Type.—Cat. No. 20148, U.S.N.M. Guinea (Mount Coffee, Liberia, R. P. Currie).

Allied to *H. mollis* Breddin (which I know only from the rather short description), but lacking the long, soft, decumbent pilosity, differently colored, and with the adventitious jointlet between the first and second antennal joints much shorter. The other known species, *H. discretus*, var? (of which I have examined a cotype), differs from *corticalis* by numerous characters, and principally by the much larger size, the more depressed body, the more tumid anterior acetabula which are visible from above, the acute apical angle of the corium, the longer inner basal cell of the membrane which passes the middle of the outer basal cell, and the much less strongly ascending lateral areas of the venter. As the genus has been somewhat imperfectly described, I have included some generic characters in the above description, but the peculiar carinated sculpture of the venter is not mentioned, as it was described by me.¹ Breddin's supposition² that this sculpture is a male sexual character does not prove to be correct, the ventral sculpture of the now discovered female being quite identical with that of the male.

The species of this genus doubtless live under bark like the other Reduviinae with flattened abdomen.

The genus *Heteropinus* Breddin was placed by its founder near *Opinus* Laporte, and the allied genus *Platymicrus* Bergroth was also placed by me near *Opinus*, but we were both wrong in so placing them. Although the small setiferous tubercles on the underside of

¹ Bol. Soc. Esp. Hist. Nat., 1904, p. 362.

² Wien. Ent. Zeit., 1905, p. 264.

the head and prosternum are not distinctly developed in all species of *Heteropinus* and *Platymicrus*, these genera must certainly be placed in Stål's division 50 (1) near *Croscius* Stål. The Indian genus *Marbodus* Distant is very closely related to *Heteropinus*, and was quite correctly placed by Distant after *Epirodera* Westwood. On the other hand, Distant¹ wrongly transferred the genus *Croscius* to the vicinity of *Opinus*.

Subfamily PLOIARIINAE.

STENOLAEMUS SCHWARZII, new species.

Rather longly pilose; ground-color of body, including hemelytra, antennae, and legs, whitish. Head with the whole underside, the antecular part, and the sides of the postocular part fuscous; rostrum pale brown; first joint of antennae a little longer than pronotum, with four fuscous annuli, second joint one-sixth shorter than first, with the base, apex, and two annuli fuscous, third and fourth joints fuscous, third as long as fore tarsi, fourth one-half longer than third; pilosity of first antennal joint long and moderately thick, the three remaining joints thickly but very shortly pilose, the second with a few longer hairs above near the base; postocular part of head tuberculate, longitudinally impressed in the middle. Prothorax with two fuscous vittae above on the anterior tumid part of the fore lobe, and with a fuscous vitta on the acetabula, the tumid part transversely impressed at the sides, which are rounded behind the impression; posterior petiolated part of this lobe a little shorter than the anterior part, with a lateral vitta and a median prosternal vitta fuscous, these vittae confluent anteriorly; posterior pronotal lobe with these blunt longitudinal ridges, the lateral ridges ending posteriorly on the disk in a small tubercle, lateral angles tuberculate, lateral margins slightly rounded anteriorly, basal margin subangularly sinuate. Scutellar spine suberect, fuscous. Hemelytra glabrous except costal margin of corium, which is densely fringed with short curved hairs; mesocorium behind the middle with four or five transverse fuscous bars which are widened at their interior end; the large triangular anterior basal cell of the membrane fuscous, with two feeble whitish transverse veins; posterior basal cell of membrane fuscous, excepting exterior border, and longitudinally divided by a white vein emitting one or two short branches laterally; rest of membrane with some small fuscous spots and at the interior border behind the posterior basal cell with three larger transverse fasciate fuscous spots; terminal cell and apex of the preceding cells fuscous, mottled with whitish; all hemelytral veins whitish. Wings whitish. Abdomen somewhat infuscated on the back, toward the apex of the venter, and at the

¹Ann. Mag. Nat. Hist., ser. 7, vol. 13, p. 276.

apical angles of the segments. Legs moderately thickly clothed with very long white hairs; fore coxae with a brownish ring in the apical half, middle and hind coxae variegated with fuscous; fore femora with three, middle and hind femora with five brown annulations, middle ring of hind femora darker, almost black; all tibiae with three dark rings in their basal half, the annulations of the fore tibiae and the first narrow annulation of the other tibiae being brown, the two other annulations of the middle and hind tibiae black; apex of all trochanters and of tibiae, and extreme base of femora brownish, apex of fore tarsi and the whole middle and hind tarsi fuscous; all dark annuli of the four posterior femora and tibiae bearing, besides the ordinary long white pilosity, a thick tuft of shorter hairs which are brown on the brown annuli, black on the black ones; fore coxae as long as the apical tumid part of the prothorax; fore femora and tibiae armed beneath down their whole length with short, black spinelets, the femora moreover near the base with two strong slightly curved spines which are white with the extreme apex black; fore femora a little shorter than the pronotum.

Length.—Female, 8.5 mm., with membrane 10 mm.

Female.—Distance between inner margins of eyes not quite twice broader than an eye; abdomen dilated, elongately suboval, lateral margins at the junction of the four last segments produced in a triangular lobule constructed as in the other species and as described by me.¹

Mexico (Tampico, E. A. Schwarz).

Type.—Cat. No. 20149, U.S.N.M.

Very distinct from *S. spiniventris* Signoret (the only American species hitherto known) and more related to *S. muiri* Kirkaldy from the Fiji Islands, from which it differs principally by the nontufted antennae and the structure of the pronotum.

SCHIDIUM.² new genus.

Head without an apical spine. Rostrum with the first joint but little shorter than the antecocular part of the head, always passing the middle of the antecocular part, longer than or as long as the second joint which passes the eyes, third joint shorter than first and second together. Other characters as in *Ghilianella* Spinola.

Type of the genus.—*Schidium lemur*, new species.

To this genus also belong the African *Ghilianella matercula* Bergroth and *nutricula* Bergroth, and the Indian *Gh. phasma* Distant. These Old World species can not be included in the American genus *Ghilianella*, in which the head is armed with a spine at the apex, and which has the first rostral joint much shorter than the

¹ Bull. Amer. Mus. Nat. Hist., vol. 31, p. 347.

² σχίδιον=stick.

anteocular part of the head, scarcely passing the antenniferous tubercles, and shorter than the second joint which does not reach the posterior margin of the eyes, and the third joint longer than the first and second together.

SCHIDIUM LEMUR, new species.

Narrow, linear, very finely alutaceous, not granulated, black; head above with a luteous streak on each side immediately behind the transverse impression; abdomen beneath brownish black sprinkled with small pale yellow spots, especially along the median line; rostrum piceous, with the articulations of the joints whitish yellow; antennae castaneous; fore legs piceous black, the spines of the femora (except their extreme tip) and a median annulation to the tibiae whitish; middle legs castaneous, their femora with four and their tibiae in the basal half with three narrow whitish rings more or less interrupted beneath; hind legs mutilated, but judging from the still existing basal half of the femora colored as the middle legs. Head with the postocular part scarcely constricted in the middle; first joint of antennae somewhat longer than head and thorax together; first joint of rostrum a trifle shorter than anteocular part of head and nearly twice the length of second joint. Prothorax two and a half times longer than head; mesothorax distinctly shorter than prothorax and a little longer than metathorax. Abdomen half as long again as head and thorax together, parallel from its base to apex of fifth segment, sixth segment somewhat widening from base to apex; female dorsal genital plate a little shorter than sixth segment, a little narrowing from the base to the truncate apex, longitudinally ridged in the middle, ventral sutures curved forward. Fore legs: Coxae a little shorter than head and prothorax together; femora somewhat longer than coxae, their unarmed basal part a little longer than the spined apical part; tibiae very finely denticulated beneath; tarsi not reaching the first long spine of the femora.

Length.—Female, 27 mm.

Type.—Cat. No. 20150, U.S.N.M. Guinea (Mount Coffee, Liberia, R. P. Currie).

Allied to *Sch. matercula* Bergroth, from which it differs principally by smaller size, shorter metathorax, and differently shaped female dorsal genital plate.

Note.—In my description of *matercula* the mesothorax is by some lapsus said to be “prothorace nonnihil longior”; it is a little shorter than the prothorax.

Family NABIDAE.

ARCHNOCORIS TRINITATIS, new species.

Smooth, shining, glabrous, piceous black; posterior lobe of pronotum finely and thickly punctulate with an extremely short erect whitish pubescence; scutellum with a few rather long hairs; abdomen aenescens; posterior margin of pronotum and of propleura, apical spine of scutellum, a subbasal vitta, median fascia, and triangular spot at apical angle of corium, and margin of acetabula white; under side of head, orificia, and the evaporative area testaceous yellow; metapleura at the anterior angle, ventral segments (except fourth and sixth) at the lateral margins, and second ventral segment at middle of apical margin with an ivory white callus; antennae, rostrum, and legs pitchy black; apex of second antennal joint, fourth joint (except base and apex), extreme apex of all femora, and a rather broad annulation to hind femora (nearer to apex than to base) yellow or reddish; tibiae and tarsi fuscotestaceous, base of tibiae narrowly whitish. First joint of antennae as long as head, second twice the length of first, third distinctly longer than second, fourth somewhat shorter than second. Pronotum scarcely as long as broad, posterior lobe two-thirds longer than anterior lobe with collar. Scutellum with a short semierect spine at apex. Hemelytra somewhat passing apex of abdomen. Middle femora not incrassated in either sex.

Length (without membrane).—Male and female, 4-4.2 mm.

Type.—Cat. No. 20151, U. S. N. M. Trinidad (Montserrat, A. Busck).

Allied to *A. panamensis* Distant, but with differently colored antennae and legs, and shorter pronotum. Described from 4 males and 1 female.

Family HENICOCEPHALIDAE.

HENICOCEPHALUS COOKI, new species.

Dull black, hemelytra and pectus brownish black, abdomen dark testaceous; fourth and apex of third antennal joint, base of hemelytra, trochanters, knees, and apex of tibiae whitish. Head shortly pilose, vertex (female) between the small eyes more than three times broader than an eye; postocular part subglobose, slightly broader than long and as broad as the width across the eyes, with a very fine impressed median line; first antennal joint scarcely passing apex of head, second joint as long as antecocular part of head together with the eyes, third joint one-fourth shorter than second and a little longer than fourth. Pronotum with extremely short pubescence; fore lobe (collar) conspicuously longer in the middle than at the sides, with a very slight median impression; middle lobe twice the

length of the fore lobe and (female) one-fourth narrower than the hind lobe, subparallel from the base to beyond the middle, then strongly narrowing to apex, the disk with a L-shaped median impression and on each side with a three-branched impression, on the outside of which is a small round foveola visible only from the side; hind lobe shorter than middle lobe, its basal margin slightly rounded. Hemelytra reaching a little beyond apex of abdomen, discal cell closed. Fore femora a little more than three times longer than broad, fore tibiae at apex somewhat narrower than fore femora in the middle. Hind femora reaching base of last ventral segment, longitudinally somewhat convex above, straight beneath.

Length.—Female, 6.5 mm.

Type.—Cat. No. 20152, U.S.N.M., Guinea (Mount Coffee, Liberia, O. F. Cook).

Not nearly allied to any described African species.

Family ANTHOCORIDAE.

MONTANDONIOLA THRIPODES, new species.

Oblong, shining, glabrous, impunctate, black; corium and clavus white, subtransparent; inner margin and commissure of clavus, the narrow posteriorly somewhat widening embolium, and cuneus black; membrane hyaline, iridescent, with a rather broad parallel brownish-black vitta running from near the interior basal angle to the apex and lying in the longitudinal axis of the body when the hemelytra are closed; third (and probably fourth) joint of antennae, apex of second joint of rostrum, its third joint (except apex), fore tibae (except extreme base), and all tarsi yellow. Head longer than pronotum in the middle; postocular part shorter than antecular part, but forming together with the apex of the pronotum a cylindrical neck which is equal in length to the antecular part; eyes (male) moderately prominent, seen from above not quite twice longer than broad, a trifle longer than antecular part; vertex between the eyes one-half broader than an eye and twice broader than the gular interspace between them, ocelli placed close to the posterior inner margin of the eyes; antennae very finely and shortly pilose, first joint glabrous, slightly passing apex of head, second joint as long as the distance between ocelli and apex of head, subcylindrical, incrassated, twice thicker than first joint, third joint somewhat longer than first and slightly narrower (fourth joint wanting); rostrum scarcely reaching anterior coxae, first joint very short, second reaching posterior margin of eyes (female), linear, third as long as second. Pronotum with a short apical neck but with no distinct apical annulation (collar), lateral margins narrowly carinate and slightly sinuate between the neck and the humeral angles, posterior

margin cut off obliquely before base of corium, deeply sinuated in front of scutellum, the disk with a transverse median impression. Scutellum impressed in the middle. Orificia curved toward anterior angle of metapleura but not nearly reaching this angle. Hemelytra passing apex of abdomen by a little less than half the membrane; membrane with two veins, one somewhat within the outer margin, the other near the inner margin. Abdomen not broader than the closed hemelytra, male genital segment with some long hairs directed backward. Legs rather slender, glabrous.

Length (without membrane).—Male 2 mm.

Tpye.—Cat. No. 20153, U.S.N.M.

China (Hongkong, A. Koebele).

In shape and color this insect, like the species of *Macrotrachelia* Reuter, reminds one of a *Thrips*.

Only two species of this interesting genus were previously known, one from the Balearic Islands, the other from Kilimanjaro.

Family MIRIDAE.

IX,¹ new genus.

Body oblong, subparallel between base of hemelytra and base of cuneus; punctulate above, except head and pronotal calli; impunctate beneath, except the punctulate propleurae. Head narrow, subhorizontally projecting, about one-half longer than broad and more than twice longer than its basal height; eyes somewhat removed from base of head, large but moderately prominent, seen from above elliptical, considerably longer than broad, seen in profile obliquely subovate, occupying the whole height of the head; anteocular part shorter than eyes, seen from above triangular, acute at tip, seen from the side rounded at apex; clypeus not separated from the forehead by an impression, lorae confluent with genae, the part of the vertex lying between the eyes narrower behind the middle; postocular part of head separated from the rest of the head by a distinct constriction visible round the head both above (where it is a little curved backward), on the sides, and beneath, shorter than the anteocular part, slightly widening from the constriction to the base and forming together with the apex of the pronotum a subcylindrical neck which is a little broader than long and slightly narrower anteriorly; throat long, almost straight and horizontal, interrupted only by the postocular constriction; antennae inserted at the anterior angle of the eyes, slender, but the first joint somewhat incrassated, narrower at base and apex than in the middle, half the length of the head and passing apex of head by two-thirds its length, second joint much longer than first; rostrum reaching a little beyond anterior

¹ ξ=an insect injurious to vegetation.

margin of mesosternum, first joint reaching middle of eyes, second and third subequal in length, each a little longer than first and a little shorter than fourth. Pronotum gently sloping, strongly narrowed from the subacute very slightly prominent humeral angles to the apical collar which is as long as the postocular part of the head, well defined posteriorly by an impressed line continued through the sides and prosternum, not callose though transversally convex, punctulate the same as the disk of the pronotum, with its lateral margins parallel; calli confluent, forming a transverse impunctate area immediately behind the collar and reaching the sides, in the middle a little longer than the collar but narrowing toward the sides, together with the collar in length occupying scarcely more than the apical third of the pronotum; lateral margins from the base of the collar to the humeral angles straight, obtuse, vertically rounded but with a slightly raised impunctate line separating the pronotum from the propleura and visible only from the side, basal margin rounded, covering the base of the scutellum. The uncovered part of the scutellum half the length of the pronotum without collar, a little broader than long, the extreme tip a little callose. Xyphus of prosternum with a small median impression, very finely margined, blunt at apex. Orificia distinct, rounded. Hemelytra passing apex of abdomen, veins of corium and clavus not distinct, cuneus moderately inclined, longer than broad, the incisure shallow, the outer and inner margins slightly rounded, membrane with a single cell not reaching beyond apex of cuneus, inner apex of cell subobtusely angular. Vagina of female passing middle of abdomen. Legs slender; fore coxae not reaching middle of mesosternum; all femora linear, the hind pair a little thicker than the others; tibiae sparingly, shortly, and softly pilose, not spinulose; third joint of tarsi incrassated toward apex, claws small, strongly curved, arolia shortly laminate.

This genus must be referred to the subfamily Bryocorinae, from all other genera of which it differs by the horizontally produced head. The membrane *appears* to be bicellulate, there being a vein separating a narrow elongate outer cell from the other, but unless I am mistaken it is the anal vein of the underlying membrane which is visible through the translucent upper membrane.

Type of the genus.—Ix porrecta, new species.

IX PORRECTA, new species.

Subglabrous, shining, beneath more so; above castaneous, cuneus, and a costal spot immediately before it red, beneath piceous (except the pale castaneous throat); membrane pellucid, a little shaded with brownish gray, iridescent, its veins piceous; antennae, rostrum, and legs pale yellowish testaceous, first joint of antennae pitchy casta-

neous, punctuation of prothorax, scutellum, and hemelytra fuscous, thick and fine but deep. Head a little over half the length of the pronotum; vertex between the eyes at its narrowest place one-third narrower than an eye, with a very short longitudinal impressed line not reaching the postocular transverse impression; antennae thinly and shortly pilose, first joint glabrous, second joint at least three times longer than first and as long as the width across the humeri, sublinear, apical half very slightly thicker than basal half. Pronotum slightly broader than long, about four times broader than its apex, and thrice broader than the head. Hemelytra passing apex of abdomen by half the membrane, cuneus reaching apex of abdomen. Femora beneath sparingly and erectly pilose.

Length (without membrane)—Female, 4.5 mm.

Type.—Cat. No. 20140, U.S.N.M. China (Hongkong, A. Koebele).

In examining the type it was injured, and after repairing the pronotum was found to be a little more inclined than in its natural position.

Family GERRIDAE.

LIMNOGONUS CURRIEI, new species.

Opaque, excepting the somewhat shining clypeus; above dark brown, except the black head and the following yellow markings: a spot at anterior angles of eyes, a median and basal fascia to vertex, the former of which does not reach the eyes and emits a longitudinal line from each end forward, and the margins and a narrow median vitta to pronotum; a whitish lateral vitta running from anterior margin of mesonotum to near apex of hind acetabula but narrowly interrupted at their base; interior part of hemelytra dark brownish testaceous; beneath pale yellowish, metasternum and venter with a faint grayish bloom; a spot on fore acetabula, a vitta on middle acetabula, a mesosternal lateral vitta running from the fore to the middle coxae, and a broad posteriorly tapering sublateral vitta to venter dark fuscous; antennae and legs brown, fore coxae, trochanters, and femora pale yellowish, except a vitta to the trochanters and a superior and inferior vitta to the femora; rostrum pale yellowish, a lateral spot to the first joint, apex of third, and the whole fourth joint piceous. Head as broad as pronotum (of the macropterous form) across the humeral angles; first joint of antennae reaching middle of pronotum, second joint one-fourth shorter than first; rostrum not reaching middle of mesosternum, first joint longer than broad, second broader than long. Pronotum with the antero-lateral margins a little sinuate behind the middle, posterior process triangular, narrowly rounded at apex. Mesosternum with the rather broad and shallow rostral furrow reaching its middle. Metasternum

one-third the length of the mesosternum and as long as the two first segments and half the third segment of the venter taken together, with the orificium placed in a foveate impression near the hind margin. Hemelytra a little longer than abdomen. Venter as long as mesosternum; sixth segment deeply arcuately sinuate at apex, in the middle a little longer than the preceding segment; apical angles acute, almost reaching second male genital segment which is about twice the length of first genital segment. Fore femora almost as long as mesosternum, somewhat thickened toward base; second joint of fore tarsi more than twice the length of first joint. Middle coxae not quite reaching base of hind acetabula. Middle and hind femora subequal in length and but slightly shorter than the body; middle tibiae a little shorter than the femora and more than three times longer than the tarsi; hind tibiae and tarsi together about half the length of the femora.

Length.—Male, 7 mm.

Type.—Cat. No. 20154, U.S.N.M.

Remarkable by its dull color, all other known species being shining, and by the very short basal joint of the fore tarsi.

Note.—The confusion prevailing in the genus *Gerris* is great, and is chiefly due to the fact that some authors have confounded quite distinct genera with *Gerris*, often even without indicating to what subgenera or groups of "*Gerris*" in this wide sense their species belong, and without mentioning such characters from which the species could be systematically located. Of that sort are all the Indian species described by Distant. *Aquarius* Schellenberg (*Hypotrechus* Stål) can be considered a subgenus of *Gerris* Fabricius (*Limnotrechus* Stål), but *Limnopus* Stål, *Tenagogonus* Stål (*Limnometra* Mayr), and *Limnogonus* Stål are good genera. *Tenagogonus* was founded in 1853 without a type, but in 1855 Stål described a single species of this genus, *alborittatus*, from Natal, which thus is the type. This species was omitted by Stål himself in his Hemiptera Africana and by Lethierry and Severin in their Catalogue, but Kirkaldy had seen specimens (probably also types) of it, and says that it is a *Limnometra*.

CYLINDROSTETHUS QUADRIVITTATUS, new species.

Apterous form.—Above fulvous with a distinct buffy tint, beneath pale testaceous; clypeus and adjacent parts of juga, apex of antenniferous tubercles, an oblong spot at posterior half of inner margin of eyes, two vittae slightly curved outward to pronotum, four vittae to mesonotum (the two median ones shortly interrupted [male] or narrowed [female] behind the middle), two vittae to metanotum, dorsum of abdomen (except the first [female] or three first [male]

segments in the middle), apical spines of last abdominal segment, a vitta to upper side of genital segments, an apical spot to all acetabula, a basal streak to middle acetabula, and a sublateral vitta to venter (but faintly indicated in the male) black; a line exteriorly bordering the lateral vittae of the mesonotum, a spot at basal angles of mesonotum, a spot on upper side of acetabula, and a slightly waved line interiorly bordering the ventral vittae, clothed with very short but thick golden yellow sericeous pubescence; antennae, last two joints of rostrum, an upper (abbreviated) and lower vitta to fore femora, the fore tibiae and tarsi, and the four posterior legs (except coxae and trochanters) fuscous black. Head a trifle longer than broad, antecular part a little shorter than the eyes, distinctly broadening from anterior angles of eyes to apex of antenniferous tubercles; eyes obliquely produced backward a little beyond base of head, twice broader than the interocular space at its narrowest place; rostrum slightly passing anterior margin of prosternum, antennae about reaching the middle of the body, first joint a little longer than head and distinctly longer than the two following joints united, second joint scarcely more than half the length of first and twice the length of third, fourth subequal to second. Pronotum a little longer than the vertex from its base to the apex of the eyes, a little rounded at the sides, rather broadly longitudinally impressed in the middle, apical margin straight, basal margin convexly rounded. Mesonotum in the middle three times longer than pronotum, slightly widening from apex to base, lateral margins straight, apical margin sinuate, basal margin bisinuate, shortly and roundedly produced between the sinuosities. Metanotum in the middle very slightly shorter than pronotum. Mesosternum somewhat longer than mesonotum, shortly and roundedly produced at apex between the fore coxae. Metasternum one-third the length of mesosternum, a trifle longer (female) or very distinctly longer (male) than the two first ventral segments together, the orificium placed in the transversely impressed line running a little in front of the posterior margin. Abdomen above as long as (female) or somewhat shorter than (male) thorax, beneath as long as mesosternum and metasternum together; connexivum in the male strongly reflexed, but not quite erect, in the female very strongly inflexed over the dorsum, covering the greater part of it, apical angle of last segment shortly and acutely triangularly produced (female) or armed with a strong somewhat divergent spine passing the middle of the first dorsal genital segment (male), last ventral segment at apex deeply arcuately sinuate (male) or much less deeply bisinuate (female); genital segments in both sexes, particularly in the female, slightly irregular, turned a little to the right. Fore femora straight, incrassated, sub-

parallel from base to beyond middle, then somewhat narrowed, a little longer than head and pronotum together, tibiae a little curved, first joint of tarsi less than half the length of second joint. Middle coxae not reaching base of hind acetabula. Middle and hind femora equal in length, a little shorter than the body. Middle tibiae about one-fourth shorter than femora. Hind tibiae more than half the length of femora. Middle tarsi about half the length of tibiae and about three times longer than hind tarsi.

Length.—Male, 10–10.4 mm.; female, 11.5–12 mm.

Male.—First dorsal genital segment a little shorter than last abdominal segment, its apical margin rounded; second dorsal genital segment a little shorter than first and only one-third its breadth, rounded at apex; first ventral genital segment a little longer than last abdominal segment, its apical angles somewhat produced; second ventral genital segment longer than first, subconical, not quite reaching apex of second dorsal genital segment.

Female.—First dorsal genital segment shorter than last abdominal segment, narrowing from the base to the subtruncate apex; ventral genital segment as long as the corresponding dorsal segment, but narrower, subparallel; second genital segment very short.

Type.—Cat. No. 20155, U.S.M.N. Guinea (Mount Coffee, Liberia, R. P. Currie).

This is the first *Cylindrostethus* recorded from Africa. In coloration it is quite distinct from the American species, and still more so from the Asiatic ones. No winged specimens of this fine species were found.