

Additions to the Neotropical *Dryopidae*.

(Coleoptera.)

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(With 21 Text-Figures.)

This paper is based on the collections of *Dryopidae* sent to me for determination by Dr. Walther Horn and Dr. B. M. Hobby. In addition, I have dealt with a few species in my collection which have long awaited description.

For fig. 12 I have to thank Miss O. F. Tassart. All other illustrations were done by myself with the aid of a camera lucida. Lines next to figures refer to a length of 0.20 mm.

Dryopinae.

Helichus triangularis Musgrave.

(Figs. 1, 3.)

1935. *H. triangularis* Musgr., Proc. Ent. Soc. Wash., **37**, 143—144, pl. 17.

Two males are before me from Mexico: Michoacan, Morelia (Georg Heine). Dr. Musgrave has illustrated the differences between his species and *puncticollis* Sharp. as regards the genitalia. These differences are good ones. However, when discussing external characters, Musgrave says of his species, „may be readily separated from that species (*puncticollis*) by the pubescence of the elytra. In *puncticollis* there is a sutural area reaching to the third striae and continuing almost to apex, which is practically bare of pubescence; while the elytra of *triangularis* are uniformly pubescent“. In both paratypes of *triangularis* in my collection the sutural area is not pubescent on basal half; and in the Mexican examples the area pubescent is identical to that of *puncticollis*.

As I have pointed out elsewhere in a study of a long series of *H. suturalis* Lec. ranging from California to Guatemala, these differences in the extent of the area of elytral pubescence are due only to the amount of rubbing the specimen has suffered. The females of *puncticollis* and *triangularis* are, so far as I know, inseparable. The males, however, may be separated by other characters than those of the genitalia. *H. puncticollis* has a group of long, prominent, testaceous hairs in front of the posterior coxae on each side of the metasternum and a similar group

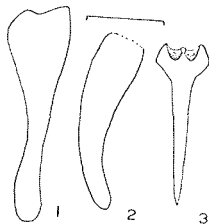


Fig. 1. Lateral view of paramere of male genitalia of *Helichus triangularis*. — Fig. 2. Lateral view of paramere of male genitalia of *H. confusus*. — Fig. 3. Dorsal view of median lobe of male genitalia of *H. triangularis*.

of hairs on each side of the base of the prosternal process in front of the anterior coxae. Males of *triangularis* do not possess these secondary sexual characters. *H. triangularis* is also very close to the Mexican *H. confusus* Hntn. (1936), but both sexes of *confusus* may be separated from the former by the punctures of the pronotal disk which vary much in size and distance from each other, the disk also having numerous fine punctures intermixed with the coarse ones, whereas in *triangularis* the punctures of the pronotal disk are more evenly spaced and have no, or very few, distinct, fine punctures intermixed. These differences may very likely prove to be of no use when a large series is examined, in which case only the males of the two could be separated and only by the structure of the male genitalia (cf. figs. 1 and 2).

Sostea.

Until now only one species of this genus has been described from America, *S. variolata* Hinton (1937) of Brazil. Before me are two female specimens representing two additional Brazilian species. A key to the three is as follows:

1. Prothorax on each side near lateral margin on basal half with a large and deep puncture. Elytra, in addition to the strial punctures, with numerous secondary punctures formed by the intervals, and these punctures are often much longer than the scutellum
variolata Hntn.
- Prothorax without a deep puncture on each side near lateral margin. Elytra without large secondary punctures 2
2. Elytra broadly and distinctly gibbous on basal fourth and with a broad and shallow but distinct transverse impression behind this gibbous portion; species moderately broad *murina*, sp. n.
- Elytra on basal fourth only very feebly and indistinctly gibbous and without a distinct transverse impression behind; species narrow
angusta, sp. n.

Sostea angusta Hinton, sp. n.

Length, 3.9 mm.; breadth, 1.40 mm. Narrow, elongate, subparallel, moderately convex. Dorsal surface clothed with fine, moderately short (about 0.06 mm.), recumbent to nearly erect, moderately dense, brownish-to goldern-testaceous hairs and also clothed with longer, erect, stouter hairs which are generally about 0.16 mm. long; there is a little intergradation between these two types of hairs. Ventral surface clothed somewhat similarly to dorsal surface but with the long hairs sparser. Cuticle shining, color black to piceous and with a feeble aeneous lustre; apical segments on antennae, mouth-parts, and tarsi paler. Head without

Distinct impressions, rather flat between eyes. Surface with the punctures about two times as coarse as facets of eyes, that is, about 0.040 mm., deep, round to subovate, and seldom separated by as much as half their diameters and often confluent; on clypeus the punctures are similar but slightly finer; labrum only with moderately fine punctures. Prothorax at broadest point, which is at basal half, a third broader than long (1.12 mm. : 0.750 mm.) and base broader than apex (1.10 mm. : 0.950 mm.). Apical margin as seen from above straight (the apical angles project forwards so that in general in this genus the anterior margin may be considered as deeply and truncately emarginate); apical angles feebly acute and when viewed from the side are seen to be distinctly deflexed; sides moderately strongly arcuate at middle half, elsewhere feebly so, broadly sinuate before apical and basal angles, lateral margins nearly smooth; basal angles not prominent, nearly rectangular; base trisinate, broadly and deeply so on each side, narrowly and more shallowly so in front of scutellum. Pronotum strongly convex, on apical fourth with a scarcely noticeable, shallow, transverse impression; surface with punctures which are similar to those of head but are often about a third coarser and are occasionally confluent but generally separated by one-third to one-half their diameters though sometimes by as much as once their diameters. Elytra nearly four times as long as prothorax (2.80 mm. : 0.750 mm.) and with the greatest breadth across humeri 1.40 mm. equal to greatest breadth at apical half. Humeri moderately gibbous; elytra elsewhere without distinct gibbosities though broadly and very feebly gibbous on discal region of basal third. Surface distinctly and shallowly striate throughout; striae punctures on disk deep, generally round, one-half to two-thirds as broad as intervals and longitudinally confluent to separated by once their diameters. Intervals flat to feebly convex; surface with only fine, moderately sparse punctures from which arise the hairs. Scutellum feebly convex, subovate, longer than broad (0.250 mm. : 0.275 mm.); surface punctate somewhat similarly to clypeus. Prosternal process with a feebly obtuse, median longitudinal elevation which attains a point opposite middle of front coxae; surface with punctures which are about half as coarse as those of head and are indistinct and moderately dense. Hypopleura with the surface similarly sculptured but also subrugose. Mesosternum flat. Metasternum with the median longitudinal line gradually becoming deeper and slightly broader posteriorly so that at hind margin it is about 0.050 mm. broad and nearly as deep as broad. Disk, especially posteriorly, feebly convex on each side of median line; surface punctate as prosternum but more finely so; sides of metasternum punctate as disk. Abdomen punctate as disk of metasternum. Genitalia absent in unique (specimen probably a male).

Type: In the Deutsches Entomologisches Institut, Berlin-Dahlem.
Brazil: Sao Paulo (ex coll. Melzer).

Sostea murina Hinton, sp. n.

Female: Length, 5.0 mm.; breadth, 1.8 mm. Broad, subparallel, strongly convex. Dorsal surface clothed with fine, moderately short (about 0.055 mm.) recumbent to nearly erect, moderately dense, brownish-testaceous hairs and also clothed with longer (about 0.16 mm.) erect, stouter hairs; there is little intergradation between these two types of hairs and what there is usually confined to the pronotum. Ventral surface clothed somewhat similarly to the dorsal surface but with the long hairs much sparser and the short hairs longer. Cuticle shining, color brownish-piceous; apical segments of antennae, mouth-parts, and tarsi generally with a tinge of testaceous. Head without distinct impressions. Surface with the punctures about two times as coarse as facets of eyes, that is, about 0.03 mm. broad, deep, round to obovate, and contiguous to separated by as much as one-half their diameters; on clypeus the puncture are similar though slightly finer and on anterior margin they tend to lose their distinctness and the surface assumes a subrugose appearance; labrum finely and moderately densely punctate. Prothorax at broadest point, which is across base, more than a third broader than long (1.3 mm. : 0.87 mm.) and base broader than apex (1.3 mm. : 1.0 mm.). Apical margin as seen from above straight (similar to that of *angusta*); apical angles not prominent, feebly acute, and when seen from side are only moderately deflexed; sides moderately strongly arcuate at middle half and elsewhere more feebly so, very feebly and broadly sinuate on apical third and equally as broadly but more strongly sinuate on basal third, lateral margins nearly smooth, basal angles moderately prominent, feebly acute; base trisinate, broadly and deeply so on each side, more narrowly and much less deeply so in front of scutellum. Pronotum strongly convex especially anteriorly; surface with punctures which are similar but often about a fourth coarser than those of head and are separated by one-fourth to two-thirds of their diameters though occasionally by as much as once their diameters. Elytra nearly four times as long as prothorax (3.5 mm. : 0.87 mm.) and with the greatest breadth at apical third to half slightly greater than greatest breadth across humeri which is 1.8 mm. Humeri moderately strongly gibbous; disk of each elytron on basal third very broadly and moderately strongly gibbous; behind this gibbous area is a very broad and shallow but distinct transverse impression, and behind this impression the disk appears broadly, slightly gibbous but by no means as distinctly so as in front of the impression. Surface feebly striate, the striae on disk at middle half of elytra scar-

eely impressed, but becoming more distinctly impressed towards sides and base; striae punctures about one- to two-thirds as coarse as those of pronotum, usually one-half as coarse as intervals though often coarser, deep, round to subquadrate, and separated longitudinally on disk usually by one-half to once their diameters. Intervals flat to very feebly convex and only punctate with fine, moderately sparse punctures which give rise to the hairs here as elsewhere on the surface. Scutellum flat, broader than long (0.30 mm. : 0.27 mm.), and subovate (or triangular with the base and angles rounded); surface densely punctate with punctures which are about three-fourths as coarse as those of head. Prosternal process with a broad, obtuse, median longitudinal elevation which attains a point opposite middle of front coxae; surface subrugose and moderately densely to sparsely punctate with punctures which are scarcely two-thirds as large as those of head. Hypopleura more strongly subrugose and more densely punctate. Mesosternum feebly concave; surface sculptured somewhat similarly to that of hypopleura. Metasternum with the complete median longitudinal gradually becoming deeper posteriorly, though the impression itself broadens behind but little; disk, specially posteriorly, feebly convex on each side of the median line; surface punctate as prosternum but more finely so; sides of metasternum with numerous distinctly coarser punctures and laterally surface also densely and minutely alutaceous, this microsculpture appearing reticulate. Abdomen sculptured as prosternum.

Male: Unknown.

Type: Female in the collection of the Oxford University Museum. Brazil (ex. coll. J. W. Miers).

Pelonomus striatus Hinton, sp. n.

Male: Length, 5.3 mm.; breadth, 1.8 mm. Elongate, subparallel, moderately convex. Dorsal surface with the usual two types of pubescence: erect hairs generally about 0.12 mm.; recumbent hairs from a third to a fourth this length; here there is a slight intergradation between these two types of hairs. Ventral surface more sparsely clothed than dorsal and on prosternum and abdomen similarly so, but elsewhere generally with a single type which is about 0.17 mm. long and usually partly recumbent. Cuticle shining, color brownish-piceous except for the head and pronotum which in the specimen before me is darker; antennae, mouth-parts, and ventral surface in general paler than elytra. Head without impressions; narrowest point between eyes 0.57 mm.; eyes projecting out from head (as seen from above) for a distance of 0.28 mm. Surface with a feebly defined, narrow, median longitudinal callosity extending for a short distance between eyes; punctures round to irregular in

shape, varying in size from 0.025 mm. (this is the diameter of facets of eyes) to a fourth or fifth this size and generally separated by less than their diameters and often confluent. Prothorax at broadest point, which is at basal third to fourth, a third broader than long (1.57 mm. : 1.07 mm.) and base broader than apex (1.55 mm. : 1.15 mm.). Sides moderately arcuate and sinuate broadly and feebly before apical and basal angles; basal angles acute and turned slightly outwards and upwards; base trisinate, broadly and deeply so on each side, more narrowly and shallowly so in front of scutellum. Pronotum evenly convex; surface with two sizes of punctures as follows: coarse punctures about a fourth coarser than facets of eyes, round and generally separated by once their diameters; fine punctures which give rise to much of the pubescence about a fourth as coarse and much sparser; there is but little intergradation between these two types. Elytra more than three times as long as prothorax (3.9 mm. : 1.15 mm.) and from humeri feebly broadening to broadest point (2.0 mm.) which is about at apical half. Humeri feebly gibbous; elytra elsewhere without gibbositities of any sort. Surface distinctly though very feebly and shallowly striate; striae punctures at middle sides round to irregular, about a fourth to a third coarser than pronotal ones, one-fourth to half as coarse as intervals, and separated longitudinally by once to twice their diameters; on middle of disk the punctures are finer and less distinct. Intervals flat and with the punctures about as coarse as coarse ones of head and separated by two to three times their diameters or more. Scutellum flat, subovate, broader than long (0.37 mm. : 0.27 mm.); surface punctate as adjacent elytral intervals. Ventral surface only with the fine punctures which give rise to hairs, these punctures are occasionally confluent but are generally separated by once their diameters or more, and particularly towards sides, often change into small granules. Prosternal process with a sharp, median longitudinal elevation extending from apex and becoming obsolete at a point opposite anterior portion of front coxae. Mesosternum feebly concave along middle; at narrowest point, which is opposite middle of middle coxal cavities, 0.145 mm. broad. Metasternal disk feebly and broadly depressed posteriorly; median longitudinal line complete and gradually becoming deeper and slightly broader posteriorly. Middle tibiae not curved at apex. Male genitalia with the parameres but slightly longer than basal piece and evenly narrowed to apex which is broadly rounded; median lobe acute at apex and extending to within about 0.06 mm. of apices of parameres.

Female: Unknown.

Type: Male in the author's collection. Brazil: Tucuman, 1.-13-1912 (A. H. Rosenfeld).

Comparative notes: The combination of the middle tibiae of

male evenly narrowed to apex and not at all curved and the feebly but distinctly striate elytra will separate it from all species with which it is likely to be confused.

Pelonomus clavipes Hinton, sp. n.

Male: Length, 6.2 mm.; breadth, 2.57 mm. Elongate, subparallel, moderately convex. Dorsal surface with the usual two types of pubescence: erect hairs generally about 0.15 mm. long and recumbent hairs from a fourth to a third as long; there is only a slight amount of intergradation between these two types. Ventral surface in parts apparently more densely clothed than dorsal, the long hairs are longer, often not less than a third longer, and appear distinctly more silky; here there is much more intergradation between the two types of pubescence than there is on dorsal surface. Cuticle shining, color brownish-piceous, with the head and pronotum darker; antennae, mouth-parts, legs, and ventral surface paler and often with a tinge of testaceous. Head between eyes with a median longitudinal impression which is about 0.25 mm. long and about 0.07 mm. broad; narrowest portion between eyes is 0.75 mm.; and the eyes project from the head for a distance of 0.28 mm. Surface contiguously and confluent punctate with punctures which are about 0.035 mm., that is, slightly coarser than facets of eyes; many of these punctures grade into sizes about a third or fourth as coarse; clypeus more finely and labrum much more finely punctate than head. Prothorax at broadest point, which is at basal half to basal third, about a fourth broader than long (2.07 mm. : 1.47 mm.) and base broader than apex (2.00 mm. : 1.44 mm.). Sides moderately arcuate and broadly and feebly sinuate before apical and basal angles; basal angles not prominent, nearly rectangular; base trisinate, broadly and deeply so on each side, more narrowly and slightly more shallowly so in front of scutellum. Pronotum evenly convex; on each side on basal fourth with an extremely feeble indication of a broad, sublateral sulcus. Surface punctate as head but with the coarse punctures slightly coarser and very slightly sparser and the fine punctures more numerous and distinct. Elytra more than three times as long as prothorax (4.8 mm. : 1.47 mm.) and from humeri gradually broadening to broadest point at apical half which is 2.57 mm. broad. Humeri but feebly gibbous; elytra elsewhere without gibbositities of any sort. Surface without perceptible striae and without (on disk) distinct strial punctures; the punctation is similar to that of pronotum but the coarse punctures are slightly finer and distinctly, though not greatly, sparser. Scutellum subovate, flat, broader than long (0.42 mm. : 0.37 mm.), and surface more finely and more densely punctate than adjacent portions of elytra. Ventral surface only finely and densely to moderately densely punctate, these

punctures often becoming subgranulate at sides where the surface is also often subrugulose. Prosternal process with a sharp, median longitudinal carina extending from apex and becoming obsolete at a point opposite and behind anterior margin of front coxae. Mesosternum with the lateral margins raised so that median surface appears concave; narrowest point which is opposite anterior fourth of middle coxae 0.30 mm. broad. Metasternal disk feebly depressed posteriorly; median longitudinal line complete and gradually becoming broader and deeper posteriorly. Middle tibiae of male feebly curved and becoming thicker towards apex so that the difference between base and apex is 0.125 mm. : 0.250 mm.; inner surface of swollen apex flat to very feebly convex. Male genitalia with the parameres curved strongly ventrad and evenly narrowed to the extremely acute apices; parameres slightly longer than basal piece (in the unique specimen the median lobe is lost).

Female: Unknown.

Type: Male in the collection of the Deutsches Entomologisches Institut, Berlin-Dahlem. Brazil: Sao Paulo, 3-11-1924 (J. Melzer).

Comparative notes: This species differs from the *curvipes* group in not having the inner apex of the mid tibiae of the male excavated, and from the *pubescens* group it differs in having the middle tibiae of the male strongly swollen at apex.

Pelonomus abdominalis Hinton, sp. n.

Male: Length, 5.9 mm.; breadth, 2.20 mm. Elongate, subparallel, moderately convex. Dorsal surface with the usual two types of pubescence: erect hairs rather dense and generally about 0.12 mm. long; recumbent hairs about a fourth to a third as long; there is a slight amount of intergradation between these two types. Ventral surface with the long hairs not as numerous and often a third or more longer, and with the short hairs also less numerous. Cuticle shining, color moderately pale brownish-testaceous; head and pronotum slightly darker; antennae, mouthparts, legs and ventral surface generally slightly darker than elytra. Head without distinct impressions, narrowest portion between eyes 0.72 mm. broad; eyes projecting out from head (as seen from above) for a distance of 0.30 mm. Surface with the punctures round to irregular, varying in size from 0.025 mm. (that is, slightly coarser than facets of eyes) to a third or fourth this size, and confluent to separated by half their diameters; clypeus and labrum more finely punctate. Prothorax at broadest point, which is about basal fourth, broader than long (1.77 mm. : 1.35 mm.). Sides moderately arcuate and sinuate broadly and feebly before apical and basal angles; basal angles not prominent, rectangular, and feebly turned inwards; base trisinnate, broadly and deeply so on each

side more narrowly and shallowly so in front of scutellum. Pronotum evenly convex; on basal fourth on each side with a barely perceptible indication of a sublateral sulcus; surface punctate as head but with scarcely any intergradation between coarse and fine punctures. Elytra more than three times as long as prothorax (4.0 mm.: 1.27 mm.) and from humeri gradually broadening to broadest point between apical half and third which is 2.20 mm. broad. Humeri feebly gibbous, elsewhere without gibbositities of any sort. Surface appears to be distinctly striate (this is chiefly due to the fact that there are strial punctures, rather than to any actual impressed striae) though the striae are scarcely impressed; strial punctures generally round, about a third coarser than those of pronotum, on disk from a fifth (sutural row) to a third (fifth row) as coarse as intervals, and usually separated longitudinally by once to twice their diameters. Intervals flat and with the punctures similar to head but much sparser, the coarse punctures being generally separated by once their diameters or more. Scutellum flat, subovate, broader than long (0.37 mm.: 0.27 mm.) and surface punctate as head but with the coarse punctures slightly less numerous and finer. Ventral surface for the most part punctate as scutellum, and at sides often subrugulose and with the punctures becoming subgranulate. Prosternal process with a carina-form elevation extending from apex and becoming obsolete at a point opposite middle of front coxae. Mesosternum nearly flat and with the lateral margins only feebly elevated; narrowest point opposite anterior third of middle coxae about 0.17 mm. broad. Metasternal disk feebly depressed posteriorly; median longitudinal line gradually becoming slightly broader and deeper posteriorly. Abdomen with a tubercle on second sternite which is 0.12 mm. high, 0.10 mm. long, and 0.08 mm. broad at base. Middle tibiae strongly curved on apical fifth, without an incised inner portion (as is the case in *curvipes*) and at apex 0.17 mm. broad; front tarsi very stout, middle of apical segment about 0.15 mm. broad. Male genitalia with the parameres slightly longer than the basal piece and each evenly narrowed to apex which is narrowly rounded; median lobe attaining a point 0.07 mm. behind apex of parameres.

Female: Unknown.

Type: Male in the collection of the Oxford University Museum. Brazil; (ex. coll. J. W. Miers).

Paratype: A male in the author's collection with the same data as above.

Comparative notes: Males of this species may be separated from those of any other species in the genus by the prominent tubercle on the second abdominal sternite.

*Elminae.**Cylloepus sexualis* Hinton, sp. n.

(Figs. 4—10, and 12.)

Male: Length, 3.1—3.7 mm.; breadth, 1.2—1.3 mm. Subparallel, moderately convex. Clothed with fine, short (about 0.037 mm.), recumbent, brownish-testaceous hairs which arise mostly at intervals equal to distinctly less than their own lengths; antennae with the apical segments more densely clothed with slightly shorter hairs; beneath with the hairs generally shorter than those of dorsal surface;

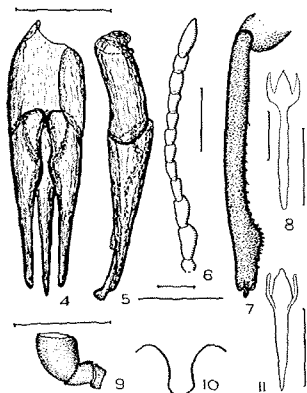


Fig. 4. Dorsal view of male genitalia of *Cylloepus sexualis*. — Fig. 5. Lateral view of same. — Fig. 6. Antennae of same. — Fig. 7. Lateral view of front tibia of same. — Fig. 8. Dorsal view of median lobe of male genitalia of same. — Fig. 9. Labial palpus of same. — Fig. 10. Prosternal process of same. — Fig. 11. Dorsal view of median lobe of male genitalia of *C. proximus*.

apical portion of labrum clothed with equally fine but generally much longer, more erect hairs which are most numerous at sides. Cuticle shining, for the most part alutaceous; color black to dark rufo-piceous; basal two segments of antennae, mouthparts and legs paler rufo-piceous. A very fine scale-like, cinereous with goldern reflections, tomentum covers most of sternal and pleural regions as is the case with nearly all the larger species of *Cylloepus*. Head without distinct impressions, but anteriorly between eyes with a median longitudinal impression which is nearly as long as basal segment of antennae and about two-fifths as broad as long. Antennae as figured (fig. 6). Clypeal suture straight, strongly impressed; anterior margin of clypeus as usual when seen from in front very broadly and arcuately emarginate and when seen from above truncate, with the angle on each side obtusely and bluntly rounded; labrum very broadly and feebly rounded in front, with the angle on each side broadly rounded. Surface densely, very minutely alutaceous so as to appear microscopically granulate; also set with low granules about as coarse as facets of eyes and usually separated by once to twice their diameters though sparser basally; surface here also somewhat rugose; granules of clypeus slightly denser and more regularly distributed; labrum without granules, base and extreme apex nearly impunctate, elsewhere punctate with fine (about two-thirds as coarse as facets of eyes), round punctures which are usually separated by about their own diameters or less. Prothorax with the greatest breadth near basal one-half not as great as length (0.97 : 1.05 mm.) and base broader than apex (0.87 mm. : 0.75 mm.). Apical margin as

seen from above moderately arcuate and deeply sinuate on each side behind eye before apical angle; apical angles moderately produced forwards and moderately acute; sides moderately arcuate on basal half, nearly straight on apical half, moderately sinuate before basal angles and with the lateral margins finely crenate; basal angles moderately acute and feebly produced backwards; base trisinate, broadly and moderately deeply sinuate on each side, narrowly and moderately deeply sinuate in front of scutellum. Pronotum with the sublateral carina prominent, moderately feebly converging towards apex, moderately sinuate at basal one-half and when viewed from above appears to be slightly sinuate on apical third, and it extends to apical margin; broadest portion difficult to delimit but apparently extending from basal fourth to apical third. Pronotum with the oblique impressions very similar to those of *optatus* Sharp (for general appearance see fig. 12). Surface feebly alutaceous, more strongly so at bottom of impressions and at sides and anterior margin but nowhere as strongly alutaceous as head; disk punctate with round to feebly obovate punctures which are moderately deep, usually one-half to two or more times as coarse as facets of eyes, often contiguous or confluent, and seldom separated by as much one-half their diameters; anteriorly on disk with most of the punctures confluent and most of the surface therefore appearing rugose; bottom of the various impressions nearly impunctate and highly polished; basal convex areas on each side of middle with a few punctures similar to those of disk but slightly sparser; surface of sublateral carina punctate as on disk but so densely as to appear rugose; sides near lateral margins much more sparsely punctate. Elytra more than twice as long as prothorax (2.42 mm. : 1.05 mm.) and feebly broadening posteriorly to broadest point near apical third which is broader than base of prothorax (1.30 mm. : 0.87 mm.). Lateral margins without distinct crenations. Surface rather coarsely striate, discal striae slightly finer at apical 10th but not obsolete; discal strial punctures subquadrate to slightly round, rather deep and at middle of disk from two-thirds to as broad as intervals and separated longitudinally by slightly more than to slightly less than their lengths; towards sides the punctures become much coarser and towards apex much finer. Discal intervals (five intervals) all nearly flat, second feebly convex on basal one-fifth, third strongly convex but becoming flat at about apical three-fourths, fourth flat (with punctures of the two striae almost contiguous so that the fifth seems to be the fourth), and fifth moderately convex on basal seventh; surface at most only feebly alutaceous; elevated intervals granulated with numerous round, low granules which are slightly coarser than facets of eyes, and the surface here also somewhat rugose; carinate intervals similarly sculptured; surface between punctures with

only an occasional granule and often feebly rugose. Scutellum flat, ovate, broader than sutural interval at base (0.14 mm. : 0.10 mm.), longer than broad (0.17 mm. : 0.14 mm.), broadly and feebly rounded basally, and at apex moderately acutely rounded; surface with a few coarse, shallow punctures. Prosternum with the anterior two-thirds (not including process) strongly but not sharply lobed; prosternal process as figured (fig. 10); surface of middle area densely, moderately coarsely rugose and obscurely granulate, sides with the granules varying much in size but usually about as coarse as facets of eyes or slightly finer and separated by one to three or more times their diameters. Hypopleura feebly, moderately sparsely rugose and with a few fine, obscure granules. Mesosternum sculptured similarly to middle area of prosternum. Metasternum with all of the middle of the disk except anterior two fifths moderately strongly depressed but with the area near to median line slightly less depressed so that an appearance is given of two impressions on disk, one on each side of median line; area just before mesosternum strongly declivous; with a moderately large, deep, roughly oval depression on each side of middle at posterior margin; with a broad (0.037 mm. basally), deep, median longitudinal impression which extends broadly to apical one-third; surface of disk granulate with round to obovate, flat-topped granules which are as coarse as facets of eyes and are separated by one to two times their diameters; sides similarly granulate but extreme sides and metapleura with only a few fine and obscure granules. Middle portion of first ventral abdominal segment entirely strongly depressed with the limits of the depression well defined; posteriorly at middle this depression appears to encroach upon middle of second segment to about three-fifths of the length of that segment; surface of this depression feebly rugose; sides of first segment and extreme sides of others with only an occasional fine granule; surface of segments elsewhere with rather flat, round granules which are one-half to as coarse as facets of eyes and are usually separated by two to three times their diameters. Hind coxa with a moderately large and deep, usually oval depression. Femora and tibiae very finely but otherwise similarly granulate to metasternal disk; the front tibia on inner apex has a toothed carina (fig. 7); inner ventral side of middle tibiae with a row of teeth similar to that of front tibiae; hind tibiae with no rows of prominent teeth, when viewed from inner dorsal side feebly curved and moderately swollen at apical two-fifths for a short distance, when viewed ventrally this swollen portion is somewhat concave and the goldern tomentum is here specially long and dense. Genitalia as figured (figs. 4, 5 and 8).

Female: Differs externally from the male as follows: (1) the basal abdominal depression does not encroach on to second sternite so that

there is no trace of a depression on this sternite; (2) the front tibia has no carina or teeth as has been figured for the male; (3) the middle tibiae has no row of prominent teeth; and (4) the hind tibia though nearly as curved at apical two-fifths as in male is not so swollen there.

Type: A male in the author's collection. Mexico: Distrito de Temascaltepec, Tejupilco, alt. 4,000 ft., VII-1934 (H. E. Hinton).

Paratypes: 80 with the same data as above and 16 also with the same data but collected from VI-15 to 28-1933 (H. E. Hinton, R. L. Usinger). Also, one specimen at Distrito de Temascaltepec, alt. 5,000 ft. (H. E. Hinton, R. L. Usinger). Paratypes have been deposited in the collections of the Deutsches Entomologisches Institut, Berlin-Dahlem, British Museum (Natural History), U. S. National Museum, and that of Dr. Paul N. Musgrave.

Variations: Besides slight variations in body size and density of granules and punctures on the various sclerites, the following have been noted: (1) a noticeable variation in the strength of the impression which parallels basal raised portion at the point where it joins the large impression near basal sinuation of sublateral carina, being sometimes absent at this point so that basal convex portion appears as part of the disk; and (2) a slightly noticeable difference in the proportions of length to breadth of the prothorax.

Comparative notes: The punctate instead of granulate pronotal disk will separate it from *C. spinipes* Hntn. The bicolored instead of uniformly colored antennae, the coarsely and densely instead of finely and moderately sparsely punctate pronotal disk, the strongly convex instead of nearly flat basal third interval of elytra, and the strongly depressed instead of flat middle of basal abdominal sternite all serve to separate it from *C. barberi* Hntn. From *C. optatus* Sharp, to which it is most closely related, it may be separated by the characters summarized below:

sexualis

1. Antennae with the two basal segments pale rufo-piceous and the others piceous to black.
2. Elytra with the fifth interval at base moderately strongly convex.
3. Male with the second abdominal sternite depressed only at middle of basal one-half.
4. Male with a short, prominent carina-like swelling at inner apical one-fourth of front tibia.

optatus

1. Antennae uniformly pale rufo-piceous; sometimes with two basal segments slightly paler.
2. Elytra with the fifth interval at base at most feebly convex.
3. Male with the second abdominal sternite depressed at middle of basal two-thirds.
4. Male without a carina on front tibia.

5. Front tarsi of male without numerous erect hairs on ventral surface.
5. Male with the four basal segments of front tarsi densely clothed on ventral side with moderately long, erect, pale-testaceous hairs.

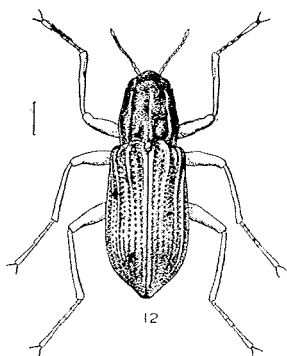


Fig. 12. *Cylloepus sexualis*
Hinton.

C. sexualis Hntn. superficially resembles *C. puncticollis* (Hntn.) (*nec Stenelmis*) but may at once be separated by the flat fourth and convex fifth, instead of flat fifth and convex fourth basal discal elytral intervals. The terminal segment of the labial palpus is normal in the new species in the male, whereas in the male of *puncticollis* it is very broadened at apex.

Cylloepus proximus Hinton, sp. n.

(Fig. 11.)

Male: Length, 3.3 mm.; breadth, 1.28 mm. Similar to male of *sexualis* Hntn. except as follows: Elytra with the fifth interval very shortly and scarcely noticeably elevated, whereas that of *sexualis* is distinctly elevated for a short distance. Abdomen with the depression of first sternite not, or just barely, encroaching on second sternite, whereas in *sexualis* this impression encroaches nearly to middle of second sternite. Inner apex of front tibia without a toothed ridge as is the case in *sexualis*; hind tibia with the apical half not as strongly curved or swollen as that of *sexualis*. Male genitalia of both species very similar, the chief difference being found in the median lobes which have been dissected out and illustrated (*sexualis*, fig. 8; *proximus*, fig. 11).

Type: A male in the collection of the Deutsches Entomologisches Institut, Berlin-Dahlem. Mexico: Necaxa, Puebla (Georg Heine).

Cylloepus abditus Hinton, sp. n.

(Figs. 13—16.)

Male: Length, 1.7 mm.; breadth, 0.77 mm. Subparallel, moderately convex. Clothed with fine, short (about 0.025 mm. long), recumbent, testaceous hairs which arise mostly at intervals equal to slightly less than their own lengths; antennae similarly clothed but with the hairs sparser and less recumbent; apical portion of labrum clothed with equally fine but longer (about 0.050 mm., but occasionally about 0.062 mm.) and paler testaceous hairs which are more erect, much denser, and usually

confined to the sides of apical portion. Cuticle for the most part finely alutaceous; piceous to rufo-piceous; antennae, mouth-parts, and legs paler; tomentum greyish with goldern reflections. Head without distinct or unusual impressions; clypeus broadly and very feebly arcuately emarginate, with the angle on each side bluntly rounded; labrum broadly and feebly rounded in front, with the angle on each side broadly and feebly rounded. Surface set with round to feebly oblong, flat-topped granules which are nearly as coarse as facets of eyes and are separated usually by twice their diameters though often by much less; granules on clypeus finer and denser; labrum without granules, punctate with very fine punctures which are separated mostly by once to twice their diameters. Prothorax at broadest point near basal half broader than long (0.62 mm. : 0.52 mm.) and base broader than apex (0.57 mm. : 0.42 mm.). Apical margin as seen from above moderately strongly arcuate and deeply sinuate on each side behind eye before apical angle; apical angles moderately acute, moderately strongly produced forwards and slightly inwards; sides moderately arcuate but slightly more strongly so at basal half, scarcely noticeably sinuate just before basal angles and with the lateral margins feebly and somewhat regularly crenate, this crenation being due to granules placed on sides; basal angles acute and very feebly produced; base trisinate, broadly and deeply so on each side, shortly and more shallowly sinuate in front of scutellum. Pronotum with the sublateral carina prominent, slightly converging towards apex, moderately strongly sinuate on basal half and becoming obsolete at about apical fourth; median longitudinal impression extending from near base to near apex where it becomes obsolete, broadest from basal fourth to apical third where it is slightly broader than scutellum; base of pronotum without oblique impressions; disk near sinuation of sublateral carina with a shallow, broad, indefinitely bounded impression. Surface microscopically alutaceous in such a manner as to appear confluent granulate throughout; also set with distinct granules as follows: sides between sublateral carina and lateral margin set with granules about as fine as those of head, usually round, and separated mostly by two to three times their diameters; granules on outer sides of sublateral carina slightly coarser and usually separated by one to two times their lengths; sides of disk near sublateral carina granulate as area near lateral margin; area near median impression with the granules slightly coarser and denser than those at sides of disk. Elytra more than twice as long as prothorax (1.18 mm. : 0.52 mm.) and feebly widening posteriorly to broadest point at apical one-third which is 0.77 mm. Lateral margins finely and regularly crenate, the crenation being due to fine lateral granules. Surface with the striae becoming finer towards apex and all except sutural obsolete beyond apical sixth; discal

strial punctures round to feebly subquadrate, moderately deep, about a third to a half as broad as intervals and separated longitudinally usually by a two to three times their diameters; these strial punctures become finer towards apex and at apical one-fifth they are shallow, sparse, and only about a third as coarse as discal punctures; discal intervals subequal in breadth and feebly convex, at base with the fourth interval more strongly convex (there is much variation in this respect, and sometimes none are more strongly convex); surface of intervals at base alutaceous somewhat like pronotum but elsewhere on elytra the microsculpture does not appear granulate; granules mostly similar in size and density to those of pronotum granules on carinate intervals slightly larger and denser but also round to feebly oblong. Scutellum subovate, flat, broader than sutural interval (0.09 mm. : 0.06 mm.), longer than broad (0.10 mm. : 0.09 mm.), feebly and broadly rounded basally and slightly narrowed to apex; surface granulate similarly to adjacent portion of elytra. Prosternal process as figured (fig. 16) and feebly concave with the lateral margins somewhat elevated; middle area of prosternum with the granules as coarse as those of elytra but with the surface also densely rugose, at sides much less rugose and with the granules finer and sparser. Mesosternum strongly depressed and with a slight indication of a median pit at the bottom of depressed area. Metasternum moderately strongly depressed posteriorly; with a fine, median longitudinal line which is traceable nearly to anterior margin; disk sculptured as middle area of prosternum but with the granules usually slightly larger; sides less rugose and with the granules sparser. Middle portion of first ventral segment moderately strongly depressed; surface here sculptured as sides of metasternum; sides of basal sternite and all of surface of other sternites with granules which are about as coarse as discal pronotal ones and are usually separated by less than to twice their lengths. Middle tibia with a row of small, short teeth on ventral side. Male genitalia as figured (figs. 13—14).

Female: Without row of spines on ventral side of middle tibiae, but otherwise externally similar to male.

Type: A male in the author's collection. Mexico: Distrito de Temascaltepec, Tejupilco, alt. about 4,000 ft., VII-1934 (H. E. Hinton).

Paratypes: 56 with same data as type and one same data but collected on VI-16-1933 (H. E. Hinton, R. L. Usinger). One has been deposited in the collection of the Deutsches Entomologisches Institut and two in the collection of the U. S. National Museum.

Comparative notes: The male genitalia is like that of no other described species.

Cylloepus horni Hinton, sp. n.

(Figs. 17 and 18.)

Male: Length, 1.7 mm.; breadth, 0.80 mm. I have written a description of nearly 1,000 words for this species, but a comparison of this description with that of *abditus* shows the two to be identical in nearly every respect, so that I see no need to give the description of the new species here. For an understanding of the external characters of this species, the student is referred to the description of *abditus* Hntn. The males of the new species differ from those of *abditus* by not having a row of spines on the ventral side of the middle tibia and by the structures of the male genitalia (cf. figures). Both males and females of the two species may be readily separated by the differences in the length of the legs. The following table is drawn up from a male specimen of each species equal in length and very nearly equal in breadth.

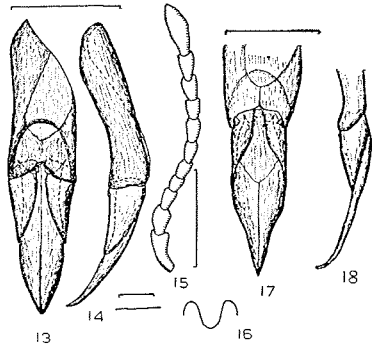


Fig. 13. Dorsal view of male genitalia of *Cylloepus abditus*. — Fig. 14. Lateral view of same. — Fig. 15. Antennae of same species. — Fig. 16. Prosternal process of same. — Fig. 17. Dorsal view of male genitalia of *C. horni*. — Fig. 18. Lateral view of same.

	front femora	front tibiae	middle femora	middle tibiae	hind femora	hind tibiae
<i>abditus</i>	0.375 mm.	0.425 mm.	0.40 mm.	0.437 mm.	0.437 mm.	0.500 mm.
<i>horni</i>	0.425 mm.	0.487 mm.	0.512 mm.	0.587 mm.	0.537 mm.	0.650 mm.

Female: Externally similar to male.

Type: Male in the author's collection. Mexico: Distrito de Temascaltepec, Tejupilco, alt. under 4,000 ft., VII-1934 (H. E. Hinton).

Paratypes: One male in the author's collection and a male and female in the collection of the Deutsches Entomologisches Institut, Berlin-Dahlem, with the following data: Mexico: Sierra de Durango, 1922 (C. Schaufuss).

I take great pleasure in naming this species in honour of Dr. Walther Horn.

Stenelmoides submaculatus Hinton, sp. n.

(Figs. 19—21.)

Male: Length, 2.8 mm.; breadth 2.0 mm. Elongate, subparallel, moderately convex. Cuticle moderately shining; color rufo-piceous; eyes

black, and elytra with numerous large, irregular, and ill-defined black areas. Head between antennal bases 0.12 mm. broad; surface densely granulate with granules which are a half to two-thirds as coarse as facets of eyes. Prothorax with the broadest point, which is at basal third, slightly broader than long (1.00 mm. : 0.95 mm.) and base broader than apex (0.92 mm. : 0.60 mm.). Apical margin strongly, evenly arcuate, and broadly and feebly sinuate on each side before apical angle; apical angles inconspicuous, feebly acute, and feebly deflexed downwards; sides moderately arcuate and nowhere distinctly sinuate; basal angles not prominent, feebly acute and nearly rectangular; base trisinate, broadly and moderately deeply sinuate on each side and more narrowly so in front of scutellum. Pronotum rather evenly convex but just before base rather strongly and suddenly declivous; surface with round to oval, flat granules which are about as coarse as facets of eyes and are separated on discal

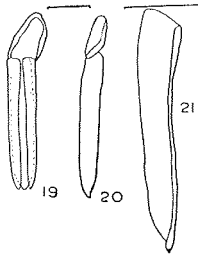


Fig. 19. Dorsal view of male genitalia of *Stenelmoides submaculatus*. — Fig. 20. Lateral view of same. — Fig. 21. Paramere dissected off and seen from ventral view.

region usually by half to once their diameters, these granules becoming slightly denser basally and slightly sparser apically; middle half of basal region glabrous and free of granules, this area extending forwards as a gradually narrowing line to middle of disk where it becomes obsolete, on this discal portion the surface, though still glabrous, is finely and densely punctate. Elytra slightly more than twice as long as prothorax (2.00 mm. : 0.95 mm.) and from humeri gradually broadening to broadest point (1.20 mm.) at apical half to third. Humeri very feebly gibbous. Surface of elytra not carinate nor striate and throughout granulate as basal portion of pronotum but much more unevenly and slightly more coarsely so; on each elytron there is a faint indication of three discal rows of granules, this appearance being due to a slight tendency for the granules to segregate into longitudinal lines. Scutellum very feebly convex, subovate, longer than broad (0.17 mm. : 0.15 mm.), and with the surface glabrous and only extremely finely and indistinctly punctate. Ventral surface throughout granulate somewhat similarly to pronotum but sides of metasternum and all of abdomen distinctly more finely and sparsely granulate. Prosternum at middle of anterior margin with a glabrous and non-granulate area which is about 0.22 mm. \times 0.22 mm. Male genitalia as figured (figs. 19—21).

Female: Externally similar to male.

Type: A male in the collection of the Deutsches Entomologisches Institut, Berlin-Dahlem. Brazil: Esp. Santo, X - 1920.

Paratypes: Three females, two of which are in the author's collection, collected at same locality as above.

Comparative notes: Close to *S. guyanensis* Grouv. from which it differs in not having a large, well-defined area free of granules on middle of pronotal disk. It is just possible that this is a synonym of *S. grouvellei* Pic. In common with most other systematists, I can make nothing of Pic's poor descriptions.

Heterelmis obesa var. *plana* Hinton (1937).

Additional locality records for this species are as follows: 7, Mexico: Sierra de Durango (C. Schaufuss); 1, Mexico: Cuautla (Hoge).

Eine Bitte an unsere Leser!

Das D. Ent. Institut sammelt seit 30 Jahren nebenbei alles, was sich kulturell auf Insekten bezieht, z. B. Darstellungen von Insekten aus Holz, Porzellan, Metall und anderen Stoffen; entomol. Embleme und Ethnographica jeder Art; Umschläge & Briefbogen mit entomol. „Köpfen“; Siegel, Postkarten & Photi; Briefmarken, Münzen, Medaillen; Vereins-Abzeichen und Diplome; Schmucksachen, Agraffen, Wand-Rahmen, Tablett, Untersätze und sonstige Gebrauchs-Gegenstände; Tisch-Dekorationen, Scherz-Artikel, Spielsachen, Lieder, „Bierzeitungen“ (sowie „sonstigen Ulk“), künstliche Insekten als Angel-Köder; historische Apparate zum Insektenfang, -Präparieren und Aufbewahren; altertümliche Insekten-Nadeln bzw. Auslagen von Insekten-Kästen, Reklame-Plakate usw. Die obige Aufzählung dürfte genügen, um dem Leser eine Vorstellung unserer „Kunstkammer“ zu geben.

Erfahrungsgemäß besitzen nun viele Entomologen ähnliche Dinge, welche meist eine gewisse Weile aufgehoben werden, bis sie dann eines Tages verschenkt werden oder verloren gehen, weil das dauernde Interesse für ihr Aufbewahren fehlt.

Unsere Bitte geht dahin, all solche abgebbaren oder überflüssig gewordenen Dinge dem D. Ent. Institut zu überlassen.

Walther Horn
