

On the Curculionidae of the Samoan Islands (Coleoptera).

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Through the kindness of Mr. F. Muir I have been able to examine a small but interesting series of Curculionidae from the collection of Mr. W. M. Giffard, taken by Dr. H. C. Kellers, of the United States Navy, on the small island of Tutuila in the Samoan Group. Very little appears to be known concerning the weevils of this group, and the only records I have been able to find are a few species described by L. Fairmaire, and a short paper by Dr. K. M. Heller on a small collection made by Dr. Reching in 1905.

It seemed, therefore, desirable to get together all the information that was available, and I have thus added descriptions of the Samoan weevils contained in the British Museum, which were mostly collected by the late Dr. H. Swale in 1916 and 1917.

There are four small species of uncertain generic position in Dr. Kellers' collection, which cannot be dealt with owing to the inadequacy or poor condition of the material; and Dr. Heller has recorded an undetermined species of *Diathetes*.

SUBFAMILY OTIORHYNCHINAE.

Sphaerorhinus puncticollis sp. n.

Color black, the elytra often partly or even wholly dark red-brown; the upper surface thinly clothed with extremely flat separated transparent scales, which appear as though they might be merely a sculpturing of the integument; in addition there are the following markings formed of small round greyish-white scales: a patch on the rostrum continuous with a small patch adjoining each eye; a narrow lateral stripe on the basal half of the prothorax; on the elytra, a variable short humeral row of about three small spots, in the middle of the disk a very irregular assemblage of small spots extending from *stria* 1 or 2 to 7, a narrow sutural stripe on the declivity, and a few minute spots near the apex. These markings are extremely variable, reaching their highest development in the females, and being mostly or entirely absent in the males.

Male. *Head* with coarse punctures that are usually more or less

confluent, the eyes moderately convex. *Rostrum* in profile shorter than the head; the declivous anterior portion as long as the dorsal basal part, broad, shiny and with scattered unequal punctures; the basal half with coarse punctures that are hidden by the scaling; the genae with rather long, obliquely raised, white setae. *Antennae* with the scape moderately curved, gradually clavate, and with sparse small round scales (often abraded) and subrecumbent white setae; the funicle with the joints all longer than broad, the order of relative length being: (1, 2), 3, (4, 5, 6, 7). *Prothorax* as long as broad, the sides rather strongly rounded, broadest at the middle, and narrower at the apex than at the base; the sides compressed near the base and with a short longitudinal fold above the compressed area; the whole surface set with coarse separated punctures, which become rather sparser and smaller near the apex, occasionally having a trace of a smooth median line in the basal half. *Elytra* ovate, jointly truncate at the base, the sides strongly rounded, broadest well before the middle, sharply pointed behind, but the outline scarcely sinuate before the apex; the dorsal outline moderately convex, not continuous with that of the prothorax, deepest at about one-third from the base, the posterior declivity comparatively gradual; there are ten rows of finely separated punctures, which are not striate except at the extreme lateral margins and sometimes near the apex, but behind the middle there are usually additional confused punctures between striae 7 and 9; the intervals between the rows are quite smooth and devoid of setae, except near the apex. *Legs* slender, sparsely set with short white setae. Length, 3.5-3.8 mm.; breadth, 1.6-2.2 mm.

Female. With the elytra much broader, the sides strongly sinuate before the apex, and the apex itself more produced and much more acute. Length, 4.8-5.5 mm.; breadth, 2.4-2.8 mm.

Habitat.—Tutuila Island; Center of Island, 700-1200 feet. VI-IX, 1918 (*Dr. H. C. Kellers*).

Type (male) in the British Museum; cotypes in the collection of the Hawaiian Sugar Planters' Experiment Station. Described from twenty-three males and eleven females.

Allied to *Sphaerorhinus* ("*Sphaeropterus*") *seriegranatus* Fairm., from Fiji, but that species differs *inter alia* in its longer rostrum, the declivous portion being shorter than the basal dorsal part; the forehead is striolate; the pronotum is granular between the punctures; the elytra are much less abruptly acuminate behind in the female, the punctures are larger and deeper, and the alternate intervals finely granulate.

Elytrurus samoensis sp. n.

Black, uniformly and densely clothed with pale sandy, dark grey or greenish grey scaling, often with a slight coppery reflection, especially on the legs.

Female. *Head* with shallow confluent punctures that are concealed by the scaling and a deep frontal fovea; eyes much flattened, oval. *Rostrum* a little longer than the head, strongly dilated from base to apex, the sides straight; the dorsal area also dilated from base to apex, confluent punctate and tricostate as far as the insertion of the antennae, the apical part shiny and sparsely punctate. *Antennae* red-brown, the scape rather sparsely setose and without true scales; the funicle with two basal joints equal, the remainder subequal *inter se*; the basal joint of the club as long as the next two together. *Prothorax* as long as its basal width, the sides subparallel from the base nearly to the middle and thence roundly narrowed to the apex; the dorsum gently sloping anteriorly, rather sparsely granulate on the disk but not at the sides, with a broad shallow longitudinal impression, with sometimes a trace of a low median carina. *Elytra* broadly ovate, widest before the middle and rapidly narrowing to a fairly sharp point; the dorsal outline moderately convex longitudinally and transversely, the posterior declivity sloping comparatively gradually to the apex; the dorsum without distinct striae, even when denuded, but irregularly set with minute flat inconspicuous granules; the lateral margins very sharply inflexed, thus forming a more or less obtuse lateral ridge, along which the granules are more noticeable; the inflexed margins with a few very distinct oblique striae and rows of granules. *Sternum* and venter densely clothed with narrow lanceolate scales and with sparse short obliquely raised setae. *Legs*: front coxae broadly impressed in front, the upper anterior margin roundly produced; the femora with sparse recumbent setae (mostly arising from small granules), those on the lower surface rather longer and obliquely raised; the front tibiae rather strongly incurved in the apical third, finely denticulate internally and there armed with a row of transparent spines; the hind tibiae almost straight and very feebly denticulate internally. Length, 12-14.25 mm.; breadth, 5.6-7.2 mm.

Habitat.—Samoan Islands. 1876 (*Rev. J. S. Whitmee*).

Type in the British Museum.

Described from three females.

Elytrurus samoensis var. *setiventris* n.

Agrees entirely with the typical form, except that all the scales on the venter and those on the median part of the meso- and metasternum are setiform.

Habitat.—Tutuila Island: One female, 760-900 feet (*H. C. Kellers*).

Type in the collection of the Hawaiian Sugar Planters' Experiment Station. Type No. 1028.

Described from a single female. Probably a local race.

***Elytrurus bicolor* sp. n.**

Female. Color black, the upper sides of the prothorax and elytra clothed with green scales, with some buff ones intermixed; the remainder of the insect, including the scutellum, covered with dark buff scales, those on the head, rostrum, legs mostly having a coppery reflection.

Very similar structurally to *E. samoensis*, the description of which will apply to it, except in the following points: Scales on the upper surface larger and more nearly circular; the longitudinal impression on the pronotum much narrower, forming a more definite furrow and without any central carina, the granules flatter and more confluent; the sub-lateral ridge on the elytra distinctly sharper, the granules on the disk more conspicuous and forming more or less regular rows, and the setae on the extreme margin of the apical half noticeably longer; the intercoxal process of the mesosternum very deeply emarginate at apex (in *samoensis* it is almost straight or very slightly sinuate); the venter and the middle of the metasternum with narrow lanceolate scales, those on the former becoming gradually narrower posteriorly, so that on the last segment they are almost hair-like; the front tibiae rather more strongly curved and with longer denticulations. Length, 14.25 mm.; breadth, 7 mm.

Habitat.—Samoa Islands, 1875 (*Rev. J. S. Whitmee*).

Type in the British Museum.

Described from a single female.

***Elytrurus bivittatus* sp. n.**

Male. Color black, with markings formed of brilliant pale green scales, the pronotum shiny, the head and elytra dull; the head with a large green spot just behind each eye; the prothorax with a broad green median stripe from base to apex, and a small green spot in the middle of the area on each side of it, the whole of the pleurae being densely clothed with golden scales, which are mingled with green ones along the upper edge; the scutellum with green scaling; each elytron with a single very broad stripe from the shoulder to the apex, lying mainly between striae 4 and 8; the lower surface densely clothed with narrow golden scales, except the base of the mesosternum and the portions of the metasternum lying between the mid and hind coxae, which are bare.

Head very finely and sparsely punctate, each puncture containing a short recumbent seta; the rostral costae encroaching somewhat on the forehead, which bears a deep central fovea. *Rostrum* strongly dilated from base to apex, the sides straight; the dorsal area aciculate, with fine sparse shallow punctures and slight inequalities, a very indefinite median costa, and a more shiny and sparsely punctate lateral costa on each side

curving inwards at the base in the direction of the frontal fovea. Antennae as in *E. samoensis* but proportionately longer. *Prothorax* a little longer than broad, almost parallel-sided from the base to the middle, then roundly narrowed to the apex; the dorsum gently convex longitudinally, with a broad shallow median furrow in the basal half, the shiny area on each side minutely punctate and with scattered rather large punctures, each bordered inwardly or anteriorly by a much flattened granule; most of the punctures bearing minute recumbent pale setae. *Elytra* narrowly ovate; rather sharply pointed behind and almost jointly rounded at the apex; the punctures in the rows separated by their own length or more and each with a depressed granule at its anterior edge; the punctures in the stripes not visible through the sealing, and the rows on the inflexed margins curved, irregular behind and not reaching the base; a large shallow oval impression close to the lateral margin not far from the base; the bare intervals adjoining the suture each with a row of small, much depressed, distant granules; on the broad inflexed margin of the elytra the median interval has a curved row of about 12-16 shiny granules, each bearing a stout upwardly directed red-brown spine, and below it another sparser row of similar but much smaller spines; the extreme lateral margin of the elytra with a fringe of projecting setae on the apical half. *Legs* coriaceous, with numerous low shiny granules (each bearing a stout recumbent seta) and thinly clothed with narrow blue-green scales; the hind femora with a large smooth oval impression on the inner face. *Venter* with the first ventrite very broadly and shallowly impressed. Length, 12 mm.; breadth, 5 mm.

Habitat.—Upolu Island. One male, Tafua Volcano, 1917 (*Dr. H. Swale*).

Type in the British Museum.

A strikingly distinct species.

SUBFAMILY ACICNEMIDINAE.

Acicnemis foveicollis Heller.

A. foveicollis Heller, Denks. K. Ak. Wiss. Wien, LXXXIX: 695, 1913.

Habitat.—Savaii Island (*Dr. Recharging*); Upolu Island (*Dr. Recharging*); Tutuila Island, one male and one female, 760-1070 feet, IV and VI, 1918 (*Dr. H. C. Kellers*). Tahiti; Tonga Islands; Wallis Island.

Genus *Trigonopterus* Fauvel (1862).

It is not clear whether Pascoe's genus *Idotasia* (1872) is really distinct from *Trigonopterus*, but certainly several species

that have been included in it are inseparable from the latter genus. Including the three new ones here described, six species of *Trigonopterus* are now known from the Samoan Islands, and they may be distinguished by the characters given in the following key:

1. (10). The apical portion of the elytra much produced backwards, the dorsal outline sloping gradually behind.
2. (5). Prothorax finely punctate above; elytra almost impunctate on the disk.
3. (4). Elytra with a transverse fascia at the base and an oblong fascia at the apex formed of snow-white hairs, and with two distinct lines of punctures at the lateral margin; sides of prothorax subparallel in the basal half.....*aeneoniveus* Frm.
4. (3). Elytra entirely without white markings and with only one lateral row of punctures; sides of prothorax convergent anteriorly throughout.....*submetallicus* sp. n.
5. (2). Prothorax coarsely punctate; elytra with regular rows of punctures throughout.
6. (7). Prothorax not constricted at the apex; 7th row of punctures on the elytra extending only from the apex to the middle.*bicolor* sp. n.
7. (6). Prothorax constricted at the apex; 7th row of punctures on the elytra extending nearly to the base.
8. (9). Elytra with all nine rows of punctures more or less striate, and with an elongate spot of white scales on each side at the apex.....*binotatus* sp. n.
9. (8). Elytra with only the 1st and 2nd and 9th rows of punctures striate, and without white spots.....*samoanus* Hell.
10. (1). The apical portion of the elytra not produced backwards, the dorsal outline abruptly declivous behind....*cribrellicollis* Frm.

Trigonopterus submetallicus sp. n.

Color uniform shiny black, purplish or bronze.

Male and female. *Head* with distinct separated punctures, which gradually disappear on the extreme vertex; the forehead with much coarser confluent punctures and short erect pale setae; a deep furrow along the upper margin of each eye. *Rostrum* (male) with three well-marked dorsal carinae extending nearly to the apex, and an additional carina on each side forming the upper edge of the scrobe; the surface set with short suberect white setae placed transversely, except at the base

where the setae are longer, scale-like and directed backwards; in the female the three dorsal carinae disappear behind the middle, the anterior half being bare and shiny, with a double median row of fine punctures and a deep lateral stria on each side. *Prothorax* a little broader than long, broadest at the base, with the sides almost straight and gradually narrowing for four-fifths of its length, then narrowing more rapidly to the apex, but not constricted; the dorsal apical margin very slightly arcuate, the basal margin without any transverse row of punctures; the dorsal punctures very fine and widely spaced, but becoming larger towards the front margin; laterally the punctures are very large and coarse in the front half, and fine and sparse behind. *Elytra* rather elongate (3:2), very slightly widening for a short distance behind the base and then rather rapidly narrowing to the apex, the sides being almost straight; the apex broadly subtruncate, with the external angles rounded; the surface practically impunctate except along the base, lateral margin and the apex, but sometimes with faint traces of rows of minute punctures; at the base a transverse row of large single punctures, which is continued along the lateral margin (but the punctures are here much smaller and shallow) and becomes a punctate stria at the apex; the whole apical area rugosely punctato-striate, each puncture containing a minute pale seta; dorsal outline continuous with that of the pronotum, deepest near the base, thence sloping (by no means steeply) to the apex. *Legs* sparsely clothed with short white setae, but no scales; femora not toothed, coarsely punctato-striate on the distal half, sparsely and finely punctate towards the base. Length, 3.25-4 mm.; breadth, 1.4-1.8 mm.

Habitat.—Tutuila Island: 1000 feet, VIII, 1918 (*Dr. H. C. Kellers*).

Type in the British Museum; cotypes in the collection of the Hawaiian Sugar Planters' Experiment Station.

Described from nine males and three females.

Trigonopterus binotatus sp. n.

Head, prothorax and legs black; elytra, mesosternum and metasternum chestnut-brown, the base and apex of the elytra blackish; on each elytron a small elongate patch of dense white scales at the apex, lying between striae 3 and 6, and recumbent white setae in each of the punctures in the apical fourth of the external stria.

Male. *Head* with strong separated punctures, which are much larger and confluent on the forehead, which bears suberect white setae; a narrow furrow above each eye. *Rostrum* with three dorsal carinae extending for three-fourths of its length (the median one much broader than the other two) and a lateral carina forming the upper edge of the scrobe; the furrows between the carinae shallowly and confluent punctate, and the apical area with very large shallow punctures. *Prothorax* a little broader than long, with the sides subparallel for about one-third from the base,

then roundly narrowed and distinctly constricted at the apex; the dorsal apical margin truncate, the basal margin impressed and with a transverse row of punctures; the entire upper surface fairly evenly set with large deep separated punctures and without any smooth median line; laterally the punctures are larger and much more crowded in the anterior half, but very sparse in the smooth basal impression for the reception of the anterior femora. *Elytra* scarcely dilated behind the base and then rapidly narrowing to the broadly rounded apex, the sides being almost straight; the basal margin elevated, subtruncate, but curving slightly forwards at the external angles; the complete regular rows of deep spaced punctures all more or less shallowly striate, the spaces between the punctures being as long or longer than the punctures themselves, and a basal puncture in each row much larger than the rest; intervals 1, 2 and 5 each with a complete row of punctures, the other dorsal intervals with only a few punctures towards the base; the posterior declivity rather longer and less steep than in *T. submetallicus*. *Legs* clothed with rather stout white setae, and the posterior pairs of femora with a row of elongate white scales along the dorsal edge; the femora not toothed, with irregular rows of deep punctures from base to apex, the apical punctures much longer and more or less confluent. Length, 4 mm.; breadth, 1.8 mm.

Habitat.—Tutuila Island: One male, 2141 feet, 22, IX, 1918 (Dr. H. C. Kellers).

Type in the collection of the Hawaiian Sugar Planters' Experiment Station. Type No. 1029.

Trigonopterus bicolor sp. n.

Male and female. Color shining black, the elytra chestnut-brown, with the apex blackish; devoid of scaling or appreciable setae. *Head* impunctate on the vertex, closely punctate in front and confluent so on the forehead; a deep narrow furrow above the eye. *Rostrum* (male) with the usual five carinae extending almost to the apex, the three dorsal ones about equal in width, the apical area rather uneven but scarcely punctate; the setae inconspicuous, very short and recumbent; in the female the dorsal carinae cease behind the middle, the apical portion being strongly punctate, with a broad impunctate median stripe in its basal half. *Prothorax* almost as long as broad, gradually narrowed from base to apex, the sides gently rounded and not constricted at the apex; the basal margin impressed and with a transverse row of punctures, the apical dorsal margin distinctly arcuate; the whole upper surface with widely spread strong punctures, which are rather less dense towards the sides and base; the lateral punctures similar to those on the disk. *Elytra* elongate, the sides slightly rounded close to the base, then rapidly narrowed to the produced and broadly rounded apex; the basal margin truncate and slightly raised; the rows of punctures scarcely striate except towards the apex, rows of seven and eight uniting in the basal half to form

a single row of large punctures; the basal puncture in each row larger than the others, and in the male all the punctures in the basal half of the lateral rows are very much larger than those on the disk, but this is much less marked in the female; the dorsal intervals with single rows of very minute distinct punctures. *Legs* with sparse short white setae; the femora not toothed, the punctures dense and coarse on the apical half, but forming regular rows towards the base. Length, 2.8 mm.; breadth, 1.2 mm.

Habitat.—Tutuila Island: Three males and one female, 760-1200 feet, IV and VI, 1918 (*Dr. H. C. Kellers*).

Type in the British Museum; cotypes in the collection of the Hawaiian Sugar Planters' Experiment Station.

Trigonopterus samoanus (Heller).

Idotasia samoana Heller, Denks. K. Akad. Wiss. Wien, LXXXIX, 696, 1913.

Habitat.—Upolu Island; under bark of a dead tree, 1905 (*Dr. Reching*); Tutuila Island: Eight males, 900-1200 feet, VI-VII, 1918 (*Dr. H. C. Kellers*).

Trigonopterus aeneoniveus Frm.

Trigonopterus aeneoniveus Fairmaire, Le Naturaliste, 1879, p. 3; Ann. Soc. Ent. France, 1881, p. 315.

Habitat.—Samoan Islands. (Unknown to the writer.)

Trigonopterus cribrellicollis Frm.

Trigonopterus cribrellicollis Fairmaire, Ann. Soc. Ent. France, 1881, p. 316.

Habitat.—Samoan Islands.

The description suggests that this possibly is not a true *Trigonopterus*.

Orochlesis nigrofasciata sp. n.

Female. Color reddish brown, densely clothed above with light brown scaling variegated with whitish and blackish scales; the head with the scaling pale brown, rather darker on the forehead, and with a short median whitish stripe on the vertex; the pronotum with a very irregular and indefinite whitish median stripe, and a small blackish patch on each side of it at the base; the elytra with a few whitish scales round the scutellum, a small well-defined oblong white patch on interval 4 at one-third from base, a narrow oblique blackish band running from near the

suture at the top of the declivity forwards to stria 7 a little in front of the middle, and a few other scattered whitish and blackish scales; the prosternum with separated broad pale brown scales interspersed with narrow ones; the rest of the lower surface very thinly clothed with small setiform scales, each arising from a puncture.

Head with the forehead narrowing from the base of the rostrum to the top of the eyes, without any median fovea. *Rostrum* rather flattened dorso-ventrally, strongly narrowed from the base to the antennae and thence almost parallel-sided; the apical two-thirds bare, shiny and with sparse minute punctures; rather coarsely punctate at the base with a few pale scales. *Antennae* with the two basal joints of the funicle equal, the remainder transverse and becoming successively wider. *Prothorax* about twice as broad as long, parallel-sided for a short distance from the base, then rapidly narrowing to the well-marked apical constriction; the basal margin truncate, except for a small rounded projection in front of the scutellum; the dorsal apical margin strongly rounded; the dorsum even, the large close punctures mostly hidden by the scales, which are much larger than those on the elytra. *Scutellum* punctiform, bare, glabrous. *Elytra* not broader at the shoulders than at the base of the prothorax, the sides gently rounded, the base truncate and submarginate, the apices jointly and obtusely rounded; the shallow striae with large separated punctures that are not covered by the scaling, but become much smaller behind; striae 8, 9 and 10 (abbreviated) much deeper than the others; the dorsal intervals broad and even, each bearing a row of small recumbent scale-like setae that are not easily discernible; the dorsal outline not continuous with that of the thorax, but rising rather rapidly to about one-third from the base and sloping more gently to the apex. *Legs* without any angular tooth on the femora. *Sternum* with the metasternum between the mid and hind coxae as long as the mid coxa. Length, 3.2 mm.; breadth, 1.8 mm.

Habitat.—Upolu Island: One female, Tafua Volcano, 1917 (Dr. H. Swale).

Type in the British Museum.

Closely allied to *O. solea* Pascoe (Jl. Linn. Soc. Lond., XI, 195, 1873), from Batchian, which, however, has two white spots on the front margin of the pronotum and two white spots on each elytron; the prothorax begins to narrow immediately from the base, is much more produced in front and is coarsely and reticulately punctate; the femora bear a very small angular tooth; the metasternum between the coxae is shorter than the mid coxa, etc.

SUBFAMILY CALANDRINAE.

Cosmopolites sordidus (Germ.).

Habitat.—Upolu Island (*Dr. H. Swale*).

Rhabdocnemis obscura (Boisd.).

Habitat.—Upolu Island: under bark (*Dr. Reching*); Tutuila (*Dr. H. C. Kellers*).

Calandra oryzae L.

Habitat.—Upolu Island (*Dr. Reching*).

Diocalandra taitensis (Guer.).

Habitat.—Tutuila Island: One female, center of island, 900-1200 feet (*Dr. H. C. Kellers*).

SUBFAMILY COSSONINAE.

Genus *Glyphostethus* nov.

Head globular, deeply imbedded in the thorax; the eyes very shortly ovate, entirely lateral, coarsely faceted. *Rostrum* short and stout, only half as long as the prothorax, and quite straight, but directed downwards; the scrobes deep, widening behind and passing rapidly beneath the rostrum, but broadly separated at the base. *Antennae* inserted beyond the middle of the rostrum; the scape short and stout, not reaching the eye, widening from base to apex; the funicle with joint 1 a little longer and much broader than 2, 3 to 7 transverse and becoming successively wider; the club shortly oval, as long as the three preceding joints, the apical third spongy. *Prothorax* strongly and broadly constricted in front, with the apical dorsal margin so much produced that the head, when deflected, is invisible from above. *Scutellum* small, punctiform. *Elytra*, oblong-ovate, much broader at the shoulders than the prothorax, subtruncate at the base, and with stria 10 very short. *Legs* with the femora hardly clavate, unarmed; the tibiae straight, slightly compressed and strongly uncinat; the tarsi four-jointed, joint 3 not broader than 2, the claws free and simple. *Sternum*: the prosternum below the level of the metasternum, with a deep furrow in front of the coxae, the front margin very deeply sinuate, the coxae rather narrowly separated; the central piece of the mesosternum trapezoidal, narrowed behind, the front margin shallowly sinuate; the metasternum between the coxae rather longer than the mid coxa.

Genotype, Glyphostethus cancellatus sp. n.

The only known species presents a strong superficial resem-

blance to *Dryophthorus*, from which it differs in not having the prosternum in one plane, in its hood-like pronotum, small antennal club, short scape, short metasternum, and, above all, in its deep prosternal furrow and strongly sinuate gular margin, characters which I have not observed elsewhere in the Cossoninae.

***Glyphostethus cancellatus* sp. n.**

Male. Color dull black, the foveae filled with light brown incrustation (possibly adventitious); the antennae and legs red-brown.

Head finely rugulose all over, and with a faint transverse depression across the forehead. *Rostrum* narrowed from the base to the middle and then gradually dilated to the apex; the upper surface distinctly rugulose, without furrows or carinae. *Prothorax* as long as broad, very convex with the sides gently rounded in the basal two-thirds, strongly and very broadly constricted at the apex, the whole apical area being depressed much below the level of the posterior portion; the basal margin truncate and depressed, the apical strongly and broadly rounded; the whole surface covered evenly with large reticulate foveae. *Elytra* parallel-sided from the shoulders to beyond the middle, sharply constricted before the apices, which are jointly and broadly rounded; the basal margin truncate in the middle as far as interval 4, and shallowly bisinuate between that and the shoulder; the broad shallow striae with regular rows of large reticulate foveae, the septa in the rows being as broad as the intervals between the rows; the intervals finely rugulose; a shallow impression behind the scutellum and a much deeper one on each side near the apex. Length, 3.25 mm.; breadth, 1.4 mm.

Habitat.—Upolu Island: One male, Apia, 1916 (*Dr. H. Swale*).

Type in the British Museum.

***Pentarthrum cylindricum* Woll.**

Habitat.—Upolu Island: One female, Apia, 1916 (*Dr. H. Swale*).

This species is widely distributed throughout the Tropics.

***Oxydema fusiforme* Woll.**

Habitat.—Upolu Island: Six males and eight females, Apia, 1916; one male, Tafua Volcano, 1917 (*Dr. H. Swale*).

This is another widely distributed species. Originally described from Ceylon, it occurs also in the Seychelles, Rodriguez, the Marquesas Islands and the Hawaiian Islands. Speci-

mens from the last-named locality have been described under the name of *Pseudolus hospes* Perkins.

Cossonus dentipes sp. n.

Male, female. Color shiny black, the apical half of the rostrum, the antennae and the legs reddish or yellowish brown, and the body with markings of the same color; the pronotum with a marking like the head of an inverted trident, its base resting on the subapical transverse furrow and the three prongs almost reaching the base of the pronotum, the median one being a little broader and better defined than the others; each elytron with a large oblong basal patch lying between stria 2 and the shoulder and varying from rather longer than to twice as long as broad, and a small ovate preapical patch lying between striae 1 and 3; the prosternum with the sides broadly and the front and hind margins narrowly black. The rest yellow-brown, a narrow pale band connecting the prosternal with the pronotal patch anteriorly; the rest of the sternum more or less suffused in the middle, and the venter along the margins, with red-brown.

Head with only a very few minute punctures on the vertex, which is separated from the forehead by a very shallow transverse impression; the forehead rather strongly and closely punctuate, with a deep central fovea. *Rostrum* half the length of the prothorax in the male, shorter in the female, subcompressed laterally in the basal half, strongly dilated and subquadrate in the apical half; the punctures rather finer and more sparse than those on the forehead. *Prothorax* about as long as broad, with the sides gently rounded, broadest behind the middle, strongly constricted near the apex, the constriction continued across the disk as a deep curved punctate furrow; the basal margin shallowly bisinuate, and just within it a deep transverse impression on each side of the middle line; the disk flattened, with two very irregular admedian rows of large punctures enclosing a smooth strip, the adjoining areas of the disk on each side with sparse punctures, those at the sides being much denser and coarser. *Elytra* oblong-ovate, parallel-sided from the shoulders to the middle; the shallow striae containing large separated punctures which are much diminished behind; the intervals almost flat, not narrower than the punctures, and bearing rows of extremely minute punctures. *Legs* with the front femora of the male armed with a stout tooth, those of the female simple. Length, 4 mm.; breadth, 1.2 mm.

Habitat.—Upolu Island: One male, one female; Apia, 1916 (Dr. H. Swale).

Type in the British Museum.

I am not acquainted with any other Cossonine that has a tooth on the femora, and its occurrence as a sexual character is even more remarkable. The greater length of the rostrum

in the male is also a very unusual feature, though it occurs in the allied genus *Rhopalomesites*.

Cossonus limbaticollis sp. n.

Color shiny black, the apex of the rostrum, the antennae, legs and markings on the body red-brown; the pronotum with a broad ill-defined red-brown stripe on each side; the elytra each with a broad indefinite stripe from the base to the middle, lying between stria 2 and the shoulder at the base and gradually narrowing behind, and with a faint red-brown spot near the apex; the metasternum with a large red-brown patch on each side.

Head with the vertex not markedly separated off from the forehead; the latter with a deep central fovea and fine sparse punctures, those on the vertex even smaller and much more distinct. *Rostrum* less than half the length of the pronotum (2:5), quite cylindrical, slightly curved, and very finely and sparsely punctate. *Pronotum* as long as broad, with the sides gently rounded, broadest much behind the middle, scarcely constricted at the apex, and without any trace of a transverse furrow; the basal margin deeply bisinuate, and just within it a deep lunate impression on each side of the middle line; the disk not impressed, fairly evenly set with small widely-spaced punctures, leaving an ill-defined impunctate strip from the base to beyond the middle, the lateral punctures closer and slightly larger than those on the disk. *Elytra* suboblong, elongate, parallel-sided from the shoulders to beyond the middle, and more broadly rounded at the apex than usual; the striae shallow, especially towards the sides, with rather widely-spaced punctures, which become much smaller behind; stria 10 deep and strongly punctate from the base to the hind coxa, there ceasing abruptly and continued as a row of minute punctures for the length of the first ventrite, then increasing in size and merging into a common furrow with stria 9; the intervals a little broader than the striae, slightly convex, and almost impunctate. Length, 4 mm.; breadth, 1.25 mm.

Habitat.—Tutuila Island: One female, eastern end of island, 1070 feet (*Dr. H. C. Kellers*).

Type in the collection of the Hawaiian Sugar Planters' Experiment Station. Type No. 1030.

Stereoderus binodifrons sp. n.

Female. Color shiny black, with the sides and lower surface of the rostrum, the antennae, the tarsi and the apical margin of the venter red-brown.

Head minutely coriaceous, evenly set with fine distant punctures and with an indistinct median longitudinal depression; the forehead with a small raised area in the middle bearing two closely placed rounded granules. *Rostrum* very short, as usual, sculptured like the head, with

a small median granule near the base; the epistome asymmetrically bisinuate, the left sinus being broader than the right. *Prothorax* longer than broad, widest near the base, rapidly narrowed behind and gradually narrowed in front, very shallowly constricted near the apex, the constriction continued across the dorsum as a curved shallow impression; the basal margin impressed and punctate; the dorsum very evenly set with strong widely spaced punctures, except along a short median line that reaches neither base nor apex, the apical area much more finely punctate. *Elytra* with five shallow dorsal striae containing strong spaced punctures, the striae disappearing and the punctures becoming much smaller behind; beyond stria 5 four rows of small widely separated punctures, those in row 9 being much closer together than those in the other rows; row 10 striate and shallowly punctate, being bordered below by a continuous carina that extends from the shoulder nearly to the suture; the dorsal intervals each with an irregular row of very minute punctures. *Sternum*: mesepimeron impressed on its posterior half and with traces of shallow punctures along the anterior edge of the impression. Length, 6 mm.; breadth, 1.8 mm.

Habitat.—Upolu Island: One female (*Dr. H. Swale*).

Type in the British Museum.

Closely related to *S. pacificus* Woll., which differs in the following particulars: The forehead has only a single prominence; the punctures on the pronotum are much finer, and the subapical transverse impression is shallower and interrupted in the middle; on the elytra the punctures in rows 6-8 are not more spaced than those in 9, and stria 10 (with the carina below it) is broadly interrupted for the space corresponding to the first ventrite; the mesepimeron is not impressed and bears eight or nine strong punctures.

It may be noted that *Rhyncolus obsoletus* Fauvel, from New Caledonia, is really a *Stereoderus*.

Temnorhamphus samoanus sp. n.

Color entirely piceous, or with the prothorax and the suture of the elytra blackish.

Head closely and deeply punctate, with a small frontal fovea. *Rostrum* slightly longer than broad, punctured like the head, and with a broad shallow median furrow. *Antennae* with joints 2-5 of the funicle transverse, the club short ovate, compressed. *Prothorax* a little longer than broad, widest near the base, rapidly narrowed behind, more gradually so in front, and shallowly constricted at the apex; the basal margin truncate and depressed below the level of the disk; the dorsum

coarsely, closely and evenly punctate, except on an abbreviated smooth central line, the interspaces narrower than the punctures; the sides more shallowly punctate. *Elytra* cylindrical, a little wider than the prothorax, slightly produced at the apex, but the margin not explanate; crenate-striate, the striae not becoming shallower behind; the intervals convex, smooth, each with a single row of minute punctures; the apical portion of intervals 7 and 9 thickened and rather prominent and uniting at the apex with 3; interval 9 obtuse and not carinate. Length, 3-3.5 mm.; breadth, 0.8-1 mm.

Habitat.—Upolu Island: Two examples (sex uncertain), Apia, 1916 (*Dr. H. Swale*).

Type in the British Museum.

Very similar to the only other described species of the genus, *T. latirostris* Champion (Trans. Linn. Soc. Lond., Zool. (2), XVI, July, 1914, p. 461), from the Seychelles, which differs as follows: The antennal club is smaller; the prothorax is much more finely punctate and more strongly constricted at the apex; the intervals on the elytra are rugulose, and 9 is carinate on the posterior half; interval 3 is free at the apex, and the apical junction of 7 and 9 is strongly produced laterally into a laminate angle, behind which the apical margin is narrowly explanate.