VI.—MEMOIRS ON THE COLEOPTERA OF THE HAWAIIAN ISLANDS. BY THE REV. T. BLACKBURN, B. A., AND DR. D. SHARP. (Plates IV. and. V.)

[Read, March 17th, 1884.]

INTRODUCTORY.

SEVEN years ago very little was known of the entomology of the Sandwich, or as they are now, perhaps more correctly, called the Hawaiian, Islands. About that time Mr. Blackburn commenced a residence in the archipelago, at Honolulu, and has since devoted as much time as the duties of his official position permitted to the subject of its entomological fauna. As the result of his activity, numerous Papers have been published in several scientific journals; and as Mr. Blackburn has now ceased to reside in the islands, we have thought it well to make what, so far as Mr. Blackburn's researches are concerned, may be called a final resumé of our present knowledge of the Coleoptera.

This object, it has appeared to us, might most satisfactorily be accomplished by Three Memoirs:—

- I. Descriptions of such genera and species as are hitherto undescribed.*
- II. A Systematic Catalogue, with a brief statement as to the habits, habitat, &c., of each species.
- III. Topographical Table, accompanied by some generalizations, summaries, and comments on the Coleopterous fauna of the archipelago.

I.

ON SOME NEW SPECIES AND GENERA OF COLEOPTERA.

In this Memoir, some of the descriptions have been made by Mr. Blackburn, and some by myself; they are arranged in sequence, our individual responsibilities being indicated by appending to each description the initials of the describer, viz. T. B. for the Rev. Thomas Blackburn, and D. S. for David Sharp. The nomenclature and classification indicated is very little, because all that is necessary is given in the immediately following Systematic Catalogue of Hawaiian Coleoptera.

D. 8.

* A short account of the Islands and of Mr. Blackburn's collecting there is appended.

TRANS. BOY. DUB. SOC., N.S. VOL. III. S



Fam. SCOLYTIDÆ.

XYLEBORUS.

Xyleborus obliquus, n. sp.—Piceus, nitidus (? antennis pedibusque testaceis); thorace anterius crebre rugoso, posterius lævigato; elytris seriatim punctatis, apice longius oblique declivo fere mutico. Long. 34 m.m.

This is very similar to Xyleborus truncatus, but the truncate portion of the elytra is still more prolonged, and is smooth and shining, so that two or three of the series of punctures mark its surface in a very conspicuous manner. the commencement of the truncation, close to the suture, there is a very minute asperity.

Found very rarely near Honolulu; the only individual I have seen is deprived of all its limbs.

D. S.

Xyleborus truncatus, n. sp.—Fusco-niger, elytris picescentibus, antennis pedibusque testaceis; thorace anterius crebre rugoso, posterius lævigato; elytris seriatim punctatis, apice truncato fere mutico, tantum tuberculis omnium minutissimus quatuor munitis. Long. 21 m.m.

Extremely similar to the European Bostrichus saxesenii, just perceptibly broader, and with the elytral apex a little more truncate, and broader. The punctures of the elytra on the basal portion are similar to those of B. saxesenii; but the apical truncation is excessively obscurely asperate, and there is a just perceptible tubercle close to the suture, at the commencement of the truncation, and another in a line with it near the apex.

Oahu.

D. S.

Xyleborus rugatus, n. sp.—Nitidus; subcylindricus; rufopiceus, antennis pedibusque testaceis; setis longis minus sparsim vestitus; prothorace antice asperato, postice obscure rugato, grosse confuse punctato; elytris subtilius subseriatim punctatis, postice obscure declivibus, parte declivi asperula minuta triseriatim ferenti. Long. $3\frac{1}{4}$ m.m.

This species is allied to X. immaturus, mihi, and X. truncatus, Sh. It differs from the former in being clothed with longer and more numerous setæ, especially about the thorax, the hinder part of which is sub-opaque, with fine wrinkles, and bears numerous rather coarse but shallow and feeble punctures; also in having the punctuation of the elytra coarser, and the apical asperities of the same very minute. From the latter it differs in having the hinder part of the thorax less smooth, in being much less sparingly clothed with setæ, in having the hinder portion of the elytra



scarcely at all flattened, and the apical asperities (though not so large, yet) more numerous, and running in rows. From X. frigidus, mihi, it differs in form (being much wider), and in having the rows of punctures on the elytra (as in X. truncatus and X. immaturus) placed in evident though not well defined striæ.

A single specimen was taken on Oahu, but the exact particulars of the capture have been lost.

т. в.

D. S.

Xyleborus insularis, n. sp.—ruiescens, erytris piceo-rufis, antennis pedibusque testaceis, thorace anterius crebre rugoso, posterius lævigato; elytris seriatim punctatis, apice oblique declivo tuberculis duobus conspicuis munito, ante eas tuberculis plurimis minoribus. Long. 3 m.m.

Closely allied to X. truncatus, but rather larger, and with the apex of the elytra less abruptly truncate, and more conspicuously armed. The retuse portion has its surface a little uneven; and near the suture, just before the middle, there is on each side a rather large tubercle. Just before, and at the commencement of, the truncation there are six or eight smaller tubercles, irregularly placed, and at the sides there are a few quite minute tubercles.

Oahu and Kauai.

|male only, = agamus

Xyleborus immaturus, n. sp.—Nitidus; subcylindricus; ferrugineus, ore nigricante; setulis sparsim vestitus; prothorace antice asperato, postice subnitido sparsim subtilissime punctato; elytris subtiliter subseriatim punctatis, postice obscure declivibus, parte declivi asperula parva triseriatim ferenti. Long. 23-3 m.m.

I have specimens of this insect from widely separated localities. They all have an immature appearance, but I think this is due only to the paleness of the colour. X. immaturus is allied to X. truncatus, Sh., but has the elytra much less abruptly sloped behind, with the apical portion hardly at all flattened. It is decidedly more setulose than X. truncatus, and the apical asperities are much more strongly developed, and are placed in three longitudinal series on each of the elytra. There are indications of some of the rows of punctures (which are very fine) being in obsolete striæ.

This species has occurred in dead branches of trees on the mountains of Oahu, at an elevation of about 2000 feet; also on Hawaii.

T. B.

saxeseni

Xyleborus frigidus, n. sp.—Angustus; cylindricus; piceo-niger, prothorace refuscente, antennis pedibusque testaceis; setulis brevibus sparsim vestitus; prothorace antice asperato, postice subnitido obsolete punctato; elytris subnitidis subtilissime seriatim punctatis, postice obscure declivibus, parte declivi asperula minuta subaqualia triseriatim ferenti. Long. 23 m.m.



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This insect resembles X. immaturus, mihi, in having on the hinder part of each of the elytra about three rows of nearly equal tubercles; but it differs in that the tubercles are conspicuously smaller than in X. immaturus, and also in being an extremely narrow, cylindrical, and less shining species, without any trace of strize on the elytra where the punctures in the rows are excessively fine. My specimen shows only slight indications of being very sparingly furnished with a few short setze, but may possibly be somewhat abraded.

A single specimen was taken out of a dry twig of Acacia falcata, on Haleakala, Maui, at an elevation of about 4000 feet.

T. B.

HYPOTHENEMUS.

Hypothenemus griseus, n. sp.—Brevis; latior; opacus; pallide brunneus; antennis pedibusque flavis; setulis tenuibus nec brevibus vestitus; prothorace in parte anteriori fortiter sparsim rugoso, in parte posteriori subtilissime granulato; elytris creberrime subtiliter punctatis, distincte striatis, interstitiis leviter convexis. Long. 2 m.m.

This species is about the size of the largest H. maculicollis, Sh. Though I have carefully examined the antennæ under a compound microscope, I cannot feel sure whether there are three or four joints in the funiculus. The fine and rather long hairlike setæ with which it is (not very sparingly) clothed, and the sculpture of the elytra—which are rendered opaque by their extremely fine punctuation, and are quite deeply striated—separate the insect widely from every ally known to me. Its colour is a light umber brown, inclining to grey, which is somewhat darker on the thorax.

A single specimen was taken from the stem of a poppy on the plains near Honolulu, where (and elsewhere) the plant grows plentifully; frequent examination of the stems failed, however, to produce the insect again.

Т. В.

Fam. ANTHRIBIDÆ.

Mauia (nov. gen.).

The following are the characters of the insect, apparently allied to Ozotomerus, for which I find it necessary to propose the above name:—Head much wider than long; rostrum about equal in length and width to the head (the two together being scarcely longer than wide), with its sides parallel, and apex very obscurely emarginate; rostral scrobes lateral, and consisting of a rounded cavity scarcely



Fam. SCOLYTIDÆ.

Tribe Scolytini.

Genus CXXXVI.—Xyleborus. Mun. Cat. ix. p. 2684.

398. Xyleborus truncatus, Shp., ante, p. 192.

ins. Oahu. (?) Imm.

In decaying wood.

399. Xyleborus insularis, Shp., ante, p. 193.

Ins. Oahu, Kauai. (?) Imm.

Occurs in decaying wood on the Waianae mountains, Oahu, and also on Kauai.

400. Xyleborus obliquus, Shp., ante, p. 192.

Ins. Oahu, Hawaii. (?) Imm.

This species has been taken from decaying wood on the mountains both of Oahu and Hawaii.

401. Xyleborus rugatus, Blackb., ante, p. 192.

Ins. Oahu. (?) Imm.

Unique.

402. Xyleborus immaturus, Blackb., ante, p. 193.

Ins. Hawaii, Oahu. (?) Imm.

This species has been taken from decaying wood on the mountains both of Oahu and Hawaii.

403. Xyleborus frigidus, Blackb., ante, p. 193.

Ins. Maui. (?) Imm.

A single specimen was taken from decaying wood at an elevation of about 4000 feet, on Haleakala.

Genus CXXXVII.—Hypothenemus. Mun. Cat. ix. p. 2679.

404. Hypothenemus eruditus, Westd. Trans. Ent. Soc. Lond. 1. p. 34, pl. 7.

Ins. Oahu. (?) Int.

In bark of acacia, on the plains near Honolulu.

405. Hypothenemus maculicollis, Shp. Trans. Ent. Soc. Lond. 1979, p. 101.

Ins. Oahu. (?) Int.

Has occurred in bark of trees in several mountain localities near Honolulu.

406. Hypothenemus griseus, Blackb., ante, p. 194.

Ins. Oahu, (?) Imm.

A single specimen occurred in the stem of a poppy, on the plains near Honolulu.



Tribe PLATYPINI.

Genus CXXXVIII.—Crossotarsus. Mun. Cat. ix. p. 2696.

407. Platypus externedentatus, Fairm. Rev. Zool. 1850, p. 51.

Ins. Oahu. (?) Int. Tahiti.

A short series occurred in the trunk of an acacia in Honolulu.

Fam. ANTHRIBIDÆ.

Genus CXXXIX.—Mauia. Blackb., ante, p. 194.

408. Mauia satelles, Blackb., ante, p. 195.

Ins. Maui. (?) Imm.

A single specimen occurred low down in the Wailuku Valley, Maui. It was beaten from a species of acacia.

Genus CXL.—Aræocerus. Mun. Cat. ix. p. 2749.

409. Curculio fasciculatus, De Geer. Ins. v. 276, t. 16, f. 2.

Ins. Hawaii, Maui, Lanai, Oahu, Kaui. Imm. Widely distributed.

Common in decaying leaves wherever they are heaped up from any cause, and occasionally beaten from fresh foliage. Very variable. This insect has no saltatory powers whatever.

Fam. CERAMBYCIDÆ.

Tribe PARANDRINI.

Genus CXLI.—Parandra. Mun. Cat. ix. p. 2751.

410. Parandra puncticeps, Shp. Trans. Ent. Soc. Lond. 1878, p. 202.

Ins. Oahu. (?) Imm. (?) Philippine Islands.

Under the bark and in the wood of acacia falcata on the mountains. This species or a closely allied one occurs in the Philippine Islands.

Tribe PRIONINI.

Genus CXLII.—Ægosoma. Mun. Cat. ix. p. 2776.

411. Ægosoma reflexum, Karsch, Berl. Ent. Zeit. xxv. p. 7, taf: 1. f. 11.

Ins. Hawaii. (?) Int.

Taken by me at a place called Oolaa on Hawaii, at an elevation of about 2000 feet above the sea, walking on the rafters of a native hut. February (T. B.) "Grove Ranche," Karsch.

