## NEW COLEOPTERA FROM THE SOUTH - WEST.—IV. BY H. C. FALL, PASADENA, CALIF.

The greater number of species made known in this, the fourth paper\* of miscellaneous descriptions of Coleoptera from the South-west, are from the Peninsula of Lower California. These descriptions were written some eight or nine years ago, and are based upon material received through Mr. Chas. Fuchs, from the California Academy of Sciences. It was the intention, when sufficient material had been obtained, to publish a third supplement to the "Coleoptera of Baja California," by Dr. Horn, but the source of supply gave out very soon after the receipt of the first installment. One of the species described at that time-Saxinis Hornii-was shortly after received from San Diego, Cal., and this name appears in my List of the Coleoptera of Southern California, the description, however, being accidentally omitted. It is high time that this Nomen nudum was made good, and it is thought best to present also the description of the other new species written at the same time. The opportunity is taken to add a few other new species collected by Mr. Beyer in the same region, together with two or three more from various sources.

Canthydrus levis, n. sp.—Rather broadly oval, more narrowed behind, colour yellowish-testaceous, elytra darker, upper surface polished throughout. Head impunctate, thorax subimpunctate, except for a line of rather fine punctures along the front margin, and a somewhat numerous group of coarser but feebly impressed punctures irregularly placed in the median basal region. Elytra with intermixed fine and somewhat coarser, feebly impressed punctures, which are slightly better defined in two discal lines bearing fine short hairs. Beneath almost impunctate, except the sternal plates, which are strongly, rather coarsely punctate, each puncture bearing a posteriorly-directed bristle-like hair. The prosternum is broadly rounded anteriorly, and bears at the middle, on either side of the central line, one long and several much shorter spiniform bristles, set subtransversely. The transverse lines of punctures of the abdominal segments are almost wanting.

Length, 2 mm. One example, San Jose del Cabo. Type in the collection of the California Academy.

This species is very easily distinguishable from any previously described from our fauna, and I am unable to identify it with any of the Mexican forms mentioned in Sharp's Monograph.

<sup>\*</sup>The third paper of this series was published in the CAN. ENT., Vol. XXXIX (1907), page 235.

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As compared with our other species, it is decidedly smoother than any, and less elongate than all except possibly *puncticollis*, the form of which I do not now recall. In *bicolor* and *gibbula*, the only other species now before me, there are three or four elongate spiniform bristles on either side of the prosternum in front, in place of the single long and one or two shorter ones in the present species; perhaps an individual variation.

Scymnus bijugus, n. sp.—Broadly oval, outline nearly continuous, black; head, anterior part of the side margins of the prothorax and two large transverse connected spots on each elytron, yellow; under surface brownish, legs entirely pale. Upper surface very finely punctulate and moderately shining; prosternum without elevated lines, sides of mesosternum and abdomen sparsely but more distinctly punctate than the elytra; metacoxal line incomplete, parallel with the first ventral suture; abdomen with six segments.

Length, 1.5 mm. One example, San Jose del Cabo. Type in the collection of the California Acadamy of Sciences.

Belongs to Horn's Group B, and must be associated with *amabilis* and *guttulatus*, from both of which it differs by its more broadly oval form and the elytral markings. The elytral spots are nearly equal in size, and are rather narrowly connected at the middle.

Bostrichus fasciculatus, n. sp.—Blackish-brown, moderately shining. Head closely punctate, front feebly margined at sides. Prothorax as wide as long, front margin sinuate, with two slender unciform processes; hind angles prominent, dentiform; entire upper surface strongly though not very densely tuberculate, and clothed thinly with moderately long, recumbent, subinterlacing yellowish-brown hairs, with numerous erect pointed tufts of blackish hairs. Elytra coarsely, deeply, subcribrately punctate, without costæ; vestiture similar to that of the prothorax, the interspersed pointed tufts of blackish hairs longer and very conspicuous.

Length, 7 mm.; width, 2.4 mm. Santa Rosa, Lower California (Beyer). A most singular insect, totally different in its vestiture from any species previously known to us.

The elytral fasciculæ are approximately as follows: a subsutural series of three prominent tufts, exterior to which are three or four others less regularly placed; a sutural series of much smaller tufts, and a number of similar ones toward the side margin.

Atænius confertus, n. sp.—Oblong, moderately robust and convex, piceous-brown, surface dull; beneath red-brown, legs not paler. Head

densely, coarsely punctate throughout, granulate in front; clypeus broadly, feebly emarginate, with a distinct denticle each side the emargination; genæ prominent, the angle scarcely rounded and nearly right. nearly one-half wider than long, sides broadly arcuate and a little narrowed posteriorly, hind angle obtuse as viewed from above, the sides and base forming a continuous curve when viewed from the side. Surface densely, coarsely punctate throughout, the punctures nearly or quite in contact at all points, basal marginal line entire. Elytra as wide as the thorax, humeri dentate, side a little arcuate, nearly parallel, striæ moderate, distinctly punctulate, intervals moderately convex, the sutural with a single row, the others with two rows of unusually coarse punctures, which are not well defined toward the margin. The punctures occupy about one-third the width of the interval, and are a little closer in the outer than in the inner series of each; those of the inner series being so close to the striæ as to render the inner margin of the interval somewhat crenate. Under surface and legs very coarsely but not very closely punctate; mesosternum not distinctly carinate between the coxe. Front tibiæ tridentate, feebly crenulate above the upper tooth; hind femora with short marginal line near the knee, hind tibiæ without accessory spinule, the first tarsal joint barely as long as the long spur.

Length, 4.3 mm. One example, San Jose del Cabo. Type in the collection of the California Academy.

This species must stand next to abditus by Horn's table, but differs very markedly by the larger, stouter form, and very coarse and dense sculpture. Abditus has not yet been reported from the Peninsula, but may reasonably be expected to occur there.

Eburia semipubescens, n. sp.—Dark brown, head and prothorax nearly glabrous, elytra uniformly but not densely clothed with a single system of very short suberect hairs, beneath sparsely pubescent. Antennæ (3) longer than the body, basal joint stouter and distinctly sulcate on its anterior face, outer joints very slender, the 11th about one-half longer than the 10th. Prothorax as in Ulkei, sides with a moderately prominent subapical tubercle and a median slender acute spine; disk uneven, with sparse, rather coarse but vague punctures. Elytra finely, moderately, closely punctate, each with two small elongate basal and two similar median ivory spots; apex squarely truncate with sutural spine, the outer angle distinct but not prominent.

Length, 19 mm.—Colorado River, California. A single male.

This species is closely allied structurally to *Ulkei*, and should follow it in our lists. In *Ulkei* the upper surface is virtually glabrous throughout, and the etytra are very finely or indistinctly punctate. In *Ulkei*, stigmatica and semipubescens there is a longitudinally sulcate interocular flattened carina, which is not obvious in the other species of the genus. In the two first-named species this carina is nearly parallel and more deeply grooved; in semipubescens it is broader behind and less prominent, with a finer median groove, and is more deeply, transversely impressed behind the antennal tubercles. In semipubescens the elytral pubescence consists of a single system of erect hairs, which are almost perfectly uniform in length except for some irregularity near the apex. In all our other species except *Ulkei* (distincta is not before me) the elytral vestiture is dual, consisting of recumbent pubescence, with intermixed longer erect hairs.

Metaleptus gracilior, n. sp.—Slender, parallel; red, pronotum with two discal spots, elytra with a small umbonal spot, and the apical third or half black; knees, tibiæ and tarsi black. Pubescence rather sparse, fine, short, erect, longer on the disk of the pronotum and the base of the elytra. Antennæ (3) very slender, nearly twice as long as the body; (2) less slender, not reaching the elytral apex, outer joints shorter, wider and subserrate. Prothorax a little wider than long, sides with a prominent tubercle just behind the middle, disk densely punctate. Elytra slightly wider than the prothorax, and about 2½ times as long as wide, densely but not coarsely punctate, the punctures becoming finer apically, each with two fine but evident subcostiform lines; apices broadly, separately rounded or feebly truncate. Prosternal process strongly convex; metasternum protuberant between the coxæ. Legs very slender; the hind thighs sublinear, longer in the male, but passing the elytral apex in both sexes.

Length, 93/4-14 mm.

This species was taken in some numbers in the Baboquivaria Mts. in Southern Arizona by Prof. Snow.

There is some variation in the extent of the black markings; the thoracic spots may unite, the humeral spot is sometimes lacking, the elytral apical area extends farther forward at the suture than at the sides, and in one example unites with the humeral spot, leaving the base narrowly and a portion of the side margin pale.

Gracilior is very distinct from Batesii, the latter being a broader insect, the body black throughout except narrow basal and lateral margins

of the elytra; elytra conjointly rounded at apex, more rugose and without trace of costæ; the lateral thoracic tubercle at the posterior third or fourth; the recumbent pubescence denser and more conspicuous both above and beneath; prosternum flat, metasternum not at all protuberant between the coxæ; hind thighs not reaching the elytral apex. In angulatus the form is said to be the same as in Batesii, the elytra lack the costiform lines, and are sinuously truncate at apex.

In his description of the genus Metaleptus, Bates states that the antennæ are 11-jointed, with the terminal joint appendiculate. Horn, however, finds a distinct articulation in the last joint of the male in *Batesii*, and pronounces the male antennæ 12-jointed. In *gracilior* this pseudo-articulation is distinct in some specimens, but almost totally absent in others, and I am convinced that the antennæ are properly described by Bates.

Saxinis Hornii, sp. nov.—Deep blue, feebly shining, head punctulate and slightly rugulose; thorax moderately, coarsely, rather closely punctate on the disk, more densely at the sides; elytra densely sculptured, the striæ distinct, but more or less irregular, the punctures of the intervals about equally coarse; humeral spot confined to the umbone, and involving less than half the epipleural lobe. Beneath finely punctured and densely cinereous pubescent.

Two examples, San Jose del Cabo.

Most closely related to *Sonorensis*, from which it differs in its somewhat coarser sculpture, and very small humeral spot and more parallel form. By Horn's table it would be associated with *saucia* and *politula*, from both of which the denser thoracic punctuation at once separate it. A specimen in my collection from San Diego Co., Cal., differs only in the colour being almost black, and there can scarcely be a doubt that it is identical with the Lower California form.

In Mr. Schæffer's recent table *Hornii* should be inserted just after *Sonorensis*.

Statira colorata, n. sp.—Head, thorax, scutellum and legs rufotes-taceous, elytra and abdomen piceous. Antennæ half the length of the body, piceous, basal joints paler, terminal joint (3) equal to the three preceding. Head finely, rather densely punctulate, feebly shining. Eyes separated on the front by a distance equal to their own width. Prothorax longer than wide, sides broadly arcuate, surface densely, minutely punctulate, rugulose and dull. Elytra finely alutaceous, dull,

striate as usual, interspaces 1, 3 and 5 with respectively 3-4, 7-9, 6-7, setigerous punctures. The seventh and ninth intervals also have each one or two punctures. Tibiæ sulcate on the outer edge.

Length, 7.5 mm. Lower California, San Jose del Cabo.

Described from a single of specimen given me by Mr. Fuchs. I have seen several others from the same source. Colorata resembles subnitida, the only previously described species from the same region, in its dull surface and sulcate tibiæ, but differs much in colour, in the somewhat more numerous setigerous punctures of the elytra, and in the much less approximate eyes.

Macrobasis excors, n. sp.—Black, densely cinereous pubescent, the tips of the femora, outer edge of front and middle tibiæ and the tarsal joints in great part, black. Antennæ black; first and second joints elongate in the male, the first about reaching the hind margin of the head, but little longer than the second, and a little shorter than the second and third united; second joint fully three times as long as the third and longer than the next two; third about three-fifths as long as the fourth; fourth and following joints linear, about four times as long as wide, slightly decreasing outwardly, both in length and width. In the female the basal joints are much shorter than in the male, the third reaching the back of the head, the second scarcely longer than the fourth. Head less broad posteriorly than in unicolor, the tempora less prominent than the eyes. Prothorax longer than wide. Anterior tibiæ with two spurs in both sexes.

Length, 16-17 mm.

Described from a single pair kindly given me by Mr. Beyer, who collected them at El Taste, Lower California.

This species is very similar to unicolor, both in structure and general appearance; the latter, however, is smaller, the head a little broader posteriorly than across the eyes, the prothorax as wide as long, and the antennal joints somewhat differently proportioned, the second being relatively shorter as compared with the first, the third scarcely shorter than the fourth, and the outer joints only about twice as long as wide.

Cantharis Blaisdelli, n. sp.—Length, 13-16 mm. Intense black throughout, except for the minute reddish frontal spot, which is often indistinct. Head and prothorax polished and sparsely punctate, elytra finely scabrous and dull. Prothorax about one-tenth wider than long, narrowed behind, sides moderately, strongly rounded at anterior third, nearly straight posteriorly. Tibial spurs slender, subequal.

Male.—Antennæ with joints 5-7 thickened, obovate, evidently longer than wide; 8-10 smaller, mutually similar, slightly elongate, and subequal to, though slightly thicker than, the fourth. Pygidium rounded at apex, the tip feebly subsinuate; last ventral broadly, rather deeply impresso-emarginate, the limiting angles prominent and somewhat deflexed.

Female.—Antennæ shorter, not passing the base of the elytra, gradually incrassate, last ventral not emarginate.

Described from a series of 9 3's and 2 9's, taken at an elevation of 2,750 feet in Siskiyou Co., California, by Dr. F. E. Blaisdell, to whom it gives me pleasure to dedicate the species.

The present species is closely allied to *lugubris*, Ulke (*Ulkei*, Beaureg), differing in the strongly shining head and thorax, and in the genitalia. In *lugubris* the thorax is relatively smaller, and it and the head are as dull in lustre as the elytra.

Anthonomus tridens, sp. nov .-- Short, oblong, rufous, beak in great part, and legs, except anterior thighs, testaceous; vestiture moderately dense, consisting of small elongate scales varying in colour from whitish through ochreous-brown to fuscous. Beak as long as the head and thorax, sparsely pubescent, feebly punctate, striate, tip nearly smooth. Antennæ slender, pale throughout, inserted one-third from the tip, scape nearly reaching the eye, joints all elongate, second equal to the two following, third slightly longer than the fourth. Head coarsely punctate and scaly, front a little concave, somewhat narrower than the width of the beak, eyes prominent, convex. Prothorax scarcely one-half wider than long, sides parallel and broadly rounded in basal half, strongly rounded and moderately constricted in front; apex half as wide as base, surface densely, strongly punctate, with dorsal and infero-lateral vitæ of broader whitish scales, between which the scales are narrower, sparser and Elytra nearly one-half wider than the proochreous in colour. thorax, sides parallel to apical third, tip conjointly rounded, concealing the pygidium; scales smaller and denser than on the prothorax, generally pale in colour; each elytron with three somewhat broken bands, consisting of spots of fuscous scales more prominent on alternate intervals, the first running inward from the humerus to the suture, the other two converging from the sides so as to enclose that area, which is subdenuded in signatus and other allied species; striæ well impressed, intervals moderately convex and feebly tuberculate beneath the dark spots in the basal region. Beneath clothed with yellowish-white scales, abdomen pubescent, second segment longer than the third, which is very slightly longer than the fourth

and subequal to the fifth. Anterior thighs very stout, armed with one long and two shorter acute teeth; middle and posterior thighs unidentate, front tibiæ strongly curved; front claws with a long tooth, which is parallel to and nearly as long as the claw; middle and hind claws toothed as usual.

Length, 2½ mm. One example, San Jose del Cabo. Type in the collection of the Cal. Academy.

This species seems most closely allied to nebulosus, agreeing with it and with no other so far as I have observed in the ungual peculiarity above mentioned.

I have more recently received several examples of this species from Mr. Beyer, who took it at Santa Rosa and San Felipe, in the Cape region.

Cryptorhynchus lucanus, n. sp.—Oblong, elongate, clothed with rather broad, pale yellowish-brown scales, which are subcrect on the head and beak, pronotum, legs and abdomen; recumbent and mixed with erect bristles on the elytra. Beak a little shorter than the prothorax, stout, regularly arcuate. Antennæ inserted near the middle, pale throughout, scape reaching the eye; first and second joints of funicle subequal, the latter more slender and about equal to the two following; club elongate, oval, rather bluntly pointed, the first joint comprising less than one-half Prothorax a little wider than long, feebly constricted at apex, sides nearly parallel and slightly arcuate in basal half, not carinate; deeply, moderately, punctate, each puncture bearing a suberect scale, which is inclined forward. Elytra parallel to, or a little beyond, the middle, then gradually narrowed, apex obtusely rounded, surface concealed by closely appressed scaly vestiture, which is nearly uniform in colour, except for a common transverse fascia of paler scales at the summit of the declivity, which extends to the fifth interval. Strige moderate, punctate, each puncture bearing a small recumbent scale, each interval with a row of erect setæ. Under surface with coarse, well separated punctures, each bearing a broad scale. Thighs all with a small acute tooth, tibize feebly sinuate at intervals, the outer margin not angulate near the knee.

Length, 3-3½ mm. Two examples, San Jose del Cabo. Type in the collection of the California Academy.

In one specimen the scales are as described in colour, in the other much darker brown, rendering the transverse subapical pale fascia much more prominent. Seems most nearly related to *lutosus*, but much smaller, and with decidedly longer and more slender elytral setæ.

Madarellus punctatus, sp. nov.-A little shorter and more robust than undulatus, black, polished, beak dark rufous. Head finely, sparsely punctulate above the eyes, front more coarsely and closely punctate. Beak strongly, evenly arcuate, feebly tapering, sparsely, finely punctured at apex, more strongly toward the base. Antennæ inserted near the middle, first joint of funicle about as long as the three following, club equal to the four preceding joints. Prothorax about one third wider than long, parallel in basal three-fourths, strongly rounded in front and but feebly constricted at apex, coarsely, closely punctate except along the median line behind the middle, punctures becoming confluent laterally. Elytra about one-fourth longer than the prothorax, and very slightly wider at the humeri; sides gradually convergent behind, disk feebly undulated; striæ deep, finely punctate, intervals scarcely more than twice as wide as the striæ, each with a single series of not very fine punctures, separated on an average by about four times their own diameters. Beneath strongly, closely punctate. Femora all armed with a small acute tooth.

Length, 2.8 mm. One example, San Jose del Cabo. Type in the collection of the California Academy.

Very distinct from *undulatus* and *cuneatus* by the coarser, closer sculpture of the upper surface. Each puncture of the thorax and of the elytral interspaces bears a very short, fine, whitish hair.

Cossonus sulcirostris, n. sp.—Moderately convex, piceous, legs rufous. Beak shorter than half the thorax, flattened cylindrical, feebly dilated apically, very finely, sparsely punctate, with a long distinct sulcus extending from the interocular puncture two-thirds the distance to the apex. Scrobes beginning near the tip, not distinctly visible from the front. Head, above the eyes, subimpunctate. Antennæ about as usual, the club nearly uniformly pubescent throughout. Prothorax longer than wide, feebly constricted at apex, a little narrowed at base, sides broadly arcuate, surface very coarsely punctate, closely at sides, more sparsely on the disk, with a nearly smooth area on either side of the middle toward the base, base not distinctly cariniform before the scutellum. parallel, very slightly wider than the thorax, striæ of coarse punctures, which are separated by about half their longitudinal diameters, intervals nearly flat, very finely, uniscriately punctulate. Beneath coarsely, rather closely punctate, except the abdomen and middle portion of metasternum, where the punctures are finer and sparser.

Length, 4.3 mm. One example, San Jose del Cabo. Type in collection of California Academy.

Resembles corticola and impressifrons most closely, but may be distinguished from all our described species by the very finely punctate and sulcate beak. The elytral striæ, except the sutural, are scarcely at all impressed. The basal joint of the antennal club is usually very sparsely hairy and shining, but is here about as densely clothed as the remainder.

## PROFESSOR M. V. SLINGERLAND.

Economic Entomologists throughout North America have experienced a grievous shock owing to the unexpected death of Mark Vernon Slingerland, Assistant Professor of Economic Entomology in Cornell University, which took place at Ithaca, N. Y., on the 10th of March. Carried off in the prime of life by an attack of Bright's disease, his loss is deeply deplored by his associates and students at the University and a wide circle of friends.

From a sympathetic notice by Prof. Comstock in the Journal of Economic Entomology, we learn that Mr. Slingerland was born at Otto, N. Y., on October 3, 1864. At the age of 23 he entered Cornell University, and in 1892 received the degree of Bachelor of Science in Agriculture; he was specially commended for proficiency in Entomology during the last two years of his course; in 1899 he was appointed Assistant Professor. He soon became widely known from his contributions to periodical literature (many of his articles appeared in this magazine) and the many Bulletins which he wrote; the publication of his last work, "Insects Injurious to Fruit," has just been announced by MacMillans in their Rural Science Series.

To quote Prof. Comstock: "He was recognized as being one of the foremost workers in economic entomology, and had attained an international reputation. . . . This position was reached by untiring industry and a devotion to truth. His work was characterized by painstaking thoroughness and an absence of anything sensational. His constant aim was to determine the exact and complete truth, and to present what he discovered in a clear manner. In this he was very successful, both in the class-room and as a writer. . . As a teacher he was clear, direct and painstaking, and he had the keenest interest in the needs of each individual student."

His wife and one daughter survive him; to them we desire to extend our deepest sympathy in their sad bereavement.

C. J. S. B.