## NEW RHYNCHOPHORA.

BY CHAS. SCHAEFFER, MUSEUM OF THE BROOKLYN INSTITUTE, BROOKLYN, N. Y.

Conotrachelus tuberculicollis, new species. — Form and size of juglandis, but thorax distinctly tuberculate, colour more uniform grayish, and the post-median fascia on elytra indistinct. Head densely covered with ochreous and white scale-like hairs; eyes separated by about the width of the beak; the beak slender, separated from the head by a slight transverse impression, about as long as head and thorax and slightly curved, distinctly tricarinate to about apical third, where it is closely punctate: from base to about middle the surface is sparsely clothed with pale scale-like hairs; antennæ inserted about apical third, first joint of funicle slightly stouter than the second, but of nearly equal length. Thorax as long as broad, sides slightly bisinuate to a little before middle, then abruptly narrowing to apex; surface rather uneven, with coarse punctures and four rather prominent tubercles, of which two are placed at apical margin and two more widely separated at middle of disk, between which the surface is convex; the vestiture consists of ochreous and white scale-like hairs, the white forming at sides a more or less distinct line from base to the median tubercles. Elytra sinuate at sides a little below the oblique humeri, then narrowing to apex; punctures large and broadly confluent on the disk; third interval with three elevated crests, of which the middle is the largest, fifth interval with two tubercles, one near base and a larger before middle, behind middle a costiform elevation not reaching to apex, seventh interval elevated, but feebly interrupted below the humeral callus, surface and crests densely clothed with appressed yellowish-gray and grayish-white scale-like hairs, the pale hairs more condensed at the humeri and behind the median crests. Body beneath with stout yellow hairs; mesosternum narrow between the coxæ, feebly impressed in front; all the femora with an obtuse tooth and small denticle, tarsal claw strongly toothed. Length, 6 mm.

Huachuca Mts., Arizona.

This species, best placed in Leconte's division, I-A, resembles juglandis in form, size and elytral crests, but differs from it, as well as from any known North America Conotrachelus, by the strongly tuberculate thorax. Of all the described Mexican species with tuberculate thorax, it is perhaps nearest nodulosus, but tuberculicollis has no decumbent sette, October, 1906.

the seventh interval is not abruptly interrupted, the ventral segments are not sparsely and finely punctured, and the beak is rather slender, and not "exceedingly stout" as in that species.

Conotrachelus Arizonicus, new species. — In form and general coloration resembling leucopheatus, but thorax not as coarsely punctured, and without crests in front, the costæ on elytra feeble and nearly obsolete on the disk, but prominent at apex, the upper surface with short semi-erect setæ. Head densely punctate, clothed with ochreous hairs, eyes separated by the width of the beak, the latter feebly curved and moderately stout, strongly convex at base, tricarinate, the intervals between the carinæ rugose, at apex moderately coarsely punctate; antennæ inserted at slightly less than apical third. Thorax broader than long; sides nearly straight and parallel to a little before middle, then strongly narrowing to apex and feebly constricted; surface coarsely punctate, very sparsely clothed on the disk with ochreous and at sides with white hairs, which are inclined forward. Elytra very feebly sinuate below the humeri, the latter rounded; surface with rows of large, closely-placed punctures; alternate intervals feebly elevated on the disk and at sides; at apex the third has two moderately prominent crests, and the fifth and seventh are distinctly elevated; colour brown, with pale brown, white and yellow hairs, the latter more condensed on the second and third interval at base, the white forming a broad, irregular, oblique fascia from the humerus to nearly the middle of suture, the rest more irregularly and sparsely intermixed with white; surface with short, semi-erect pale setæ. Body beneath sparsely clothed with pale hairs, and very coarsely punctate; mesosternum nearly flat, not impressed in front; legs sparsely pubescent, slightly denser on the broadest part of hind femora, femora with one moderate tooth and one feeble tubercle, claws with a small tooth. Length, 4 mm.

Arizona, one specimen in collection Dietz.

This species is to be placed near *nivosus* in Dr. Leconte's table, from which the closely punctured and very sparsely pubescent thorax, the slightly longer beak, the distinct elytral crests and the pale setæ on elytra will separate it.

Conotrachelus ecarinatus, new species.—Brown, elytra clothed very sparsely with pale and ochreous hairs, the latter forming an indistinct band behind middle, costæ almost obliterated, thorax without carina. Head closely punctate, and with short yellowish-white hairs, feebly transversely

impressed between the eyes; beak slightly longer than the head and thorax, and feebly curved, tricarinate, at apex rather closely punctate, punctures elongate at sides, and larger than at middle; antennæ inserted at about apical fourth. Thorax slightly broader than long; sides nearly straight to slightly before middle, then narrowing to apex, where the impression is feeble; surface with large closely-placed punctures, which are confluent at apex, not carinate, very sparsely clothed with short, forwardly-inclining, decumbent yellowish hairs. Elytra with rows of large punctures, alternate intervals feebly convex; surface with recumbent dark setæ, and very sparsely clothed with white and ochreous hairs, the latter forming an indistinct post-median fascia. Body beneath sparsely pubescent; mesosternum flat, truncate in front, abdomen coarsely punctate, punctures of last segment smaller. Legs slightly annulated, femora with two moderate teeth; claws finely toothed. Length, 4 mm.

Huachuca Mts., Arizona.

There is no sinuation at the sides of the elytra below the humeri, and the sides of elytra are more parallel to slightly behind middle than in any other species of Division I-A of Leconte, where this species has to be placed. This group contains those species which have the claws divergent, toothed, not cleft, prothorax not sulcate, femora bidentate, and elytral costæ interrupted. The three species described above all belong to this group, and to facilitate their identification the following table is presented. Our anaglypticus, which occurs in Mexico also, has two crests in front of thorax, and the surface between these impressed, but specimens occur without crest and impression. A few of the species in the following table are not represented in the material before me, and the characters employed had to be taken from the descriptions.

ı.	Costæ of elytra abruptly interrupted
	Costa of elytra feebly interrupted5.
2.	Thorax strongly tuberculate
	Thorax without tubercles
3.	Post-median elytral fascia uniformly white or pale yellow4.
	Post-median elytral fascia white and yellow; the two post-median elytral crests near suture much larger than the
,	othersnenuphar, Hbst.
4.	The two post-median elytral crests near suture large, more elevated
	than the others; elytra with a pale-yellow fascia
	behind middle juglandis, Lec.

	The interrupted elytral costæ equal, not forming elevated crests; elytral fascia pale yellow or whitealbicinctus, Lec.
5.	Prothorax with small median callus
6.	Prothorax more or less distinctly carinate
7.	Ventral segments coarsely and closely punctate
8.	Upper surface with short erect setæ; femora with two acute spiniform teeth
9.	Thorax distinctly carinate from tip nearly to base; hind femora with a large acute tooth and a small denticle seniculus, Lec. Thoracic carina feeble; hind femora with two small denticleso.
10.	All the ventral segments closely and rather coarsely punctate, last ventral without tubercles
	Thorax coarsely punctate, punctures not closely placed, but well separated, and never confluent; elytral costæ almost obsolete on the disk, but visible at apex
12.	Front femora with a moderate tooth and a small denticle, coloured like leucopheatus, but the thoracic white lines indistinct, and the elytra with pale, semi-erect setæ
clo the	Conotrachelus Texanus, new species.—In form and colour resembling small fissunguis, but thorax and elytra with short bristles. Head thed with white scale-like hairs; beak scarcely as long as head and orax, feebly curved, trisulcate on each side, apex sparsely punctate on edisk, at sides with a few larger punctures. Thorax shining, slightly

broader than long, sides very feebly narrowing to a little before middle, then more strongly narrowing to apex, scarcely impressed, surface with large, closely placed punctures, which are confluent at apex, very sparsely clothed with short, stiff bristles. Elytra not impressed laterally below the humeri, which are rounded; punctures large and closely placed; intervals feebly convex; surface clothed with white and pale-yellowish hairs, not forming a fascia or band, with some erect, pale, short bristles intermixed. Body beneath and legs sparsely pubescent; mesosternum flat, feebly rounded in front; abdomen coarsely and closely punctate; femora with a moderate tooth; claws cleft, the inner portions touching each other. Length, 3.5 mm.

Brownsville, Texas.

By the cleft claws and erect setæ, this species has to be associated with erinaceus, echinatus and hispidus. From echinatus the toothed femora and the short bristles of thorax and elytra will separate it, and from the other two the shorter setæ of the upper surface, the more closely punctate abdominal segments, the stouter and larger form, and the distinctly carinate beak.

Cryptorhynchus lacteicollis, Champ.—Oblong oval; elytra blackishbrown, with sparsely placed yellowish scales, and with a number of reddish, shining tubercles; thorax uneven, densely clothed with white scales, on each side of middle of base two distinct darker spots. coarsely and closely punctate, with closely placed ochreous and white scales; front deeply impressed, between the eyes flat and carinate, above each eye a tuberculiform elevation; beak stout, feebly arcuate, rather coarsely and confluently punctured, finer towards apex; antennæ inserted at about middle of beak, funicle seven-jointed, with the first stouter and shorter than second, club elongate-oval, one-jointed, as long as the preceding five joints, finely pubescent. Thorax twice as wide as long, sides feebly narrowing from base to a little before middle, then strongly narrowing to the distinct subapical constriction; surface uneven in apical half, on each side of the median carina, the latter starting from the subapical impression to middle, and from here to base is a feeble impressed line; on each side two more or less distinct tubercles, one at about apical third and one at about basal third; apical margin at sides feebly emarginate, ocular lobes therefore feeble; base bisinuate, the feeble basal lobe truncate at apex; surface very densely clothed with white scales, slightly less densely around the apical irregularities; on each side of median line is a darker spot of larger size, and near the basal angles on each side a smaller one. Elytra with irregular placed, not deeply impressed, punctures, and some reddish tuberculiform elevations; surface uneven, clothed with blackish-brown and pale-yellow small scales; near base at about middle, between the two median tubercles and near each of the two subapical tubercles, is a velvety-black spot of variable size, each surrounded by yellow scales. Abdomen alutaceous, sparsely punctate, with broader white and narrower, elongate, yellowish scales; mesosternum broadly and deeply excavated; anterior femora with an obliquely truncate-emarginate, moderately broad tooth, middle and hind femora with an obtuse tooth; tibiæ shorter than the femora, tarsal claws simple. Length, 6–7 mm.

Palmerlee, Cochise Co., Arizona.

A small number of this fine species was taken by beating mistletoe growing on walnut, and was first discovered by Mr. H. G. Barber.

After sending in the above description of this species, Vol. IV., pt. 4, pp. 601-729 of the "Bialogia" was received, in which on p. 650 the species was described from a single specimen from Taxpam, Vera Cruz, Mexico.

The Mexican specimen is said to have two teeth on the anterior femora, while the Arizona specimens have the tooth obliquely emarginate truncate. The emargination of the tooth is very likely very strong in the Mexican specimen, giving the appearance of "a conspicuous additional tooth on the outer edge of the larger one."

The suture between the first and second ventral segments is more or less arcuate, which makes the second segment, especially at middle, longer than the third or fourth, but this is not in all specimens so well pronounced. In some of our species, placed in *Cryptorhynchus*, the first suture is not exactly straight as required, but it seems, from the variation observed in this respect, that not much stress can be laid on this character.

The form is more elongate than any of the North American species. This, together with the peculiar coloration and sculpture, makes it easily recognizable.