

JOURNAL
OF THE
New York Entomological Society.

Vol. 1.

JUNE, 1893.

No. 2.

TICKS IN THE EARS OF HORSES.

BY C. H. TYLER TOWNSEND.

Notwithstanding the recent valuable papers of Dr. Cooper Curtice (in Journ. Comp. Med. and Vet. Arch., July 1891—Jan. 1892, and in Bull. 24 Texas Agric. Exper. Station), and the timely and valuable classificatory paper of Dr. Geo. Marx, (Proc. Ent. Soc. Wash., Vol. 11, pp. 232-6) on ticks, I can find no mention of any species ever being found in the ears of mammals. In southern Mexico, and also western Texas, we have a tick which is, at least here, confined to the *ears* of horses and perhaps some other animals. They are never found outside on the body of the animal, but only within the ears and usually deep-seated. They are very abundant also, and the wonder is that there seems to be no record of this habit in a tick, and what is more that the tick itself is not readily determinable.

I am informed that ticks, perhaps not the present species, are found in the ears of horses, and also cattle, in the southern states, and as far north as Pennsylvania. It therefor seems strange that no mention should be made of this habit by writers on ticks. I have also been told of ticks that were found in the ears of dogs in northern Indiana, the tick being a species apparently either of *Ixodes*, or of *Dermacentor*.

In March, 1891, in Las Cruces, I took from the ears of a horse of the type commonly called bronco, a good number of ticks of all stages except the larva. These are of all sizes, from the egg (?) and white young ticks to the leaden blue older ones. But they all have eight legs, which indicates that they have all passed the larval stage.

I have spent much time in rather vainly trying to arrive at a

NEW NORTH AMERICAN ACULEATE
HYMENOPTERA.

By WM. J. FOX, Philadelphia, Pa.

Myrmosa parvula

♂.—Clypeus strongly convex medially, more or less depressed on the sides, its anterior margin emarginate in the middle; front and vertex with tolerably fine punctures, the former with an impressed line down the middle; antennæ short, stout, the flagellum of nearly the same thickness throughout the third joint of antenna shorter than the fourth; thorax coarsely and closely punctured; metathorax coarsely and closely granulated, with a strong furrow in the middle, extending from base to apex, interrupted at about its middle and strongest on upper surface; posterior coxæ, as in the other two species armed with a large tooth or spur at base, above; hind tibiæ and tarsi very feebly spinose; abdomen fusiform, finely punctured, the first segment much narrower than the second, gradually widened to the apex, the first and second segments, both above and beneath, separated by a wide fissure. Black; tips of mandibles reddish; head and thorax sparsely clothed with fuscous pubescence; the mandibles, clypeus, metathorax and abdomen with pale pubescence; wings hyaline strongly iridescent, nervures testaceous; second submarginal cell fully twice as large as the third, receiving the first recurrent nervure before its middle, the third submarginal receiving the second recurrent at about the middle. Length, 4 mm.

Southern Illinois (*Robertson*). The following table will aid in distinguishing the three North American species of *Myrmosa*, the males of which are only known.

- Clypeus planate; head coarsely punctured; antennæ long, reaching about to the apex of scutellum; second submarginal cell triangular, the first and second transverse-cubital nervure meeting at the top; abdomen rather coarsely punctured, first segment of abdomen dentate beneath **unicolor** *Say*.
- Clypeus strongly convex; first abdominal segment not dentate beneath; transverse-cubital veins widely separated above. Second submarginal cell more than twice longer than the third; metathorax without a depression at base; entirely black **parvula** n. sp.
- Second submarginal not twice longer than the third; metathorax with a transverse depression at base; abdomen, except first segment, ferruginous **rufiventris** *Bl.*

Tachysphex apicalis

♀.—Medial portion of clypeus convex, with tolerably strong and close punctures, before its anterior which is slightly emarginate medially, there is a wide, transverse depression or furrow, extending from side to side and giving the anterior

margin a reflexed appearance, front and vertex more coarsely punctured than the clypeus; behind the insertion of each antenna, there is a strong depression which terminates angularly above; just above these depressions the face is slightly protuberant; front rather strongly furrowed medially, the furrow interrupted by the fore ocellus, then extending back on the occiput dividing in its course the swollen portion between the ocellus into two strong lobes or tubercles; space between the eyes at the vertex about equal to the length of the first two joints of the antennæ united; dorsulum depressed in the middle, anteriorly its punctuation sparser than that of the front; scutellum punctured likewise, not impressed; upper surface coarsely rugose or rugged, the metalpleuræ strongly and obliquely striated, the posterior face coarsely granulated, with a strong depression at base and with a strong, sinuous, transverse ridge at the top; four hind tibiæ and tarsi tolerably well armed with whitish spines; abdomen with exceedingly fine punctures, strongest on the second ventral segment; pygidium with a few scattered punctures, acute at tip, convex. Black, last dorsal segment red; front, face and clypeus with silvery pubescence; vertex and thorax more or less with short, fuscous pubescence; abdomen with sparse silvery pile; wings subhyaline, palest basally, iridescent; marginal cell obtuse at apex. Length, 9 mm.

♂.—Differs from the ♀ by the clypeus being not emarginate; the stronger punctuation of front and vertex; the shorter antennæ; the slightly impressed scutellum and more finely sculptured metathorax. Length 7 mm.

Southern Florida (*Robertson*). To the genus *Tachysphex* belong several of our species of *Larra*, prominent among them are *terminata*, *acuta* and *tarsata*. *T. apicalis* is related to the two first mentioned species but is at once distinguished by the sculpture of metathorax.

Priocnemis agenioides

♀.—Anterior margin of clypeus strongly rounded out; front convex, the face in the region of insertion of antennæ depressed, third joint of antenna very little, if anything, longer than the fourth space between the hind ocelli but little less than the distance between them and the nearest eye-margin; posterior margin of prothorax subangular; metathorax rather short, not impressed, but with a slight pit or fovea at the extreme base in the middle, four hind tibiæ strongly armed, especially the hind pair, which are serrate; longer spur of hind tibiæ more than one-third as long as the first joint of the hind tarsi; claws with a large tooth on inner margin; abdomen fusiform polished, the apex rather densely clothed with long, brownish hairs. Black, the head and thorax with a slight, greenish tinge; face, clypeus, sides of thorax and coxæ with silvery pile; wings subhyaline, their apical margins fuscous; second submarginal cell more than one-third wider beneath than at the top, its height is about equal to its width at the top; first recurrent nervure received by second submarginal cell, before the middle, the second is received by the third submarginal in about the middle, the marginal cell does not extend to the apex of the third submarginal. Length 7 mm.

Southern Illinois (*Robertson*). Related to *conicus*, *pomilius* and *germanus*. From the first mentioned it will be distinguished in the form of the clypeus; from *pomilius* in the color and by the pale

wings and from *germanus* by the pale wings, the form of prothorax margin and the shorter marginal cell.

Planiceps minor

♀.—Anterior margin of clypeus in the middle slightly incurved or subtruncate; space between hind ocelli greater than that between them and the nearest eye-margin, antennæ joints 3-7 about equal in length, all the flagellum joints more or less narrowed basally on under side, so that the flagellum has the appearance of being slightly serrate; the prothorax is longer than the dorsulum and scutellum combined, its posterior margin subtruncate; metathorax above faintly impressed down the middle; legs stout, the four hind tibiæ and tarsi strongly spinose; claws armed with a strong tooth within longer spur of hind tibiæ fully equal to half the length of the first hind tarsal joint; apical abdominal segments with a few long, black hairs. Black, the thorax with a strong, purplish reflection; fore wings dark-fuliginous, with a strong, purple reflection, which is not to be seen on the apical margins. Length, 8 mm.

Southern Florida (*Robertson*). Differs from its ally *P. niger* by its smaller size, the purple wings, and the much longer prothorax and hind tibial spur.

Planiceps dubius

♂.—Anterior margin of the clypeus rounded; antennæ short, stout, not reaching beyond the tegule, third joint about one-third shorter than the fourth, space between the eyes at the clypeus is a little greater than the length of the first, three joints of the antennæ united; posterior margin of prothorax angular, upper surface of metathorax with a longitudinal medial impressed line, the posterior face depressed; four hind tibiæ and tarsi strongly armed with spines; longer spur of the middle and hind tibiæ very nearly equal in length to the first joint of their respective tarsi; abdomen shorter than the thorax, more compressed than depressed. Black, the head and thorax more or less clothed with silvery pile, which is most dense on thorax beneath, upper surface of hind coxæ, the metathorax and the femora, the two first dorsal segments of the abdomen are also silvery when viewed in certain positions; wings hyaline basally, becoming gradually darker to the apex; first recurrent nervure received by the second submarginal cell between its base and middle. Length, 6.5 mm.

Southern Florida (*Robertson*). From *Pl. feralis* Cr., it is distinguished by its smaller size, angular prothorax, longer hind tibial spurs and darker wings; from *calcaratus* Fox it will be separated by the black tibial spurs, larger size and the shorter and more robust antennæ.

Cerceris Robertsonii

♀.—Middle part of clypeus with a short, flap-like, appressed lobe, which is indistinct when viewed from above, the anterior margin strongly crenulated; head coarsely punctured, the punctures strongest on cheeks and vertex, finest in depression behind antennæ and sparsest on face and clypeus; third antennal joint about

one-third longer than the fourth, the fourth joint is, if anything, very slightly longer than the fifth ; thorax very coarsely punctured, the punctures sparsest on scutellum and deepest on metathorax ; enclosed space on metanotum, with exception of base and laterally, smooth ; tibiæ and tarsi strongly spinose, the hind tibiæ in addition very strongly serrated ; punctuation of abdomen less coarse than that of the thorax, the posterior margins of dorsal segments 1-5 reflexed, the basal portion of segments 2-5 transverse depressed, so that when viewed from the side these segments are seen to be separated by a wide fissure ; ventral segments sparsely punctured, transversely swollen in middle ; pygidium elongate-ovate, its surface pustulate. Black, clypeus except anteriorly, sides of face, carina between antennæ, scape beneath, an elongate spot on mandibles, spot on summit of cheeks, line on prothorax above, interrupted medially, spot on tegulæ, two large spots on scutellum and dorsal abdominal segments 2-5, all yellow, that on second segment entire, on the others very widely emarginate anteriorly ; first four or five joints of the flagellum beneath, the apical joint also, tegulæ in part and coxæ and femora more or less reddish, the tibiæ and tarsi and the hind trochanters generally yellow, the hind tarsi black ; wings subhyaline, the apical margin with a fuscous band which also includes the marginal cell, stigma and adjoining nervures reddish ; the head, thorax and first two abdominal segments are clothed with sparse, pale fuscous, long hair. Length, 12-13 mm.

♂.—Anterior margin of clypeus armed with three teeth, the middle one of which is most prominent ; third joint of the antennæ distinctly less than one-third longer than the fourth, the last joint obliquely truncate ; head and thorax punctured about like the female ; the enclosed space on metanotum with strong radiating ridges ; tibiæ and tarsi spinose but not so strongly as the female, the punctures of the abdomen stronger and sparser ; pygidium with very large sparse punctures ; colored like the ♀ except that the clypeus is entirely yellow, and the yellow on abdominal segments 3-5 is very narrow, slightly broader laterally ; ventral segments 3-5 with a small, yellow spot on each side. Length, 10-11 mm.

Montana ; Smithville, Southern Dakota (*J. T. Aldrich*) ; Southern Illinois (*Robertson*). Related to *clypeata* and *compacta* from both of which it will be distinguished by the form of the clypeal lobe in the female. The male will be distinguished from that of *clypeata* by the scutellum having two yellow spots and the shorter and stouter antennæ.



Mr. Wm. Schaus intends to illustrate those species of American Lepidoptera which have not been figured previously, and he is desirous of obtaining material not represented in his collection. The first part of his work, with three colored plates, has already appeared and treats on South American Zyganidæ and Bombycidæ.