TWO NEW ORTHOPTERA FROM INDIANA.

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LOCUSTIDÆ—XIPHIDIUM. Serville.

Xiphidium Scudderi, nov. sp.

Female.—Front and sides of head and body dark reddish-brown; vertex, disk of pronotum and tegmina greenish-brown in life, (dull yellow after immersion in alcohol). A dark reddish-brown stripe extends from the front extremity of the fastigium to the posterior border of pronotum, and contrasts strongly with the general colour of vertex and disk of pronotum. Femora greenish-brown punctate with many dark brown impressions on their upper surface; the tibiæ darker. Antennæ with the basal third reddish, the remainder fuscous.

The apex between the eyes rather broad, with the sides rounded; the cone projecting strongly upward and forward and much more prominent, though narrower, than in *X. strictum*, Scudder.

The tegmina cover two-thirds of abdomen; the wings are shorter, reaching to middle of abdomen. Ovipositor of excessive length, almost twice as long as body; slender, and nearly straight until near the apex, where it is curved slightly upward. The posterior femora and tibiæ are also longer and more slender than is usual with members of the genus.

Measurements: ♀, length of body, 18 mm.; of antennæ, 52 mm.; of tegmina, 9.5 mm.; of wings, 7 mm.; of posterior femora, 16 mm.; of posterior tibiæ, 16 mm.; of ovipositor, 30 mm.

A dozen or more females of this striking species were taken from the margins of a large pond in Vigo County, Ind., on October 11th, 1891. Although in company with *Xiphidium strictum*, Scudder, and *X. brevipenne*, Scudder, yet it was at once noticeable on account of its dark glossy-brown colour and exceedingly long ovipositor. Careful search was made for the males, both then and two weeks later, when the pond was again visited, but none were found, and on the latter visit but one female was seen. Those taken were on the stems of the partially fallen rushes and sedges which filled the margins of the pond. When disturbed they gave two or three enormous leaps, and then moving rapidly for some little distance would endeavor to hide beneath the mass of fallen vegetation.

Since the above was in MSS., Mr. S. H. Scudder, in whose honour the species is named, and to whom specimens were sent, suggests that

McNeill's *Xiphidium* sp. ♀, mentioned in PSYCHE, VI, 24, as being deformed and having the ovipositor two and a-half times as long as the body, may have been this species.

GRYLLIDAE—APITHES = (HAPITHUS), Uhler.

Apithes McNeillii, nov. sp.

Female.—Front margin of pronotum of same width (3.5 mm.) as head, slightly incurved; posterior margin but little broader, truncate. Tegmina slightly exceeding the abdomen, entire at the tip, the dorsal field the longer. Wings extending 2.5 mm. beyond the tip of tegmina. Posterior femora stoutish, exceeding the abdomen. Posterior tibiae of same length as the femora, armed with two slightly divergent rows of spines on lower face—eight on the inner margin and five on the outer, besides the three at the apex on either side, the middle one of which is twice as long as any of the others. Between each two of the larger spines in the outer row are two small ones, about one-fourth the length of the large ones. The basal joint of tarsus has also a row of five spines on either margin of its lower face, the apical pair of which are much the longer.

The top of head, disk of pronotum, and the tegmina, are covered with a fine soft pubescence, visible only with the hand lens. All the tibiae and upper and lower borders of posterior femora more coarsely pubescent with yellow hairs.

General colour, after immersion in alcohol, a dull brownish-yellow. A dark brown stripe reaches from eye to posterior border of pronotum. The tegmina with a small brown spot at their base, and the vein separating the dorsal from the lateral field with a number of oblong dark spots; the cross-veinlets are also much darker than the ones running lengthwise, giving the dorsal field a checkered appearance. All the femora are rather thickly marked with small dark spots, those on the posterior pair being arranged in regular rows. Extreme tip of ovipositor black.

Length of body, 16 mm.; of antennæ, 42 mm.; of tegmina, 14.5 mm.; of posterior femora, 9 mm.; of ovipositor, 12 mm.

A single female, the type specimen, was taken October 21st, 1891, from the lower leaves of a golden rod, *Solidago latifolia*, L., which grew in a thick upland woods in Vigo County, Ind.

I have named the species in honour of Prof. Jerome McNeill, of Fayetteville, Arkansas, a well-known writer on Orthoptera, and my first instructor in entomology.