THE CANADIAN ENTOMOLOGIST.

sector ; and beyond is a crescent of five spots, most of them contiguous, on the upper part of the second gradate series, the posterior four of these are geminate with a minute white point ; a larger triangular dark spot near ends of cubitus and anal veins. Hind wings with the costal neuration toward middle and towards apex distinctly brown ; between it is very pale. The fore wings are very broad, but acute at tips; the costal area very broad at base. There are four radial sectors, but the first arises nearer base than usual, and at first diverges but little, but curves before origin of second sector; none of the sectors are connected back to the radius. The median is not bent toward cubitus at connecting veinlet.

Expanse, 16 mm.

One specimen from Plummer's Island, Maryland, Sept.

DESCRIPTIONS OF FOUR NEW HORN-TAILS.

BY WILLIAM H. ASHMEAD, M.A., D.SC.

Genus Sirex, Linné.

Sirex taxodii, new species .- 9. Length, 11.5 to 13 mm.; ovipositor very nearly the length of the abdomen. Black ; a spot back of eyes and the process of the last dorsal segment reddish-yellow ; antennal joints from 11 to apex, an annulus at base of middle and hind tarsi, and at base of hind tibiæ, yellowish white. Wings brown-black, with a faint purplish tinge in certain lights.

J .-- Length, 12 mm. Agrees well with the female, except that the metanotum and the abdomen are reddish-yellow, the apex dusky or blackish, the angles of the pronotum faintly reddish, the apices of the front and middle femora and their tibiæ and tarsi are yellowish ; the hind tibiæ have an annulus at base, the hind tarsi have an annulus at base, while the extreme tip of the basal joint and joints 2 to 5 are yellow. The antennæ are 20-jointed, the joints 12 to 20 being yellow, the rest black.

Types.-Cat. No. 7681, U. S. N. M.

Tryon, N. C. Described from 29's and 13, labelled No. 1611; bred by Mr. W. F. Fiske from the Cypress (Taxodium distichum, L.).

Sirex Fiskei, new species .- 9. Length, 27 mm.; ovipositor about two-thirds the length of the abdomen. Head and thorax black, the thorax above brownish ; abdomen reddish-yellow, the basal two-thirds of first dorsal segment, dorsal segments 3 and 4 and the fifth segment laterally black. The antennæ are apparently 22-jointed, black, with joints 13 to 22 yellowish or yellowish white ; legs black, an annulus at the base of the middle tarsi, the basal third or more of the hind tibiæ, and the base of the hind tarsi, white or yellowish-white. Wings purplish-black.

Type.-Cat. No. 7682, U. S. N. M

Tryon, N. C. Described from one female taken by Mr. W. F. Fiske on Pine.