

mentary, present on joints 5-12 (none on joint 13). Thoracic feet small, almost lateral, indistinctly jointed, faintly brownish, not used. Body flattened, rounded, of nearly even width, segmental incisures distinct and broad, segments faintly 3-annulate. Colour shining whitish, subtranslucent, the alimentary canal green. No anal plate, but a very large, bisected, brownish cervical shield. No tubercles nor setæ distinguishable. Burrows large, spreading from $28-35 \times 14-9$ mm., often becoming confluent with others over the whole leaf, transforming the upper surface into one continuous brown blister.

Sixth stage.—On attaining this stage the larvæ burst through the upper epidermis and fall to the ground, eating nothing after the moult. Head slightly darker than body, shining, mouth brown, eye dark brown; width, 0.75 mm. Body shining pale yellowish-white, with no discolourous shade from the alimentary canal. On joints 5-12 two watery transverse areas on each segment, the anterior composed of two dorsal dots, the posterior of two elongate pyriform subdorsal patches, slightly elevated and connected over the dorsum. Feet concolorous. Length, about 5.5 mm.

Pupa.—Formed in an elliptical cell in the ground; entirely pale yellowish, the eyes brown-black.

(TO BE CONTINUED.)

DESCRIPTION OF THE PREPARATORY STAGES OF NEMOPHILA SCUDDERI, PACK.

BY H. H. LYMAN, MONTREAL.

Eggs laid July 9-10. Round, considerably flattened at base, honey-yellow, shining, under a microscope very slightly and irregularly pitted, $\frac{1}{16}$ of an inch in diameter.

Hatched July 17-18, egg period eight days.

Young larva.—Length, about one-tenth of an inch. Head brown, rather lighter below. Body, dull greenish-yellow, with lead coloured warts and long hairs of a brown colour.

I failed to observe the first moult, but the following description was taken on August 16th, just before what I believed to be the second moult. Length, $\frac{1}{8}$ to $\frac{3}{8}$ inch. Head small, slightly and obtusely bilobed, black and shining, with a few hairs about mouth parts.

Body above generally dark, but occasionally rather light in colour, with 10 or 12 warts on each segment. These warts are round, black and