through the cornfields in swarms without inflicting the slightest injury."

"When the devouring multitudes are at work upon the grass the noise of the grinding of their jaws is distinctly audible to the listener as a well defined crackling sound.

"Over the face of the country traversed by the hosts, their almost complete destruction of the grasses leaves the ground looking bare and brown, while ahead of them the hills are fresh and green. The coarser grasses in the "draws" are generally left untouched, as are also the numerous asters, sunflowers, goldenrods, and many other plants."

"As we left Hugo this afternoon on our way northeast to Arriba, thousands of these heavy flyers came dashing into our faces. Our horses were greatly annoyed, and it became necessary to protect our eyes from the force of the blows inflicted by the numerous collisions.

The average rate of travel for the individual was about a mile in six hours: this rate was not maintained through the day. They were most active during the middle of the day and advanced north at the rate of nine miles in two weeks and south at about the same rate. The eggs from which these hordes came were deposited the previous August and September by locusts which flew into this area. No internal parasites were observed. A species of Asilidae was noted capturing and killing several individuals.

These notes are of interest in throwing light upon the habits and destructive possibilities of a species of locust up to this time comparatively rare, and therefore considered of little economic importance. The causes which give rise to the sudden appearance in great numbers of a species, classed as rare, are not readily found. They are, nevertheless, an interesting study.

## LIFE HISTORIES OF NORTH AMERICAN GEOMETRIDAE. --- II.

BY HARRISON G. DYAR, WASHINGTON, D. C.

Nemoria subcroceata Walk. The specimens from which eggs were obtained were in poor condition, but Dr. Hulst remarks, "1 took this to be a faded specimen of Nemoria subcroceata" and I believe that this determination is correct. I find no previous description of the larva.

Egg. Elliptical, flattened above and below, pale green, slightly shining; surface smooth, finely shagreened; size  $.6 \times .5 \times .3$ mm. Later the color is greenish yellow.

Stage I. Short, with normal feet, the thorax contracted. Head round, pale brown, width . 25 mm. Body pale brown, a broad dorsal and fainter narrow subdorsal light red lines: cervical shield and anal plate not differentiated. Feet a little paler than the body, moderate except the anal pair which are large and widely spread laterally. Setae i to v small, black, with large clubbed tips, the tubercles minute; head setae also clubbed; cervical shield area roughened, the tubercles there slightly produced. Later pale ocherous greenish with faint whitish subdorsal and lateral lines. Skin finely reticular shagreened. Still later rusty brown dorsal, subdorsal (below the white one) and subventral bands appear.

Stage II. Head with conical pointed lobes; four conical points on the cervical shield, the posterior pair small, anal flap triangular and with the anal feet large. Dark brown, paler subventrally, on the anal plate and feet; densely white frosted with numerous granules which segregate to form a linear pale subdorsal line. Width of head about .4 mm. The larva is a slender normal Geometrid.

Stage III. Lobes of head conical, high and pointed, the vertex therefore deeply notched; width .6 mm. A pair of similar conical points on the cervical shield anteriorly. Anal plate pointed behind. Otherwise the larva is smooth, slender, ot a pale dead-leaf brown, frosted with whitish granules that form narrow, obscure, subdorsal, lateral and subventral lines and oblique ones between the subdorsal and lateral. Setae obsolete except on joint 13.

Stage IV. Ilead high with pointed flat lobes, greenish brown, brown on the angles and narrowly in two lines that form an Xmark with the clypeal sutures; width S mm. The points on the cervical shield are not so high as the lobes and are roughened; anal plate with a pointed projection; anal footplate large. Body slender, smooth, greenish brown, thickly white granular, forming faintly raised pale lines one granule wide; a dorsal, subdorsal, way lateral (almost forming a series of obliques) and subventral, all obscure. A series of dorsal, intersegmental, deep brown dashes on joints 5 to 9.

Stage V. Ilead roughly granular, 1.5 mm, wide, marked as before, but there is a whitish shade on the front of each lobe. Cervical horns red tipped. Otherwise as before. Towards the end of the stage the larvae became shrunken so that the dorsal brown spots were occluded in the incisures; they looked shorter and thicker and more densely granular. They sit erect without spinning a supporting thread.

The species is single brooded. Eggs laid June 14th from moths that were at the end of their time of flight. The larvae spun August 4th and pupated on the 7th, passing the winter in this state. The larvae fed on the red oak (*Quercus coccinea*). Found at Brookhaven, Long Island, N. Y.

## DESCRIPTION OF THE TYPE OF POLYDONTOSCELIS ASHM.

## BY WILLIAM H. ASHMEAD, WASHINGTON, D. C.

In my generic tables of some Homoptera, published in Entomologia Americana, vol. V, p. 126, I characterized a new genus under the name of Polydontoscells, the type of which has never been described. This I propose to do now since the type is requested of me for study.

Polydontoscelis differs from Aethalion Latreille, principally by having no cross-veins on the clavus, the cross-veins in the costal cell being more numerous, the submedian cell having only one cross-vein, while all the tibiae have a broad rather deep, longitudinal channel outwardly, the hind and lower edge of the posterior tibiae being armed with numerous minute teeth.

Polydontoscelis cintifrons n. sp. -3. — Length to tip of tegmina 9.5 mm; breadth across shoulders 3.6 mm. Brownish-yellow with agreenish tinge, and probably greenishyellow in life. Head seen from in front with two transverse bands; pleura with a longitudinal black band, extending forward and connected with a similar band on the



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