It had swallowed two young birds, and another was part way down its throat. The young man had not "believed in killing snakes," but on this occasion he despatched the reptile forthwith. The barn is sheeted up with rough pine boards, upon which there are two coats of paint, and from the ground to the point whence the snake was dislodged the distance is nineteen feet and four inches. How it managed to get to the spot seems altogether a mystery. There was no hole through the side of the barn nor under the roof boards, nor did it seem possible for it to have worked its way from the top of the roof. Then, it was quite as difficult for it to have found a way to the roof. Mr. Carpenter is a most reliable observer of all natural phenomena,—an investigator, really,—but he was unable to form any opinion as to how the reptile reached its prey. He described it as resembling the common garter-snake, except in the matter of its great size, hence I could form no idea as to the species to which it belonged.—CHARLES ALDRICH, Webster City, Iowa, July, 14, 1890.

Snakes in Banana Bunches.—Banana bunches brought from tropical America sometimes contain snakes of the family Boidæ, tightly wound round the central stem. A specimen of this kind was taken in Savanna, Georgia, and was sent to the United States National Museum. I identified it as the Epicrates augulifer, a native of Cuba. More recently a snake was found in a similar situation in a lot of bananas in Chicago, and was sent by Dr. J. L. Hancock to the National Museum. Dr. Stejneger has identified it as the Boa imperator, the common species of Central America and Mexico. The specimens are always young, as adult boas of the genera named could not be concealed in so small a space.—E. D. COPE.

ENTOMOLOGY.

Recent Literature.—Several notable entomological articles have been recently issued by the National Museum. Mr. Henry Edward's Bibliographical Catalogue of the Described Transformations of North American Lepidoptera, which forms Bulletin No. 35, is a very useful compilation, and ought to stimulate the study of the earlier stages of the group. There are 1,069 species included in the Catalogues, the Tineidae heading the list with 222 entries, and Zygaenidae bringing up the rear with 13 entries.
Another valuable paper is the Catalogue of the Described Araneæ of North America, by George Marx, which forms No. 782 of the Museum Proceedings, and covers about one hundred pages. The author deserves the thanks of all arachnologists for this careful piece of work.

Other Museum Proceedings contain descriptions by Mr. Lawrence Bruner of New Acrídidae, including the characterization of the three new genera, Dracotettix, Eritettix, and Boòtettix; revision of some Tæniocampid Genera by John B. Smith; and descriptions of New Ichneumonidae by William H. Ashmead.

Professor Alfred Giard has published in the Bulletin Scientifique de la France and de la Belgique an interesting article entitled Sur Quelques Types Remarkables de Champignons Entomophytes. Three colored plates, representing Entomophora saccharina, E. calliphora, E. plusie, and Polyphizium leptophycri infesting their respective hosts, accompany the paper.

The report of the U. S. Entomologist for 1889 contains accounts of the Fluted Scale (Icerya purchasi), Six-spotted Orange Mite (Tetranychus 6-maculatus), Horn Fly (Hematobia serrata), and the Grain Aphid (Siphonophora avena). A brief synopsis of the work of the division and its agents is given.

Mr. Lawrence Bruner has published in the Bulletin of the Nebraska Experiment Station (Vol. III., Article II.) an extended paper on Insects Injurious to Young Trees on Tree Claims, which will prove useful to western planters.

A New Phalangium.—In a lot of harvest-spiders received from Mr. C. W. Woodworth, Entomologist of the Arkansas Experiment Station, I found a number of specimens of a remarkable species of Phalangium, in which the sexes are very different, the male having extremely long palpi, and the second joint of its chelicerae being articulated with the first at the middle, so as to form a right angle, while in the female the palpi are but little longer than usual, and the second joint of the chelicerae is articulated with the first at the end in the ordinary manner. The species may be called Phalangium longipalpis. This case is exactly analogous to that of Phalangium opilio of Europe, in which the two sexes are similarly distinguished.

Description.—Male.—Body 7 mm. long; 3.5 mm. wide. Palpi 20 mm. long. Legs: I. 30 mm.; II. 47 mm.; III. 30 mm.; IV. 38 mm. Dorsum light mottled gray, with a darker central marking beginning at the eye eminence, and expanding rapidly to margin of abdomen,
then suddenly contracting and again expanding on the first two abdominal segments; suddenly contracting on the third and running as a broad stripe to posterior extremity. Scattered over the dorsum of the cephalothorax are numerous tubercles, having whitish bases and black tips, and generally having also a black spinose hair arising on one side of the tubercle near the apex of the white portion, and extending beyond the tip of the tubercle; a transverse row of similar tubercles on each abdominal segment. Dorsum of abdomen covered with numerous small black granules. Eye eminence gray, well developed, canalicate, each carina surmounted by a well-marked series of tubercles, whitish with black tips. Chelicerae large, light brown, with tips of claws black; first joint long, cylindrical, convex, furnished above with black spinose tubercles; second joint very large, smooth, except for some black spinose hairs, articulated at a right angle with the first, prolonged above in the form of a large conical horn, curved forward. Palpi slender, very long (three times as long as body), smooth, except for rows of stiff black hairs; light brown, except middle portion of femur, which is black. Ventrum, including coxae, grayish white, with numerous black hairs. Trochanters light brown, almost whitish, with a few tubercles. Rest of legs brown, with femora darker; proximal joints with rows of spinose tubercles.

**Female.**—Body 7.5 mm. long; 4.5 mm. wide. Palpi 6.5 mm. long. Legs: I. 21 mm.; II. 36 mm.; III. 23 mm.; IV. 32 mm.

Dorsum light mottled gray, with a rather distinct darker central marking beginning at anterior border of abdomen, and expanding rapidly on the first two segments; suddenly contracting on the third segment and running as a stripe to the posterior extremity. Scattered over the dorsum of the cephalothorax are numerous tubercles, having whitish bases and black tips, and generally having also a black spinose hair arising on one side of the tubercle near the apex of the white portion, and extending beyond the tip of the tubercle. A transverse row of similar tubercles on each abdominal segment. Dorsum of abdomen having numerous small black granules. Eye eminence well developed, gray, canalicate, each carina surmounted by a well-marked series of tubercles like those on the dorsum. Chelicerae light brown, dorsal proximal portion of first joint mottled with chocolate brown; tips of claws and a blunt tubercle at base of outer claw, black; both joints furnished with scattered black, spinose hairs. Palpi rather long (but very much shorter than in male), slender; very light brown, almost whitish, with middle of femur black; all the joints furnished with well-developed spinose hairs, those on the tarsus being more
PLATE XXVII.

Fig. 1.

Phalangium longipalpis.

Fig. 2.

Fig. 3.
slender than others; claw of tarsus not denticulate, moderately robust. Ventrum, including coxae, grayish white, with numerous black hairs. Trochanters very light brown, almost whitish. Legs light brown; femora provided with rows of spinose tubercles; tibiae angular, with rows of fine hairs on angles.

Described from many specimens.

In the accompanying Plate, Fig. 1 represents the male, natural size, while at Fig. 2 are shown the parts magnified, The letters a, b, d, e, and z show respectively a dorsal view of the body, and a side view of the eye eminence, the palpus, the palpal claw, and the chelicera of the male; while in Fig 3, d and g represent similar views of the palpus and chelicera of the female.—CLARENCE M. WEED.

Injuries of Buffalo Tree-Hopper.—This insect (Ceresa bubalus) has become a serious pest in many parts of Ohio. It is only comparatively lately that it has attracted special attention as a destructive insect, Professor Popovoe having described its work in Kansas about five years ago. During the last winter I have received twigs injured by the egg-punctures of the insect from three counties of the state, and in each of the orchards much damage had been done. Apples and

Buffalo Tree-Hopper.—a, back view; b, side view, both slightly magnified; c, apple twig showing egg-punctures.

pears are both attacked. The insect is represented, slightly magnified, at a and b of the accompanying figure, while at c is shown a twig partially covered with the egg punctures of the insect.—C. M. W.

The Maple Bark-Louse.—This insect (Pulvinaria innumerabilis), which was so destructive in the central western states about six years ago, is again appearing above the danger line. In some of the leading cities of Ohio it is present on the trees in great numbers, and is causing considerable alarm.

Am. Nat.—August.—7.