Bryant sectioned the eyelids of a bloodejecting specimen, and found them highly vascular and full of blood sinuses.

On July 4, while collecting specimens of Phrynosoma cornutum for examination of stomach contents. I was fortunate enough to witness this phenomenon. One of my students, walking by my side, stooped and thrust out his hand to pick up a large specimen, when he was met by a sudden spurt of blood coming unmistakably from the lizard's eye. The blood spread over the young man's hand in a fan shaped and even smear, extending from the second joint of the index finger to the wrist, and being about thirty mm. wide at the base. On July 7, another specimen, while being chloroformed, shot a quick jet of blood from one eye. The blood was given an almost explosive impulse, and formed a single thick drop on the inner wall of the bell jar. On July 20, another specimen ejected blood while being anesthetized. In this case, the blood on the wall of the bell jar was mixed with tiny fragments of skin and a few scales.

All three animals were subjected to a very careful examination. All were males. Their lengths were 108 mm., 110 mm. and 108 mm. The lizards were in good condition, even being free from tapeworms and other intestinal parasites with which local Phrynosomas are much infected. The stomach contents were characteristic, consisting of agricultural ants, small beetles, isopods, etc. In each case, the eye from which the blood was ejected showed a small quantity of clotted blood in the posterior corner. The vessels were slightly swollen. The cornea seemed to be intact. In the first two cases there was a small spot in the sclerotic coat, which can be best described as a blood blister. The contents on removal to a slide, and staining with Wright's stain, showed nothing except a few red corpuscles and lymphocytes. The third specimen showed nothing but a mass of clotted blood in the posterior corner of the eye. In each case, careful dissections were made, using needles and working under a 48 mm. objective. No parasites of any kind were found.

In my opinion, the most significant fact of all is that all three animals were moulting, the third being in quite an advanced stage.

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## THE COTTON WORM MOTH AGAIN

THE large northward flight of the cotton worm moth, *Alabama argillacea* Hubn., in September, 1911, is still fresh in the memory of entomologists. In 1912 a few of these moths were taken in Massachusetts, but in 1913 none were found, so far as the knowledge of the writer goes.

The present year none were reported in September, but on the evening of October 17, large numbers appeared at the lights in and around Worcester and were in evidence for several days. No other reports of their appearance in the state this year have been received, but it is hardly probable that they were only locally present.

It is interesting to note that while they were taken during the last week in September in 1911, and from September 21 to 25 in 1912, their first appearance this year was October 17, nearly a month later than in the other years mentioned.

Since the above was put in type this insect has also been reported as abundant in Pittsfield during the same period.

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## SCIENTIFIC BOOKS

Lehrbuch der Meteorologie. Von Dr. JULIUS HANN, Professor an der Universität Wien. Dritte, unter Mitwirkung von PROFESSOR DR. SÜRING (Potsdam) umgearbeitete Auflage. Leipzig, 1913, 1914. Chr. Herm. Tauchnitz. 8vo. Pts. 1-9, pp. 800.<sup>1</sup>

It is significant of the progress of meteorology that three editions of von Hann's "Lehrbuch" have been published in the past twelve

<sup>&</sup>lt;sup>1</sup> Ten parts are to be issued. The last one has been delayed, doubtless on account of the war.— *The reviewer*.