was a keen observer, a careful recorder, a close student of nature, and that the work he did in his day along entomological lines, alone and unaided, entitles him to a prominent place with the early economic entomologists of this country.

In this connection, Mr. Johnson exhibited three photographs of Mr. Trimble taken at different ages, and a large series of unpublished plates prepared, under Trimble's direction, for the second volume of his work on fruit insects. The plates excited considerable interest from their excellence.

Mr. Schwarz pointed out that some manuscript determinations on the margins of the plates were in the handwriting of the late Professor Riley, and placed the date at which the notes were made at some time between 1872 and 1875. Mr. Schwarz further stated that most of the figures of insects, while carefully drawn, did not possess the characteristic appearance which the Germans call "Habitus."

Mr. Ashmead called attention to the fact that a special effort had been made by Dr. Trimble to have the natural enemies of the injurious insects figured. He said that he could at once name several of the parasites from the figures. There was some doubt as to the date of the preparation of the plates, and Mr. Schwarz pointed out that *Lema trilineata* was figured as "the potato-beetle," showing that the plate must have been prepared before the eastern advent of the Colorado potato-beetle—that is, prior to 1871.

- Dr. Dyar presented the following note:

## NOTE ON AN EXTERNAL FEEDING HYMENOPTEROUS PARASITE.

By Harrison G. Dyar, Ph. D.

The larva of a nematine saw-fly occurs commonly on the black oak on Long Island, N. Y., in June (larva marked 8 H in my notes\*). They normally rest on the edge of the leaf, feeding almost continuously, and move the abdomen somewhat actively if disturbed. A few were found in an entirely abnormal position, holding on firmly to a rib on the back of the leaf, the abdomen hanging down flaccid. They were quite paralyzed, the dorsal vessel

<sup>\*</sup> The flies proved to be Numatus chloreus Nort. The larva is described in Journ. N. Y. Ent. Soc., VI, 123.

not in motion, yet they adhered by the feet more firmly to the leaf than in the healthy condition. On each larva were two eggs of a parasite, rather large, elliptical, pale orange eggs, placed transversely on the venter. Several larvæ were placed in a vial June 8th. The eggs soon hatched. June 11th there were two elliptical smooth green maggots, motionless, the head applied to the saw-fly and sucking its blood. Slightly corrugated by the incisures, otherwise smooth, flattened on the ventral side where they rest on the host. No perceptible substigmatal ridge. Head rounded, distinct, a large black patch on each lobe and one on the clypeus, forming a trilobate mark. Length 1.7 mm. June 12th they were 4 mm. long, dark gray-green, the sides above and below the tracheal line dotted with white by transparency; shape elliptical, the tail a little produced and narrowed. They crawled forward on the host and applied themselves in a new place. In the afternoon the host had turned black and the parasites also, but they had not increased in length. June 13th they left the saw-fly larva and spun cocoons in the corners of the vial.

Mr. Ashmead has determined the parasite as a species of Pam-

micra.

This note was briefly discussed by Messrs. Ashmead, Busck, Stiles, and Howard. Mr. Ashmead said that this was the first instance of an external feeding parasite on a saw-fly larva which he had known, except one recorded in the note-books of the Division of Entomology and afterwards published by himself under the name of *Catelytus pallipes*. He knew of no published instance of paralysis of a larva resulting from the sting of a terebrant hymenopterous parasite.

Mr. Busck remarked that the Proctotrypid Lælius trogodermatis paralyzes the larva of the Trogoderma by stinging it before it lays its eggs. Dr. Stiles inquired whether the parasite always stings the larvæ in the same place, suggesting that if this were the case the paralysis was mechanical; if not, that it was probably chemical. Mr. Busck replied that the Lælius always stings the Trogoderma larva at about the base of the third pair of legs, holding itself in a transverse position and inserting its ovipositor under the body of the host larva, thus evidently piercing the third thoracic ganglion. He said that the parasite would generally wait nearly half an hour after stinging the Trogoderma larva, to see whether the operation had been effective, and if so, would then lay its eggs upon the paralyzed body. He had noticed that