

Junctura, but have gray primaries without darker shades. There is also an unnamed variety of *Verrilliana* with yellow secondaries, from Arizona.

The synonymy of the species here discussed should be as follows :

- 1173 *Junctura* Walk.
 Walshii Edw.
 Aspasia Streck.
1174 *Arizonae* Grote.
1186 *Semirelicta* Grote.
 Var. Pura Hulst.

I have *Catocala Violenta* also from New Mexico, collected by Prof. Snow.

(To be Continued.)

THE FOOD RELATIONS OF THE CARABIDÆ AND COCCINELLIDÆ. By S. A. FORBES. From Bulletin No. 6, Ill. State Lab. of Nat. Hist., Normal, Ill., Jan., 1883, 8vo., pp. 31.

Through the kindness of the author, we have been favored with a copy of the above paper, which embodies the results of a very laborious series of microscopic examinations of the contents of the alimentary canal of insects belonging to the Carabidæ and Coccinellidæ. In the Carabidæ the results of the dissection and study of 175 specimens are given, representing 38 species and 20 genera. Of the Coccinellidæ, the results of the dissection of 39 specimens are given, accompanied by carefully compiled tables presenting the evidence in the most convenient and accessible forms. Prof. Forbes' experiments show clearly that the opinions hitherto held by Entomologists as to the food of these insects are in many respects incorrect. While it is shown that the insects belonging to the genus *Calosoma* live almost exclusively on animal food, those of *Chlœnius* and *Galerita* to the extent of nine-tenths, and those of *Pterostichus* three-fourths; the species of *Harpalus* take only about 12 per cent. of animal food, *Anisodactylus* 21 per cent., *Amara* and *Amphasia* 23 per cent., and *Agonoderus* about 33 per cent.; the whole series of Carabidæ examined averaging 57 per cent. of animal food, the remainder being vegetable and consisting mainly of the pollen of flowers and the spores of fungi.