logue of 1884 is put down as a variety of *montivaga*. If, therefore, he is himself so uncertain of the true position of these forms, he cannot expect others to follow him blindly, and though many years must elapse before any certain conclusion will be come to, I venture to think that the arrangement I have adopted represents the facts shown by my collection, including about fifty specimens from all the States where the species occurs and from many of the collections which supplied his own materials. If it should eventually prove that the Pa-

cific coast form is not separable from the Rocky Mountain form *montivaga*, it may be better to use the name *eurynome* in preference to *montivaga* or *egleis*, because both Behr's and Boisdual's descriptions which have priority over Edwards's, can only be identified with doubt. My specimens of *montivaga* and *egleis*, all come from the Sierra Nevada, and not from the Mt. Shasta district, where *monticola* and its vars. are so abundant; but local information as to their distribution, in this, as in the other cases, is very deficient.

INSECTS OF BERMUDA. — The Bermuda Islands by Professor Angelo Heilprin contains chapters on the insects, arachnida and myriopods of the Bermudas by Drs. P. R. Uhler, George Marx and the late Mr. C. H. Bollman. Dr. Uhler considers the species already found as almost entirely Nearctic in character but anticipates the discovery of multitudes of Neotropical forms. He does not enumerate the hymenoptera, lepidoptera, and coleoptera and his lists of the hemiptera, homoptera, pseudoneuroptera, dermaptera and diptera include but fifteen species or less than half the number recorded in Mr. J. Matthew Jones's "Visitors Guide to Bermuda." Dr. Marx mentions seventeen species of spiders, describing *Lycosa atlantica* as new. Mr. Bollman notes *Fulus moreleti*, *Spirobolus heilprini* n. sp., *Mecistocephalus guildingii*, *Scolopendra subspinipes* and *Lithobius lapidicola* as all the myriopods that have been reported from the Bermuda Islands.

DESCRIPTION OF THE LARVA OF MEGALODACNE FASCIATA, FABR. — COLOR. Body sordid white, with the patches on the segments above piceous; head light brown, mandibles piceous.

HEAD subglobose, small, smooth, shining.

CYPLEUS transverse, about five times as broad as long.

LABRUM somewhat narrower than the clypeus and about twice as long, anterior margin straight with a series of strong hairs; angles rounded; sides slightly oblique.

MANDIBLES short and thick with the apex strongly bifid.

ANTENNAE very short; two jointed; first joint short, and about three times as broad as long; second joint more slender and about twice as long as broad with the apex somewhat rounded.

MAXILLAE elongate, rounded at the apex with hairs and a few bristle-like short tubercles.

MAXILLARY PALPI three jointed; first joint much broader than long; second joint, less wide; third joint more slender and longer.

LABIUM subcordate, apex rounded; base much broader.

LABIAL PALPI two jointed; first joint, short, thick, twice as broad as long; second joint more slender, broader at the base than apex and about twice as long as broad.

BODY elongate, segments all about equal width and length except the first which is

narrower; last segment also narrower and bluntly rounded at the posterior extremity with two very short, pointed tubercles. On each segment is a transversely oblong, rugose, corneous patch divided in the middle by a narrow dorsal line.

LENGTH about 14 mm. WIDTH about 4 mm. Lives in numbers in fungus found on stumps and decaying trees.

William Beutenmüller.

OBSERVATIONS ON SATURNIA IO. — At Lexington, Mass., 3 July, 1888 I found on the upper side of a leaf of false indigo (*Baptisia tinctoria*) a cluster of about fifty (50) eggs. *Shape*: oblong, compressed on two sides. Attached to the leaf by their ends and touching each other by their sides. Arranged for most part in rows. *Color*: white, with black spots on outer end. In some the compressed sides were white, while in others they were partially yellow and in others still there was a black spot on each side. On 4 July I found on the under side of wild cherry (*Prunus serotina*) leaf a cluster of about thirty-four (34) eggs and these had hatched 6 July. The young larvae were brown, with the head much darker than the body. There were four rows of spines, sending out star-shaped clusters of concentric branches.

As observed by all writers who have described these caterpillars, they have an odd way of following each other, like a file of soldiers, keeping their line of march unbroken, even when turning corners.

The first moult occurred 13 July, the second 22 July. I have no record of subsequent moults.

On the 20 July I found another cluster of thirty (30) eggs also on the under side of a wild cherry leaf. These hatched 2 August.

Again, 25 July, in the same situation I obtained a cluster of twenty-three (23) eggs. These hatched 1 August.

From these various broods of larvae I raised a large number of imagines, which afforded me a good opportunity of studying the typical and the variational forms. The

following are my conclusions: the males differ from one another far less than do the females. In the latter the typical form has the fore wing plum-colored and the central dark spot of the hind wings nearly equidistant from the surrounding dark circle. From the plum-colored form there are several gradations of shade, till we reach a variety in which the fore wings are light brownish grey, with but little of the typical plum color. From the nearly equidistant spot of the hind wings we pass through gradations in which the spot has lost much of its roundness and become nearly contiguous with the circle, on the side towards the outer angle of the wing, till we reach a well marked variety in which the spot is pear-shaped with the small end turned towards the base of the wing, the large end almost touching the outer circle.

While the males present less difference, one from another, there is yet a well marked variety corresponding to that of the female just described. On comparison I find that out of more than thirty (30) females there are only four (4) with the pear shaped spot, while of twenty (20) males there are six (6) with this peculiarity.

Through the kindness of Dr. H. A. Hagen I have examined the specimens of *S. io* in the collection of the Museum of comparative zoology, where I find a very remarkable variety in a male, captured, I believe, by Dr. R. Thaxter at Newtonville, Mass., 27 June, 1870.

In this specimen the anterior wings were in the main typical; but the plum-colored concentric spots were somewhat peculiar, the outer ones becoming parallel lines instead of spots. It was in the hind wings that the aberration was most striking. The violet centre of the dark spot was reduced in size, and the surrounding dark area extended to the circle with only a mere suggestion here and there of the normal yellow belt between the dark spot and the circle. The latter, in its turn, had run over into the yellow belt beyond thus making a highly suffused variety.

It is my desire at some future time to ascertain whether these imaginal variations correspond with any larval peculiarities, and also whether they can be reproduced in breeding.

Holmes Hinkley.