forming a dense covering to the body ; the dorsals and the small spines over feet orange, all others black ; head black.

MATURE LARVA (after fifth moult probably).—Length 1 inch; color velvet-black, dotted with whitish points ; under side smoky-brown ; the dorsal spines yellow, with black bristles, those over feet yellow ; all others black ; feet black, pro-legs brown ; head small, sub-cordate, the vertices a little prominent ; dark brown ; much covered with black hairs.

CHRYSLIS.—Length .6 to .65 inch. Cylindrical ; head case narrow, short, compressed transversely, excavated at sides ; mesonotum not prominent, rounded, followed by a shallow depression ; abdomen stout, furnished with several rows of sharp, conical, rather short tubercles, those of medio-dorsal row standing on the anterior edges of the segments ; the wing cases a little flaring at base, depressed in middle ; color a delicate blue-gray ; of wing cases buff, more or less, but always slightly, tinted with red ; whole surface much marked with black ; on wing cases a black patch extends from base almost to hind margin, the nervules being orange ; the hind margins are bordered by two parallel rows of serrated spots ; the head case is largely black, and the mesonotum also ; the tubercles more or less enclosed by black ; behind those of medio-dorsal row are four small spots forming with the tubercle a triangle, and there are similar spots on sides. Different chrysalids vary in respect to these black markings.

This history of *Baroni* is more complete than that of any other of the Californian *Melitæas*. The species is the most beautiful of its genus on this continent, the larger part of the under surface of wings being of a brilliant red-lead color. In size and in the appearance of upper surface it is near to *Edithe* Bois.

A SUCCESSFUL MOTH-TRAP.

BY O. S. WESTCOTT, RACINE, WIS.

Many attempts have been made to devise something by means of which to capture the Noctuidæ, but the results have been usually so meagre that the contrivances have been abandoned in disgust. I have been using a contrivance this season which will really abundantly repay

one for the trifling trouble and expense involved in its construction. It consists first of a gallon glass jar, heavily charged with cyanide of potassium. To the top of this is fitted a funnel, the spreading mouth of which opens at right angles to the axis of the poisoned jar. The lower end of the funnel is four or five inches below the mouth of the jar and has an opening three inches in diameter, the funnel mouth being twelve or thirteen inches across. Opposite the mouth of the funnel, and on the opposite side of the jar, is soldered to the funnel a sheet of tin so bent as to thoroughly enclose a lamp. The lamp is supported by a piece of tin *hinged* to the outer edge of this projection. The lamp being placed in position, the tin support is made to rest upon the projecting part of the jar below its neck. Immediately in front of the light is placed a sheet of mica. The whole contrivance is placed within a tight wooden box, and a tin flap is also arranged above the lamp chimney as a precaution against an undesired conflagration.

The moth, attracted by the light, flies into the mouth of the funnel, is stopped by the mica, and after fluttering a very short time, is so far overcome by the fumes of the potassium as to fall within the poisoned jar, whence it cannot emerge. A projecting lip of an inch or so in height is soldered to the lower edge of the mouth of the funnel in such a way as to catch any insect that falls outside the mouth of the jar. It thus is most likely to return to the light. I have taken with this contrivance hundreds of Noctuidae and Coleoptera, among the former many things—especially among the Tineidae—entirely new to my cabinet.

THE TYPICAL COLLECTIONS OF THE DIPTERA OF NORTH AMERICA IN THE MUSEUM IN CAMBRIDGE, MASS.

BY DR. H. HAGEN, CAMBRIDGE, MASS.

The new edition of the Catalogue of the described Diptera of North America, by the Baron Osten Sacken, Washington, 1878, ranges doubtlessly among the most important works published on the North American Fauna. A very detailed and elaborate preface tells only in brief manner the immense amount of work done by the author since the publication of the first catalogue in 1858. A large part of new information is given at the end of the Catalogue in 335 notes.