

backwards into a sickle shape, giving the pupa a remarkable appearance." Mr. F. X. Williams has kindly given me a pupa, with a description of the larva, of a species of *Euchloe*, and as the latter agrees so well with Mead's, and the pupa differs so radically from that of *sara* and *ausonides* (both of which are known to me), I have no hesitation in referring the species to *lanceolata*. The curvature of the anterior portion of the chrysalis is especially distinctive, and for this reason it can hardly be confused with either of the other species found in the same region. Mead says of this: "In many particulars the pupa is not unlike that of *Terias nicippe*, and I believe that this species is the nearest to *Terias* of all our *Anthocharis*." Besides the specimen given me, Mr. Williams has three or four others, taken towards the middle of July in Shasta county, California, at an elevation of about 2,000 feet. Careful breeding will probably eliminate a number of our so-called species and varieties. *Stella*, *thoosa*, *julia* and *flora* are probably synonyms of *Reakirtii*, Edw., and *mollis*, Wright, is the same as *sara*, Boisd. *Lanceolata* is a very distinct species.

Chrysalis.†—Navicular, cylindrical, slender, the palpi-case much curved, more so than in any species known to me, giving the pupa a semi-lunar appearance; thickest in the middle and tapering gradually therefrom to the extremities; anterior end sharper than posterior, colour at first green, changing to a very light wood-brown, very faintly streaked, and with a few scattered black points; tip of palpi-case somewhat blackish; a narrow median ventral line somewhat darker than the ground colour; lateral ridges concolorous; incisures of segments whitish. Length, 19 mm.; width, about 5 mm.

*Lanceolata* is one of the first species to appear in the mountains, where it ranges. Like others of the genus, it varies considerably, especially in the density of the apical coloration and the size and form of the discal bar. Northern specimens differ from southern in having the auroral spot lighter, both above and below. *Lanceolata* ranges from Mexico to Alaska, and is essentially a mountain flyer. The food-plants are various species of Cruciferæ, particularly *Arabis perfoliata*, *Turritis glabra* and *Erysimum officinale*.

†The pupæ of *Euchloe* seem to be very variable as to colour, and also the degree of curvature of the anterior portion. Mr. Williams tells me, however, that his pupæ are quite uniform. In *E. ausonides* the chrysalis varies greatly in the colour of the longitudinal stripes, and the tip of the palpi-case may be recurved to a noticeable extent in some specimens, while in others the curve is only moderate.