

banded with jet black outside. The hairs over the body are now quite long. Length 33 mm.

MATURE LARVA.—Head jet black, sometimes chestnut-red, shining, finely punctured, neck bright yellow, cervical shield dull orange. Body pitchy black with four sulphur-yellow equidistant longitudinal stripes on each side, all being narrower than the intervening spaces, the dorsal space being the widest; anal plates jet black, roughly punctured. Under side also pitchy black with three stripes. Thoracic feet jet black, with their bases yellow; abdominal legs bright yellow, banded with jet black outside. On the 4th, 5th, 10th and 11th segments two yellow patches. The sordid white hairs are few to each segment, though long and most numerous on the lateral region. Length 45 mm.

PUPA.—Pitchy black, wing cases brown and very much wrinkled; head prominent; segments coarsely punctured about the anterior portion, smooth at the junction; cremasters very short, four in number; spiracles ovate, very conspicuous. Length about 23 mm.; width of wing cases 7 mm.

FOOD PLANTS.—Linden (*Tilia*), cherry (*Prunus*), pear (*Pyrus*), quince (*Cydonia*), walnut (*Juglans*), hickory (*Carya*), oak (*Quercus*), chestnut (*Castania*), beech (*Fagus*), hazel (*Corylus*), hornbeam (*Carpinus*), birch (*Betula*). Found from the latter part of July to about the middle of September. Single brooded. Subterraneous.

PREPARATORY STAGES OF CATOCALA RELICTA, WALK.

BY HOWARD L. CLARK, PROVIDENCE, R. I.

EGG.—Shape of flattened sphere. Diameter, 1 mil. Color, brownish slate. There are thirty-six vertical ribs, each alternate one only reaching the apex; and numerous horizontal parallel striations. The eighteen ribs which reach the apex there unite with the horizontal lines, forming an irregular network. Duration of this period 241 to 246 days.

YOUNG LARVA.—Length, 7 mil. Body very slender and geometrid-like, the two anterior pairs of pro-legs rudimentary. The two posterior pairs fully developed. Crawl with a very rapid looping movement. Head ochreous, large and prominent, with minute black piliferous spots. Color