## PRACTICAL AND POPULAR ENTOMOLOGY.--No. 12. Winter Retreats of Insects.

BY REV. THOMAS W. FYLES, LEVIS, QUEBEC.

Occasionally, after a mild day or two in winter, we see a newspaper paragraph headed "Remarkable Appearance of a Butterfly." From the tone of the article we usually judge that the writer had been lost in astonishment, at what he regarded as a strange phenomenon. This short paper will rob such appearances of their mystery.

Many insects pass the winter in the egg-stage, such as Orgyia antiqua, Linneus, and Orgyia leucostigma, Smith and Abbot. With such we have not now to deal. Others pass the dreary months in (1) the Larval, (2) in the Pupal, or (3) in the Imago stage of their existence.

(1) Of insects that pass the winter in the larval condition, those of the beautiful butterflies *Melitæa Phaeton*, Drury, and *Melitæa Harrisii*, Scudder, weave webs upon their food-plants, and dwell in companies. I have found the former on Turtle Head, *Chelone glabra*, in bottom-lands, in the township of Brome, and the latter on the White Aster, *Diplopappus umbellatus*, in the Fort Woods at Levis. The larvæ go into a torpid state after the third moult. They scatter and feed up in the spring.

Other larvæ pass the winter in solitary, sullen independence. A familiar instance of such is afforded by the bristly, black and red caterpillar of the Isabella Tiger Moth.

of the Isabella Tiger Moth, Isia Isabella, Smith and Abbot, (Fig. 12). This is often found curled up hedge-hog fashion, among the chips in a neglected corner of the wood-shed; under the buckets piled in the sugarshanty; or under loose planks in the hay-barn. It creeps into any convenient shelter.

In the spring the black larvæ of the Virgin Tiger Moth, Apantesis virgo, Linneus, may sometimes be seen crawling from a sidewalk, under the planking of which they had found a winter retreat.

April, 1906,

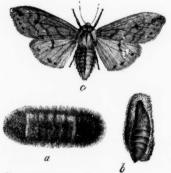


Fig 12.—Isia Isabella. a. caterpillar. b. chrysalis.
c. moth.