r of the young id between four however, were could be dis-

of a lace wing fly s from the young elper was a little had placed itself rrant worms and was taken in the arvæ about halfmale lace wing fly 0 a, placing quite y pretty objects. ve the purpose of istance from the herwise, probably posits these eggs e, when out colcaptured a lace v moments after, ited ; after walkot have occupied pened again when we had no opporthese eggs. The numerous would

> the season, the r broods seem to ooseberry bushes, rrant bushes with the fact that the rown or more and all to be found at ese newly hatched bly some beneficial em and with a few nd with but little he larvæ had been

rom a box, search o pupæ of ventrininch long, of a each extremity; ominent; the feet, insparent covering ittle deeper green, to be incapable of e microscope when S.

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s early as the third it, gooseberry and h in length; judg ing from the numbers infesting the bushes, they appeared to prefer the black currant to either the red or the gooseberry. By the 15th of the month they were well grown, and ap-

the 15th of the month they were well grown, and appeared as shown in fig. 12, (after Riley). They are then nearly an inch and a quarter long, of a whitish colour with a number of black spots on each ring or segment; a wide yellow stripe down the back, and another of the same character along each side, the latter somewhat broken. The underside is white with a slight tinge of pink, also spotted with black, and with a wide yellow stripe down the middle.

The length of the chrysalis see fig. 1%, is about half an incl.; it is of a dark reddish brown colour, paler between the segments, appearing under a magnifying glass roughened with minute punctures and irregularities of surface; the abdominal segments are dotted with round punctures of varying sizes, while the terminal one is armed with two short sharp brown spines. By the 2nd or 3rd of July, fresh specimens of the moth fig. 13, were on the wing becoming much more abundant about the 6th, when they were observed flying in almost every direction about the bushes. The moth when its wings are expanded measures an inch or more across; the wings are of a pale yellowish colour with several dusky spots, varying in size and form,

and more distinct in some specimens than in others; sometimes these spots are so arranged as to form one or two irregular bands across the wings. About the middle of July, some of these active specimens were captured, and one of the females, confined in a box by itself, laid a large number of eggs, 140 in all, between the 22ud and 23rd of July. These were laid loose in the box excepting 24 of them which were slightly attached to the sides. The egg when viewed through a microscope is a very beautiful object; its length

is nearly  $\frac{3}{100}$  thes of an inch, width nearly  $\frac{2}{100}$  the; in form it is an elongated oval, rather blunt at each end. Colour dull yellowish grey, sometimes with a bluish tinge with the surface honeycombed with regular depressions, the ridges bordering each cell having several bright minute whitish dots, which give the egg a very pretty and brilliant appearance when brought under the strong light of the condenser of the microscope. At the present date, December 1st, these eggs are still unchanged, excepting slightly in colour, owing to the developing larvæ showing through the semi-transparent shell in spots, the larvæ in all probability will not emerge until early spring. As there is only one brood of this insect with us during the year, it is never likely to prove very troubleome; a seasonable application of hellebore will in any case keep it within bounds.

## THE WHITE-MARKED TUSSOCK CATERPILLAR, Orgyia leucostigma.

The orgyia caterpillar is always common in our section of Ontario. The clusters of eggs from which the larvæ are produced are quite numerous in winter on our fruit trees especially those of the apple, pear and plum, they are securely fastened to the tree along with a dead leaf or two by threads of silk.

Fig. 14, (after Riley), represents the fullgrown caterpillar which, when about to change to a chrysalis, selects a leaf on which to undergo this important transformation, and this leaf in such a position that while the chrysalis is firmly attached to it on the one side, it is firmly secured by silken threads to the under side of a branch on the other, thus securing the leaf from falling to the ground in the Au