

each leaf attacked, eating small holes through its substance, and gradually devouring all but the skeleton. Then forced to seek new feeding grounds they separate more and more as size and appetite increase, until often the whole bush is visited and defoliated. The



Fig. 28.



Fig. 29.

larvæ* (Fig. 29) are whitish when hatched, but soon become green, and then develop numerous black spots, and have the extremities tinged with yellow. When full-grown they descend to the ground and spin oval, smooth, tough, brownish cocoons, either under leaves and rubbish or in the ground; occasionally they are found attached to the stems and leaves of the bushes. The flies emerge generally about the first of July, and the second brood of worms attain their full growth toward the close of summer, and winter in their cocoons. Hellebore has been proved to be the most convenient and efficient

remedy for the removal of the worms. It is applied in the proportion of an ounce to a pail of water, thoroughly mixed, and freely sprinkled over the plants; care being taken to watch for the successive broods.

Nematus Erichsonii is a saw-fly which has recently been found committing immense ravages upon the larch (commonly known as tamarac, hackmatack, juniper, etc.) in the Provinces of Quebec and New Brunswick, as well as in portions of the United States. It is about the size of the preceding species; the head, antennæ, thorax and tip of abdomen are black; the legs, except hind feet, and five segments of abdomen are rufous. The larvæ devour the leaves rapidly, and when numerous a tree is speedily stripped. They spin cocoons very similar to those of the ventricosus.*

Nematus Similaris is a smaller species, of which the worms feed upon the leaves of the locust. The fly (Fig. 30, *f*) is about one-fourth of an inch long; yellowish, with a patch on top of head; the sides and front of the thorax and bands on the abdomen, black. The egg (Fig. 30, *a*) is laid in a slit made on the under surface of

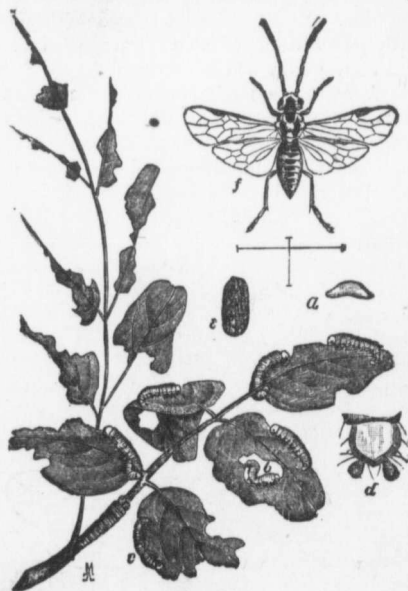


Fig. 30.

of the leaf (as are those of many other species) and the worm (Fig. 30, *b, c*), when hatched,

* A special paper on this species is being prepared by Mr. Fletcher, who has studied its extensive ravages, so that a more complete account of it is unnecessary here.

commences its green, with a cocoon (Fig. 31, *b*) broods, as I found older ones in I found larvæ probably killed on the night of Entomological and no signs nor am I aware

Several *salix-pisum*.

and the larvæ on the side of same size, produced yellowish, hollow

The genus well-known end The eggs (Fig. 31, *a*) spring in slits fortnight after and *b*) are found foliage. They pale yellowish are about three cocoons (Fig. 31, *c*) of particles of early in July.

of larvæ appear their earthen cell 31, *d*) is black ruptured so as to whence the specimen of the abdomen

We now realize, and of which insects of inconspicuous distinguished from space here only to



Fig. 32.