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much like the curculio does, and remain for a short time motionless; their structure, however, is not such as will permit of their disguising themselves as thoroughly as the "little turk" does, and hence they are easily detected. During the past season these flies were very numerous during the early part of June, and their progeny was destructive in a corresponding degree later in the summer.

After pairing the female places her eggs singly within little semicircular incisions through the skin of the leaf, which is frequently followed by some discolouration at the point of insertion. Harris says that the eggs are generally placed on the lower side of the leaves, whereas in our experience we have found them quite as often on the upper side. According to the same author the flies all finish this business of egg depositing and disappear within the space of three weeks. "The flies have not the timidity of many other insects, and are not easily disturbed while laying their eggs. On the fourteenth day afterwards the eggs begin to hatch, and the young slug worms (see those on leaf in Fig. 41) continue to come forth from the fifth of June to the 20th of July, according as the flies have appeared early or late in the spring."

Fig. 41.



head which is of a dark chestnut colour is small and is entirely concealed under the fore part of the body. They are largest before, and taper behind, and in form somewhat resemble minute tadpoles. They have the faculty of swelling out the fore part of the body, and generally rest with the tail a little turned up. These disgusting slugs live mostly on the upper side of the leaves of the pear and cherry trees, and eat away the substance thereof, leaving only the veins and the skin beneath untouched. Sometimes twenty or thirty of them may be seen on a single leaf; and in the year 1797 they were so abundant in some parts of Massachusetts that small trees were covered with them, and the foliage entirely destroyed, and even the air by passing through the trees, became charged with a very disagreeable and sickening odour, given out by these slimy creatures. The trees attacked by them are forced to throw out new leaves, during the heat of the summer, at the ends of the twigs and branches, and this unseasonable foliage which should not have appeared until the next spring, exhausts the vigour of the trees, and cuts off the prospect of fruit."

"The slug worms come to their growth in twenty-six days, during which period they cast their skins five times. Frequently as soon as the skin is shed, they are seen feeding upon it; but they never touch the last coat which remains stretched out upon the leaf. After this is cast off, they no longer retain their slimy appearance and olive colour, but have a clean yellow skin, entirely free from vicidity. They change also in form and become proportionally longer, and their head and the marks between the rings are plainly to be seen. In a few hours after this change they leave the trees, and, having crept or fallen to the ground, they burrow to the depth of from one inch to three or four inches, according to the nature of the soil. By moving their body the earth around them becomes pressed equally on all sides, and an oblong, oval cavity is thus formed, and is afterwards lined with a sticky glossy substance, to which the grains of earth closely adhere. Within these little earthen cells or cocoons the change to chrysalids takes place, and in sixteen days after the descent of the slug worms, finish their transformations, break open their cells, and crawl to the surface of the ground, where they appear in the fly form. These flies usually come forth between the middle of July and the 1st of August, and lay their eggs for a second brood of slug-worms. The latter come to their growth and go into the ground in September and October, and remain there till the following spring, when they are changed to flies and leave their winter quarters. It seems that all of them, however, do not finish their transformation at this time; some are found to remain unchanged in the ground till the following year; so that if all the slugs of the first hatch in any one year should happen to be destroyed, enough from a former brood would still remain in the earth to continue the species."

"The disgusting appearance and smell of these slug-worms do not protect them from the attacks of various enemies. Mice and other burrowing animals destroy many of them in their cocoons, and it is probable that birds also prey upon them when on the trees both in the

"At first the slugs are white; but a slimy matter soon oozes out of their skin, and covers their backs with an olive-coloured sticky coat. They have twenty very short legs, or a pair under each segment of the body excepting the fourth and the last. When fully grown (See a Fig. 41) they are about nine-twentieths of an inch in length. The