trophi of the first form, and the other and larger one of the second form. It had therefore been in its mine within a few hours, more or less, of seven days, and had undergone two moults there. On the next Friday, July 23rd, I found that the larva was not feeding, so I unrolled its cone and found in it two more casts, one of which was still fresh. Here were therefore two moults *within* the week, making four in two weeks from the egg, and the larva was a little more than half grown It eats much more and grows much more rapidly in its last stage. When taken from its roll, as just stated, it was placed upon a fresh leaf, where in a little while it had curled up the edge of the leaf, fastening it all around by a web instead of by the little cords as in its first roll. On Monday morning early, July 26th, it was still in its roll, but three hours later it had left the roll and begun its cocoon at the edge of the leaf. This is unusual, as the mine when the larva is free is placed over the midrib. The contraction of the silk curled the edge of the leaf over the cocoon. The pupa was disclosed early in the morning of the 28th July, about two days after the cocoon was begun, but less than a day after the cocoon was finished; the four previous moults each occupied about twelve hours, as I was able to determine approximately by observing whether or not the larva was feeding. There are thus five larval stages. The entire larval life before beginning its cocoon is about seventeen days, within a few hours more or less, giving nineteen days as the entire larval life. This is about the length of larval life in *Lithocolletis* and *Leucanthiza*. That of *Phyllocnistis* is not known; that of some species of *Nepticula* (a genus very far removed from the others above named) is sixteen days in some species, only a week in some others, and probably even less in some others. In the larva whose history I have given above the imago was disclosed Aug. 4th, so that the pupa state lasted just a week, or just twice as long as any single larval state. The same rule holds in *Lithocolletis* and *Leucanthiza*. In *Phyllocnistis* we do not know the length of the larval stages, but the pupa state lasts eight days. I refer only to the summer broods, of course. In some species of other genera, as *Nepticula ptelicella*, not yet described, the first and second larval stages each last three days, whilst the third (and last one) lasts just twice as long—six days, and has just double the rate of growth, so that it looks as if a regular moult had been skipped. Is the pupa state likewise the equivalent of two larval stages?