

melanic, black over dorsal area and wing-cases, and black varied with brown on ventral side. Duration of this stage 7 to 10 days.

I have raised many broods of *Nycteis* the past five years, but only this season (1878) have I been able to assure myself fully of its peculiarities. Upwards of 50 larvæ were carried through last winter, and by separating them into small lots and regularly noting the changes in each, it was made certain that three moults occur after hybernation, instead of two as in *Tharos*. And treating the larvæ of the June brood with the same care, the complete winter and summer history is manifest. Of 92 larvæ from one lot of eggs laid 28th May, and all which passed their first moult about 18th June, 56 proceeded to second moult about 21st June, and third moult about 26th, and so on to chrysalis. But 36 lingered after the first moult, and 32 of them assumed the russet hybernating coat, before described, at second moult, while the remaining 4 came up then in black coats like the larger part of the brood, and slowly proceeded to chrysalis, which they reached many days after the others. These 4 seemed to have had a tendency to join the hybernators which was somehow counteracted, but they proceeded with a hesitancy at every stage till they reached chrysalis. The shrinking of the hybernators I have spoken of. These are now resting, some of them in the folds of a dried leaf, others on the tin cover of the glass they fed in, gathered in a close cluster, and if kept through the summer in a moderately cool place, and in the winter in a cool and dry one, will be apt to survive till next spring.*

Of the larvæ which I had alive last winter, most awoke 15th and 16th February, on being brought into a warm room, and moved about. Some fed a little and then rested for their first spring moult, which took place shortly after. Others passed this moult without feeding, for no food was given them. Others remained motionless, or if aroused, went to sleep again, and though subject to the same temperature and treatment as the active ones, did not pass their first moult till early in April, that is, fully six weeks after some of the others. Four larvæ of this drowsy lot passed their first moult 7th April, fed for a day or two very sparingly and dropped to sleep again. On 8th of May one of these began to feed once

* As the printing of this paper has been delayed nearly a year, I am able to add (June 1, 1879) that such of these larvæ as rested on the tin survived the winter with no loss, but those in the leaves all died. I have several times noticed that a cool metal surface protects the larvæ better than leaves, which are apt to become damp with changes in the weather, and mould.