

dark green stripe down the back. The caterpillars as they grow larger become more voracious and the leaves of our first clover plant, if we have more than a dozen caterpillars feeding upon it, will now probably be much eaten. When the caterpillars have ceased feeding preparatory to the third moult, some of them may be removed to a fresh plant. This is done, not by taking them from their silken mats, but by cutting off the whole leaf upon which they are resting and dropping it in among the leaves of the other food plant. After the third moult they will crawl up on to the leaves of the new plant and will be seen to have improved in appearance. They are now three-fifths of an inch in length, the lateral stripe is more distinct and marked with red on some of the front segments. In some specimens black lunate spots occur beneath the stripe. In the next and final stage the colors are more intense, the body being dark velvety green above and a crimson line runs down the centre of the side stripe on which the breathing pores or spiracles are situated. When full grown these caterpillars are over an inch in length; they then begin to wander from the food plant, unless confined in a gauze cage, and look for a suitable place to change to the chrysalis condition. There a mat of silk is spun over the surface with a button of pink silk at one end. The hind feet are attached to the button and the front legs are hooked into the silk of the mat. After resting for some hours the caterpillar spins a very slender girdle from side to side of its body, and then slips it over its head and rests upon it. While the girdle is being spun it is passed several times over a small cushion-shaped organ beneath the neck of the caterpillar, evidently to strengthen the cord.



Fig. 3.

The chrysalis is about an inch long, somewhat, but not quite, like Fig. 3, is apple-green in color and has a yellow stripe down each side. About six days after it is formed the color of the future butterfly begins to show, and the exciting period of watching for the perfect insect begins. As a rule about the ninth day the critical moment arrives, and lucky is the watcher who is fortunate enough to see the emergence of the butterfly.

The above account gives only in a general way the life-history of the Clouded Sulphur Butterfly; there are many other points of interest which will be discovered by an observant student, some of which have been purposely left untold. In addition there is always much variation in the way in which, even in the same brood, some individuals develop when compared with others. Noting these differences demands just such an attitude of mind as Nature study calls for, together with close observation and constant attention so as to cultivate the powers of perception.