

etc., with wonderful labour and perseverance; but the most curious instance is that of the tumble-dung, (*Scarabæus pilularius*.) This beetle, having previously prepared a grave for its ova, encloses its egg in a ball of soft dung, which, when indurated by the power of the sun, they roll along the ground until they reach the excavation, into which it is dropped. We have seen numbers of these little animals, during the spring time in Virginia, trundling their pellets over the hard road, and were much amused at their progress, and the resolution with which they strove to overcome the obstacles in the way. Two individuals are generally employed in conveying the burden; one in front, assisting with its legs while walking backward; the other pushing on the opposite side with its hind legs, calling into play those amazing powers of physical strength, with which this insect is peculiarly gifted. Often, on arriving at the top of a small hillock, the ball would slip from their hold and course to the plain beneath, yet as often would they recover their charge and recommence the journey. We may mention here, that species of spider (*Lycossa saccata*) which carries her eggs in a bag or case, fastened as an appendage to the body of the mother, until, not only the young spiders are hatched, but have acquired sufficient strength to venture beyond the care of the parent insect. The ear-wig is the only insect which has been observed to hatch her ova by the process of incubation.

Our preceding remarks were limited to those insects which are *oviparous*, or depositing eggs from whence the embryo is extricated in the commencement of its first stage. There are however, exceptions to this rule; where the larva is produced alive, and unconfined in any envelope from the body of the mother, having previously undergone development *in ovo*, consequently these are termed *ovo viviparous*, of this kind, the scorpion and blow-fly are examples. In the latter, the embryo flies are formed into an immense coil, which is wound up in a pouch within the abdomen; these, as they are hatched, are lodged upon dead animal substances, to the number, as Reaumur estimated of 20,000, which easily accounts for the prodigious quantity of maggots found among putrid carcasses; it is this mode of generating larva, which gives rise to that evil denominated *fly-blow*, but the trifling nuisance occasioned thereby, is absorbed in the reflection, that, through this simple means, nature is enabled to destroy the noxious qualities attendant upon organic decomposition.

The *Aphides*, that large family of insects which, living on the juices of plants, infest every portion of the vegetable kingdom, afford a singular anomaly in the history of animals, as they are *ovo viviparous* in summer, and *oviparous* in the autumn; but it is discovered that these separate modes are peculiar to different generations, and not common to the same individual.

The intention of this provision is evident, as in the egg state, the germ is alone capable of enduring the cold season that precedes its development in the ensuing spring. This class is also remarkable in another respect, namely in producing young for nine successive generations without impregnation, which is perfected in the short space of nine months; so rapid is their increase. Some idea may be formed of their astonishing fecundity, when we mention that Reaumur ascertained by experiment, "one *Aphis* may be the progenitor of 5,904,900,000 descendants during its life," and that in one year there may be twenty generations.

The incalculable number of these insects which swarms upon every leaf as soon as they are expanded by the warmth of spring, and also the great quantities of caterpillars, at times appearing, as if spontaneously, have given rise to the opinion of their being wafted by the power of some noxious wind; hence the term *blight*, which was imagined to account for the natural phenomenon. The truth is, that these eggs, equally exposed to atmospherical influences, and laid nearly about the same time, are consequently matured simultaneously; which explains the sudden appearance of such multitudes of living creatures, whose magical presence, many of our fair readers may have witnessed, to their sorrow, upon the buds and leaves of their favourite flowers. These plant lice, secrete the honey dew, as it is absurdly called, to be seen in small drops upon leaves which they frequent—of this sweet liquid, ants are very fond; an almost improbable instance of which we may be permitted to mention.

In the spring of 1840, a small thorn tree was found almost deprived of its growth and foliage from the ravage of innumerable aphides, as the continual draining of the sap had dried and shriveled the leaves and young shoots. This tree was visited by numbers of ants, for what purpose was not evident at first, as there was no appearance of honey-dew whatever. These ants were continually walking over the legions, with which every leaf and stalk were paved, and pausing at each aphid, moved its antennae as if employed in some definite purpose; and