

latter portion of their history is more immediately connected with the present subject, we may be permitted to offer a few general remarks thereupon.

The perfect insect, issuing from its temporary shroud, provided with means and instincts, widely distinct from those of which it was possessed during any previous period of its life, spreads its new-born wings and launches into an element in which it never before was capable of venturing.

But there is little time wasted in unprofitable amusement, the chief attention seems to be directed to the preservation of its species, indeed, it seems to be the main intention of Nature, in effecting the last transformation, that an opportunity should be given each insect to make provision for a continuance of kind; as soon after the accomplishment of that purpose they almost invariably die,—and though some may linger out a few months, yet the greater number do not survive until their progeny is hatched, but seem to have fulfilled the last object of their lives, and are content to relinquish the duties of their little sphere to the brood which the ensuing summer is sure to bring forth, with its vivifying beams.

Insects in this stage eat little, and therefore we do not observe any very great enlargement in their growth, as they attain full size while in the aurelia. In some insects (a species of *ephemera*, for instance,) the purposes of this stage are completed in a couple of hours, and in some countries, at certain periods, myriads are seen springing into air, while myriads are continually falling, until the ground is covered with their lifeless remains. It seems a remarkable provision of Nature, that females, during the progress of parturition, are more tenacious of life than at any other period—a fact which strikingly illustrates the great importance attached by the Almighty to the preservation of species. We have observed this in various moths, which were found most difficult to deprive of life, for the purpose of study, while laying; for, though impaled in the usual way, they still persisted in depositing ova, in a regular manner, on the box where they were fastened, as if unsusceptible of pain—the force of instinct triumphing over every other feeling.

Insects usually deposit their eggs singly, or in groups, upon or near those substances on which their larvae feed; with the exception of some that hollow excavations, or fabricate nests in which their young are brought forth; and here are seen evidences of the most surprising ingenuity and labour. In the first instance, we

cannot sufficiently admire the sagacity of the mother in selecting a locality so favourable for the nourishment of the future progeny, whose habits and structure are so different from her own; for it must be remembered that she has undergone several complete transmigrations, and may be considered in every respect a different species, save in the undeviating faculty of producing *ex ovo*, an individual of the type from which it originally sprung. It is well known that substances in a state of decomposition, are a favourite nidus for the maturation of insect eggs; which has given rise to the opinion, that maggots were produced *spontaneously* from the fermentation of dead bodies, instead of resulting from innumerable ova, implanted therein by insects, attracted through the effluvia of putrefaction. And thus we trace a wise and beneficent purpose effected by means of these, apparently insignificant creatures, in the economy of Nature; for, as the larvae feed voraciously upon those substances, in that manner carrion and other offensive organic remains are destroyed, which would otherwise contaminate the atmosphere, and prove injurious to the health or comfort of mankind.

Among insects of prey,* there is a large family. (*Ichnumons*) the individuals of which have this peculiarity: they are furnished with a borer, (*ovipositor*) projecting like a bristle or tail, from the abdomen, by means of which they are enabled to penetrate the bark of trees, the bodies of other insects, and even their eggs for the purpose of lodging ova in their substance. All larvae are subject to the attacks of these parasites, particularly those of moths and butterflies; and, strange to say, a caterpillar has been known to survive several broods, generated in this manner, in the fatty material of which it is composed—even when lungs and heart have been devoured, and the animal reduced to a mere hollow sack. So minute are some of these tormentors, that a butterfly's egg has been known to contain several of them in its interior.

Some insects cover their eggs with down which is furnished from their own bodies, as a protection from the severity of winter. The Gipsy Moth is an instance of this kind, and, to accomplish this purpose, her tail is covered with a bunch of that material, which she attaches to her eggs by means of a glutinous fluid, with which they are moistened. The various methods in which insect eggs are deposited are very curious; some are ranged in a circle, some enclasp a twig, like a bracelet, while others again are wound round the branch