

working and toiling underground, and so loosening and honeycombing the soil that the blessed air can revivify it, our beautiful earth would soon be nothing but a mass of dead matter, along with ourselves. All is kept sweet and healthy by the untiring labour of countless numbers of animals and insects, many of which we look upon merely as vermin.

There is scarcely an insect or animal in existence but has its particular pest in the form of a parasite, some being so deadly as to become permanently attached and never to leave its victim till all life is sapped away. Some are most repulsive in appearance, whilst others are beautiful and friendly-looking, and so amiable as to quite disarm all suspicion of their real character, and they attach themselves to their prey in many ways. For instance, the poor worm, in threading its long sinuous course through the damp ground, perhaps picks up a grain of dust, so small as to be invisible to the human sight, and this grain is the seal of the worm's death-warrant, being a little parasite which will work into the folds of its skin, breed there, and multiply exceedingly. Each of the offspring breed and multiply till at last the unfortunate worm is actually eaten up.

Other parasites partake of the colour of certain leaves, and the caterpillar picks one or two up on its hairs in passing, perhaps little dreaming that it has from that moment begun a life of misery till death proves a blessing. This particular parasite enters and lodges between the velvety scales and there deposits its eggs. The presence of this foreign substance causes a kind of pus to form, which feeds the eggs; these in time are hatched and the young spread about and form fresh colonies, and so this process is repeated till the caterpillar dies from exhaustion.

Deep under the ground are innumerable forms of life which are being beset by various other insects which, through long habits of idleness, have lost the faculty of finding their own food and are compelled to quarter themselves on other insects to feed on their efforts and bodies, or die. Many remain inactive till their prey comes along and they can start their baleful operations; others spend more time, and work harder in finding some insect to bleed than would keep them all their lives if the same efforts were exerted in search of honest food. In many cases these parasites are themselves eaten as food by other insects, and, increasing rapidly, spread over the whole system of their devourer till there is nothing more than a mass of corruption.

The poor persecuted house fly often leads a most miserable existence. As is well-known,

its whole body and legs are covered with hairs, and with the microscope, one can occasionally be seen having every hair of its body, and, indeed, its whole surface, as thickly covered with parasitic insects as settling bees at swarming time, scores deep, each trying to struggle its way to the surface of the fly's body to get a bite. The tortured fly walks and flies hither and thither, each motion of its legs and wings knocking off thousands, and when on a table the microscope will show them hurrying and scurrying in the trail of the fly, endeavouring to overtake it and reattach themselves. Sometimes a fly in sheer desperation will fling itself into a vessel of tea, milk, or other liquid, to drown, and, by its immersion, millions of these tormentors will be washed off its body and float around it on the surface of the liquid in the form of a scum. If the fly is rescued, it is not at all pleased and will, if possible, fling itself in again, in a deliberate endeavour to end its miseries by actual suicide. That this is its definite determination is seen by the fact that when so tormented, it will drop in again and again, and make no attempt to swim or save itself, but will immerse its body as far as the buoyancy of the liquid will permit, and remain still, until drowned. Not so otherwise, for when free from parasites, it will struggle and swim for hours and assist every effort to rescue it, by creeping on a stick or skewer, and when safe, will preen and dry itself with evident pleasure at its escape. The hairy body of this insect, and its weakness for investigation, which leads it into all sorts of obnoxious places, make it easy for foul microbes and the like to be carried away by it. Then when it flies, the flapping of its wings and the wind caused by this, shake off many of these disease germs on to anything beneath, which may, perhaps, be handled or even eaten by us, and so these disease-germs get into our system and we suffer more or less in consequence.

All these dangers of parasites, together with other evil insects which would kill for food, are guarded against by many natural means. Some insects have wonderful sight development which enables them to see danger some distance ahead—the house fly for instance, with its dome of eyes—others have wonderful hearing, which warns them of the approach of any enemy, however minute; others have a strong sense of smell, which is yet so delicate that nothing can possibly draw near without the insect's knowledge, and so it is with all the senses. If nature, or accident, deprives any living creature of a certain sense, nature also comes to the rescue with a kind and gentle hand, and develops some other sense so abnormally that the loss is

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