appear and therefore how we may either guard our flowers and food-vegetables from their ravages, or remove the parasites when once they have settled on their victims. The loss to farmers, fruit-growers and horticulturists each year through parasites is enormous.

Fungi and moulds are parasitic on animals as well as on vegetables; the salmon has the fungoid salmon disease, the grouse has the bacterial grouse disease, the barn-door fowl has its cholera, the swine have swine-fever, the cattle have anthrax and Rinderpest, horses "glanders" and so on.

Then animal parasites infest animals; the frog's lung harbors certain lowly creatures known as Gregarinidæ; dogs, cats, pigs, horses, all have their intestinal parasites, from which obnoxious worms man himself is by no means exempt.

Host and unbidden guest, victim and parasite—this inter-relationship runs through the whole of living nature; it is not the exception, it is the rule. Nature has indeed provided for it; the intestinal worms of the horse have actually developed an *anti*-ferment which prevents their being digested by the digestive ferments of the horse's intestine.

Attack and defence, action and reaction unceasingly, this is nature's method; there is no rest; and there is no splendid isolation; we must be attacked and preyed upon and resist—forever!

A few plants and animals have taken refuge in "protective mimicry"; the dead-nettle imitates its stinging neighbor, and so is avoided by such animals as avoid the latter; some insects imitate dead leaves, twigs, etc., and so are not devoured by insect-eating birds.

But the majority of the foes that man has to battle with are far more subtle than intestinal worms or mosquitoes, or even fungi; for there are myriads of bacteria so light that they float in air even when dust settles; so small that millions can inhabit a drop of water; so numerous that arithmetic is powerless in designating them; so powerful that they have emptied cities, decimated armies and devasted continents. The mortality of the great Boer War had been a trifling thing if the English had had only to reckon with the Mauser bullets; far more deadly the typhoid bacilli than all the guns of all the Dutchmen and their allies.

It is now common knowledge that nine out of ten diseases have an actual, physical recognizable source or cause in some particular parasitic bacillus (rod-like form) or coccus (round form). Undoubtedly some diseases are due to microscopic animal forms, such as ague (malaria), yellow fever, dysentery, the sleeping sickness; but the vast majority are due to vegetable parasites of microscopic size. All those serious diseases known as diphtheria, typhoid fever, cholera, plague, tuberculosis, pneumonia, influenza, rheumatism, common cold, and infantile paralysis, have been shown to be due to the living body being invaded by countless numbers of infinitely minute rod-like or ball-like microbes.