

ferred by the bite of the famous biting fly known as the tsetse-fly. The germs of the disease of cattle known as anthrax are carried by gad-flies, or horse-flies, and when these flies subsequently bite human beings malignant pustules may result. And other discoveries of this nature are constantly being made. Even the common bedding is strongly suspected in this connection.

"These statements are not guesses, they are proved facts of science. It will be some time before these facts and their significance receive their full recognition in the medical practice; the knowledge of medicine is always in advance of its practical recognition. But modern medical practice is much swifter to incorporate the new facts of biology than was the practice of even a decade or two ago, and in such lines of work as army and other governmental service the new methods of preventive medicine are quickly adopted. Already there are organised movements all over the world to make use of the new knowledge concerning the relation of insects to human disease. As I write these pages comes the report of the work of Major Ronald Ross, one of the discoverers of the malaria-disseminating capacity of the mosquito and one of the leaders in the anti-mosquito crusade, in nearly stamping out malaria in the long notorious pest-hole of Ismailia. Malarial cases have been reduced there from 300,000 cases annually to 300, by effective war on mosquitoes. Dr. Cruz reports that Rio Janeiro has abolished its old-fashioned quarantine regulations, and vessels with yellow fever on board will hereafter simply be disinfected and supervised. In October, 1903, Cruz directed the operations of 1,200 men especially employed in destroying the larvæ of the mosquito in their breeding-places in and around the city, and, as a result, only nine cases of yellow fever developed in the midsummer months of January and February (1904), as against 275 cases in the same months in 1903. In the period from 1850 to 1896, 51,600 deaths occurred in Rio Janeiro from this disease, and at times as many as 2,000 patients have been cared for in the isolation hospital, which is now closed. The benefits of the war waged on the mosquito at Rio Janeiro have been as great as those obtained at Havana, where the vigorous work of the American authorities during our occupation of the islands practically stamped out yellow fever in a city long notorious the world over as a plague-centre."—*Insects Injurious to Crops, by Dr. Fletcher.*

Every crop grown by the farmer and gardener is liable to be attacked and reduced in value by various insect enemies, from the time the seed is sown until it is harvested. Frequent inquiries concerning even the commonest and most injurious pests make it advisable to issue in concise form for reference, an account of some of the more important of these, together with the latest approved remedies, and the most convenient methods of applying them.

It must be acknowledged by all observant people that the losses due to the attacks of insects are every year enormous; and it should be more widely known that there are practical—that is effective, cheap and easily applied—remedies for most of those kinds which year by year levy such a heavy tax on all crops. For the effective use of remedies against injurious insects, a certain amount of knowledge as to the habits and structure of the latter is very useful, so that the most appropriate remedy may be made use of, and this at the time when it will be most effective.