

the entomological writings of the late Dr. Asa Fitch, a list of the insect enemies of the apple-tree, descriptions and notes of Lepidoptera, on the life duration of the moths, followed by a very complete general index covering 33 pages, with an additional index to food plants. We have had many excellent reports from State Entomologists in the past, but we doubt if ever there was a report published containing so much useful information and so well arranged in every respect as this first report of Prof. Lintner's. The State of New York may well be congratulated in having secured the services of an officer so efficient and painstaking.

Twelfth Report of the State Entomologist on the Noxious and Beneficial Insects of the State of Illinois.

This twelfth Illinois report is the first of the recently appointed State Entomologist, Prof. S. A. Forbes. It is a large octavo pamphlet of 162 pages, illustrated with 30 cuts. An exhaustive account is given of the corn-root worm, *Diabrotica longicornis*, Say, with magnified figures of the insect in all its stages, together with details of the injury it has inflicted. This is followed with an account of the remedies, both natural and artificial, which have been found useful in subduing this pest. The Chinch bug, *Blissus leucopterus*, is next noticed, its life history given, and natural enemies enumerated, including a species of bacterium, *Micrococcus insectorum*, which has been found destructive to the Chinch bug in the west.

The strawberry crown borer, *Tyloderma fragaria*, is described very fully, and its work illustrated; also the crown miner, *Anzisia lineatella*. Following these are descriptions of the melon plant louse, *Aphis cucumeris*, n. sp., which has been found injuring cucumbers and melons; the European cabbage worm, *Pieris rapae*, with details of experiments with various remedies. The cherry or pear slug, *Selandria cerasi*; the white-marked tussock caterpillar, *Orgyia leucostigma*, the bag-worm, *Thyridopteryx ephemeraeformis*; the army worm, *Leucania unipuncta*; the stalk-borer, *Gortyna nitela*; and the zebra caterpillar, *Mamestra picta*, are also described, following which is an interesting article on the food relations of predaceous beetles, a subject to which Prof. Forbes has devoted much attention. Next in order is a paper on the Phytopti and other injurious plant mites, by H. Garman, and observations on the angoumois grain moth and its parasites, by F. M. Webster; the whole forming an excellent report, one which well sustains the character to which the Illinois reports have attained.