

SPECIAL REPORT OF THE STATE BOARD OF AGRICULTURE on the Extermination of the
Ocneria Dispar, or Gypsy Moth. Boston: Wright & Potter Printing Co., 1892.

This official pamphlet gives an interesting account of the very remarkable and unique efforts that are being made in the State of Massachusetts to exterminate the Gypsy Moth. This insect, imported from Europe, was accidentally permitted to establish itself about twenty years ago, and has now multiplied to such an extent as to be a serious pest throughout a considerable area of the State. In March, 1890, the Legislature passed an Act appointing three Commissioners to "provide and carry into execution all possible and reasonable measures to prevent the spreading and secure the extermination of the *Ocneria Dispar* or Gypsy Moth in the Commonwealth;" the sum of \$25,000 was also appropriated for the work. Last year the Commission was merged into the State Board of Agriculture, and a further grant of \$50,000 was made to it. The Report before us gives the details of the work carried out and the modes adopted for waging war against the insect. They were very largely under the direction of Professor Fernald, as Entomological adviser, and Mr. Forbush, as Superintendent of Field Work. The number of men employed varied with the season, and at one time, in June last, was as many as 242. The work began with the destruction of the eggs; when these proceeded to hatch out, spraying the caterpillars with insecticides was adopted, and towards the close of the season the eggs were again made the objects of attack. An enormous number of the insects were destroyed, and a perceptible diminution in the amount of injury was observed in some places. We shall look forward with great interest to the result of the present year's operations, and hope in time to be able to record a great victory in this field of practical Entomology.

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INSECTS INJURIOUS TO FOREST AND SHADE TREES, by Alpheus S. Packard, M.D., Ph.D.
(Fifth Report of the Entomological Commission of the United States). 1 vol.,
8vo., pp. 957. Washington: Government Printing Office, 1890.

About ten years ago (in 1881) what was then called the Entomological Commission, consisting of Messrs. Riley, Packard and Thomas—three very eminent men—issued a work by Dr. Packard on "Insects Injurious to Forest and Shade Trees" (Bulletin No. 7), a goodly volume of 275 pages, well illustrated and replete with valuable information. Recently a revised and much enlarged edition of this publication has been issued by the Department of Agriculture at Washington, bringing the original work more nearly down to date, and furnishing, as far as possible, a complete manual on the subject. The new volume is more than three times the size of the former edition, consisting of no less than 950 pages, illustrated by over 400 wood cuts and forty plates, twelve of which are colored. Some idea of the extent of the work, as well as of the importance of the subject, may be found from the fact that descriptions are given of over three hundred species of insects that affect the oak, and the names of nearly one hundred and fifty more are mentioned; sixty-one are described as attacking the elm, and thirty more mentioned; one hundred and fifty-one described that affect the pine, and a list of twenty more given; and so on for a large number of other trees. Economic entomologists for the most part devote their attention to the insects that attack fruit trees, crops and vegetables, as these most directly affect the public; but surely no more important matter can be studied than the preservation of our forests, which are annually being depleted for the purposes of commerce, as well as by fire and insects. It is high time that more attention was paid to this matter, and that people generally should be aroused to the dangers that will surely result if we allow our country to be stripped of its woods and forests. In some countries of Europe, notably in Germany, a very rigid oversight of the forests is maintained by the government, and no wanton or careless destruction is permitted. In connection with this, they encourage scientific men to devote their studies to the insect enemies of trees, and as a result some magnificent books have been published, chief among these are the grand work of Ratzeburg and the perhaps less widely known publications of Kalténbach. Alongside of these Dr. Packard's book will assuredly take its place, as his work is very carefully and completely done. The life-history of each insect described is as far as possible fully given; the best published descriptions of each stage are quoted and references given wherever the author