

SENATE....No. 66.

Commonwealth of Massachusetts.

HOUSE OF REPRESENTATIVES, February 26, 1850.

ORDERED, That the Committee on Agriculture be requested to consider the expediency of republishing the Report on the Insects of Massachusetts, made by order of the Legislature, in the year 1841.

Sent up for concurrence.

C. W. STOREY, *Clerk.*

SENATE, February 27, 1850.

Concurred.

CHAS. CALHOUN, *Clerk.*

Commonwealth of Massachusetts.

IN SENATE, March 13, 1850.

The Joint Committee on Agriculture, to whom was referred an order of the 26th of February, instructing them to consider the expediency of ordering to be printed, a new edition of the Report on the Insects of Massachusetts, which are Injurious to Vegetation, submitted to the Legislature, in the year 1841, by Thaddeus W. Harris, M. D., present the following

REPORT:

Pursuant to an order of the Legislature in 1841, fifteen hundred copies of Dr. Harris's report were printed, and have been distributed gratuitously throughout the Commonwealth. Not a single copy remains in the office of the secretary. The committee learn from the secretary, that applications,—which of course he is unable to comply with,—are frequent, not only from citizens of this State, but from those of other states, and from scientific societies, and individuals in foreign countries, where the report is considered as a standard work on the subject of which it treats.

Under these circumstances, the committee have felt no hesitation in recommending a reprint of the report. It seemed to them that common courtesy, required that the author should have an opportunity to superintend the printing of a new edition, and to introduce, if he should choose to do so, any changes or amendments, that the experience and study of ten years might render desirable and proper. It seemed also, but an act of justice to the author,—inasmuch as the compensation he received for his labor in preparing the original report was a

mere trifle, in comparison with what is frequently paid for literary and scientific services,—that he should receive some consideration for the labor of preparing a new edition for the press. In accordance with these views of the committee, the chairman transmitted to Dr. Harris, a notice that they should recommend the reprinting of the report, with such improvements as he might think expedient. The chairman has received from Dr. Harris a letter, from which, the committee select the following extracts, and commend them to the consideration of the Legislature :—

“ When the work was published, (in 1841,) having fulfilled my engagements, and the requirements of the State being complied with, I considered the affair as finally ended. It never occurred to me that the State would either wish or expect to reprint the report. While it was passing through the press, some of my friends advised me to have a small edition printed at my own expense. This was accordingly done; a portion of the first chapter was re-written, a new title-page and new headings were substituted, and some other verbal changes were made in the work. Delicacy alone, prevented me from then complying with the further advice of friends, who suggested that it would be well for me to take out a copyright of my little edition of about two hundred and fifty copies. The sale of these was very slow, and they were not all disposed of till last year. Meanwhile, however, liberal extracts were published in the periodical papers, from the report; and, in Johnson's *Farmers' Encyclopædia*, one hundred and sixty-three pages of my work were copied verbatim, not, however, without giving credit for them. I do not mention these circumstances as matter of complaint, but only as furnishing justification for caution hereafter; and this seems the more necessary, as it has been intimated that some publisher might undertake, on his own account, to reprint the work, without leave, either from me or the State.

You are aware, my dear sir, that the compensation originally received was moderate, and that which was derived from the slow sale of my edition, came in small sums at long intervals. Still, I am satisfied, if the purpose for which the work was originally written, has been in any considerable measure attained.

Since the publication of the work, I have thought of making a new edition of it, and have collected some materials with this view. Some portions of it, that were necessarily left imperfect, have been completed; accounts of several other destructive insects, have been written, and a few errors, that escaped revision, have been corrected. Want of leisure has prevented me from doing more.

If the secretary wishes me to superintend the printing of a new edition, for the use of the Commonwealth, I will do so, furnishing the additions and corrections above referred to, and cancelling such passages as the more complete information may render unnecessary; and I will leave it to yourself and the secretary to make such terms for compensation as may seem just and reasonable, and that may secure to me the legal rights of an author.

The additions proposed to be made to a new edition of the book, were principally these:—An account of the insect that has hastened (if it has not been the first cause of) the destruction of many of the noble and venerable elms, that adorned the mall and common, in Boston. These I have examined on the spot, under the direction of the late mayor, the Hon. Josiah Quincy, Jr., and in presence of the superintendent. These trees have suffered terribly from the ravages of the insect; but the impenetrable nature of the surface-soil, the exhausted condition of the sub-soil, and the deprivation of all benefit from the decay of accumulated leaves, which, in a state of nature, the trees would have enjoyed, but which, a regard to neatness has industriously removed, have doubtless had no small influence in diminishing the vigor of the trees, and thus made them fall unresistingly a prey to insect destroyers. Such is the law of nature. The lindens of Philadelphia have suffered much in the same way, and from similar causes, but to a far greater extent, and from a different insect, whose history I have written. This same insect I have repeatedly taken upon our Cambridge lindens; and one of the large trees, lately cut down in the garden of Mrs. Manning, was very much injured by its depredations. My published account of “the Fly-weevil, that destroys wheat” in the middle states, was very imperfect; for the insect had not then passed under my own observation. Since then I have had a colony of them, obtained from infested corn in

Worcester; and they have propagated and gone through their changes, under my own eye, repeatedly, in the course of three years. They proved to be, as I had suspected, imported foes, identical with the formidable Angoumois moth, which, one hundred years ago, committed deplorable ravages in the fields and granaries of the provinces of Angoumois and La Vendee, (now chiefly included in Charente,) in the west of France. The insects lay their eggs on the wheat in the fields, and also on stored grain. From these are hatched little maggots that bury themselves in the grain, entering by so small a hole as to escape observation, and eating out the substance of the grain, while concealed within the hull.

As soon as I discovered what the insects were that were depredating on my friend's cornbin, I bottled up my samples of infested corn in a large glass jar; feeling something of the same alarm that agitated the Swedish traveller, Kælm, when he found some bugs in peas that he had carried home from this country, and "who feared lest he might thereby introduce so great an evil into his beloved Sweden." I have likewise had, *in safe keeping*, a swarm of wheat-flies, which I raised from the worms, obtained with much trouble and at some considerable expense, in western New York; and have thus been enabled to add, from my own observations, to my former account of the insect, which I had not before seen in a living condition. I have observed the increasing ravages of the vapor-er-moth, during several years, and particularly on some trees in Boston, both in private yards and on the common. Several horse-chestnuts in the city have been entirely stripped of their leaves, by the caterpillars of this moth; and to its history I have accordingly added the result of further observations. Moreover, the history of a little caterpillar, that lives in swarms on the grape-vine, has been completed, from results obtained by watching their growth and transformations on both, in Boston and in Cambridge. A similar insect is very destructive to the grape-vines in the south of France and Italy, and is the subject of a special treatise, by a celebrated Italian naturalist. A few years ago, my attention was directed, by the late Judge Darling, to an insect injurious to the raspberry. Some of these insects, before unknown to me, were discovered on the plants in my own garden, and though the amount of the mischief then done by

them was not great, prompt measures to check them would become necessary, should they increase here as elsewhere.

Such, my dear sir, are some of the subjects proposed to be introduced into a new edition of the work, either as entirely new to it, or as tending to complete former accounts.

Almost every month, inquiries are made of me respecting injurious insects, either through agricultural papers, or by private letters; and all such have been answered to the best of my ability. Some of the replies are foreign to the design of the report; but were they all embodied in it, they would swell the work to twice its present size. Allow me to advert to two cases alone. The Probate records of Adams county, Mississippi, were found to be infested by certain insects, in such numbers, as to threaten their *total destruction*. A mass of fragments and insects were enclosed in a letter and forwarded to me by mail, with a request for an account of the insect, and suggestions for suitable remedies. The parcel, when opened, saluted my nostrils with an odor like rotten cheese, and amid the fragments were found, a multitude of the dead bodies of insects, recognized to be white ants, the pests of hot climates, and not wholly unknown, even in temperate regions, where they are found in old houses and decayed trees. Fortunately, they were the subject of a chapter of insect biography that I had written on a former occasion, but had never published.

Would you believe it possible that a little beetle, not above one-tenth of an inch in length, and as slender as a knitting-needle, would have power to suspend the operations of a large flouring mill? Such was indeed, the case, in this way: The insect had bred and propagated in the mill for some months, had infested all the grain in it, filled every crevice where meal was found, and contaminated the whole concern to such an extent, that the proprietor was obliged to stop work, concealing the cause, for fear of destroying the reputation of his establishment, and consult for means to get rid of the scourge. A single specimen was sent to me by letter, and my advice was solicited. The insect proved to be an old acquaintance, occasionally found in rice that had been stored too long before it was shipped from its native country, and escaping thence into sugar, of which, also, it is fond. You may (if your necessities like mine, compel you to use cheap brown sugar) sometimes see floating, on a

cup of coffee, one of these tiny beetles, conveyed from the sugar bowl. I conjectured immediately, that my western correspondent might, at some time, have had a quantity of old and infested rice to grind for some customer, and that, thus he had introduced the depredator into his mill. Inquiries brought the fact to his recollection, and thus the source of the mischief was ascertained. The means of getting rid of these insects, were tedious and expensive, but were effectual, and thus the miller's reputation was saved. I forbear giving either name or place, out of regard to my correspondent.

On these and all similar occasions, my services have been rendered gratuitously. Had they been remunerated with lawyers' fees, my pockets would not have been so light.

The study of natural history has never been with me any thing but a secondary pursuit. Compelled to glean a living in other fields than those that science lays open, it has not been in my power to devote any time thereto, save those leisure moments that others give to pleasure and repose. Nevertheless, these occupations have not been altogether without their reward. Independently of the actual gratification arising from such studies, I may, without vanity, encourage a hope, that my humble labors have contributed somewhat to the progress of science, and have entitled me also, to a certain extent, to be accounted a benefactor to mankind, and in a way, that in other countries, is rewarded by official appointment or regal munificence."

The committee will add nothing to these extracts, but an expression of their strong convictions of the expediency of reprinting the report herein referred to, and their recommendation that the accompanying Resolves be adopted.

By direction of the committee,

JOS. T. BUCKINGHAM, *Chairman.*

Commonwealth of Massachusetts.

In the Year One Thousand Eight Hundred and Fifty.

RESOLVES

For reprinting a Report on the Insects of Massachusetts, which are Injurious to Vegetation.

Resolved, That the secretary cause to be printed, as soon as may be, two thousand copies of the Report on the Insects of Massachusetts, which are Injurious to Vegetation, by Thaddeus W. Harris, M. D., presented to the Legislature in 1841.

Resolved, That Dr. Harris be requested to superintend the printing of the said report, and to make such changes and additions, as further investigation may require,—and that he be authorized to secure the copyright of all future editions for the benefit of himself and his heirs.

Resolved, That, in consideration for the service of preparing the copy for this new edition, and superintending the printing thereof, there be allowed and paid to Dr. Harris, from the treasury of the Commonwealth, one hundred and fifty dollars, and that a warrant be drawn accordingly.

Resolved, That of this new edition, there be presented to the author, two hundred copies,—to each of the agricultural societies, and to each of the horticultural societies in the Commonwealth, ten copies; that one hundred be at the disposal of the governor and council, for such gratuitous distribution as they may judge proper; and that the remainder of the edition be left to the disposal of the Legislature.