

who were strangers. The insect that had attracted the most attention during the past year was undoubtedly the Hessian Fly, which had injured the wheat crop in Ontario about 20 per cent., or to the value of many hundreds of thousands of dollars. Since 1878 they had been comparatively free from this scourge, but now they had returned in very great magnitude. He described the manner of the growth of this dreaded pest and their effect on the plants they ruin. No successful measures had yet been devised for their cure or killing; some people advocating the immediate reaping and thrashing of the wheat; others were for burning the field as it stood, but it must be remembered that this would also kill the many friendly parasites who were the farmer's friends; and some people were in favor of harrowing the stubble and thus clear the ground. But in his opinion the only effectual remedy was late sowing, which rendered the wheat better able to withstand its enemy. He referred incidentally to the parasites to which the farmer was very much indebted for their destruction of hurtful insects. He had noticed in Ontario what many people doubtless thought did not exist in this country, he referred to the Phylloxera which had caused so much damage in France to the vines. A person untutored in the matter would be greatly surprised at the extent to which it prevailed, and he explained the time and manner of the growth of the insect and the way it went to its deadly work. He showed some examples of the Diplosis, the only parasite inimical to the Phylloxera, and expressed the hope that it would be extensively distributed in districts where the latter prevailed. The short fruit crop of the year had been put down by many to insects, but it was in reality the very wet weather and low temperature that prevailed in the Spring. He looked forward to an excellent crop, all things going well in 1883, as it was generally the case after a short year. It was the opinion of many that California was the fruit grower's paradise, and it undoubtedly was so till 1874, when insects were rare. Since then, however, they have begun their ravages, and the State Legislature has been compelled to make provisions for their prevention. An inspector is appointed, with sub-inspectors, authorised to visit each grower, and in the event of his not obeying certain regulations, he was liable to a fine. The whole process only costs the State \$10,000 a year, and he was of opinion that if it proved

a success in the Far West, it should be tried here in the East. It was certainly the right thing to do in their case and why not in ours. The President resumed his seat amidst loud applause.

The annual meeting of the Entomological Society of Ontario then adjourned, and Dr. Hagen, of Cambridge, Mass., drew attention to the status of the Entomologists in relation to the section of Biology in the A.A.A.S. The Entomological Club had, a year or two since, been merged in that section, and that state of affairs is not satisfactory at present.

#### GENERAL MEETING OF ENTOMOLOGISTS.

Dr. Hagen moved a resolution that the Entomologists resume their old status in relation to the Biology Section, but without any regular organization, the understanding being that they meet a day before the A.A.A.S. each year, and that Mr. Lintner, of Albany, be responsible for due notice, etc., in calling them together.—Carried.

There is a feeling of discontent among the American and Canadian Entomologists regarding their present status in connection with the American Association for the advancement of Science, *i.e.*, their transfer to section F. in Biology, which doubtless will terminate in the formation of an International Union of Entomologists, who can meet wherever they please to discuss their subjects without embarrassment.

Springing from inquiries made by Mr. Fletcher, an interesting discussion took place on the cotton moth, he said, Mr. Riley, of Washington, had made investigations which had all gone as evidence to prove that the insect had no other food plant than the cotton plant. Specimens of the cotton moth had been found in the Northern States and Canada, where no cotton grew, but these might have flown there, as the moth was capable of immense flights. Mr. Riley did not believe it could perpetuate itself outside of the cotton belt.

Dr. Hoy, of Racine, Wisconsin, said he had found a specimen of the cotton moth in the north whose wings had not hardened; it must have been born there. Other gentlemen had met with the same experience.

Mr. Saunders thought it possible that insects so found had been brought to the finding place either in an egg, larva or chrysalis state in nursery plants, etc.