1884, he summed up the condition of the larches as follows, and he thinks that the prediction therein contained, was almost verified in 1885: "On the whole, then, while a small proportion of larches have been killed by this worm, this vigorous tree, though defoliated for two successive summers, seems, in the majority of ca es, to survive the loss of its leaves, though it threw out much shorter ones the present summer. Possibly 10 per cent. of our northern larches died from the attacks of this worm. Very probably the numbers of this insect will diminish during the next year, and the species may ultimately become as rare as it has always been in Europe."

The maximum of damage having been committed, and the supply of food having been correspondingly diminished, have probably led to an arrest in the further development of the insects, and their numbers may continue to decrease. It will be, however, many years before the districts ravaged by them regain their wonted luxuriance of vegetation, and the larch forests which they have destroyed will in many instances be replaced by spruces (Maritime Provinces) cedar (Quebec) or other trees which may find the vacated localities suitable for their propagation.

In the paper by the Rev. Mr. Fyles, already mentioned, he gives some figures to show the amount of injury done in the one Township of Bury, in the County of Lennox, Quebec, and an application of these estimates for one square mile, to the extended areas of trees destroyed in the several Provinces, will give some idea of the actual money value of the damages inflicted upon our possessions by this unwelcomed immigrant. "As we have seen, there are in Bury 640 acres of tamarack, giving on an average forty marketable trees to the acre, or 25,600 such trees in all. Every tree contains at least 400 feet, board measure, of lumber. This gives for the whole forest 10,240,000 feet, which, in a sound condition, would have been worth \$30,720," at \$3 per 1,000 feet on the stump, " and which left standing, would, under favorable circumstances, have been increased in value." He places the total loss to the township at \$50,000, and to the adjoining Township of Lingwick at double that sum, and in consideration of the wide extent of the insect's depredations, he comes to the conclusion that "Nematus Erichsonii has been the worst insect pest that has ever visited the Province of Quebec." Regarding the re-growth of the trees, he adds: "The tamarack forest of the Townships is a thing of the past. There seems to be a law of nature, that, when one growth of trees is swept away, another of a different kind shall succeed it. The hemlocks and pines of our mountain sides give place to the poplar and the white birch. The tamaracks will probably be succeeded by the American arbor-vite, or white cedar (*Thuja occidentalis.*) And, if there were no such natural law, the world is too old, its population too vast, and land in the temperate regions too valuable, for us to suppose that large tracks of lowlands will be left in a state of nature for 200 years to come.

Although this insect has probably come to us from Europe, it is not there the same prolific pest which it has become under the stimulus of our more extensive tamarack forests, a change of climate, and, perhaps, escape from hereditary parasitic foes. It was described and named in 1838, and Cameron gives its continental distribution as Sweden, Denmark, Prussia, Holstein, Harz, Bohemia, Holland and France. The only country in which it is reported as injurious is Germany. In Great Britain "it does not not seem to be a common species. I have only seen a specimen taken by the Rev. T. A. Marshall, of which I do not know the locality. Mr. Dale records it from Glanville's Wootton." Its parasites are given as *Perilissus filicornis* and *Pteromalus Klugii*, Rtz. The former genus has not been recorded from America, but the latter species may possibly be identical with the parasite of which D. Packard bred considerable numbers in 1882, and to which he gave the provisional name of *P. nematicida*.

For descriptions of the insect and further information as to its habits, reference can be made to the excellent paper by Mr. Fletcher in Ann. Rept. No. XV. Cameron states that the male is unknown, and from all the larvæ we have bred there has not emerged a single male. I have, however, one male, taken in a tamarack swamp on the 15th June, 1889, which seems to belong to this species, differing from the female chiefly in having the antennæ, except two basal joints, and posterior legs almost rufous, and the sides of prothorax almost white.

A new saw. three species atta years to the love not promptly loo placed in the ge America there is troublesome inse The small stout the under surfac night, upon the In about a fortn struct an earther or June. There by Mr. Gott, of becoming very a Rept. XV, page The second

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*Cameron state "The small oval co

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