

which there attains large dimensions. The hemlocks generally reproduce themselves very freely in North America, and even in Britain, as at Murthly and Dropmore, seedlings come up naturally in large numbers. In the lower valley of the Fraser River and especially in the park at Vancouver, the Douglas fir, Giant Thuja, Sitka spruce, *Abies grandis*, and the Sitka cypress reach large proportions. It did not strike me, however, that the growth was any better than, if indeed it was so good as, is to be seen under suitable conditions in this country.

At Ottawa, Vancouver, Victoria and elsewhere, I had the opportunity of seeing large sawmills, and the rapidity and ease with which the largest logs are brought to the saw bench, and handled there, was a revelation. In most cases the logs are floated, in many instances for hundreds of miles, to the foot of an inclined plane, up which they are transported by endless chains to the saw bench. Even where floating is not the

means of conveyance it is found desirable to construct a pond, into which the logs are thrown from the trucks. The pond serves many purposes. In the first place it is the means of clearing the logs from adhering grit, it offers the most convenient opportunity of sorting the timber, and it is a suitable place of storage for logs that it is desirable to hold over for some months. From any lot of timber felled in a virgin forest a considerable proportion is "pumped," "wormy," "foxy," or otherwise defective, and to get the largest proportion of sound, or fairly sound, boards, the logs have to be frequently turned over on the saw bench. This is done by means of a steam "nigger," which takes various forms, but is often a great notched bar of iron that comes up from below the bench at the will of the operator, and turns over and otherwise manipulates logs weighing a ton or more as easily and quickly as a man could move corks.

THE BROWN-TAIL MOTH IN CANADA.

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Although the Brown-tail Moth (*Euproctis chrysorrhæa*), which was introduced into Massachusetts from Europe about 1890, has spread rapidly into the adjacent eastern states, causing great destruction to fruit and shade trees and physical suffering to the inhabitants and involving an annual expenditure of thousands of dollars, it was not until 1907 that the first winter web of the caterpillars of this insect was found in Kings County, N.S., and sent to the Division of Entomology. This discovery was an indication that the brown-tail moth had established itself in Canada.

Realizing the serious results that would follow its spread in Nova Scotia the Department of Agriculture for Nova Scotia instituted a campaign which has been continued against the

insect, and many thousands of nests have been destroyed annually in Kings, Annapolis and Yarmouth Counties which were found to be infested with the insect. This prompt action cannot be too highly praised.

Stray specimens of the male moths have been found since 1902 in New Brunswick, but as yet no signs of the insect having gained a foothold have been observed in that province.

Early in 1909 the winter webs, which the young caterpillars spin and in which they pass the winter in colonies of several hundreds, were found in New York State on nursery stock imported from France. The Division of Entomology at Ottawa was advised of this fact and steps were immediately taken to have all European nursery stock imported into