

bidder above a certain minimum price. In 1912, 2,465,430 saw-timber trees (10 inches and over in diameter breast high) were offered for sale at such auctions, together with considerable tie material and firewood. The trees are ordinarily sold in the form of single logs, and the average price per log was 83 cents, varying from 12 cents to \$1.93. Because of low bids about 630,165 stems were left unsold. Of the material put up at auction, 76.6 per cent. was Scotch pine and 23.4 Norway spruce.

Considerable smaller saw timber, tie material, and firewood are also offered for sale at smaller local auctions. In 1912, for instance, products valued at \$229,724 were disposed of in this way. These auctions are constantly increasing in popularity and importance, as is seen from the fact that while they were held in only three of the State forests in 1904, they were held in 45 in 1912. The chief purchasers at such auctions are now sawmills, which some ten years ago had practically no interest in them.

Small Fire Losses

For so large and comparatively unsettled a forest area the extent of the fire damage is remarkably small. In 1912 only 991 acres were burned over at a loss of \$11,945 (\$12.05 per acre). This showing is particularly remarkable, when it is remembered that it is not so many years since reckless burning of the forests was the rule, and fires were frequently set in order to clear patches of land which were cultivated for a few years and then abandoned. Trespass occurred in 277 cases, but amounted to only \$1,732.

The State itself operates three sawmills. These at first were intended only for the utilization of such forest products as did not find purchasers in the general market and for the procuring of firewood for the State railways. They have, however, developed considerably, until now they are a source of more or less export material. In 1912, for instance, 2,000 standards were produced by these mills for export, and considerably

more in 1914. In addition to making possible the utilization of the more distant forests, these mills have proved of decided advantage in giving the government a clearer insight into conditions in the international timber market and a better grasp on the sawmill industry.

Public Income

The total income from the State forests in 1912 was \$2,726,853 and the net income \$1,692,039. This amounts to a net income of 12.7 cents and is certainly a creditable showing, when the poor growing conditions and comparative inaccessibility of much of the State forest areas are considered.

From 180 to 200 trained foresters are regularly employed, in addition to which there are a varying number of temporary appointments in the different forests. Technical forestry is now taught at the University of Helsingfors, where the course covers from three to four years.

WALNUT NEEDED FOR ARMY

Major E. A. Shepherd, of the Ordnance Department of the U. S. army, has sent the following letter to lumber manufacturers:

"The Ordnance Department and the Signal Corps of the United States army jointly request that you refrain for the duration of the war from the manufacture of veneer from walnut lumber, other than butts, crotches, or figured material, none of which walnut lumber is suitable for the manufacture of gun stocks or airplane propellers.

"The walnut lumber that enters into the manufacture of veneers, other than that above stated, is urgently needed at this time by the United States Government in the prosecution to a successful conclusion of the war which we are now waging against Germany. In other words, this lumber is a vital necessity for the manufacture of gun stocks and airplane propellers for the immediate equipment of our forces. It is requested, therefore, that you refrain from the manufacture of veneers, as stated above."