

Reforesting Norway With Douglas Fir

Douglas fir is recommended by Anton E. Smith, chief forester at Stavanger, for the reforestation of western Norway, whose former wealth of oak forest was exhausted hundreds of years ago. Mr. Smith is just returning to Norway after a year's study of American soft woods for the Norwegian government. He spent most of his time in Oregon, Washington, British Columbia and Alaska. The climate of western Norway is very similar to that of the states of the Pacific Northwest. Accordingly,

Mr. Smith recommends Douglas fir, which, he believes, if planted in Norway, will attain merchantable size in about 80 years.

Norway has been cutting very heavily during that last decade, and the government has taken effective steps to safeguard the nation's timber supply, both by encouraging reforestation and by limiting the cutting to trees above 6¾ inches in diameter, measured five feet from the ground. Both pine and spruce are employed for paper making, the principal use to which timber is put.

Hungry? Try Shredded Birch-O!

Some suggestive experiments have been recently carried out in Germany by G. Haberlandt, partly under official auspices, on the possibility of utilizing wood as food for animals and man. The first experiments were made on a sheep, in a respiration chamber, for the purpose of determining the digestibility and nutritive value of birch wood. The trees were felled in the early spring, and the trunks, measuring four to six inches in diameter, were reduced to very small chips in a paper mill. Microscopic examination showed that the wood was very finely divided, so that the membranes of nearly all the cells were destroyed, while the cell contents had been almost all removed by the water used in the preparation of wood. Thus the residue consisted chiefly of cellular membrane. The wood was fed in combination with other foods. Good results were obtained, both as to digestibility and nutritive value. Apparently the reason why previous experiments on the same subject had not been successful was that the wood was not cut up fine enough and its cells were not thor-

oughly torn. The experiments were repeated by Prof. Rubner on a dog, the same wood ration being fed with meat, and the results were also successful. Haberlandt believes that man is capable of digesting finely ground birch wood, and that it might replace rye or wheat to the extent of ten or fifteen per cent. in bread making.—(Scientific American.)

AEROPLANE FOR SURVEY

A small aeroplane, to be used this summer in survey and reconnoiter work in the engineering summer camp in Kittitas county, is being constructed by J. W. Miller, assistant professor of civil engineering at the University of Washington. Mr. Miller will complete his machine sometime in May and if tests on the campus show it to be successful, he will take it to the camp.

The machine will have a spread of 24 feet and is designed to carry the aviator and 200 pounds of baggage. A low power rotary motor will be used in an attempt to get a slow speed airship.