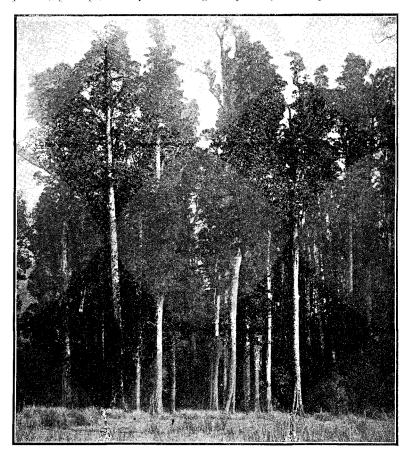
5 C.—3.

Section of Pathology.—Treatments for the prevention of sap-stain commenced on a commercial scale. Survey of insects introduced on imported forest products continued.

## Silvicultural Research.

Indigenous Forests.—Up to the present the investigations of the Forest Service in indigenous forests have been carried on through the various steps of preliminary studies: inventories of native-forest resources, land-classification surveys, the ecology and growth of native trees, standtables for various forest types, volume-tables on which to base the mensuration of the various species of trees, together with studies in regard to the mill and forest utilization. In addition, regeneration studies have been carried out in various differing forest-types. By fusing the results obtained from these various studies and investigations, data for the foundations of forest-management and working-plans have been obtained.

Plantations.—A stocktaking and study of the growth of the exotic plantations has followed the completion of the preliminary forest inventory and growth studies of the indigenous forests. These investigations into the successes or failures of previous years in plantations supply reliable data for future operations, and only two of the minor plantations remain to be studied. The completion of this work will provide the State Forest Service with records concerning its exotic plantations unequalled, perhaps, in any other English-speaking country.



STAND OF KAHIKATEA, WESTLAND.

Plant-propagation.—Studies concerning the time of sowing (which yields the best results) have been continued, and will be carried on during the current fiscal period. Weed-eradication experiments to date have not yielded the desired results, and will also be continued. Increased efficiency and economy in wrenching have been obtained by the adoption of an improved root-pruner evolved by Ranger W. M. Menzies, Rotorua Nursery. Good results are recorded in the control of grass-grub (Odontria) experiments at Tapanui, and the effects of the preventive treatment during the next flight of the beetles are awaited with interest.

Seed of a number of species which have not been tried on a commercial scale in the Dominion have been received from overseas institutions, and experimental sowings made. These include *Rhamnus pursiana* (which produces the cascara of commerce), Indian teak, gold mohur, and various species of pines.

Sand-dunes.—Consolidation of the drifting sand on portion of the Rangitikei Sand-dune Experiment Station has been assured, and investigations into the possibilities of flax (phormium) planting on parts of the area deemed unsuitable for tree-growth have been commenced.

Destructive Forest Insects.—Much has already been accomplished by the Forest Entomologist in the study and control of the destructive insects already established in New Zealand. The position now demands not only the continuance of these activities, but also their extension,