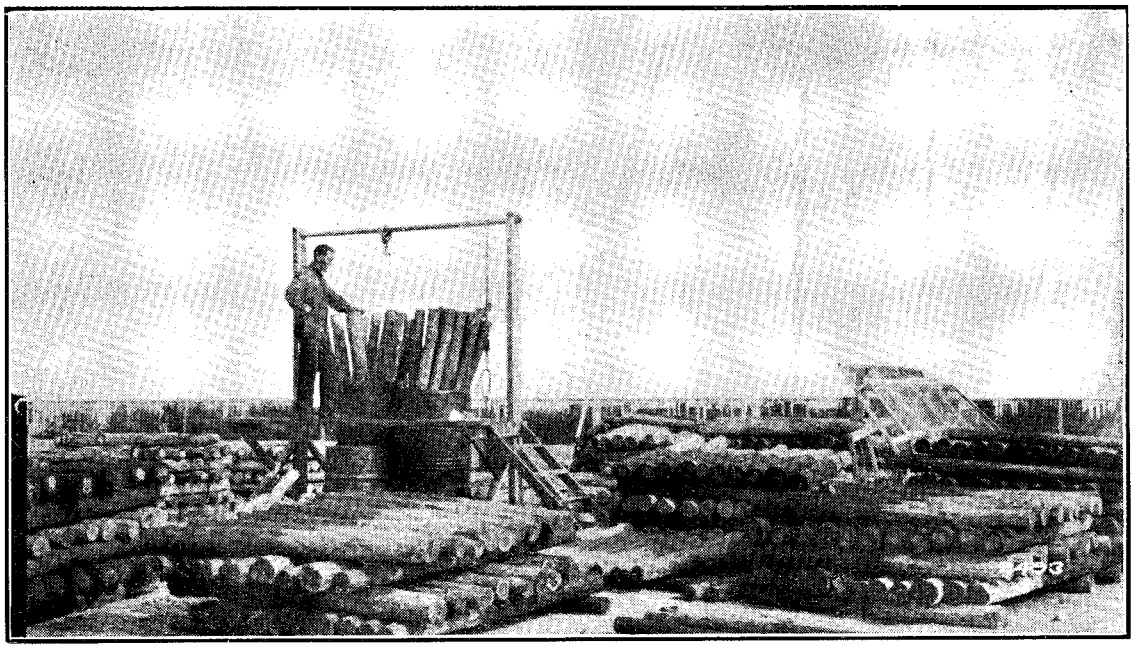
Public Relations.

Forest-extension activities during the period under review embraced lectures to farmers', forestry, and business-men's organizations, free distribution of foresty literature, free information on all forestry and tree-planting problems, &c., while the fostering of the forestry-in-schools movement, whereby the future citizens of the Dominion are interested and instructed in forestry and tree-growing, together with the display of forest-produce and nursery stock at the New Zealand and South Seas Exhibition at Dunedin, and at winter shows throughout New Zealand, has brought forestry prominently before a very large portion of the population of the Dominion.

Our Indigenous Forests and their Use.

The period 1965–70 will see the end of our original softwood resources, and from that time onwards New Zealand must look primarily to her man-made forests for wood-supplies; but in the meantime we must husband, conserve, and use our remaining forest wealth with the greatest care, for we waste every year, in the production of 25 to 30 million cubic feet of sawn timber, five to six times as much. Henry Ford's remark that "There is wood enough in the country for every one when we learn to use it" teaches a lesson for New Zealand as well as the United States. The problem of full use is, however, much more intensified in New Zealand than in most countries, for our demand upon the forest wealth is chiefly in the form of sawn and round products, and then only of the best, while the growing inaccessibility of the forests, the small size of the manufacturing units, and the relatively scattered consuming centres render difficult fullest economic use. The Service, through its Branch of Forest-products, has accomplished very definite results during the year in promoting new uses for



Treating Fencing-posts by the Open-tank Method: Demonstration Plant, New Zealand and South Seas Exhibition, Dunedin, 1925–26.

our waste woods and in developing economies in manufacture. Results are recorded under the following headings:—

Timber Mechanics.—Determination of the mechanical and physical properties of eight species of timber. Green tests were conducted on matai, miro, kahikatea, rimu, and Douglas fir, and air dry tests on kauri, rimu, hard beech, insignis pine, and kahikatea. Tests of structural timbers of insignis pine commenced. Strength tests of full-sized poles of locally grown *Eucalyptus Risdoni* and *Larix europea.* Complete strength and physical tests of New Zealand and foreign manufactured ply-wood.

Timber Physics.—Design of a new standard metal-bound butter-box for export service. Routine tests and specifications for box-bindings in connection therewith. Determination of fundamental data on the microscopic anatomy of native and exotic woods.

Wood-preservation.—The treatment with creosote of the native hardwoods, kamahi, silver, red, and mountain beeches, and of the exotic softwoods—Corsican, Austrian, and pondosa pine—by the open-tank process. Installation of treated experimental fence-posts. Preparation of specifications for wood-preservations, and further development of a preventative for sap-stain in kahikatea.

Derived Products.—The bleeding of kauri-trees, the deresinating of kauri, and the pulping values of kauri and insignis pine.

Industrial Investigation.—Partial analysis of statistics of sawmill industry. Analysis of the foreign timber trade for the past five years.

Entomology.—Survey with a view to protection, liberation, and control, as required, of the forest and timber insects of the Dominion, and of new types introduced in imported forest-produce. The publication under the imprimatur of the Forest Service of a bulletin "Forest and Timber Insects," by Mr. D. Miller, M.Sc., Government Entomologist.

Imports of Forest-produce.

One of the major developments in timber-use during the last year has been the importation of softwoods—Douglas fir, white and red cedar, hemlock, redwood, spruce from Canada and the U.S.A., and spruce from Baltic ports.