

to Canadian wood species not now considered as commercial timbers, and to determining the suitability for additional uses of timbers now in commercial production. Special attention will be given to problems related to the handling, transportation and chipping of slabs and edgings for the manufacture of pulp.

Intensive research into logging will continue to explore possibilities for higher extraction and limitation of waste. The Research Sawmill studies will comprise determination of the variables affecting production as well as the development of machinery and methods for reducing manufacturing costs.

Studies of the chemistry of Canadian woods, chemical utilization, wood laminations, veneers and plywoods, dielectric heating, preservation, and wood rots will form the subject matter of numerous research projects.

Research findings will continue to be reported in Forest Products Laboratories of Canada publications, prepared to contain the maximum of useful information. The Laboratories also will continue to provide, on request, specific data in response to industrial inquiries. This sometimes necessitates additional investigation to supplement the data on record.

In a developing economy, increasingly dependent on research findings for expansion and orientation, it is difficult accurately to forecast research requirements. However, the original and continuing policy of the Forest Products Laboratories of Canada is to carry on research work of a fundamental nature and at the same time to adapt investigations and studies so that they can best meet the needs of industry.

## Section 6.—Forest and Allied Industries

This Section is concerned with the many industries employed in the hewing down of timber in the forest and its transformation into the numerous utilitarian shapes and forms required in modern living. The basic industries provide the raw material for sawmills, pulp and paper mills and for the wide range of secondary industries that convert the products of the basic industries into more highly manufactured goods such as veneers and plywoods, sash and doors, furniture and all the vast range of industries that use wood in any form in their processes. These industries, especially the pulp and paper industry and the lumber industry, contribute substantially to the value of Canada's export trade and thereby provide the exchange necessary to pay for a large share of the imports purchased from other countries, particularly the United States.

### Subsection 1.—Woods Operations

In connection with operations in the woods, it should be borne in mind that the forests not only provide the raw materials for the sawmills, pulp mills, wood distillation, charcoal, excelsior and other plants, but also provide logs, pulpwood and bolts for export in the unmanufactured state, and fuel, poles, railway ties, posts and fence rails, mining timber, piling and other primary products which are finished in the woods ready for use or exportation. A number of minor forest products help swell the total, such as Christmas trees, maple sugar and syrup, balsam gum, resin, cascara, moss and tanbark.

It has been estimated that operations in the woods during the logging season in 1952 gave employment amounting to 44,795,000 man days and distributed \$158,000,000 in wages and salaries.