Research Work in Forestry.—In a special article on Scientific and Industrial Research in Canada, which appears at pp. 979-1012 of the 1940 Canada Year Book, a comprehensive review of all phases of scientific research work being undertaken by the various Government Departments is given. Specifically at pp. 993-995 research in forest economics, silviculture, forest fire protection and forest products appears.

## Section 6.—Forest Utilization

## Subsection 1.—Woods Operations

A short review of the differences in logging methods throughout Canada is given at pp. 195-196 of the 1941 Year Book.

In connection with operations in the woods it should be borne in mind that the forests not only provide the raw material for the sawmills, pulp-mills, wood distillation, charcoal, excelsior and other plants but that they 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. There are also a number of minor forest products, such as Christmas trees, maple sugar and syrup, balsam gum, resin, cascara, moss and tanbark, that all go to swell the total.

The imports and exports of forest products in the years 1937-40, are shown in Tables 16 and 17 of the chapter on External Trade.

| Product   | 1935  | 1936  | 1937  | 1938  | 1939  |
|---|---|---|---|---|---|
|   | \$  | \$  | \$  | \$  | \$  |
| Logs and bolts Pulpwood Firewood Hewn railway ties Poles Round mining timber Fence-posts Wood for distillation Fence rails Miscellaneous products | 34,077,938<br>41,195,871<br>31,864,500<br>3,188,651<br>1,359,736<br>997,357<br>976,402<br>274,797<br>266,253<br>1,260,274 | 44,827,957<br>48,680,200<br>32,167,410<br>3,190,052<br>1,563,681<br>1,102,255<br>1,008,178<br>274,077<br>273,282<br>1,717,136 | 58,004,070<br>63,057,205<br>32,457,629<br>3,129,207<br>2,455,345<br>1,262,658<br>992,610<br>309,892<br>262,160<br>1,319,111 | 52,759,660<br>53,761,999<br>32,740,566<br>2,222,509<br>2,824,512<br>1,297,993<br>978,679<br>298,110<br>264,480<br>1,117,349 | 55,685,197<br>58,302,668<br>33,058,240<br>2,048,186<br>2,940,361<br>1,461,507<br>1,111,883<br>289,230<br>267,437<br>2,582,689 |
| Totals  | 115,461,779   | 134,804,228   | 163,249,887   | 148,265,857   | 157,747,398   |

4.—Values of Woods Operations, by Products, 1935-391

It has been estimated that operations in the woods in Canada in 1939 involved the investment of over \$198,000,000, gave employment during the logging season to more than 277,240 people and distributed over \$79,000,000 in wages and salaries. In estimating the annual drain on our forest resources, certain converting factors have been used. Each of these factors represents in cubic feet the quantity of standing timber that must be cut in the forest to produce one unit of the material in question, based on the total cubic contents of the tree.

<sup>&</sup>lt;sup>1</sup> The total value of woods operations in 1940 was \$194,567,875.