

quarter of the Forest Service has applied the nucleus of silviculture management. As to the power of a Canadian Government to revoke a timber cutting license, this is not exercised except for flagrant breach of regulations; and over much of the licensed area official supervision of operators is yet so slight as to make the operator's conscience the main crutch for statutory observances.

Although in all civilized lands forest materials enter into the processes of production to an amazing extent some nations, as the United Kingdom, manage to maintain commerce even with the handicap of importing seven-eighths of all wood materials used. Canada, however, maintains foreign trade in normal times on the strength of primary products, and the products of the forests occupy a place in the export trade of Canada second only to those of agriculture. In the fifty-one years since Confederation, the values of various classes of exports have been as follows: Agricultural products, \$2,010,298,011; animal products, \$1,743,974,236; the forest, \$1,418,568,514; the mine, \$849,845,443; the fisheries, \$485,298,526; manufacturers, \$898,623,720; miscellaneous, \$20,857,806; total exports, \$7,427,466,256. Our agriculturists, producing cereals and live-stock, are prolific wood consumers, employing about six times as much building wood per capita as the European farmer. Our fishermen rely upon cheap wood supplies for their fishing nets, their boxes, barrels, and buildings. The coal mines of Nova Scotia and Alberta stand helpless without pit props. To meet the thousands of producers in the irrigated sections of Alberta is to recognize one of the foremost services performed by the forests of the eastern slopes of the Rockies, that of maintenance of stream flow. Not only, then, is the forest in Canada to be identified as the supplier of the lumbering and paper-making industries, but in its contributory relations to all other natural resources and forms of development it is an absolutely essential balance wheel.

The total area of forested lands in the Dominion is approximately four hundred million acres. As to timber contents, British Columbia tops all the provinces with about three hundred billion board feet, one-half the amount of timber growing in the whole country. Quebec, Ontario, New Brunswick, Alberta, Nova Scotia, Saskatchewan and Manitoba rank in the order given. Canadian forest conditions to-day, however, represent a strong modification of those existing even a century ago. At the time of the Napoleonic wars, Canadian soil under plow crops formed a trifling contrast to the vast regions of untouched timber. Always we have had the barrens of Ungava and the far-reaching profitless tracts sweeping north-westerly to the mouth of the Mackenzie River, where only petty vegetation thrives. The treeless prairie, then as now, almost devoid of trees, covers a triangular shaped wedge extending from eastern Manitoba to the Rocky Mountains, the apex penetrating 260 miles north of the international boundary, on the North Saskatchewan River.

(To be continued in August issue.)

## \$14,000,000 FOR FOREST ROADS

A safer insurance against devastating forest fires, a realization of the recreational advantages in endless miles of wooded scenery, and a fuller comprehension of commercial benefits accruing through the linking up of national forests with bordering highways are the impelling motives in the programme for the coming year for building 1,643.3 miles of forest roads under the supervision of the United States Forest Service.

The first federal effort towards road building

in the national forests came in 1912 when the so-called 10 per cent fund was formed. It provided that 10 per cent of all receipts from the national forest funds be used in the construction and maintenance of forest roads. It was not necessary that the state or states in which the roads to be constructed should co-operate financially in the venture. The only stipulation was that the money should be spent in the same district as that from which it was derived.