

# New Forest Chief on Saving Our Forests

By RENE BACHE.

WHEN we get our new forests growing we shall be able to supply all our needs for wood." So said Colonel William B. Greeley, the new Chief of the United States Forest Bureau. "But it will take fifty years to get them grown," he added.

"What are we going to do in the meantime?" I asked.

"Alaska will furnish one bridge to carry us over," he said. "Her resources of timber are enormous. All we have to do is to get busy and develop them. Our Western States and our public forests must do the rest. We have vast areas of cut-over land, formerly covered with timber, but now practically waste. Nature, if let alone, will reproduce the forests on those areas, helped out by artificial tree-planting here and there, where the devastation has been exceptionally thorough. But this cannot be accomplished unless adequate protection is given, especially against fire."

"About this Alaskan timber bridge that is to carry us over until our new forests are in shape to supply our needs?" I asked.

"The population of Alaska," Colonel Greeley answered, "is only about half what it was ten years ago. The cream has been skimmed off the Territory. The rich placers have been worked out and some of the gold lodes have been deserted. The salmon industry has been overdeveloped and exhaustion of that enormously profitable fishery threatens. The time when a small investment in a salmon cannery would yield assured rich returns is past."

"But Alaska still has immense resources that have hardly been touched. Its deep-sea fisheries, for example. Off the west coast are cod and halibut banks which are said to be larger and capable of greater production than the banks of Newfoundland or Norway."

"What is needed is that Alaska shall be put on an entirely new footing. Hitherto it has been on a mining camp basis. Its economic structure must be made permanent in character through agricultural and industrial development. When this has been accomplished Alaska will become a much greater producer of wealth than she has been up to now. Her latent resources will be made available. The reindeer, to mention one item, will be multiplied by millions, becoming a most valuable source of meat supply. In particular, for lumber and paper pulp her forests will be productive of riches."

"Since 1909 we have been largely dependent upon imported supplies of pulpwood. But the national forests of Alaska offer to paper manufacturers quantities of pulp timber at low prices under long-term contracts. The Forest Service is doing its utmost to develop this resource of the Territory. We expect to make Alaska a great producer of paper for the United States and to put the industry on a permanent basis, as it is in Norway, by keeping the cut of timber within what the forests are growing. In other words, the cut will not be allowed to exceed what the natural growth is able to replace."

"The national forests of Alaska could produce 1,500,000 tons of paper annually in perpetuity. Paper manufacturers who go there may count on an unending supply of pulp timber indefinitely. Already they are waking up to the opportunity, and before long mills in the Territory will overcome our shortage of newsprint."

"Only the other day we made a sale of 100,000,000 board feet of Alaskan pulp timber to a paper-

making concern, and we have in prospect a sale of 1,500,000,000 feet, which will supply for thirty years a great paper plant near Juneau, where water power on a large scale has been already developed and made available for the purpose by a gold-mining company."

"It was the airplane that discovered the spruce forests of Alaska. That is, in a sense. During the war we were badly in need of first-class spruce for flying machines, and, looking about for it, we found plenty of it in Alaska. In fact, the Territory has the finest body of high-grade spruce in America. It is one of the best substitutes for white pine, and is now being utilized for piano boards, for outside finish of houses, and for all other purposes to which the white pine, now so nearly gone, is adapted."

"The forests of Alaska are not locked up or shackled with burdensome restrictions, as has often been alleged. For the last fifteen years they have supplied all the sawmills on the coast of the Territory, furnishing large quantities of lumber for local use, salmon cases by the hundreds of thousands, and high-grade spruce for shipment to the Eastern States."

"Ninety per cent. of the work of the Forest Service in Alaska is done by our resident supervisors, and only matters of exceptional importance are referred to Washington. That sort of organization is the cure for long-range administration and red tape."

"So I say the forests of Alaska, together with timber in our Western States, will furnish the bridge to safety. As I have said, it will take about fifty years to grow our new forests—to bring them to a matured and productive state, where they can be relied upon, under proper and careful management, to meet our requirements for timber."

"The thing of greatest importance is to stop forest fires. If we can do that, it will accomplish 75 per cent. of the task. We must have protection from fire if we are to have a continuous and adequate supply of wood."

"The depletion of timber in the United States has resulted, primarily, not from the use of our forests, but from their devastation. On 81,000,000 acres there is practically no forest growth, as a result of forest fires and of methods of cutting which destroy or prevent new timber growth. This territory, formerly covered with trees, is not now in use for agricultural or any other valuable purpose. There were 27,000 recorded forest fires in 1919, burning a total of 8,250,000 acres. During the preceding year there were 25,000 fires, which burned over 10,500,000 acres of forest land."

I asked Colonel Greeley what was the next most important thing, supposing forest fires to be eliminated.

"Simple methods of cutting," he replied, "to provide for the reproduction of the more desirable kinds of timber. Supplementing this by artificial planting of trees, which will be required on badly denuded areas, representing from 5 to 10 per cent. of the whole."

"The national forests contain several million acres of forest land so severely burned that it cannot be restocked without planting. Such planting is most urgently required on denuded watersheds from which water is obtained for power, for irrigation and for municipal use. Work of this kind already done by the Forest Service has established methods, costs and the limits of successful reforestation by artificial planting. The project can therefore be undertaken upon an assured basis of costs and results."



Ranger Spotting Distant Forest Fires on the Map.

Cabinet National Forest, Montana.

"What we want in this country is not forest management of the Prussian type, but what any practical woodsman can employ. Over limited areas in the State and national forests a more intensive system is needed. Private owners of forest lands might take lessons therefrom, observing the profit derivable from the growing of wood by intensive methods, which include artificial planting and careful thinning at frequent intervals to produce the best kinds of timber and the best growth. To furnish good lumber, a tree should have a long bole, free from branches, and so growth for height is desirable."

"The original forests of the United States are estimated to have covered 922,000,000 acres or thereabouts. Five-sixths of this total area has been cut over, culled or burned. We have left about 137,000,000 acres of virgin timber—not counting Alaska, you understand. Eighty-one million acres have been totally devastated and made waste."

"We take 26,000,000,000 cubic feet of wood out of our forests every year, and grow only 6,000,000,000 cubic feet in them. We are cutting more of every class of timber than we are growing. We are even using up trees too small for the sawmill—trees on which our future lumber supply depends—three and a half times as fast as they are being produced."

"Annually we require 40,000,000,000 board feet of lumber, 87,000,000 hewed railroad ties, nearly 5,500,000 tons of pulpwood (one-third of which we import), and 110,000,000 cords of wood for fuel. This use cannot be appreciably reduced without serious injury to our agriculture, home building and manufacturing. We cannot cut our per capita consumption—amounting to about 300 board feet yearly—to the level of European countries, where lumber is a luxury, if our resources are to be developed and our industrial supremacy maintained."

"In the Eastern States one timbered region after another has been cut out. Less than 5 per cent. of the virgin forests of New England and but 12 per cent. of her original stand of timber are

left. New York, which in 1850 was the leading State in lumber production, now manufactures only thirty board feet per capita yearly, or about one-tenth of the requirement of her own population and industries. In 1860 Pennsylvania stood foremost as a lumber-producing State; she now cuts less than is consumed by the Pittsburgh district alone. The original pine forests of the Lake States, estimated at 350,000,000,000 board feet, are now reduced to 8,000,000,000."

"The bulk of the building and structural timbers used in the Eastern and Central States during the last twenty years was grown in the pine forests of the South. The virgin pine forests of those States are estimated to have contained 650,000,000,000 board feet of wood; today only 139,000,000,000 feet remain, if second growth be not counted. But the cut of Southern pine is already falling off and promises within another decade to exceed by little, if at all, the requirements of the Southern States themselves."

"What is the situation as regards hardwoods?" I inquired.

"The commercial cut of hardwoods in the Middle States is almost a thing of the past," said the Colonel. "Our principal reserve of hardwoods today is the Southern Mississippi Valley. Scarcity of high-grade oak, poplar, ash, hickory, walnut and other standard hardwoods is now confronting many American industries with a critical condition."

"The United States has ceased to be self-supporting in newsprint paper. In 1919 our production of turpentine and resin had fallen off 50 per cent. Within ten years this country will lose its commanding position in the world's markets so far as those products are concerned."

I suggested that the West—at all events, the Far West—was better situated in respect to its available wood supply.

"Very much," replied Colonel Greeley. "It is a fact that one-half of the timber remaining in the continental United States is in three States bordering on the Pacific

Ocean. Sixty-one per cent. of it lies west of the Great Plains."

"Lumber shortages and high prices have seriously affected almost our entire population. The country is short many hundreds of thousands of homes and the cost of lumber fairly precludes building by the average citizen. It has checked the development of agricultural lands and is an obstacle to needed improvements on farms. The output of several entire industries has been reduced 50 per cent. by the shortage and high cost of lumber."

"It seems absurd that we should find ourselves in such a situation when we consider that there are in the United States something like 463,000,000 acres of forest land, not required for any other economic use, which are capable of supplying all the wood we need if they were kept productive. We suffer from lack of wood because we have failed to make use of our timber-growing land."

"The remedy must and will be found in concerted effort to stop the devastation of our remaining forests, and to put our idle forest lands to work growing timber. Our policy in the future must aim toward timber production on somewhat the same plan as in France and Scandinavia. It must be a definitely established national policy."

"The Federal Government should assist the States in their endeavors to stop forest fires, in the development of wise methods of cutting and in systematic tree planting on denuded areas. It should help with money appropriations—let us say, with an understanding that it should give no more in any year than the State itself, in any given instance, expended for the purpose within the limits of its own territory. In other words, Uncle Sam might 'go halves' with the States which undertook such measures, just as now he does the same thing where road building is concerned."

"The Government should provide for the progressive reforestation of denuded lands in the national forests, to be completed in twenty years, under the direction of the Forest Service. This would call for appropriations of \$1,000,000 a year after the enterprise got started."