Forestry and the National Defense

By Henry S. Graves, Dean, School of Forestry, Yale University

Col. Graves is well qualified to write on this subject, as he was at the head of the United States Forestry Service before that Nation's entry into the World War. In the Summer of 1917 he went to France as a Lieut.-Col. of Engineers to assist in Forestry matters. In this work he came into intimate contact with the French and British forestry officials and it was largely due to his efforts that French forests were obtained for the operation of United States Forestry Engineers Corps in the Fall of 1917. We are indebted to "The Military Engineer" Journal of the Society of American Military Engineers with headquarters at Washington, D. C., for this article and the plates used in illustrating it.—Editor.

GREAT BRITAIN has embarked on a new forest policy, looking to the restoration of the forests which were cut off during the war and also to the establishment of forest plantations upon nearly two million acres of land not heretofore used for growing timber. The policy is primarily one of national defense. While the forests will be of great industrial service in normal times, there will be an element of national security in having a timber reserve large enough to meet the home requirements for fully three years if another emergency

should cut off the supplies of forest products from other countries. Great Britain regards this problem of such importance that, in spite of the present financial situation, an authorization of fifteen million dollars has been made to initiate the work of forestructure.

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On the continent of Europe the service of the forest in national defense has been for many years a factor in the development of the public policies in forestry. While the primary thought has been the supply of wood and timber, the strategic value of forests in military operations has also been given consideration, especially in those countries whose frontiers are exposed to possible vasion. The strategic importance of forests as a cover for the movement of troops, for the concealment of artillery, and as pivotal points in an advance or a retreat, was repeatedly demonstrated The in the great war. point to the

value of the forests of the Vosges in the defense of Epinal and of the Grand Courohne de Nancy in 1914. In the first great German drive in 1914, the forests of Trois-Fontaines near St. Dizier played an important part in protecting the French lines of communication, and in the west the forests of Villiers-Cotterets and of Compiègne enabled the French by a swift maneuver to make a successful attack on the left wing of von Gluck's army. We are more familiar with the second service of the forests of Villers-Cotterets and of Compiègne, as a cover for the movement of the troops of Marshal Foch in 1918 when he began the great offensive that resulted in the

termination of the war. Many other incidents of the war could be cited to show the strategic value of forests in military operations.

The greatest service of the French forests, however, was in supplying the lumber, round wood and fuel needed by the armies. France has furnished a most conclusive demonstration of the value of far-sighted policy of forestry. For many years the forests have been handled under conservative and scientific methods, both on public and private land. While using the mature timber for industrial

Forests--A Vital Resource

By Henry C. Wallace
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VERY civilized nation in the world has come to realize that its national security and prosperity are built, in no small measure, upon a foundation of wood which forests supply. This fact was clearly demonstrated in the recent war, when the forests of France were called upon to supply the materials so essential to the success of the Allies. Only the far-sighted forestry policy of that nation made it possible to meet this demand. Forests are a prerequisite not only in the defense of a nation, but also in its economic and industrial upbuilding. recent demands of the French for control of the German forests emphasizes this fact. America has not yet fully awakened to the seriousness of its own forestry problem, which includes in part the elimination each year of thousands of man-caused forest fires, the reforesting of waste land suited only for the growing of trees, and the highest use of the remaining virgin forests of our country. With the awakening of public conscience and the solution of these problems will come a new era of prosperity and security based on the knowledge that these United States are, and always will be, self-sustaining in the production of this most vital resource-wood.

and domestic needs, the total timber capital has been constantly increasing. Not only was there a large aggregate quantity of timber available in the war emergency, but the forests were well distributed throughout the country, readily accessible for use with a minimum burden on the railroads. After the supplies of lumber from Scandinavia, Finland, Russia, and North America were cut off by the submarine and by pressure for tonnage to move troops and supplies, the French forests furnished most of the lumber and wood material needed by all the allied armies in France. Prior to the interruption of shipping by the submarine, Great Britain had imported lumber from other countries both to supply her requirements in France and to meet the various needs at home. French had drawn upon their own forests for the war needs, and had even been able to send railroad and mine props to Eng-

land. About the time of our entry in the war, the British turned to the limited forests of England and Scotland. Lacking a skilled industry to exploit them, battalions of lumbermen equipped with portable mills were brought over from Canada. Ten sawmill units were also sent from New England to operate in the Scottish forests. It did not take long to exhaust the British forests, though the private owners readily offered their woodlands and even the park trees upon their estates. It was then that the Canadian forestry troops were transferred to operate in the French forests.

One of the early requests of the British for American