

United States Soldiers laying track in the spruce forests of Washington

assistance in the Spring of 1917 was for a regiment of forestry engineers to work in the French forests to supply lumber and other wood products for the British army. It was this request that led to the organization of the 10th Engineers (afterwards incorporated with the 20th), though the needs of the American army made it impossible to give the British the promised aid until 1918. A similar request was also made by the French for about 5,000 men, because they lacked the personnel and equipment to meet their current needs for wood products.

The American troops were at first greatly embarrassed because of the lack of lumber and other wood materials. Our first needs were for barracks, storehouses, and other buildings, for railroad ties, for piling and lumber for docks, for telegraph and telephone poles, and for fuel. The allied armies did not have the skilled men and equipment to produce the material really required for their own needs, and the small quantities of lumber, ties, poles, piles and cordwood furnished the American army were given at a real sacrifice. The French placed their forests at our disposal, although they were able to offer but little manufactured lumber or even dry fuel. Necessarily, some time elapsed before the forestry troops and their equipment could be transported to France. Every one who was there during the Summer of 1917 will recall the difficulties resulting from the inability to obtain wood materials.

The work of the 20th Engineers (which absorbed the 10th), under the admirable leadership of Colonel J. A. Woodruff, Corps of Engineers, is well known to the entire American army. The operations of these troops supplied most of the wood material used for construction and other purposes in the rear; they provided also the large quantities of material needed at the front for construction, shelter, ties, poles, trench material, pickets, road plank, etc. To produce the required material it was necessary to ship to France not only a large number of sawmills but all the logging equipment, from axes and peavies to logging wagons and trucks. At the close of the war there were in progress 90 operations in the French forests. These comprised 81 sawmills, most of which had been shipped from Nearly 12,000 technical engineer the United States.

troops and 8,500 service troops were engaged in this work. Fuel operations also were conducted at the front by quartermaster troops. Thirty officers from the 20th Engineers were loaned to the quartermaster corps to aid in this work.

The early estimates of the needs of the American army in France called for about 25 million feet of sawn and round material each month, in addition to fuel. At the time of the armistice, the needs were estimated at nearly 75 million feet a month. To meet these needs and for possible greater requirements, additional companies of forest engineers were being recruited when the armistice was signed, and orders were being placed for many more sawmills and for an immense quantity of logging equipment.

The production from the American mills constituted a record in the history of lumbering. The production of over 160,000 feet of lumber in 24 hours from a mill classed as having a capacity of 20,000 feet for 10 hours was previously unknown. But a similar rate of production was achieved by a number of Colonel Woodruff's companies. The total quantity of material produced by the mills operated by the American troops aggregated about 300 million feet of lumber and ties, in addition to nearly 3 million piles and poles of various sizes. This was a fine achievement when one considers the local difficulties, the relatively small size of the timber, and the necessity of operating small tracts and of making transfers of the mills to new points of operation.

Of special interest is the work accomplished in furnishing fuel wood for the American army. Fuel operations were carried on both within the zone of the armies and in the rear. Altogether there had been produced by the forestry section about 400,000 cords of wood for fuel when its work was completed in 1919.

France had over 1,250,000 acres of forest practically devastated in the zone of fighting. At the close of the war there were fully 50,000 forestry and engineer troops, French, British and American, operating in the forests in different parts of the country. Yet there remained considerable areas which had not been cut over and in case of necessity some of the forests from which only the