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THE AMERICAN LUMBERJACK IN FRANCE

BY LIEUT.-COL. W. B. GREELEY, 20TH ENGINEERS

NOTHING illustrates the far-reaching economic demands of the Great War more sharply than the enormous use of timber in almost every phase of military operations. From the plank roads at the front, the bomb proofs, the wire entanglements, and the ties needed for the rapid repair or construction of railroads upon which military strategy largely depended, to the hospitals, warehouses, camps, and docks at the base ports, timber was in constant demand as a munition of war. One of the earliest requests for help from the United States by both our French and British allies was for regiments of trained lumbermen. General Pershing had been in France less than two months when he cabled the War Department for a force of lumberjack soldiers large enough to cut upwards of 25,000,000 board feet per month for the American Expeditionary Force. A year later, the requirements of the enormous army then planned for and being sent to France with all possible speed were put at over 73,000,000 board feet per month.

Such was the task marked out for the lumberjack regiments of the American Army, for the lack of ocean transport made it necessary to obtain practically all of this material from French forests. The organization of these lumberjack units, all of which were combined later in the 20th Engineers (Forestry), began in May, 1917, and continued until March, 1918. By May, 1918, forty-eight

companies of forest and road engineers, each 250 men strong, had been sent to France. The core of a 49th Company was obtained subsequently from the New England sawmill units which were sent to old England in

the early summer of 1917 to cut lumber for the British Government. These troops represented every State in the Union. Practically every forestry agency in the country, together with many lumber companies and associations, took off their coats to help in obtaining the right type of men. The road engineers of the United States took hold of the organization of the twelve companies of troops designed for road construction in a similar spirit. The lumber units were officered largely by picked men of experience in forest industries of America; and the road units by road and construction engineers of exceptional technical ability.

The earlier units were made up entirely from volunteer enlistments. The later units contained a large proportion of men from the draft, selected for forestry work mainly on the basis of their former occupations, together with many volunteers beyond the draft age from among the experienced loggers and saw-mill mechanics of the country. But there was no distinction between volunteer

or drafted soldiers in the way the American lumberjacks hit their job in France. These men represented the best of their hardy and resourceful profession in the United



LIEUT-COL. W. B. GREELEY

States. They came straight from her forests and sawmills, trained in her woodcraft, with all of the physical vigor, the adaptability to life in the open, and the rough and ready mechanical skill of the American woodsman. They knew their work and were ready to put all that they had into it.

Furthermore, these lumberjack soldiers felt in a peculiar way that their country was behind them. This was not only in the focusing of national forces from every

crews made off with the laurels of certain pure lumberjack units, in the records of the operations for production.

To meet the growing requirements of the American Army, Engineer Service battalions were rapidly added to the forestry and road troops during the summer and fall of 1918. At the end of hostilities, thirty-six Service companies were working with the 20th Engineers. The first four of them were white troops, organized as the

"The lumbermen and foresters of the United States may well take pride in the men who have represented them on the American Expeditionary Force. Now they are returning, better men for the sacrifices they have made, for the sense of organization and responsibility which they have learned, for the difficulties which they have mastered, and for the understanding which they have gained of forest culture and forest thrift in France. Such a body of trained men represent an asset of the utmost value to the forest industries of America. Let us recognize their worth and their capacity by an intelligent direction of the return of these soldiers to civil life in positions where their experience in national service can be effectively utilized."—Lt. Col. W. B. Greeley, 20th Engineers (Forestry).

point upon winning the war, but in the special efforts of the forest industries to man and equip the lumber regiments. Many lumber companies had sacrificed their own interests in urging valued employees to join the ranks of the forest regiments. In many cases differences in pay were made good by old employers or provision made for the families left behind. And the lumberjack soldiers felt, too, the backing of friendliness and forethought which followed them to France, in the organized steps taken by the lumber and forestry associations for their comfort and welfare.

Special credit is due to the officers and men of the three battalions, the 41st, 42nd, and 43rd Engineers, which were organized and equipped for road and construction work in connection with forestry operations. They came to France keen to take up this task, for which they too had been especially fitted by training and experience.

But the necessities of war dictated otherwise. They landed in France to find the undermanned Forestry Section struggling to keep up with the timber needs of an army already twice the size of that originally intended. It was necessary for these road builders to turn lumberjacks themselves, cutting fuelwood, piling, or entanglement stakes as occasion demanded and manning the new sawmills which were installed as fast as they arrived from the United States. The road companies took hold of this work, to which most of them were unaccustomed, with splendid spirit, and in the end some of their mill

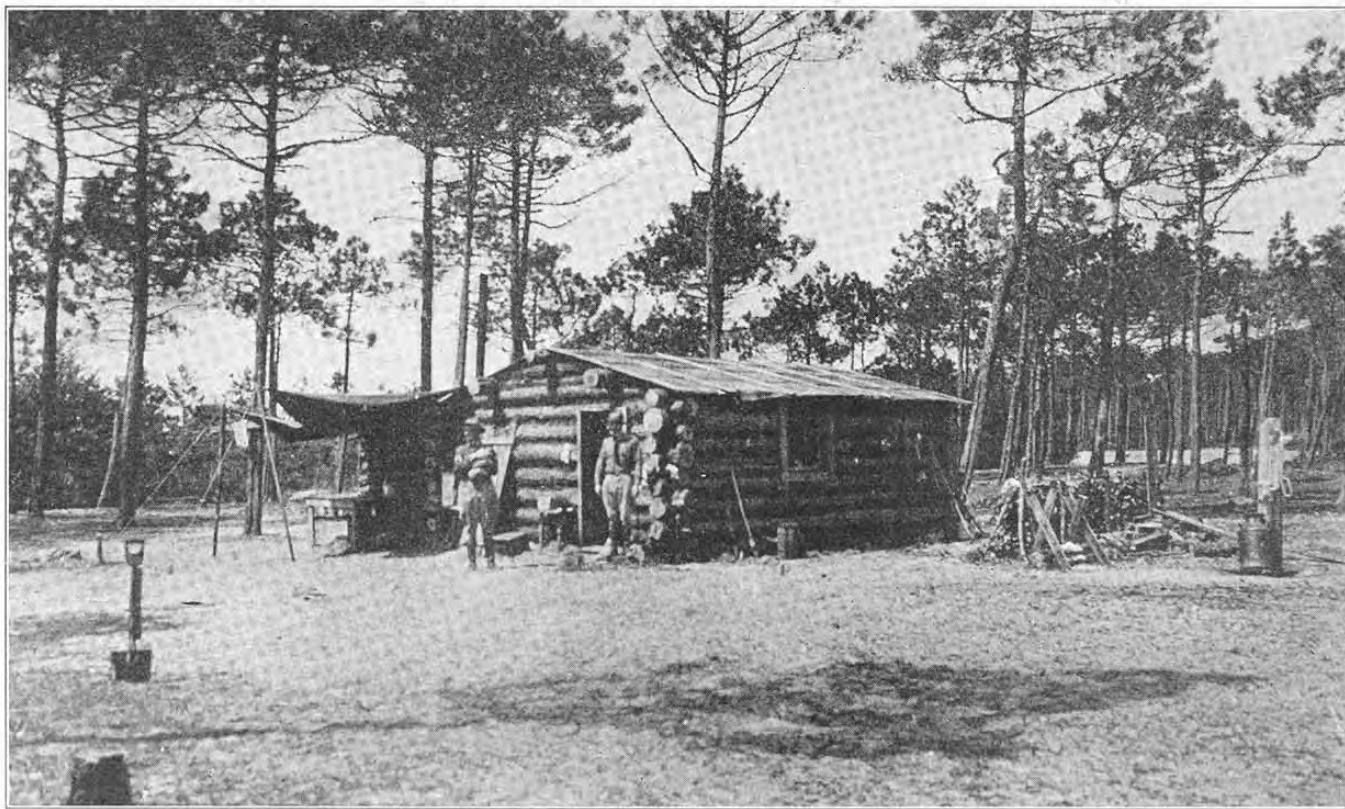
503d Engineers. They contained a large proportion of railroad men and other skilled workers, and were soon in the mills and woods and on railroad jobs, on all fours with the forestry troops. Upon the other Service Companies, composed of colored troops, fell the brunt of cutting the fuelwood which the Quartermaster was calling for by the hundreds of thousands of cords. But several sawmill crews composed largely or entirely of black soldiers made exceedingly creditable records.

The first board was cut by the American troops in France, at a little French mill in the Jura Mountains, on November 26, 1917. The first American mill began sawing near Gien, on the Loire River, November 29, 1917. Still earlier, another company of the old 10th Engineers began cutting fifty-foot piling in the pine forests of the Landes, hauling them out of the woods on the running gear of army supply wagons, by man power. On the

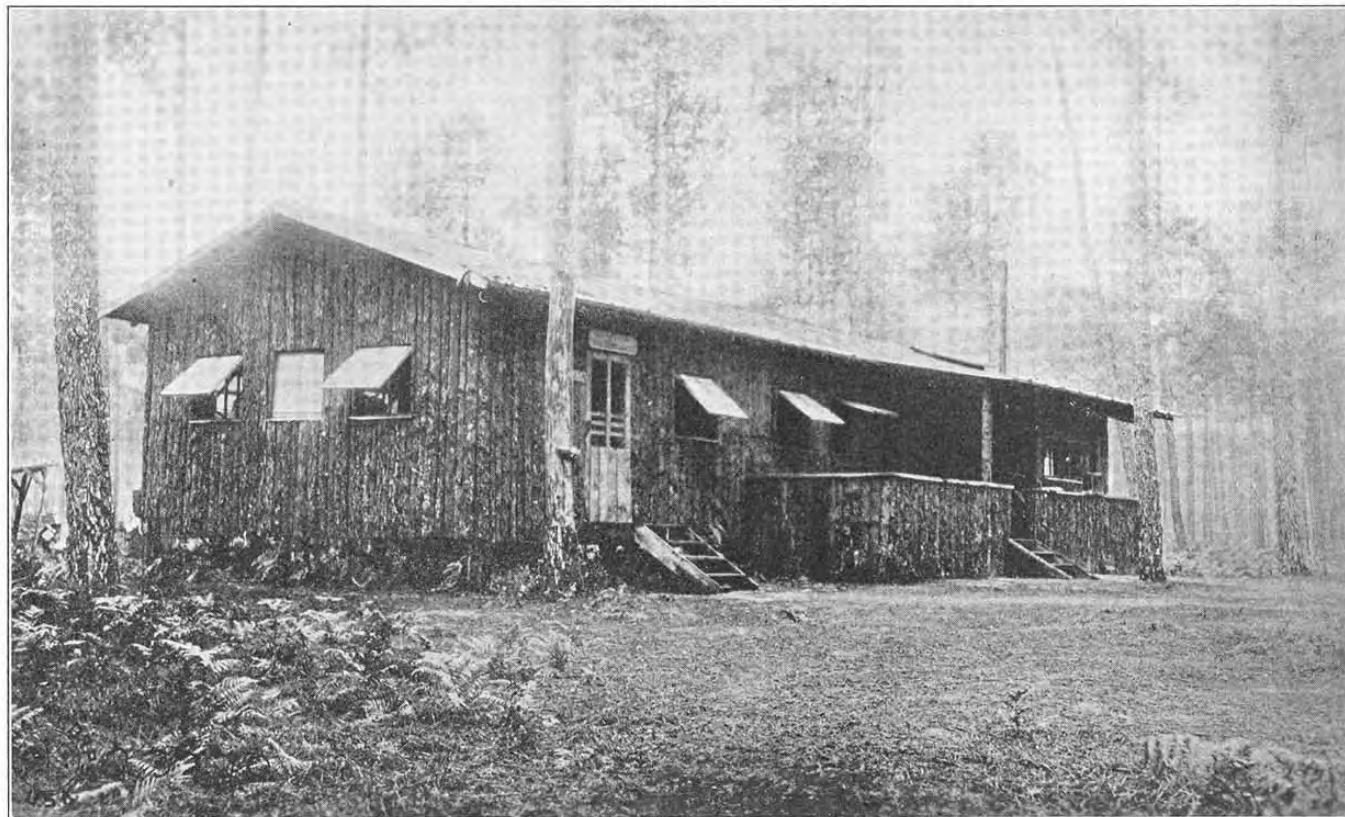
Lt. Col. W. B. Greeley is Assistant Forester of the United States. He has had general charge of all forestry operations of the regiment and his administrative ability, his knowledge of forestry and lumbering had much to do with the successful work of the regiment. The French have honored him by presenting him with the Legion of Honor. Shortly before this honor was conferred upon him he induced the French government to reduce its bill against the A. E. F. for forest acquisition about 2,000,000 francs.

Editor, American Forestry Magazine.

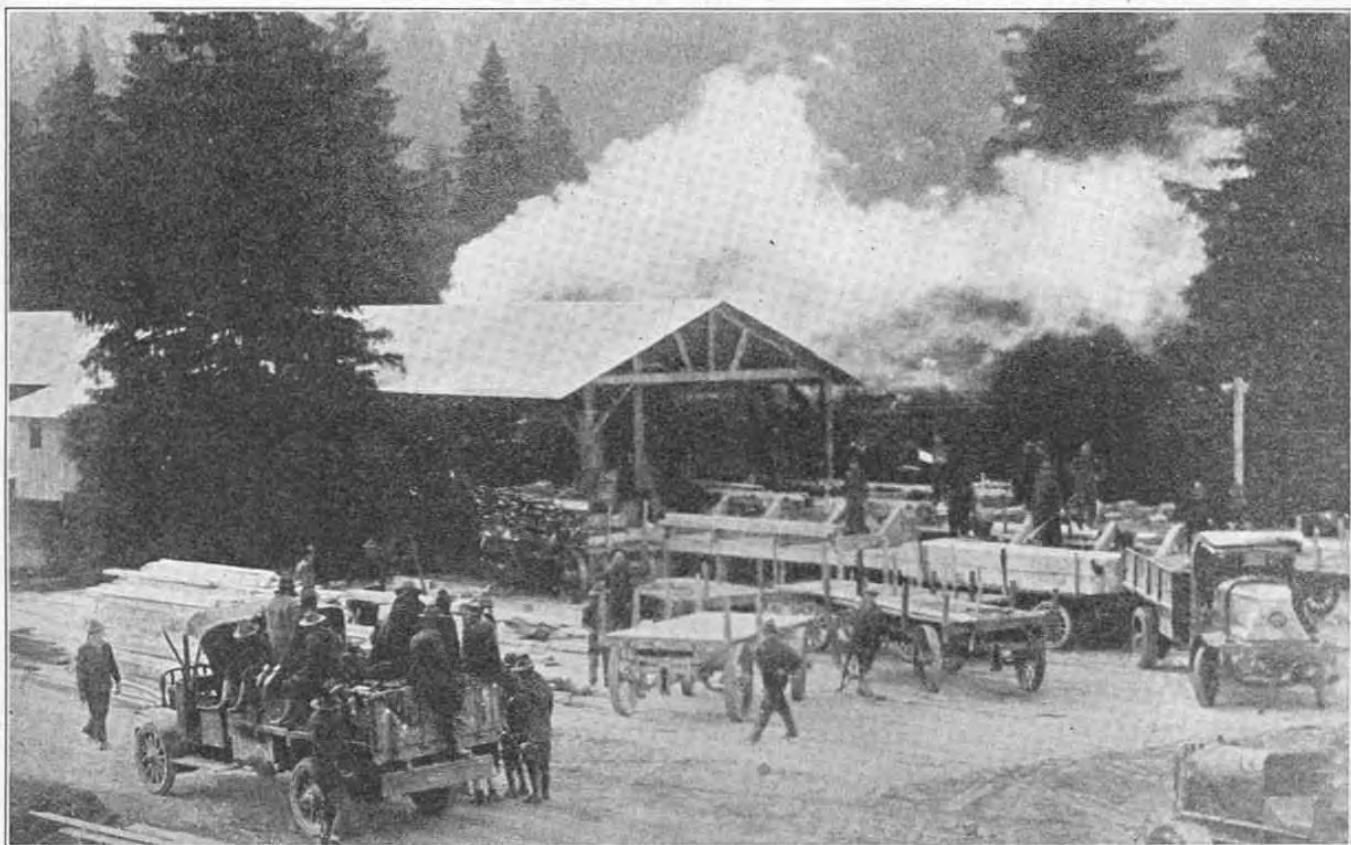
date when the armistice was signed, the 20th Engineers were operating eighty-one American sawmills in France and cutting 2,000,000 feet of lumber, ties, poles and piling every working day. One year after the first American saw bit into its first log in France and shrilled defiance at the Kaiser, the forestry troops of the American Expeditionary Forces had cut 300,000,000 board feet of lumber and ties, 38,000 piles, 2,878,000 poles of all sizes, and 317,000 cords of fuelwood. It is impossible, in a few words, to tell of the labor, the Yankee ingenuity, and the resolution to back up our fighting doughboys which were



A LOG CABIN BUILT NEAR PONTENX, LANDES, FRANCE, BY A SQUAD OF AMERICAN RIVER DRIVERS IN THE 20th REGIMENT.
THE FRENCH NEVER USE WOOD SO LAVISHLY IN BUILDING



OFFICE BUILDING AT CAMP OF THE 20th ENGINEERS IN FRANCE



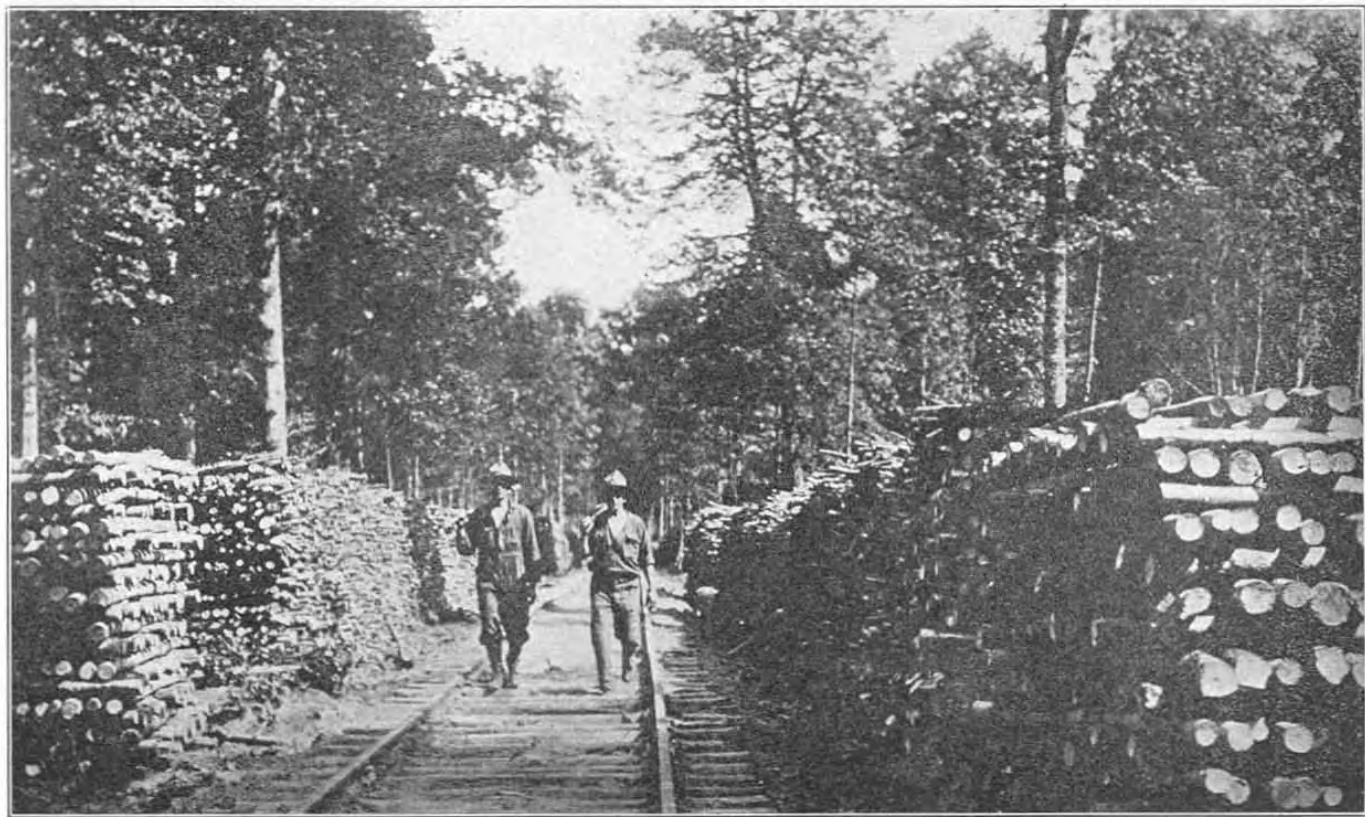
MILL OF 20th ENGINEERS IN MOUNTAINS OF EASTERN FRANCE. LARGE TIMBERS BEING LOADED ON TRAILERS READY FOR HAULING TO THE RAILWAY

called for to win these results. Nor is it possible to describe the pressure upon all of us during the summer and fall of 1918 when every lumberjack in the regiment felt the tenseness of the final grapple and put everything he had into it. I will never forget the big mill at Eclaron as I saw it one October night—sparks streaming from its stacks, its two carriages flashing back and forth, loads of oak logs creaking up to the mill deck, cars being shunted about, ties loaded into them hot from the saws, and the sober, earnest faces of the men as they worked under the electric lights. They were shipping 5,000 ties daily to the Argonne offensive. That scene was typical of the eighty or more forestry operations in France during the great drive. It is doubtful if American resourcefulness was ever put to a harder test than during the first months of the forestry work

in France. One company of the 4th Battalion began skidding ties with harness made out of ropes and old sacks, and bridles fashioned from twenty-penny nails and wire. This "hay-wire" camp speedily made off with the monthly records of the section for tie production. During the long, anxious wait for the arrival of the American sawmills, French mills of various antique designs were utilized at many points. On his introduction to one of these, a millwright from the northwest offered to eat its daily cut. The French mills were aggravations of the flesh and promoters of profanity. They all had to be bolstered up, more or less rebuilt, have carriages devised out of any odd lots of machinery at hand, and new saws added. Poor as they were, they served to tide the army over its first few months in France, and their production under the "ancient regime" was



AN AMERICAN FORESTRY ENGINEER AT THE WATER BAG WHICH CONTAINS THE CAMP'S SUPPLY OF DRINKING WATER. THE ROOF OVERHEAD KEEPS THE SUN OFF THE BAG, AND A DITCH CARRIES AWAY THE LEAKAGE



BARBED WIRE STAKES, TO BE USED LATER AT THE FRONT, CUT AND STACKED ALONG BROAD GAUGE RAILWAY IN A HARDWOOD FOREST IN CENTRAL FRANCE



LOADING MARITIME PINE PILING IN SOUTHWESTERN FRANCE, NEAR PONTENX, LANDES



ANOTHER TYPE OF THE 20-M AMERICAN SAWMILLS USED BY THE AMERICAN FORESTRY AND LUMBERING TROOPS IN FRANCE

doubled or trebled by the lumberjack soldiers.

As the American mills were installed and production jumped month by month, fierce joy of rivalry seized the souls of the forest engineers. Time would fail to tell of the early contest between A and B Companies of the 10th Engineers, when records stood but a day or two and our "ten-thousand" mills showed up as twenty-five and thirty thousand a day producers. The largest day's cut at any forestry operation was turned out by the 27th Company at Mouthe, which in 23 hours and 35 minutes cut 177,486 board feet of fir lumber and timbers on a "twenty-thousand" mill. The largest twenty-hour cut, 163,376 feet, was made by the 37th Company (Old F Company of the 10th Engineers) at Levier with the same type of mill and product. The 26th Company at La Cluse holds the record for a twenty-hour run with a "ten-thousand" mill, 78,881 feet; close behind came the 24th Com-

pany with a record cut of 68,650 feet, the 30th with a cut of 63,849 feet, and the 49th Company at Murat, organized to build roads, with 63,000 feet. The 23d Company, at Marchenoir, holds the record for a twenty-hour cut with a "ten" mill in hardwoods, knocking off 55,539 feet. The 22d Company, at La Gavre, pushed its rival hard, however, with a twenty-hour cut of 49,416 feet of oak lumber and timbers. One of the best hardwood records is that of the 2nd Company, at Grande Mirebeau, which was determined to reach the million a month mark with a "ten" mill, and finally did so, in October, with a cut of 1,000,620 feet. One of the most remarkable achievements was that of the 19th Company, which in ten and one-half hours cut 64,047 feet of straight oak ties with a bolter mill rated at five thousand feet per day.

Small wonder that the American Lumberman has indicted the forest engineers of the American Expedi-



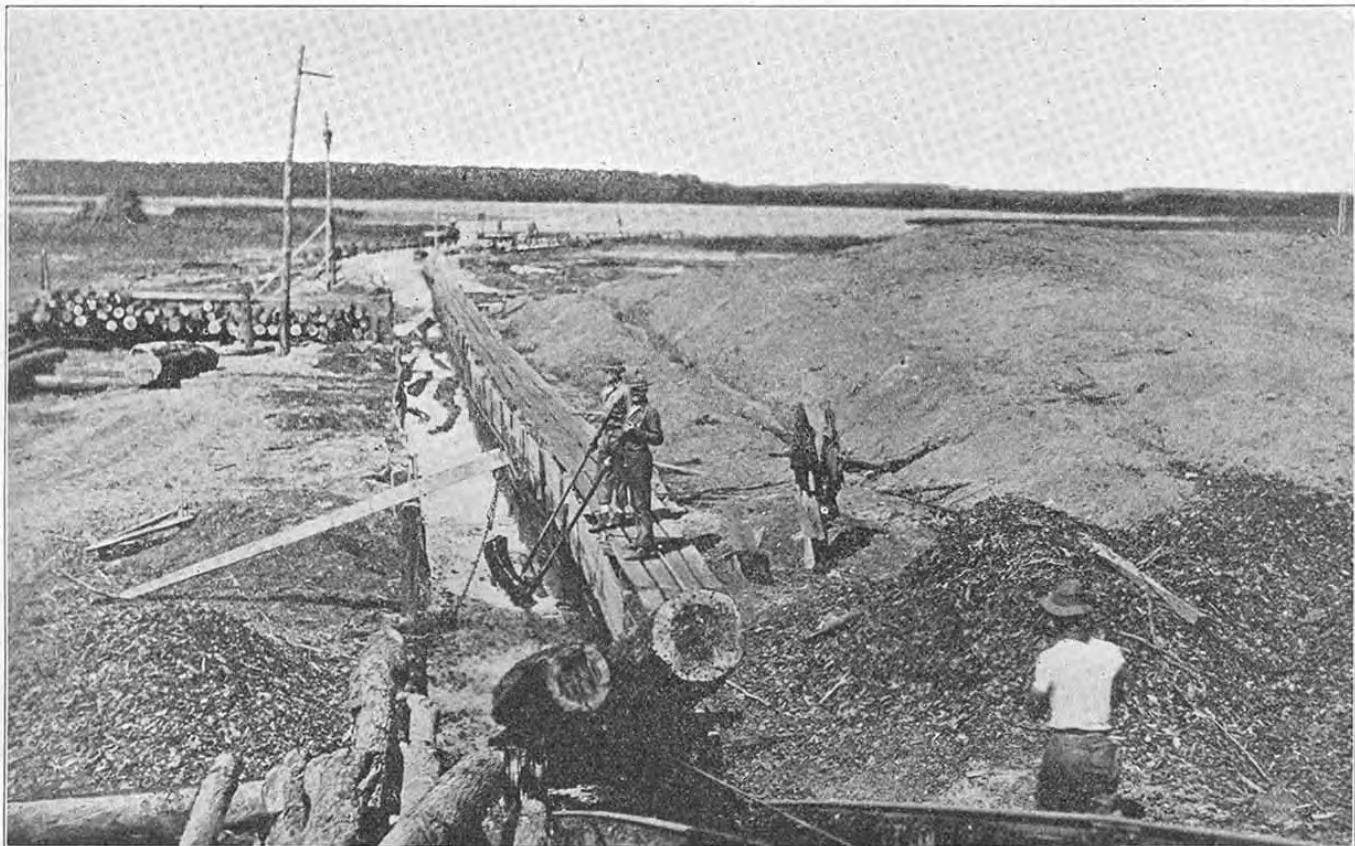
20th ENGINEERS FELLING LARGE BEECH TREE IN CENTRAL FRANCE



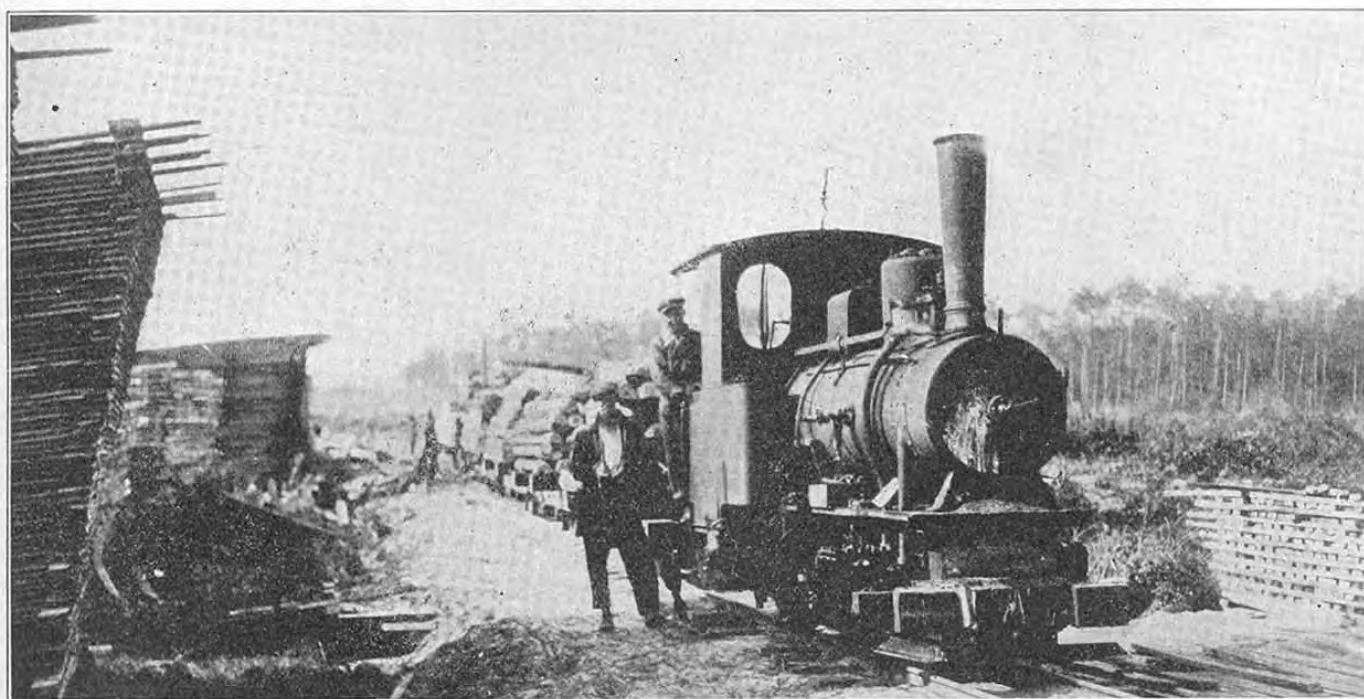
LOG DECKS ALONG A FLUME LEADING TO A MILL OF ONE OF THE COMPANIES OF THE 20th REGIMENT IN SOUTHWESTERN FRANCE



AMERICAN CAMP WITH TENTS "MUSHROOMED" IN THE SHADE OF A MARITIME PINE FOREST NEAR THE ATLANTIC COAST IN SOUTHWESTERN FRANCE



VIEW OF AUREILHAN LAKE, FRANCE, FROM AMERICAN 20-M SAWMILL. LOGS WERE TOWED ACROSS THE LAKE FROM THE MOUTH OF THE COURANT RIVER, BROUGHT TO THE BOOMS AT THE EDGE OF THE LAKE, THEN POLED ALONG THE CANAL TO THE POINT IN THE FOREGROUND WHERE THEY WERE LOADED UPON A SMALL CAR WHICH WAS PULLED BY CABLE UP THE INCLINE INTO THE SAWMILL. THE LARGE HEAP OF SAWDUST AT THE RIGHT WAS PRODUCED BY THE MILL AS THE RESULT OF SEVERAL MONTHS' OPERATION



A TRAIN LOAD OF TIES BEING TRANSPORTED BY NARROW GAUGE RAILWAY TO THE MAIN LINE IN THE MARITIME PINE FORESTS OF SOUTHWESTERN FRANCE

tionary Forces for "cruelty to machinery." But the Hun wanted war—and, by the shades of the forest primeval, he should have it. It is difficult to stop in recording these instances of how the American lumberjack "tied into" their work in France. The 6th Battalion, working for the British Army at Castets, cut 124,242 feet in nineteen hours with a twenty-thousand Canadian sawmill, and 72,697 feet in twenty hours with a French band mill whose makers would have been aghast at such perform-

gineers contain records of twenty thousand foot mills set up and running fourteen days after the first machinery arrived; of a ten-thousand mill dismantled, moved fifty miles, re-set, and sawing on the eighth day; and of another "ten" mill moved about half that distance and sawing its first log forty-seven hours after the last log left its carriage at the old set. These were not holiday contests, staged after weeks of preparation. They are cited to illustrate the spirit of the 20th Engineers;



A LOG LANDING OF A 20th REGIMENT DETACHMENT IN ONE OF THE FORESTS OF FRANCE

ances. The 13th Company, at Brinon, cut 1,361 pine logs on a "ten" mill in twenty hours, with a yield 53,895 feet of lumber. Many of the American "twenty" mills cut steadily upwards of 1,200,000 board feet per month, and several of them exceeded 2,000,000 feet monthly on their best runs. The spirit of "hitting her hard" pervaded every camp. The 19th Service Company, at Collonges, not to be outdone by the chesty mill crews, organized a fuelwood contest in which 100 black soldiers averaged 6.31 cubic meters of cut wood daily for a week. It is even rumored that a red-headed captain of the old Tenth, learning from his own spies that his monthly record was in jeopardy, connived with his men to put on a Sunday night shift, something strictly tabooed by the Forestry Regulations. The annals of the 20th En-

but the great service of the regiment lay in its sustained effort, month after month, on exacting physical labor, much of it under the incessant rains and in the indescribable mud of France.

In the spring of 1918 came orders to furnish 15,000 piling in lengths up to 100 feet, with all possible haste. These timbers could not be brought from the United States and were essential to complete the docking facilities required by the rapid increase in the American Expeditionary Force. Again the resourcefulness of the forest engineers was put to the test, for every nook of France had to be scoured for long timbers and practically every tree that was large enough had to be cut—no matter where it stood. The 2d Battalion—up in the Vosges Mountains—covered itself with glory, get-



AN AMERICAN 20-M SAWMILL IN THE SAND DUNE COUNTRY OF SOUTHWESTERN FRANCE, NEAR THE COAST. MARITIME PINE FOREST IN THE BACKGROUND.



AMERICAN FORESTRY ENGINEERS IN FRONT OF TENTS IN THEIR CAMP AT ST. DIZIER, HAUTE MARNE



HAULING PILING 60 TO 80 FEET LONG BY MEANS OF MACK TRUCK AND TRAILER FROM THE FOREST TO THE SHIPPING POINT IN EASTERN FRANCE



CAR LOAD OF MARITIME PINE LOGS BEING DUMPED INTO AUREILHAN LAKE TO BE TOWED TO THE AUREILHAN AMERICAN SAWMILL NEAR PONTENX, LANDES. NARROW GAUGE RAILWAY SHOWN. THE MULES BRING THE LOGS FROM THE PINE FORESTS OF THE SAND DUNES.



LOADING MARITIME PINE LOGS ON NARROW GAUGE RAILWAY CARS FOR TRANSPORTATION TO AMERICAN 20-M MILLS IN SOUTHWESTERN FRANCE. THE PINE FOREST IS HERE CUT CLEAN. BIG WHEELS USED TO SKID LOGS TO THE RAILWAY SHOWN AT THE RIGHT

ting out 9,399 "long and straight" ones faster than the docks could use them. Nor was it a simple trick to get 90 and 100-foot sticks out of the little gullies and down the long, winding roads of the Vosges. The 5th Battalion, meanwhile, was running an express train service with tractors and steel-tired trailers—taking out 80-foot spruce piles over ten miles of French highways. This Battalion furnished over 5,000 piles for the American docks.

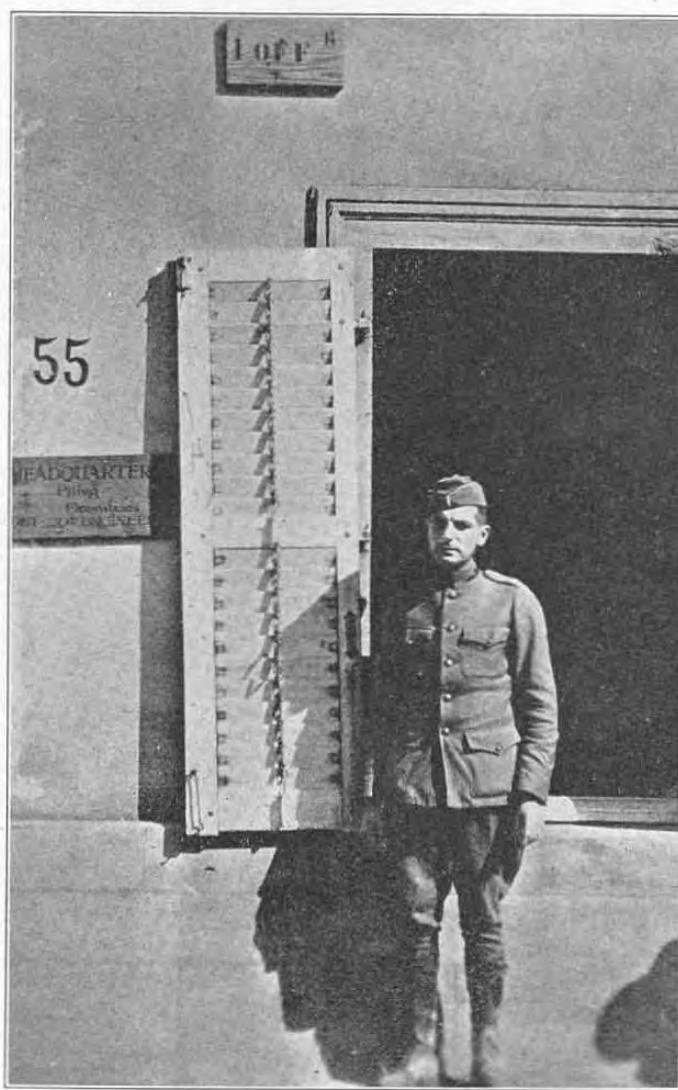
New demands upon the forestry troops followed the formation of the American First Army. A flying squadron of lumberjacks was organized by the 2nd Battalion, to work in small units with portable mills at the advance Engineer dumps and cut from day to day bridge timbers, mine sets, bomb proofing—the material most urgently required and which could not be forwarded quickly enough from the rear. All told, the 20th Engineers operated thirteen of these advance camps. Their lumberjack soldiers had a real taste of work close to the front, with frequent occa-

sion to take shelter from bombardments and night bombing raids. And it was while scouting for a new camp in the Argonne that Capt. Harry H. McPherson and Lieut. Wilford A. Fair, of the 20th Engineers, were shot down by German machine-gunners.

Last December Colonel James A. Woodruff, commanding the 20th Engineers, summed up the work of the twelve thousand odd lumberjacks comprising the regiment in a general order which was a cordial commendation. (See page 1092.)

Not all of us were permitted to share in this achievement. With sorrow but with pride the 20th Engineers recall the ninety-one men of the 6th Battalion who won their golden stars on the transport *Tuscania*. The story is best recorded in the words of an officer of that battalion:

"On the morning of the eighth day out from Halifax, the convoy was met by seven British destroyers, which romped along like porpoises in the heavy seas. With this protection everybody on board felt pretty safe, especially



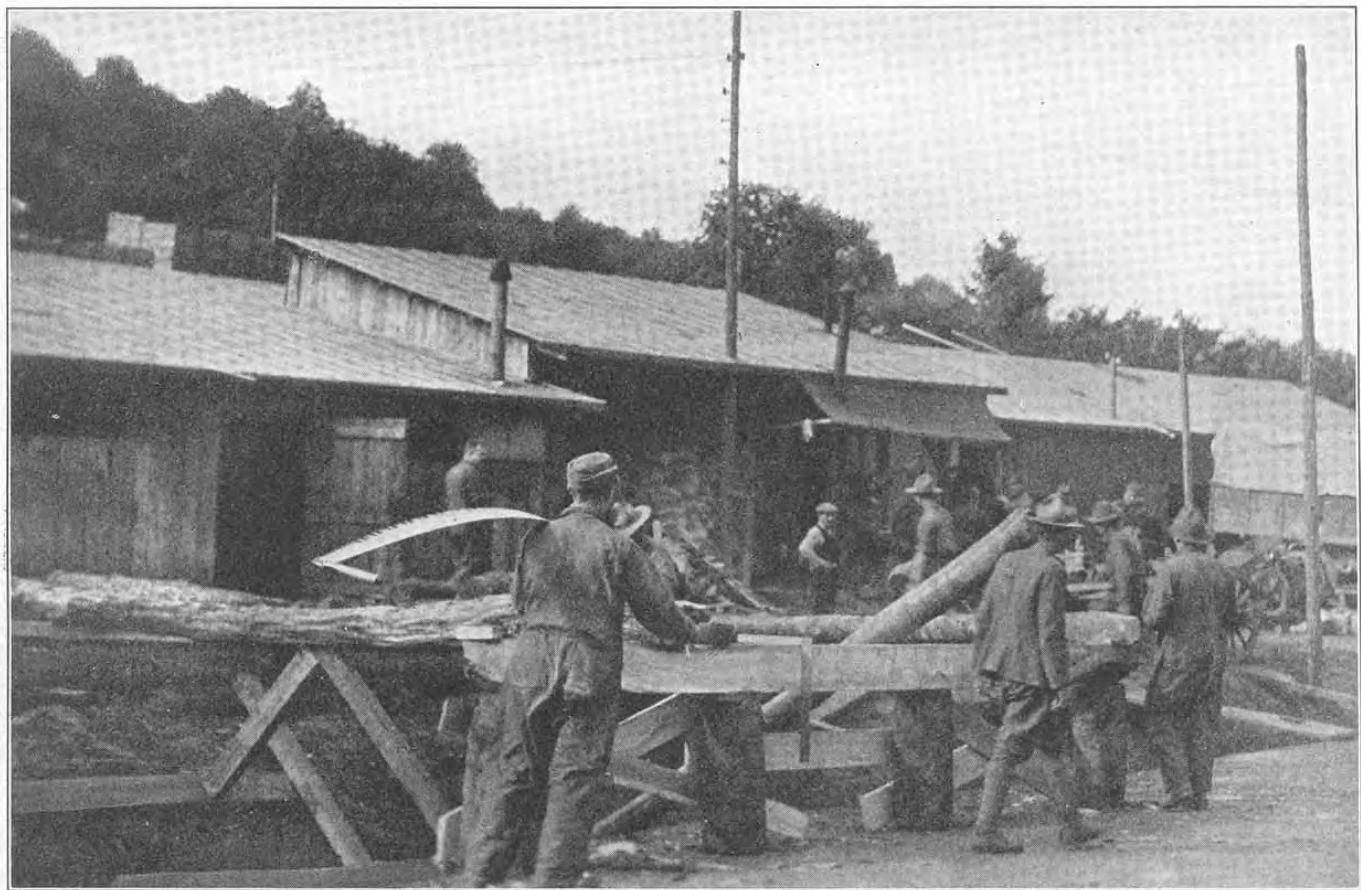
AN OFFICER OF THE 20th ENGINEERS AT A BATTALION HEADQUARTERS IN FRANCE



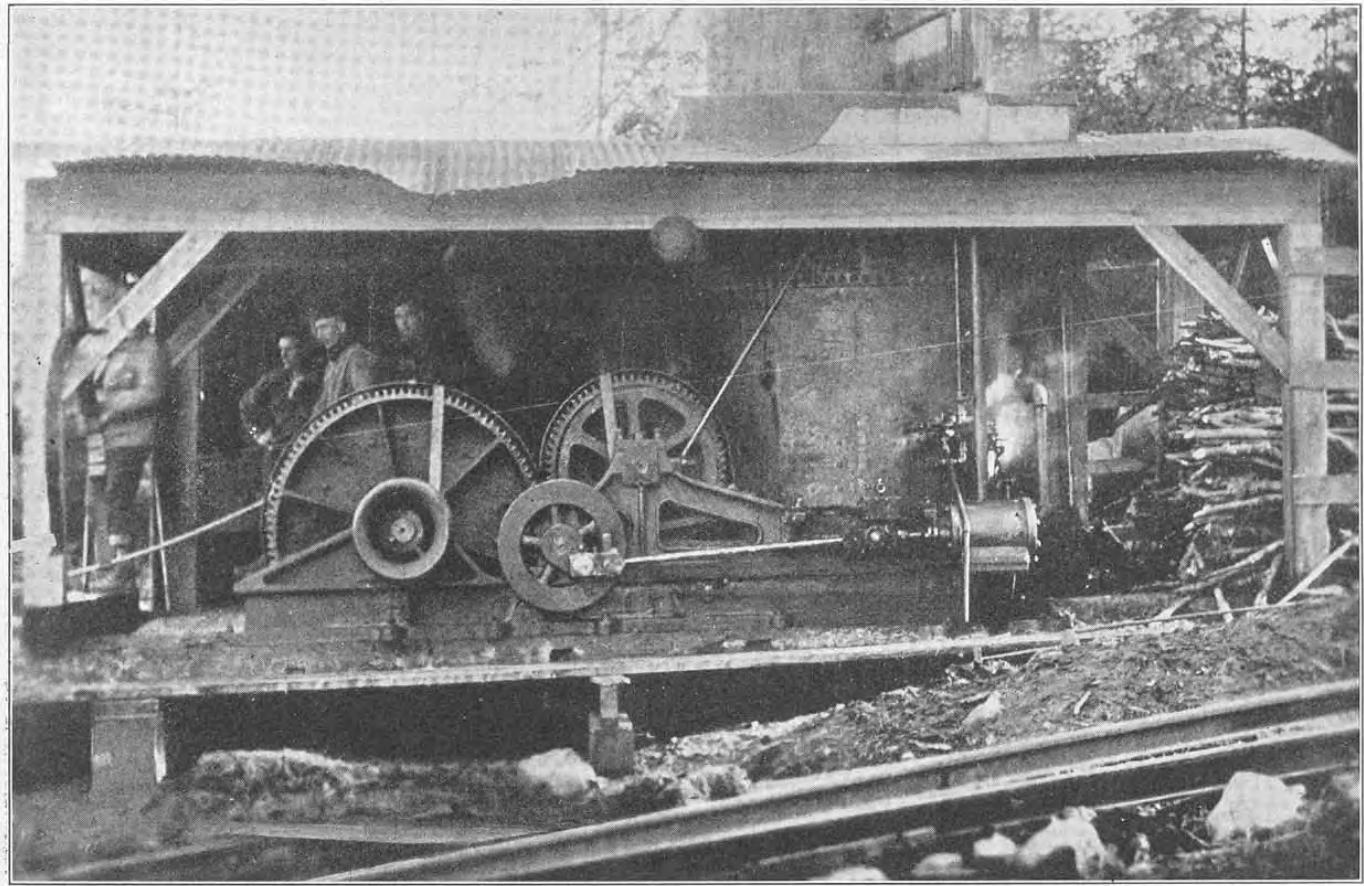
LOG TRAIN AT THE RIGHT COMING FROM THE MARITIME PINE FOREST TO THE LABROQUETTE 20-M AMERICAN MILL NEAR PONTENX, LANDES. THE LOGS ARE UNLOADED ON TO SKIDS AND ARE THEN ROLLED INTO THE FLUME IN THE FOREGROUND, ALONG WHICH THEY ARE FLOATED TO THE MILL. THE LOGS ARE LIFTED FROM THE FLUME INTO THE MILL BY CHAINS. MARITIME PINE FOREST IN THE BACKGROUND



HARDWOOD LOGS DECKED NEAR MILL. LOAD OF LOGS JUST GOING TO MILL ON MOTOR TRUCK. THINNED HARDWOOD FOREST IN BACKGROUND



GENERAL VIEW OF AN AMEX MILL OF THE 20th ENGINEERS IN FRANCE



A 10 x 13 LOGGING DONKEY ENGINE USED TO LET THE CARS LOADED WITH LOGS DOWN A 72% GRADE FROM THE CUTTING ON A HILLSIDE TO A 20th REGIMENT SAWMILL NEAR EPINAL, IN FRANCE



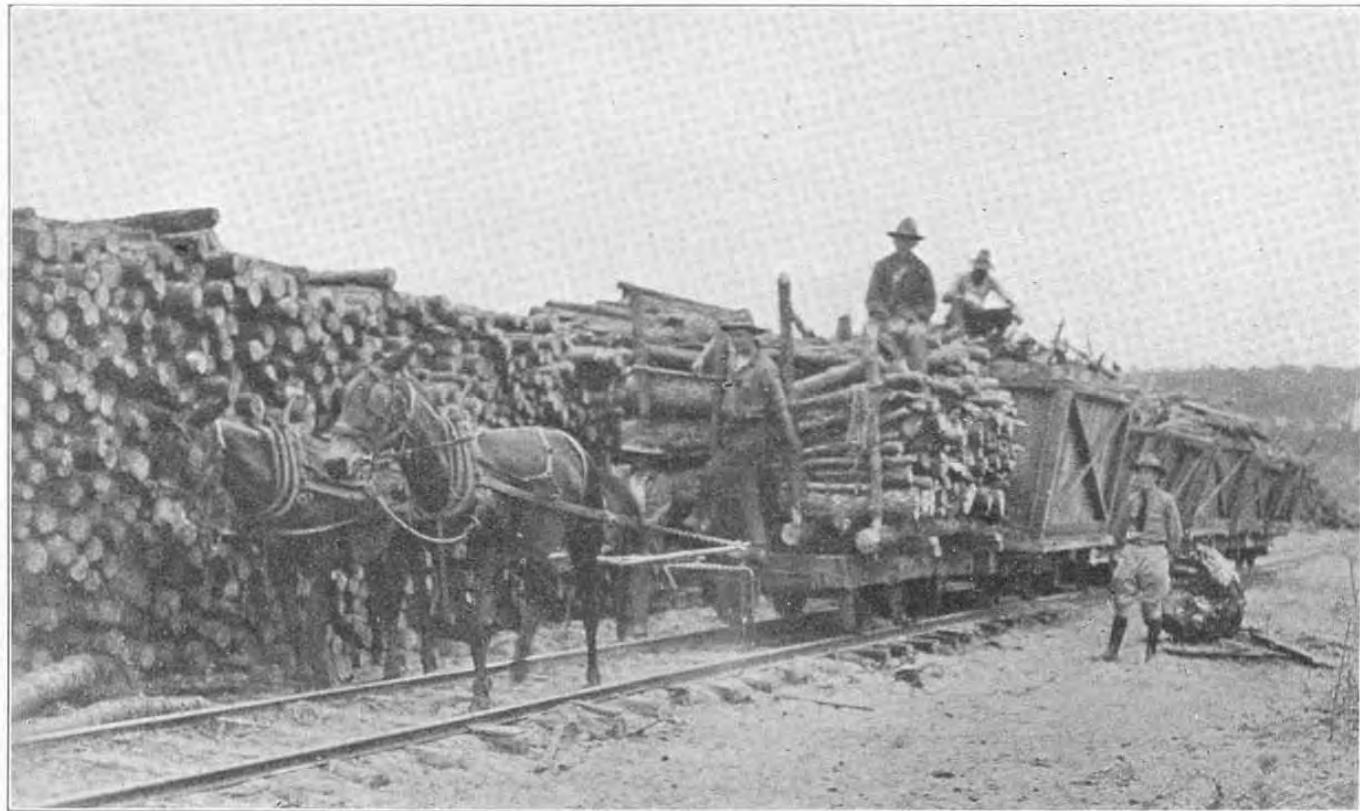
AMERICAN 20-M SAWMILL NEAR PONTENX, LANDES. COL. BENEDICT WITH HIS BACK TURNED, IN THE FOREGROUND, STANDING NEAR NARROW GAUGE TRACK OVER WHICH LUMBER IS TRANSPORTED THREE MILES TO THE SHIPPING YARD



LOADING HARDWOOD LOGS ON LOG TRUCK IN FOREST OF CENTRAL FRANCE

when, on the afternoon of February 5, the shores of Ireland and Scotland hove in sight. But at 5:45 that evening came a bang! bang! With the crash all lights went out, due to the electric plant being put out of commission, and the ship was left in absolute darkness. The men came pouring up onto deck from their quarters, two or three decks below; flares were lighted and everybody set to work lowering the life boats. In many cases, the members of the crew assigned

to do but wait and see what would happen next. No more destroyers seemed inclined to come to the rescue of the ill-fated 700. The *Tuscania* listed more and more to starboard; the flares burned out, leaving the ship in darkness. The chances of those left on board grew slimmer and slimmer as the icy water crept up closer and closer to the starboard rail. Then, slowly and quietly, out of the black night a long, black destroyer slipped alongside and, by pumping overboard forty tons



SMALL TOPS BROUGHT FROM THE FRENCH FOREST TO BE PILED UP NEAR THE MAIN RAILWAY LINE FOR USE AS FUEL.
THIS SCENE IS IN THE SAND DUNE COUNTRY NEAR THE COAST IN SOUTHWESTERN FRANCE

to the boats failed to put in an appearance, and the soldiers, unaccustomed to this work, had to get the boats away as best they could. Some boats were unsuccessfully launched, causing their occupants to be thrown into the icy water. After all available boats and rafts had been launched and two loads of men had been taken off in two British destroyers, which came alongside, 700 men were still left on board with nowhere to go and nothing

of oil, was able to accommodate all those left on the sinking ship."

During the long wait, one of the companies of the 20th, after seeing comrades drowned in front of them, and not knowing what was in store for themselves, stood in line in perfect order and sang "Where do we go from here, boys? Where do we go from here?"

LAGUNA MOUNTAIN RECREATION AREA

AN important new development of recreation in the open is taking place in San Diego county on the Cleveland National Forest, in California. This is the Laguna Mountain recreation area, very careful plans for which were worked out in advance by the United States Forest Service. The plans are being carried out under expert supervision, and the Forest Service has already spent about \$60,000 in the development of the area. It is situated only fourteen and one-half miles from the San Diego-Imperial Valley State highway, with which

it is connected by an excellent automobile road. It can be reached in a few hours by the people of the hot interior valleys. It has both public camping-grounds and private lots, which are leased to individuals for a term of years, thus making it worth while for the lessees to build substantial cabins. Many people are already taking advantage of the opportunity, and Laguna Mountain bids fair to become one of the best outing areas in Southern California.