

tween the use of the national forests or any of their resources, for the permanent benefit of many, or for the temporary benefit of a few, the forest service encourages use by the many and prevents its monopoly by the few. There are two planks in the platform of the forest service. They are these;

To insure through public ownership and administration the fullest permanent use of those forests which are essential to the public welfare.

To teach American citizens how to make the best use of forests in private hands and of their product, by finding out and telling them how.

The 194,500,000 acres of national forests stand for the first plank. They conserve most of the water and one-third of the timber of the west. This national heritage, whose measurable material resources are worth more than two billions of dollars, is being administered by the forest service in the best permanent interest of all the people. At an average cost for protection of about one-fifth of a cent per acre, the damage by fire on national forests for the last three years has been, per million acres, about three per cent, of that on private forest lands. In these three years the use of the national forests by the people has more than doubled. In 1908, so great were the demands of the people's business, that an average of only about one-fifth of the time of the forest rangers could be given to fire patrol. This was the equivalent of all the time of one man for the patrol of 580,000 acres, an area half the size of the state of Delaware.

From Arizona to the Canadian border and from California to Minnesota and Arkansas, the forest rangers have done their duty. This has meant unrelenting effort, usually under frontier conditions. There is no more exacting work than fire patrol; and, short of war, nothing makes greater claims than fire fighting upon personal courage, fiber and devotion. The forest rangers are the backbone of the service. Were it not for them, the national forests would soon be forests no longer. And as each of these public servants comes to lay down his tools for younger hands to pick up, he will leave behind him, in the vigorous, unscarred forests of his district, a valuable heritage to the community and the honorable record of a trust fulfilled.

The protection of the national forests from fire is incidental only to the development of their fullest permanent use. This use is limited only so far as is needed to insure the permanence of the forest and to keep it in satisfactory condition. Last year 1,500,000 cattle and horses and 7,500,000 sheep and goats grazed within national forests, or 12 and 21 per cent., respectively, of the range stock of the west. Nearly 400,000,000 feet of mature timber was sold and cut, or enough to build 25,000 ordinary frame houses. More than 130,000,000 feet more was given away to settlers for firewood and other home uses. All this timber was cut and logged conservatively, to the improvement of the condition of the forest. Under such management a forest produces wood forever.

For a man can handle his forest in three different ways, just as he can handle money in three different ways, and the same is true of a nation. He can destroy his forest by wasteful logging and the fire which follows it, just as he can squander money until it is all gone. He can protect his forest adequately from fire or other injury, but fail to harvest its crop, just as he can lock up money in a safe and let it lie there protected from loss, but unproductive and useless. Or he can handle his forest rightly and profit by the interest without impairing the capital, like the man who invests money safely and well.

There is nothing intricate about the principles or the practice of forestry. It has its own careful, skilled methods based on study comparatively recent in this country, but which in other countries began hundreds of years ago. To describe these methods would fill many pages and it takes trained men to apply them. But in the last analysis forestry is common sense, scientifically applied. Cut the mature trees, but do not cut them until they have shed seed enough to start young trees to make another forest. Remember always that the sapling will make a valuable tree some day if it is not injured, just as a boy will make a wage earner if he has his chance. Keep fire out of the forest, because

THE FOREST AND ITS SOIL CONSUMED BY FIRE out forests to check the run-offs, streams fluctuate or even go dry for part of the year; but those streams which rise in well forested wa-

tersheds maintain a comparatively even flow. The reclamation service, when its task is finished, will have turned 50,000,000 acres of desert into fertile farm land, dotted with homes. Under its director, Frederick Haynes Newell, whose achievement is national and enduring, this work, unparalleled in scope, is going successfully forward. The story of what has been done by the men of the reclamation service, in the face of engineering di ulties historic in their magnitude, has yet to be adequately written. But for the permanent success of its work, the reclamation service must depend not merely upon its reservoirs and dams, but upon the thoroughness with which the forest service does its duty. The preservation of the national forests is vital to the fulfillment of the national irrigation policy.

In the conservation of water used for the development of power through electricity, as well as for irrigation, lies another great function of the national forests, whose importance is only beginning to be generally realized. In the regulation of the development of this power within national forests, through the other resources, of which more than half were without charge.

This vast and increasing business is handled by the officers of the forest service, who will purchase," remarked the man are the servants of the people, in the interest with the pencil. first of all of the small man. The timber and the grass the national forests produce cost a goes to show how much figuring you fair price to the lumberman and the stockman. can do without any money."

The forest service is not charged with the regulation of corporations. But it is charged with the right care of a vast public property. It sees to it that the yield from this property, the water, the wood and the grass, goes first to those who need it most-to the home builders. For every permit granted to a man to graze 1.000 head of stock or more, the forest service has granted 10 permits to small owners to graze their little bunches of sheep and cattle. For every large sale of timber, it has made 20 small sales to feed the little sawmills upon which the frontier communities depend

The national forests are to the west what coal is to the engine. The forest service is the stoker. There is coal enough in the bunkers to keep a full head of steam through out the run, if it is not wasted. If it be wasted. the engine will soon slow down for lack of fuel.

ONLOOKER WILBUR D. NESBIT. Dah goes lazy Eph'm Jones,

Good-foh-nuffin bug o' bones! Got his fish' pole in his han', Got his bait in dat ole can-Huh! Des look at Eph'm's hat! Evah see de beat o' dat? It's de on'y one he owns-Lazy, loafin, Eph'm Jones!

Why'n't he wak lak folks lak me? Why'n't he let dem fishes be? What he s'pose he comin' to? Ain't he nuffin else to do? Look at him, des slouchin' 'long Hummin' some old soht o' song-Lawd! I'se got ter dig en scratch In dis hyuh ele 'tater patch!

Huh! I reckon he's er gwine Some're wid dat pole en line-'Way erpast de bruk-down mili de crick goes 'roun' de hill, Den he'll set down in de shade Dat de willer trees is made-Lazy, shif'less bag o' bones Good-foh-nuffin Eph'm Jones!

Lawd! It's hot hyuh in de sun! Wish dis 'tater patch 'uz done. Reckon Eph'm he'll des lay it is in the mak- In de shade dah all dis day, Th'owin' in en pullin' out-Red-eyes, bass, en melbe trout! Den be'll come er-slouchin' home spreading, Grinnin' tak er currycomb!

Lawd! Dis sun is hot. My lan'! men need pow-power to work for Um-m! I bet dat sindo feel good! them and water "Tain't no use. Nobedy owns runs down hill. Me dan dey do Eph'm Jones! Tater patch: PH let Epi'ni, Eph'm! Wait fon me!



Some Figures on Cheese. "I see," said the man with the high minor uses of forehead and the stub pencil, "that great impor Mr. Rockefeller is again urging cheese tance to the as a staple article of food."

"I reckon he will spring the Standlive in and near ard Cheese Company next," growled them and to the the man with the incandescent whisk-

"But, thinking about cheese," said the other man, tapping his stub pencil they lie. A to- upon a sheet of paper covered with tal of about 10,- figures, "I find that for \$29,240,000 one 000 permits for could buy 292,400,000 pounds of cheese these minor at ten cents a pound."

"Who wants to buy that much cheese?" inquired the man with the ing the occu- incandescent whiskers.

"Nobody. It is merely interesting, that is all. And that quantity of or the use of cheese, in cheeses of 25 pounds each, would mean 73,100,000 cheeses."

"What kind? Camembert, Roquefort, limburger or what?" "The-the what kind. The ordinary cream cheese. Of course, in lim-

burger, it would be-" "It would be flerce."

"Perhaps. But, now, you take 73,-100,000 cheeses and set them one on top of the other and they will make a tower 13,844 ½ miles high. Laid flat, side by side, they would make a line 27,689 miles long-long enough to go around the world and have 2,689 miles to spare. In other words, to make a parallel line of cheeses across the United States. Pared in inch strips, the rind of all those cheeses would make a strip long enough to

reach half way to the moon, and-" "And if an inch cube of that cheese was put on every piece of apple pie eaten in the world it would supply the pie dishes of all the earth until September 2, 1997," suggested the man with the incandescent whiskers. "Made into welsh rabbits it would provide enough to fill the Pacific ocean and the Desert of Sahara."

"It goes to show what \$29,240,000

"Huh!" growled the other man. "It

## How He Felt.

After having been made D. D., L. D., B. A., M. A., Ph. D. and about a hundred more things like that by different colleges, the great man beomes a thirty-third degree Mason.

"How do you feel?" asks a friend. "Feel? Now I feel like a human thermometer," he says, first looking about to see that the reporters will overhear the remark.

Enhances Her Chances. There is a young lady in Kas. Who always is seen at the das., When asked why, she'll say: I must marry some day,

So I never must miss any chas," Mebur Dresbit