

AN OBJECTION TO FOREST RESERVES.

E. G. Hansen.

The extreme drouth that has affected our state for several seasons past has awakened a desire in many people to discover some means by which to successfully solve the question of a sufficient supply of water for irrigation and domestic purposes. Some have concluded that if all animals were excluded from grazing on the mountain ranges the water would be ample for all purposes. No one but those living adjacent to forest reserves knows what a calamity they are to the people. In order to procure a load of wood from a reserve where thousands of cords are rotting, one must first obtain a permit from the supervisor defining the locality where he wants to get the wood. If like the god of Baal the supervisors happen to be away on a visit or has gone on a journey, the applicant must await his return.

Having the permit he is allowed to pile the wood and tops, and apply to the supervisor or some subordinate, who measures the wood. He may then remove it and not become a trespasser. A farmer desiring to procure a load, a few stable logs or a little lumber must go through the same routine, but in the latter case he must find the down timber where it is not controlled by a sweeping permit. Under the present system of granting permits, adopted by the department of the interior, nearly all the timber nearest the settlements, including the terminus of all wagon roads made by the people, is being monopolized and made merchandise and is being removed more rapidly than at any time in the past.

Native lumber, because of these monopolies, has advanced seven dollars the thousand feet. The government requires all of the tops and logs to be piled ready for burning, and rumor says that all the refuse down timber is to be burned. Thus all obstructions to the free and easy flow of water in the reserves are to be removed so that the water produced by rainfall and the melting of the snow may find its way rapidly down to the valleys before needed for irrigation. Would it not be more wise for us to look to some other source of relief from drouth than to the establishment of timber reserves? They are a menace to our prosperity and must be kept up at an enormous expense.

Why not utilize the natural reservoirs in the mountains—the lakes and moraines situated at the source of the larger streams. Many of them could be drained from the bottom, where pipes and gates could be placed in position to draw off or retain the water as desired. At the natural outlets levees could be constructed to increase the water in the lakes. Spills could also be arranged to convey the water from them upon adjoining bench lands, there to form glaciers that would melt slowly and add to the volume of water during the irrigating season. There would be no danger of breakage of floods, nor would they fill with debris, but would prove an effectual relief in times of drouth, and would add much to the wealth of the state.—Field and Farm.

GRAND EXCURSIONS.

To North Yakima account Washington State Fair. Special train over the Northern Pacific will leave Seattle Oct. 1st at 8:00 a. m., and on Oct. 2nd at 8:30 a. m. for North Yakima. Only \$3.50 for the round trip, good returning to Oct. 5th.

PUYALLUP STATION NOTES.

On the train the other day we had the pleasure of meeting Prof. C. V. Piper, entomologist of the State Experiment Station, who had been spending a day at the Puyallup substation. He expressed himself as extremely well pleased with the condition of things at Puyallup, and with the work accomplished during the season.

As a result of the investigations carried on at Puyallup, a number of bulletins will be published in a few weeks.

One of these will relate to rape, which has been cultivated under various conditions at the station for the past four years. The results indicate that this is one of the most valuable forage plants that can be grown in Western Washington.

A second bulletin will give the station's experiments with Angora goats. Supt. Brodie is very enthusiastic indeed over these animals, and in addition to his experience gained with the station flock, he has gathered a great deal of information by personal visits among the goat raisers in all parts of the Northwest.

The third bulletin will give the detailed results on the very extended experiments with strawberries. This information is of value, particularly to Western Washington growers. In addition to the ordinary experiments as regards culture, yield and vigor, sample packages of the different varieties of berries have been shipped to distant points in the east, and reports have been received as to their condition when they arrived. Then he has also received reports on flavor and quality. This information will be entirely new in connection with such a bulletin.

"One of the most striking things I have ever seen in an experiment" said Prof. Piper, "was in the orchard where experiments for the treatment of apple scab are being carried on. Briefly the plan has been to determine whether one, two or more sprayings of Bordeaux mixture gave the best results in the prevention of this disease. The experiments were carried out in an orchard of Baldwin apples and just beginning to bear nicely. In all cases the first spraying was given before the buds burst. A second spraying was given immediately after the setting of fruit. Later sprayings were given at intervals of two or three weeks.

The most striking feature of these experiments is that all the sprayed rows, even those sprayed only once, have a good setting of fruit. On the contrary the unsprayed trees are with few exceptions entirely bare of fruit, and have at most very few apples. Inasmuch as nearly one-half the orchard was not sprayed, the difference is rendered particularly conspicuous. Without any question this difference is due to the fact that the scab fungus destroyed the blossoms on the unsprayed trees. This injury of the disease to the blossoms is ordinarily overlooked, but at times it is the most serious loss the fungus causes. On the trees that were sprayed but once there is a fair setting of fruit but the apples are somewhat marred by the scab. Where the trees have been sprayed twice or more it is almost impossible to find a spot of the scab. Unfortunately an undesirable percentage of the fruit is more or less severe-

Starting and Staying.

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ly russeted or even distorted by the Bordeaux mixture. This action of the spray, made according to the standard formula, has been complained of rather frequently, particularly in the case of light colored apples. The experiments for next year are planned to discover if possible a modification of the Bordeaux that will prevent the scab without causing the russeting effect.

WASHINGTON AGRICULTURAL COLLEGE.

Editor The Ranch:—We are sending you, under separate cover, a copy of our annual catalogue for 1902. We wish to call your attention to some of the facts relative to the college for the past year, mention of which we should be pleased to have made in your paper.

The total enrollment for the year is 724. Exclusive of summer school the enrollment is 609. This does not include students in music and art who took no other work in the college. Eight states are represented, and 31 counties of this state are represented. The number of graduates is the largest in the history of the college. Degrees were conferred as follows: Master of arts, 1; master of science, 1; bachelor of arts, 11; bachelor of science, 14; graduate in pharmacy, 11; doctor of veterinary science, 2. The number of faculty and instructors is 44, besides 6 tutors, thus making the whole number of the teaching force 50. There are ten departments of instruction, four supplemental courses and seven schools and short courses. Entrance examinations for the year 1902-93 begin September 24th, at 9 o'clock. The regular college work be-

gins September 25th. Persons desiring information or a catalogue will write to Registrar, Pullman, Washington.

L. V. COINER,
Registrar.

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