

less during the summer, following partial denudation by fire of the forests on the watershed.

A \$5,000,000 Crop.

From the above points it may safely be concluded that the success of the irrigation system of the Okanagan Valley, and thus the safety of that valley's five million dollar crop is dependent upon the forest cover on the watersheds. For that reason as well as for the intrinsic value of the timber and second growth, the British Columbia forest service maintains a very efficient system of fire protection in action in the Okanagan and so far has been able to preserve the important watersheds intact. Their continued protection rests as much with the public in general and particularly with those who travel in the forests, as with the Forest Service. Most fires are set by human agency and if the

public can be educated to the point where they will set no fires at all, practically 95% of all the fires that occur will be eliminated. The other 5% are caused by lightning. It comes down to this: the output of the Okanagan is in the hands of the people in more ways than one. They must protect their water supply while growing their crops. The Forest Service will maintain its protection system to look after all accidental fires and by constant publicity try to eliminate all fires of human origin.

We are thankful to say that a very commendable public spirit is manifest in the valley and each year we see a little betterment of conditions and a better spirit of co-operation and care with fire on the part of the citizens.

GEO. P. MELROSE.

WHY SHOULD A TREE DIE?

Dr. Bernard E. Fernow.

So impressed was Dr. Asa Gray with the persistence of individual tree life that he questioned whether a tree need ever die: for the tree (unlike the animal) is gradually developed by the successive addition of new parts. It annually renews not only its buds and leaves, but its wood and its roots; everything, indeed, that is concerned in its life and growth. Thus, like the fabled Aeson, being restored from the decrepitude of age to the bloom of youth,—the most recent branchlets being placed by means of the latest layer of wood in favorable communication with the newly formed roots, and these extending at a corresponding rate into fresh soil,—why has not the tree all the conditions of existence in the thousandth that is possessed in the hundredth or the twentieth year of its age? The old central part of the trunk may, indeed, decay, but this is of little moment, so long as new layers are regularly formed at the circumference. The tree survives, and it is difficult to show that it is liable to death from old age in any proper sense of the term.

However this may be, we know trees succumb to external causes. Nevertheless they are perennial enough to outlive aught else, to be the oldest inhabitants of the globe, to be more ancient than any human monument, exhibiting in some of its survivors a living antiquity, compared with which the mouldering relics of the earliest Egyptian civilization, the pyramids themselves, are but structures of yesterday. These

dragon trees, so called, a genus of the Lily family, found on the island of Teneriffe, off the African coast, are believed to be many thousand years old. The largest is only 15 feet in diameter and 75 feet high. The Sequoias or Big Trees and Redwoods on the California coast are more rapid growers, and attain more than double these dimensions in 3,000 to 4,000 years, which may be the highest age of living ones.

BUFFALO HERDS ARE THRIVING

The current report of the Commissioner of Dominion Parks contains information regarding the national buffalo herds in Buffalo and Elk Island parks.

It is not very widely known that the Commissioner of Dominion Parks has under his care nearly three thousand buffalo, that live under natural conditions, with the same habits of feeding and the same liberty of range, within certain limitations, enjoyed by the herds on the prairies in the early days. These animals are healthy and in splendid condition. Their handsome appearance and the fact that the normal increase is taking place afford excellent proof that they are in their natural surroundings. During the year 1917 there was an increase of 356 buffalo in Buffalo Park, and 28 calves were born in Elk Island park. The report states that the young stock are splendid types and are thriving.