are installed, which will control fires within 2,000 feet of the shores. Portable gasoline pumping units are also being used where water'is available. In much of the territory, however, the only method of fighting fires that can be resorted to is the use of the shovel, grub hoe and axe.

Take All Possible Precautions

With extreme dry weather and hot winds, many localities contain conditions that make fire fighting very difficult. In such localities if fire occurs it is frequently a problem of escaping to shelter rather than fighting the fire.

Plans should be made in advance to meet all emergencies in case a fire gets beyond control, so that loss of life can be prevented. It is difficult to outline the precautions necessary to be taken, as local conditions control the methods to be adopted.

In general, the forest ranger should be in touch with every settler in his district and make sure that the settler knows what to do in case of emergency. Many lives were lost in the 1916 fire, owing to lack of information. Many took refuge in root cellars or wells and were suffocated. Few realized the value of covering the head with wet blankets, so that the hot, dry air would not enter the lungs, which in many cases was the chief cause of death.

The forest ranger in semi-settled districts carries a great responsibility and should have the hearty co-operation of everyone to PREVENT FOREST FIRES.

MAKING WOOD FIRE RETARDANT

A number of different chemicals have been used to make wood fire retardant or *non-inflammable*, but its *combustibility* is not thereby destroyed. The wood will smoulder slowly.

Probably the most efficient protection to wood—for interior use—is silicate of soda. If boards or planks of moderate thickness are brushed three or four times over on each side with a strong solution, they are rendered partially incombustible; they will, however, burn under intense heat. The silicate fuses and forms a glass which envelops the surface, and even the internal fibres of the wood, if it is sufficiently saturated, are thus sealed up from the oxygen of the air.

A treatment known as "Burnettizing" consists of immersing the timber in a solution of zinc chloride. This tends to harden the wood and renders it partially incombustible.

Asbestos paint is also used as a fire retardant.

PRIZES FOR ESSAYS

The writing of competitive essays in the various grades and forms of the schools and colleges for prizes offered by public-spirited citizens or organizations is a splendid means of educating the children and youth of our country in fire prevention measures. If the prize winning articles are published in your local newspaper the educative value of the competition is enhanced. The parents, as well as the children, are reached in this way.