

towers, patrolmen, trails, telephone lines, tools and men for fighting the fire. These are all accessories to reaching and putting out the fire before it gets beyond control. Another phase of efficient protection is in preventing the occurrence of fire, by educating the frequenters of the forest to be careful in the use of fire. This is the hardest task that has to be done.

**Suggested Means of Protection** Turning to the phase of efficient protection, the object of which is the quick extinguishing of the fire when once started, and applying it to the area under consideration, it was found that it could be adequately protected by one lookout station on the Blue mountains, situated in the centre of the territory and commanding a view of nearly every acre of the area. It should be connected by telephone with the neighbouring communities, to summon help in case of fire. A rural telephone line is already in operation on two sides of the area and most of the inhabitants live along this line. It could be tapped from the Blue mountains for a distance of eight miles, and could be installed for \$500, including cost of materials. The lookout man could be provided with a cottage at the foot of the mountains, not more than a half mile from the best position for the lookout station. Such a building, suitable for summer occupation, could be erected at a cost of \$500, making a total outlay of \$1,000 for the telephone line and the cottage. This initial capital investment could readily be made from the sale of mature material now on the ground.

The cost of patrol, fire-fighting and supervision need not exceed three cents per acre per year. For this sum it is possible to afford a very good degree of protection. The cost of overhead supervision per acre chargeable to fire protection would be reduced if a larger area than that discussed in this report were to be included in the proposed reserve, or if some line of scientific investigation, preferably a forest experiment station, were to be carried on, in connection with the general work of forest protection and administration. However, it will be safe to estimate the average cost of fire protection at three cents per acre per year.

**Results of Protection** It has already been shown that the potential value of the existing young growth of pine and poplar is, in round figures, \$2,275,000. Out of the total of 85,000 acres, only 15,000 acres are unburned mature forest (see p. 190), leaving approximately 70,000 acres which were occupied by the former pineries and have been more or less burned over. This includes unburned swamps and oak barrens, which must be included in any scheme for protection, being scattered in relatively small areas. Using