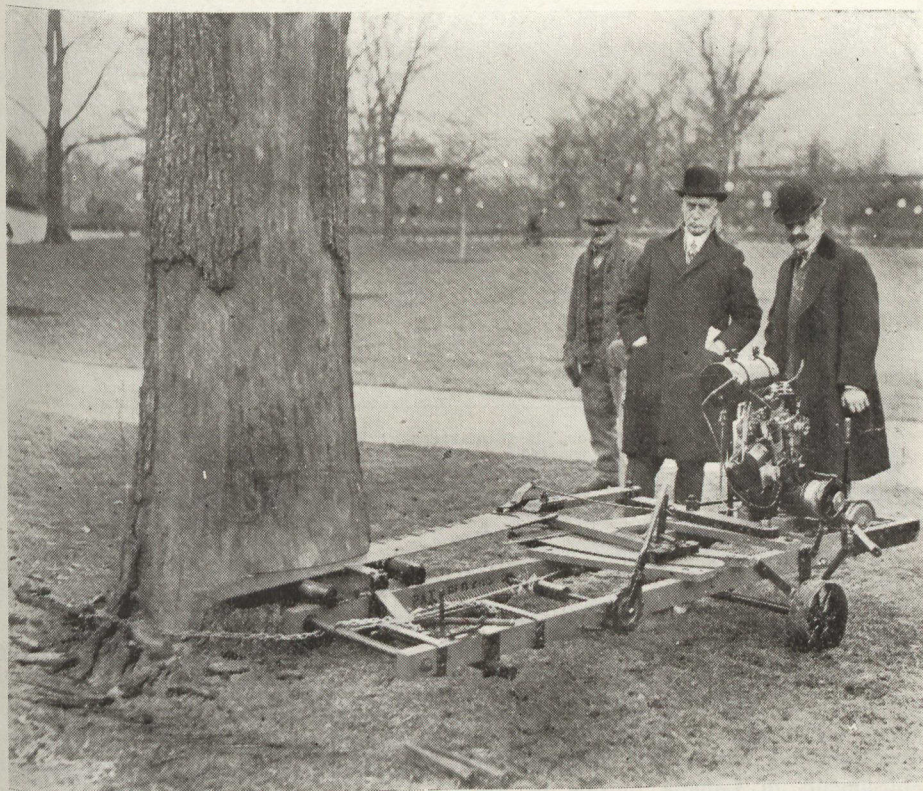


Questions and Answers on Forestry



TREE FELLING MACHINE TO SAVE LABOR.

A new machine, to be used in tree felling was successfully demonstrated recently. The machine does the work of 18 men; that is requiring exactly 1/18th of the time to cut the trunk of a tree that would be necessary by human hands. The photo shows a closeup of the machine, which will shortly make its appearance in lumbering districts.

Q.—As a school teacher I have been recently asked the question why a tree should ever die. Can you answer this for me?

A.—Theoretically a tree should never die, for while the old central part of the trunk may decay, this is of little moment so long as new layers are regularly put on at the circumference. The growth of a tree is entirely in the cambium layer at the outer edge and not at the heart. The fact is, of course, that trees succumb always to external causes. Insect, fungus diseases, fires, excessive cold or drought, are factors that limit the actual life of trees. The Redwood trees on the California Coast, some of them thirty feet in diameter, have attained an age of from three thousand to four thousand years. There are also trees on the island of Teneriffe, off the African coast, which are believed to be equally as old.

Q.—Some people claim that forest fires have actually increased the fur bearing animals in the far north. Is this true?

A.—The Hudson's Bay Company declare such a theory emphatically untrue. They state that repeated forest fires have gone far to extinguish for commercial purposes the fur-bearing animals such as fox, ermine, fisher, and others in Northern Ontario, which unlike the beaver and muskrat, are unable to take refuge from forest fires by entering the water. It is a

curious fact that the marten in face of a forest fire will climb a tree for safety and usually of course falls victim. Canada's fur trade is decidedly menaced by the present plague of forest fires.

Q.—Is there any way of finding the forest fire loss of Quebec Province in 1921?

A.—According to the Provincial Forester, Quebec lost twelve hundred square

miles by fire last year. This of course represents an enormous loss and it is the duty of every citizen who enters the forests of Quebec to join hands with the fire rangers in making a repetition of such loss impossible in 1922. The great majority of fires doing such damage to one of Quebec's great resources were due to human carelessness and the attitude of "don't care."

Q. Is there any way of estimating financially what a shade tree in good condition in front of my residence is worth? Has there been any court decision establishing such a point?

A.—In New York State the court established a record by handing down a verdict of \$500 each for destruction of trees by a construction company. In this case an arbitrary value was placed on the tree by means of its diameter, as for instance, \$2 per inch. That is, a tree eighteen inches in diameter would be worth \$36. There is a second method which takes in an arbitrary value per square inch of basal area taken at breast height or four and a half feet from the ground. In Massachusetts the usual figure used in this case is one dollar in which case a tree having a basal area of 254 square inches would be considered worth \$254; the latter figure, however, is generally regarded as being far too high.

Q.—As a resident of the Prairie Provinces I would like to know something about the Forest Reserves, their purpose, extent, etc.

A.—The Forest Reserves of the Prairie Provinces are 39 in number and nearly 35,000 square miles in extent. They are owned by the Dominion Government, and



The Water Prospector.