

# THE CANADA LUMBERMAN

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## AN ENTERPRISING LUMBERING FIRM.

In the fall of 1878 the firm of Kelley Bros. commenced lumbering operations in the province of Nova Scotia, establishing themselves at River Hebert. The partners in the concern are Messrs. B. Kelley and C. L. Kelley, originally of Calais, Maine, the former being the resident manager, while the senior member, Mr. C. L. Kelley, still resides in Calais.

During the twenty years of their operations at River Hebert, the firm have encountered two serious losses. In the spring of 1881 a huge sheet carried away two driving dams, one hundred and fifty thousand feet of deals, one and one-half million feet of logs, and the saw mill, which had just been equipped with steam power, at a cost of \$3,000. These were carried out to the Bay of Fundy, and became a total loss. This left the firm in a bad condition, there being in the stream one jam of logs of one million feet, and no way to get them out or manufacture them. The following summer Messrs. Kelley Bros. erected another mill, which they operated until August of 1892, when it was entirely destroyed by fire. In this instance, however, their season's logs had been manufactured into lumber. Not easily discouraged, the firm decided to again rebuild, and the result is the mill shown in the accompanying illustration. This mill is 70 x 90 feet, covered with sheet iron, and contains gang, gang edger, and bath machine. It is operated by two engines, 14 x 20 feet, fed by two tubular boilers. The annual output of lumber is about three million feet, the bulk of which is disposed of in the British market, being handled by St. John shippers. Boards, scantling, and lath are manufactured for the United States market. The timber in the woods is felled by a cross-cut saw, the firm claiming that a large saving is effected thereby. A portrait of the manager of the business, Mr. S. B. Kelley, is presented herewith.

## THE LUMBER SLUICE.

Persons manufacturing lumber at River Hebert have been somewhat handicapped in getting their lumber from the mills to the shipping point. Scows carrying thirty thousand feet were formerly used, but these did not prove entirely satisfactory. In the summer of 1897 the firm of Kelley Bros., in conjunction with Pugsley Bros., concluded to build a sluice from their mills to the loading ground, a distance of five miles. The sluice at the mill is built at an elevation of thirty feet from high water, which gives a fall of one and one-quarter inches to the hundred feet, which is sufficient to float the lumber. When

the construction of the sluice was decided upon, a competent engineer was engaged to lay out the route, so as to have a true grade from beginning to end.

Properly speaking, there are two sluices, the width over all being thirty inches, with a board in the centre, the object being to keep the



MR. S. B. KELLEY.

lumber of each firm separate, and also to utilize the full capacity of the water. The bottom is made of two inch spruce plank, planed on one side, and jointed and chamfered, so that as soon as the water was let in, the dirt and sawdust filled into the chamfer, making it perfectly tight. The sides are of pine boards, ten inches wide, and with a base board five inches wide, are nailed to the plant and the joint strengthened

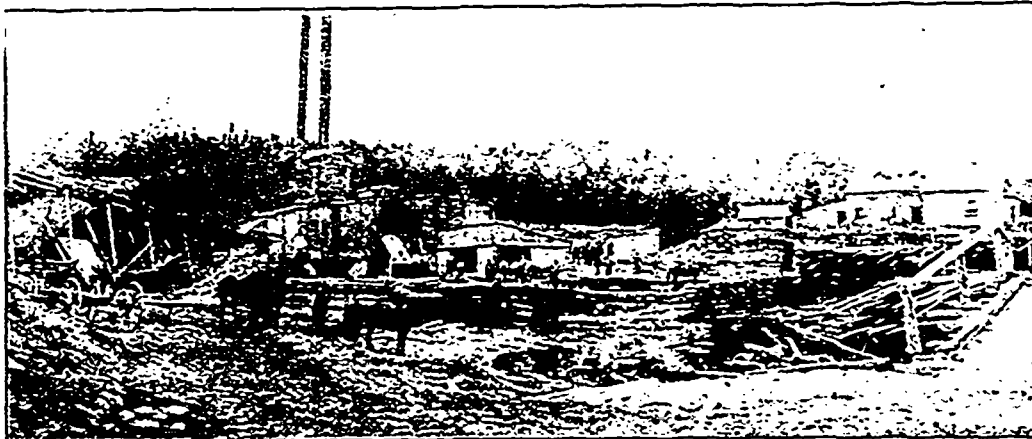
sluice by an endless chain, and is then fastened together with short chains and stout nails to prevent jamming in going around short curves where the sluice had to be made wider. The sluice has a capacity of carrying from one hundred to one hundred and twenty-five thousand feet of deals per day; it cost \$1,000 per mile, and consumed 450,000 feet of lumber in its construction. This system of conveying lumber has given perfect satisfaction, and is regarded as an inexpensive method.

## TREES WHICH DRAW LIGHTNING.

ALEX. McAdie has asked the Weather Bureau to investigate the question why some kinds of trees are more frequently struck by lightning than others. Apart from the importance of this subject from other points of view, it demands attention primarily as a matter of saving human life. As Mr. McAdie shows, many people, particularly farmers and those who work in the fields exposed to thunder storms, will work until the storm is almost upon them and then run to the nearest tree for shelter.

If the tree is an oak, and the charged thunder-clouds are moving toward it with high electrical potential, the person or persons under the tree are in the line of strain and all unconsciously are contributing to the establishment of a path for the lightning discharge through themselves. On the other hand, if the tree selected for shelter happens to be a beech tree, there is some reason to believe that it will afford safety as well as protection, though the reason why is not at present made clear. It is known that the oak is relatively the most frequently and the beech the least frequently struck.

Based on the somewhat loose figures on the subject heretofore available, it is estimated in the matter of relative attraction of lightning, if the beech is represented by 1, the pine tree stands at 15; trees, collectively, rank about 40, and oaks 54. The trees struck are not necessarily the highest or most prominent. Oak trees have been struck twice in the same place on successive days. Trees have been struck before



SAW MILL OF KELLEY BROS., AT RIVER HERBERT, N. S.

with a short piece of board on the outside, making all tight. There is a piece of 2 x 4, of the proper length, nailed across the bottom at every joint.

The bents are 3 x 6 with cap, all spiked solid. The sluice merely lays on the caps and is not spiked thereto. The water is fed to the sluice from a pond made by damming the brook, and in case of severe drought the water is elevated by a pump. The lumber is raised from mill to

rain and split, and some have been struck during rain and only scorched.

It is suggested that the division of forestry and the division of vegetable pathology shall combine with the Weather Bureau in an exhaustive investigation of this subject, and those familiar with the forests in their respective neighborhoods will tender their experience as to the relative frequency of lightning strokes on different kinds of trees. — St. Louis Globe-Democrat.