

"While the forest resources of the country have been rapidly decreasing, the domestic demand has rapidly increased. The quantity and value of the Canadian timber cut for various purposes in 1909 is given here:

	Cu. Ft.	Value.
Fuel	900,000,000	\$25,000,000
Lumber, lath and shingles	657,252,913,	67,118,193
Mining timbers, posts, poles, rails, piles and cooperage	150,000,000	4,500,000
Pulpwood	138,398,580	9,216,739
Railway ties	85,069,446	5,210,490
Square timber	1,657,680	991,491
Total	1,832,378,619	\$112,036,913

"This is the recorded timber cut. It is probable that altogether about 2,000,000,000 cubic feet of timber, or one-sixtieth of the total quantity available, is taken from Canadian forests yearly, exclusive of the quantity destroyed by fire. It takes one hundred years and more to produce a forest tree large enough for lumber, therefore, even if there were no forest fires, to keep from using more timber each year than grows, we should not cut more than one per cent. of the total standing timber each year. We are now cutting at least 1.6 per cent., and as much more is annually burning up. We are far from any ideal of national economy. Not only do forest fires destroy large quantities of our timber capital each year, but in our virgin, uncared-for forests the annual decay balances the annual growth.

Productivity of Reserves.

"The productivity of the reserves will be much greater than that of the virgin, uncared-for forests. There will be no waste areas. Just as is done with farm crops every type of soil will be given up to the trees which are known to produce in such situations the largest quantities of valuable timber per year. This forest improvement can only be accomplished through a long period of years by trained men. But it pays immensely, as is shown by the experience of Europe. When the forests of Prussia were taken over by the technical officers of the Government the average production per year was only twenty-nine cubic feet per acre. This was in 1830; by 1907 the average growth of timber per acre had been raised to sixty-one cubic feet per year. Similarly the yearly growth of the public forests of Saxony was increased by skilled management from sixty cubic feet per acre in 1826 to ninety-four cubic feet per acre in 1905.

"In both cases the quality as well as the quantity of the wood improved greatly. The Dominion Government has these ideals in view and hopes to approach them. They have the land and the men, and are now undertaking, for the first time in Canada, the steps necessary to secure the timber supply indispensable to our future development. If kept for the Canadian people our supplies of virgin timber are sufficient to last us for the two or three generations necessary to thoroughly develop our forest reserves and bring them up to the highest production.

Three Million Acres.

"When the virgin supplies are exhausted, the Governments, both Dominion and Provincial, should have sufficient forest reserves under scientific management to provide perpetually for all the needs of the nation. There will be required about 3,000,000 acres of forest reserves for every 1,000,000 inhabitants. There will be easily this amount of non-agricultural land available; all that is required is that it be wisely administered so as to constantly improve in condition and productivity. Given this administration, Canada will be a nation of abundance and happy homes; without such management, it will be a country of desolation, squalor and discomfort, if not poverty."

Talmage, located on the Grand Trunk Pacific line about 65 miles southeast of Regina, already has a hardware store, a general store and a blacksmith shop doing business. Thirty-eight lots have been sold for a bank, a real estate office, two lumber yards, a boarding house, a hotel and other businesses of the kind. The Massey-Harris Company is erecting a warehouse. So far there are no dwellings, three shops, big prospects—and a live board of trade, which has already taken the matter of streets and roads in hand, and is making preparations to grade the streets and build walks. The town is only two months of age.

UNDERWRITERS CONDEMN HAMILTON'S FIRE FIGHTING SYSTEM.

Report Says Adequate Fire Precautions Have Not Been Taken—Some of the Recommendations.

The Fire Underwriters' Association recently made an examination of the precautions against fire taken by Hamilton, Ont., and the report is a condemnation of practically everything in the fire prevention scheme of the city.

The report says in part:—

"The new electric pumps are said not to come up to the guarantee and are unable to pump the volume of water required for the city use, during the maximum demands, at a pressure equal to that given from the James street reservoir. This reservoir is at present out of use, and the pumping is against the head given by the Barton reservoir. The whole city is, for the present, dependent upon the two electric pumps and upon the numbers one and two steam pumps, after steam has been raised, from cold water, but the boilers are only capable of sustaining the pressure of 48 pounds, whereas 60 pounds are required to get full value from the pumps. In case of fire, the Barton reservoir would be shut off and the standpipe in connection with it opened; this, during the night, is said to give a pressure, when full, about the same as James street reservoir, but according to special standpipe tests made in June, 1898, the standpipe pressure, owing to the heavy draughts between the pumps and the standpipe, is entirely unreliable. It will be noted, further, that the electric and steam pumps are unable to work together, as when the pressure from the steam pumps exceeds 109 pounds, this causes one of the electric pumps to stop working."

Some of the Recommendations.

In the course of his recommendations the representative recommends that electric wires on streets, with the exception of trolley wires, should all be put underground; that the James street reservoir is too small and should be increased to a 20,000,000 gallon capacity; that the transformers at the beach pump house be placed in a separate building, as, with so many electric wires around, they constitute a serious hazard; that the electric motors for the two centrifugal pumps at the beach should be strictly in duplicate, which could be done by having separate motors operated by current from the Cataract Power Company's plant; that duplicate high level pumps are required, as the present apparatus is too small; that more boiler power be secured for the high level pumps; that as the present mountain system cannot be looked upon as of value from a fire protection point of view, because of its small capacity and the fact of there being no fire appliances located within the area covered, greater precautions should be taken, as a house catching fire on the mountain would probably be destroyed before the engines could get to it; that as it would appear that in future the pumping will largely be dependent upon electric power and as there is always a possibility of that power becoming unavailable, automatic steam pressure recording gauges should be installed in the steam pump house at the beach; the purchase of another first-class aerial turntable truck, with rapid-raising devices and ladder to extend 85 feet; better salvage equipment; the building of a new and commodious central fire station, and also another new station in the eastern section of the city, and larger fire alarm telegraph system, the present one being very unsatisfactory.

The Best Kind of Protection.

In conclusion the report says:—"In view of the conflagration hazard in the congested business section of the city and the increasing number of high buildings the best kind of protection that can be devised would be from a high pressure fire system, having separate mains, with hydrants placed thereon and not exceeding two hundred feet apart, and would suggest for such a system a capacity of 5,000,000 imperial gallons per 24 hours in duplicate, not necessarily two pumps of 5,000,000 each, but preferably three of 2,500,000 each, the pumps being capable of operating at 300 pounds per square inch with the required number of fire streams running, so that in case of the disability of any one pump the requisite capacity would remain available. In the event of electric power being used for operating such pumps the current should come from at least two independent sources, on separate transmission wires