The street lighting has now been in operation for nine years, and is run in connection with the fire alarm system. The man in charge of the latter is likewise in charge of street lights. He is assisted by one trimmer and occasionally employs outside help for line work or for installing new lamps and circuits. There is likewise one man at dynamo who assists at other work in power-house.

Some items of cost may be of interest in this connection. The amount charged against capital account, to the present time, amounts to the sum of \$29,300. This includes power-house, poles, wires, lamps, etc.



Pump House Hull City.

The cost of operation for 1909 was :--

Superintendent—part salary charged to fire		
Lineman and trimmer part colory charged	\$	325
to fire alarm		700
		500
	\$	825
Amount carried forward		825
Assistant at dynamo-part salary charged to		
waterworks		275
Carbons and repairs to line, poles, etc		400
Oil and sundries for dynamo		300
	\$1	,800
iterest on capital at 5 per cent. plus depreci-		

ation at 5 per cent. = 10 per cent...... \$2,930

I

\$4,730

Say \$43 per lamp per annum. The lamps are run on an all-night schedule every night in the year.

ICE TROUBLE AT HULL ELECTRIC POWER HOUSE.

It will be seen from the enclosed sketch that the power plant is located at the foot of Lake Deschenes, and in consequence comparatively free from frazil ice trouble.

The only time of the year that any bother is experienced from this source, is before the lake freezes over; a sudden change in temperature accompanied by a strong wind will often cause the formation of frazil. However, the number of times the plant has had to shut down from this cause has not proved frequent enough to warrant the installation of a steam plant for protection against frazil. Following the first ice formation on the lake this year, there was a fall of snow accompanied by sleet, and a strong south-west wind. This broke up the lake ice, and drove a slushy mixture into the head race which was quickly drawn



OTTAWA RIVER

into the forebay and against the racks. Frazil began to form, blocking the racks, and the wheel gates had to be closed. The slush packed from the bottom of the forebay to, in some cases, two feet above the surface of the water,



Head Race, Bulkhead and Power House of the Hull Electric.

and extended from the racks to the end of our wing dam. This had to be drawn towards the sluice way by a large gang of men armed with wooden scrapers. The sluice way not being of a very large area produced no appreciable current, so that this method proved very slow and little progress was made until the weather became colder and tended to solidify



Forebay at Hull Electric Power House. Forebay full of Slush, Frazil Ice, etc.

the mass. Virite was then used to advantage. About 300 lbs. of this explosive was used before a channel was opened up through the ice pack to the lake.

These ice troubles during the winter months increase the cost of operation of our power plant over 50 per cent.