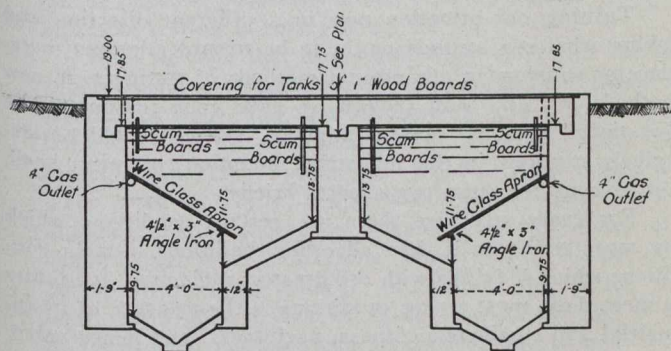


The sand filter is 14 ft. 0 in. by 14 ft. 0 in. by 2 ft. 6 in. in depth, well underdrained, as shown. The square surface is 196 feet, the rate being slightly over a half million gallons per acre of surface.

The work of construction, was let by tender to Mr. Roland McLaren, of Oakville, Ontario. Work was commenced on or about the 1st of June this year, and finished, apart from the housing, in the middle of August. The whole system, together with effluent drain to stream and housing, including cost of a resident engineer, has totalled approximately \$3,000.



SECTION C-D

Fig. 3.

The plant has not been sufficiently long in operation to allow of analysis of the effluents from the various parts to be made, but it may be said that the effluent at present is pure in appearance to sight and odor. Regular samples of the effluent will be taken from now on and the results published in the Canadian Public Health Journal.

TEMISKAMING RAILWAY FINANCES.

The following is the condensed statement of revenue account of the Temiskaming and Northern Ontario Railway for the year ended October 31st, 1911, compared with the year 1910:

	1911.	1910.
Revenue from transportation ..	\$1,708,249.02	\$1,522,020.05
Revenue other than transportation	72,715.81	69,831.97
Total operating revenue ..	\$1,780,964.83	\$1,591,852.02
Operating expenses	1,181,998.63	1,165,361.36
Net operating revenue	\$ 598,966.20	\$ 426,490.66
Ore royalties	17,060.56	31,762.92
	\$ 616,026.76	\$ 458,253.58
Hire of equipment, etc.	22,874.07	22,123.27
Total earnings	\$ 593,152.69	\$ 436,130.31
Paid Treasurer of Ontario	515,000.00	420,000.00

The operating expenses amount to 66.4 per cent. of the gross earnings, and the net earnings to 33.6 per cent., as compared with 73.2 per cent. and 26.8 per cent., respectively, for the twelve months ending October 31st, 1910.

The total mileage of the railway, including main and branch lines, yards and siding is 379.62.

CANADIAN CANAL TRAFFIC.

Canadian canal traffic from the opening of navigation until July 31 of this year has exceeded by approximately 3,000,000 tons the traffic for the corresponding period of last year, as shown by statistics just issued from the department of railways and canals. The increase is about 16 per cent. The total tonnage through Canadian canals for the period mentioned this year is 20,116,188 tons, as compared with

17,154,111 tons for a similar period last year. The increase in correct figures is 2,962,077 tons.

The Soo canal, leading all others in volume of traffic, shows the largest increase, being 2,793,682 tons, or almost equal to the total increase throughout all the canals, a decrease in the volume of tonnage through the Chambly, Rideau, St. Peters, Murray, and Trent considerably offsetting in the totals what would otherwise have been an enormous increase over last year.

As against the decrease in those above mentioned, large increases are shown in the volume passing through the Welland, St. Lawrence and Ottawa, while St. Andrews locks on the Red River above Winnipeg shows probably the highest proportionate increase of all, the volume having jumped from 11,241 tons last year to 50,063 this year, or an increase of 38,822 tons.

The statistics for the various canals are as follows:

Canal—	1911.	1912.	Increase.
Soo	14,028,453	16,823,135	2,794,682
Welland	1,138,284	1,201,588	63,304
St. Lawrence ..	1,339,766	1,417,731	77,965
Chambly	273,356	257,374	*15,982
Ottawa	134,990	173,563	38,573
Rideau	80,439	76,243	*4,196
St. Peters ...	29,473	24,860	*4,613
Murray	86,206	68,475	*17,731
Trent	30,903	23,156	*7,747
St. Andrews ..	11,241	50,063	38,822
Totals	17,153,111	20,116,188	2,963,077

*Decrease.

The large increase at the Soo is chiefly made up from the tremendous volume of iron ore passing through, this being partly American traffic handled by American vessels. There has also been a large increase in the volume of Canadian wheat conveyed.

Of the total traffic passing through the Soo, over 82 per cent. was purely United States' traffic.

The statistical branch of the department of railways and canals is this year collecting figures showing comparative rates by water on the canals, as compared with those by rail and are requiring all shippers to supply a statement of rates. It is purposed that the scheme be elaborated next year so that these figures will be analyzed according to canals and also commodities.

RAILROAD EARNINGS.

The following are the railroad earnings for the week ended August 31st:—

	1911.	1912.	Increase.
C.P.R.	\$3,329,000	\$3,809,000	+ \$480,000
G.T.R.	1,442,953	1,660,916	+ 217,963
C.N.R.	460,900	563,800	+ 102,900
T. & N.O.R.	58,451	58,451	— 13,205
Halifax Electric ...	8,532	7,699	— 833

The July statement of the Grand Trunk Railway system shows a total decrease of £14,450 sterling. The earnings of the Grand Trunk proper show an increase of £10,300, but the subsidiary companies show a substantial decrease: Grand Trunk Western Railway, net profit decreased £2,200; Grand Haven & Milwaukee Railway, net profit decreased £10,150; Canada Atlantic Railway, net profit decreased, £12,400.

The gross earnings of the C.P.R. for the month of August, as given in the weekly statements, show an increase of \$1,813,000, or 18 per cent., over earnings in the same month last year. August earnings were \$11,886,000 against \$10,073,000 for August, 1911.