

Secretary, D. H. Beatty. Messrs. Osler and Sheppard replaced B. E. Walker and Jas. Scott, who were on last year's board. J. D. Beatty was heretofore General Manager, and Treasurer, but up to the date of writing this (Feb. 24th) the question of management for this year had not been decided. It is probable that the management of the two companies will be merged, though the N.W.T. Co. may nominally be operated separately for a time.

H. B. Smith, of Owen Sound, has been elected a director of the N.N. Co. to succeed his late brother, H. E. Smith.

French River Navigation.

L. Coste, C.E., of the Dominion Department of Public Works, recently addressed the St. John, N.B., Board of Trade on the importance of the French river route as a factor in handling grain shipments. He stated that only 4% of the grain trade of Canada was handled in the Dominion and he would not be satisfied until the whole of it reached the seaboard without touching U.S. territory. To bring this about the accommodation at Montreal must be increased; the St. Lawrence channel must be rendered absolutely safe; and the French river should be made navigable from Georgian bay to Lake Nipissing. He hoped to see the Intercolonial Ry. extended to North Bay, so that it could share with the C.P.R. the handling of grain from that point to the coast. In addition to handling Canadian grain, U.S. grain would be largely carried, as by the French river route the shipping port could be reached from Chicago in 420 miles, and from Duluth in 450 miles less than via Buffalo. In conclusion he said the total cost of the works required to make the French river navigable to Lake Nipissing was estimated not to exceed \$5,000,000, which would involve an annual charge of \$150,000. When this was done, and the St. Lawrence end properly equipped with elevators there was no reason why the C.P.R. could not handle up to 50,000,000 bush. of wheat from North Bay, landing it on shipboard at Montreal for 4c. a bushel, as against 7c. a bushel for transportation to New York. There were no engineering difficulties in the way of construction, and the climatic conditions were such that navigation to North Bay would be possible during the length of time it was to Buffalo.

In connection with the proposed improvement of the French river, the Department of Public Works has issued a map showing the principal transportation routes from the head of the great lakes via Montreal, New York, etc., to Liverpool. The rail and water connections of the routes to Montreal via Depot Harbor, the Welland canal, and the proposed new route, as well as to New York by Buffalo are clearly shown on the map and tables are given showing the distances by the several routes, and also showing the length of canals on the two waterways with details as to locks, etc.

The following figures give distances of the different routes:

	Fort	Mil.	
	From William	Duluth	Waukegan Chicago.
Via Depot Harbor to Montreal.	3547	3653	3593 3680 miles.
Via Depot Harbor to Quebec.	3521	3627	3497 3554 "
Via Midland to Port land, Me.	3848	3954	3623 3681 "
Via Buffalo to New York.	4287	4393	4251 4308 "
French River route to Montreal.	3563	3669	3553 3610 "

The Dominion Canals.

The total expenditure charged to capital account on the original construction and the enlargement of the several canals, up to June 30, 1901, was \$81,404,543.98. A further sum of \$17,218,448.67 has been expended on the

repairs, maintenance and operation of these works, making a total of \$98,622,992.65. The total revenue derived, including tolls, and rentals of lands and water powers, was \$12,717,343.01.

The total expenditure for the fiscal year ended June 30, 1901, was as follows:—On construction and enlargement, \$2,514,214.93, and \$638,909.72 for repairs, renewals, and operation, a total of \$3,153,124.65. The net revenue collected for fiscal year was \$315,425.69, a decrease compared with the previous year of \$7,217.87. The net canal tolls amounted to \$26,129.40, a decrease of \$11,404.42. The expenditure on canal staff and maintenance, repairs and renewals, amounted to \$638,909.72, a decrease of \$72,690.34, and the net receipts amounting to \$315,425.69, the amount of expenditure in excess of receipts was \$323,484.03, compared with an excess expenditure the previous year of \$388,957.20.

The total traffic through the several canals for the season of 1900, amounted to 5,013,693 tons; a decrease of 1,212,231 compared with the previous year. This includes 2,035,667 tons passing through Sault Ste. Marie canal, which is free of toll. On the Welland canal, 719,360 tons of freight were moved, a decrease of 70,410, of which 379,658 were agricultural products, a decrease of 82,865, and 115,217 produce of the forest; of coal, 47,392 tons were carried. 601,130 tons passed eastward and 118,230 westward; 688,557 tons were through freight, of which 579,312 passed eastward. Of this through freight, Canadian vessels carried 319,497 tons, an increase of 9,911, and U.S. vessels 369,060 tons, a decrease of 91,012. The total freight passed eastward and westward through this canal from U.S. ports to U.S. ports was 318,529 tons, a decrease of 42,000 compared with the year 1899. The quantity of grain passed down the Welland and the St. Lawrence canals to Montreal was 244,651 tons, a decrease of 88,085 compared with the previous year; of this, 38,403 were transhipped at Ogdensburg, as against 48,828 transhipped in 1899. The further quantity of 51,267 tons of grain passed down the St. Lawrence canals, only to Montreal, making the total 295,928 tons. The rate of toll on grain for passage through the Welland (giving free passage through the St. Lawrence canals), was 10c. a ton.

On the St. Lawrence canals, 1,115,171 tons of freight were moved, a decrease of 233,922; of which 667,584 were eastbound, and 29,979 westbound through freight; 693,734 were agricultural products, 437,423 merchandise, 375,239 coal, and 95,518 forest products. Fifteen cargoes of grain, aggregating 7,924 tons, were taken down direct to Montreal through the Welland and St. Lawrence canals, as against two cargoes, aggregating 558 tons, in 1899.

On the Ottawa river canals, the total quantity of freight moved was 389,145 tons, a decrease of 130,960, of which 378,801 were produce of the forest. On the Chambly canal, 348,561 tons were moved, a decrease of 14,074, of which 205,160 were produce of the forest, and 92,598 coal. On the Rideau canal, 75,432 tons were carried, an increase of 5,527; 37,925 being the product of the forest, and 17,292 coal. On the St. Peter's canal, 73,843 tons were carried, an increase of 3,009, of which 42,548 were merchandise, and 32,418 coal. On the Murray canal, 19,067 tons passed, an increase of 2,279, and 4,496 of this were the product of the forest. On the Trent Valley canal, 43,572 tons were moved, of which 42,292 were the product of the forest.

On the Sault Ste. Marie canal, the total movement of freight was 2,035,677 tons, being a decrease of 970,987 carried in 3,081 vessels, the number of lockages being 2,205. Of wheat, 9,291,114 bush., and of other grain 1,113,414 bush. were carried; 647,944 barrels of flour, 999,591 tons of iron ore, 530,298 tons

of coal, and 7,435,806 ft. b.m. of lumber; all of these items show a considerable decrease. The total traffic at this point, accommodated by the two canals, the Canadian and U.S., amounted to 25,643,031 tons, an increase of 384,228, carried in 19,450 vessels, a decrease of 779. The total quantity of wheat carried was 40,616,807 bush., a decrease of 17,684,875, and of other grain 16,439,208 bush., a decrease of 13,898,147. Of lumber, the total was 905,528,806 ft. b.m., a decrease of 127,073,194.

As having an interesting bearing on the question of canal versus railway transport of grain from the west, it may be noted that whereas grain and peas passed down to Montreal through the Welland and St. Lawrence canals to the extent of 244,661 tons, a decrease of 88,085, compared with the previous year, the quantity carried to Montreal via the C.P. and G.T. railways was 229,624 tons, an increase of 20,454. In addition, during the past three seasons, a new system of grain traffic has come into operation, viz., from Depot Harbor, on Georgian bay, Lake Huron, over the Canada Atlantic Ry. to Coteau Landing, at the head of the Soulanges canal, thence by barge to Montreal. In 1899, the total freight carried by this route to Montreal was 309,573 tons, of which 259,531 were grain. In 1900, 319,865 tons were carried, of which 303,259 were grain (including 153 of peas and buckwheat). Of the grain so carried in 1899, 66,635 tons were wheat and 174,932 corn, and in 1900, 126,963 were wheat and 154,815 corn. The quantity of grain carried to tidewater on the New York state canals was 308,945 tons, a decrease of 107,755, while the quantity carried by the railways of the state to tidewater amounted to 4,396,441 tons, a decrease of 246,511. Of the total east and west-bound freight carried by the canals of the State of New York (the Erie, the Champlain, the Black River, the Cayuga and Seneca and the Oswego) and the competing railways, the New York Central and the Erie respectively, amounting in 1900 to 65,433,541 tons—greater by 13,730,780 than in 1899, the proportion carried by the canals has fallen steadily from 68.9% in 1859 and 47.0% in 1869, to 6.8% in 1898, 7.2% in 1899, and 5.2% in 1900. These canals carried, in 1900, 3,345,941 tons, a decrease of 340,110; of this quantity, 857,607 were through freight eastwards to tidewater, 596,246 coming through the Erie Canal. This eastward bound through freight is answerable for the total decrease to the extent of 307,058 tons. The falling off in the U.S. canal traffic is officially ascribed to the rate war between shippers and boatmen, the unusually late opening of navigation, the strike in the coal regions, which reduced shipments, and the fact that a number of old boats were put out of commission on account of their condition, and there were but few boats built to take their place, owing to uncertainty as to the action that might be adopted in regard of improvement to canal navigation. In attempting to draw deductions from the above figures in dealing with the great question of waterways versus railways as freight carriers, the dimensions of these U.S. canals, their length, and the difficulties of lock passage must be kept in mind. The enlarged Erie canal between Buffalo and Albany, which is, of course, the main factor, is 350½ miles long, comprises 72 locks, 110x18 ft., with a depth of 7 ft. of water, accommodating, as a maximum, vessels of 240 tons burden.

On the opening of navigation in the spring of 1900, by means of the enlarged Canadian canal systems and the intermediate waterways (though not fully completed), a minimum depth of 14 ft. of water from Lake Superior to the head of ocean navigation at Montreal was afforded. The extent of the improved facilities of communication so obtained, and their value to commercial interests may be understood from the fact that in place of the old