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From Port Hope to Thunder Bay Joseph Goodwin King, the Canadian Pacific Railway and Western Canada's first grain elevator on the Great Lakes 1883-1910

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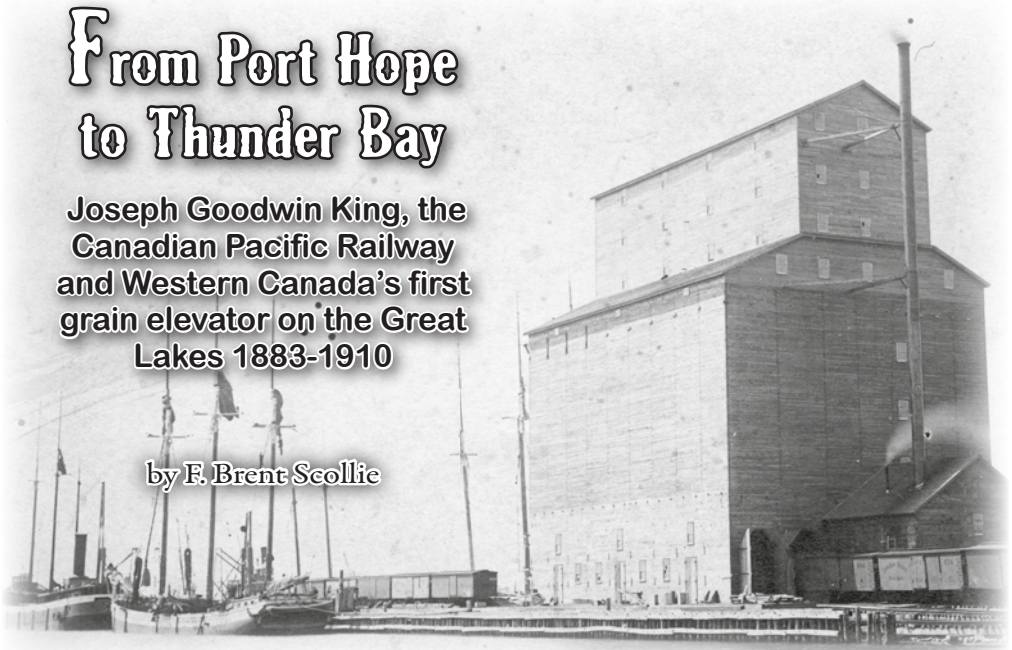
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From Port Hope to Thunder Bay

Joseph Goodwin King, the
Canadian Pacific Railway
and Western Canada's first
grain elevator on the Great
Lakes 1883-1910

by F. Brent Scollie



Port Arthur CPR grain elevator depicting how trains with box cars could pass directly through the structure to facilitate elevation of the grain to the handling floors in the cupola and eventual deposit in the wood crib storage bins. Thunder Bay Historical Museum Society, 977.80.103a.

The career of Joseph Goodwin King, a man whose name survives only as a caption on fading postcards of his Port Arthur gardens and grain elevator, provides insight into why many Ontario farmers, millers, and grain merchants chose to try their chances in the nascent grain trade of western Canada and adapt to new conditions. His career also sheds light on many aspects of Canadian ag-

ricultural and economic history—the role of railways in the grain trade, the decline of Lake Ontario grain ports, the rise of Thunder Bay on Lake Superior as the major Canadian grain port for western Canada, as well as improvements in North American grain cleaning and drying methods, and grain elevator construction.¹

King was born on 29 February 1844,

¹ The standard accounts are, for Ontario, Robert Leslie Jones, *History of Agriculture in Ontario, 1613-1880* (Toronto: University of Toronto Press, 1946), Chapter XIV: The Grain Trade and Grain Growing, 1866-1880. For Western Canada, D.A. MacGibbon, *The Canadian Grain Trade* (Toronto: Macmillan, 1932), who rarely cites any sources, and C.F. Wilson, *A Century of Canadian Grain: Government Policy to 1951* (Saskatoon: Western Producer Prairie Books, 1978) Chapter I Origins of the Grain Industry. For Thunder Bay's role in the grain trade, the best accounts are John Everitt and Warren Gill, "The Early Development of Terminal Elevators at the (Canadian) Lakehead," *The Great Lakes Geographer*, 4 (no. 2), 1997, 47-56, Edward Porritt, "Canada's National Grain Route," *Political Science Quarterly*, 33:2 (September 1918), 344-77, and, J.E. Young's booklet *Historical Facts, Grain Elevator Construction and Shipping, Lakehead Harbour, 1883-1964* (Port Arthur, Ont.: Lakehead Harbour Commission, 1965). For the grain elevator,

Abstract

The career of Joseph Goodwin King (1844-1910), grain elevator operator at Port Hope and Port Arthur, Ontario, sheds light on many aspects of Canadian agricultural and economic history—the role of railway companies in the grain trade, the decline of Lake Ontario grain ports, the rise of Thunder Bay on Lake Superior as the major Canadian grain port for western Canada, as well as improvements in North American grain cleaning and drying methods, and grain elevator construction.

Résumé: *La carrière de Joseph Goodwin King (1844-1910), exploitant d'éleveurs à grains à Port Hope et Port Arthur, en Ontario, éclaire de nombreux aspects de l'histoire agricole et économique du Canada—le rôle des compagnies ferroviaires dans le commerce des grains, le déclin des ports céréaliers du lac Ontario, l'essor de Thunder Bay sur le lac Supérieur comme principal port céréalier de l'Ouest canadien, ainsi que les améliorations apportées aux méthodes de nettoyage et de séchage des céréales, et à la construction des silos-éleveurs en Amérique du Nord.*

to Benjamin Owen King and his wife Emma Archer in Stowmarket, a market town on the River Orwell between Ipswich and Bury St. Edmunds in East Suffolk, a low-lying agricultural county in southeastern England. The King family were maltsters.² His grandfather Benjamin King, a merchant with warehousing and malting businesses in Ipswich and

Stowmarket, had settled in Stowmarket shortly after his marriage in 1810 to Ann Goodwin. After his death in 1855, financial problems led two of his sons Benjamin and William, with their children, to emigrate about 1862 and settle in the Lake Ontario counties of Durham and Northumberland where they soon attained a degree of success. His father Benjamin first took up residence as a farmer in Hamilton township, then in Cobourg where he worked as an accountant.³

Joseph King, however, chose to settle with his uncle William in Port Hope, a town thought by contemporaries to be more of a go-ahead place than sleepy Cobourg. Joseph soon emerged as the heir to the traditional family business of malting and grain warehousing. He would marry there and have five children between 1872-1883.⁴ Town directories list King in

William J. Brown, *American Colossus: the Grain Elevator, 1843-1943* (Brooklyn, NY: Colossal Books, 2015) and John Everitt, *A History of Grain Elevators in Manitoba. Part I: A History* (Winnipeg: Historic Resources Branch, 1992).

² Malting, the process of steeping, germinating and drying grain to convert it to malt. Peter Mathias, *The Brewing Industry in England 1700-1830* (Cambridge: Cambridge University Press, 1959), chapter XI Barley and Malt, 387-424.

³ Joseph was living in Islington, Middlesex, with his cousin William J. Owen UK census 1861 Suffolk. Benjamin Owen King died 18 December 1898 at Cobourg. Uncle William King died 7 February 1913. William's son, William Frederick King (1854-1916), would become Dominion astronomer. King's younger brother Richard Norman King joined the Ontario Bank in February 1871 launching a career that would take him to a management position with the Bank of Montreal. Another brother Robert William King became an engineer and businessman in Toronto.

⁴ Mrs. Jennie (Fowler) Acheson compares sleepy Cobourg with go-ahead Port Hope in her reminis-

1869 as proprietor of the Beamish Mills at Port Hope and a commercial merchant resident on Hope Street, with his warehouse on John Street on the west side of Port Hope harbour. There is no record of any lease in the Port Hope Archives until March 1871 when King formally leased from Francis Beamish his flour mill and dam located on the east side of Cavan Street for twelve years dating the lease back to 1 April 1870 for \$1240.00 per annum.⁵ The 1871 census lists the 27-year-old King—still unmarried—as a mill owner with a fixed capital of \$4,000, floating capital of \$30,000, employing on average six males with yearly wages paid out of \$3,000. The mill produced 35,000 barrels of flour worth \$200,000. At the Philadelphia International Exhibition of 1876, King won “the highest award gained by any Canadian” for his flour from winter wheat. He claimed that he was one of the largest flour millers in Canada at the time. By fall that same year King was insolvent.⁶

We do not know why his milling business failed, but we can speculate on

the reasons. Newmarket miller, William Lukes, told a House of Commons committee investigating the depression that began in 1873 that millers had formed the Dominion Millers’ Association in 1875 to deal with the many problems they faced since abrogation of the Reciprocity Treaty. He ascribed the industry’s depression to the relative high price of wheat, the limited Canadian market for flour, lack of export markets (American tariffs were twenty-five percent ad valorem on a barrel of flour), “excessively keen” competition, milling capacity that exceeded demand, an influx of duty-free American flour, and discriminatory railway freight rates. He had shut down his Port Hope flour mill partly because of American tariffs, but chiefly because the Grand Trunk Railway made him pay twenty-five cents more per barrel to ship flour east than a Toronto shipper. No wonder smaller millers like King were unable to compete.⁷

King survived a few more years by shifting to the grain warehousing and elevator business. In Dodd’s 1880 di-

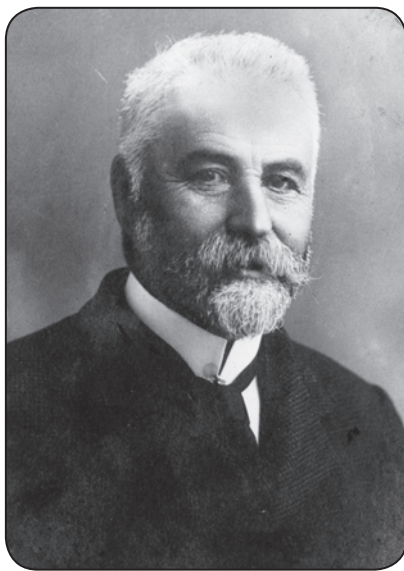
cences in *Ontario Genealogical Society. Ottawa Branch News* (June 1978), 5-7. In June 1871 King married Emma Julia Holdsworth at St John’s Anglican Church. The boy Francis Benjamin lived only five months. The daughters were Vera Charlotte, Haliburton Barbara (Hallie), Amy Edith, Constance Louise, and Muriel Stuart (Molly).

⁵ The Port Hope Archives has the registry documents for the East Riding of Durham county. Lease instrument no. 3762 registered 24 October 1872. King told William Van Horne that he had twenty-three years experience in the grain business, nine of which he operated King’s Flouring Mills at Port Hope, CPR Archives Montreal file 10622 King to W.C. Van Horne 7 September 1885.

⁶ LAC Census 1871 Reel C9979 Schedule 6 Port Hope p.6. There are advertisements for King’s Mills flour in the few surviving issues of the 1874-75 *Port Hope Times and County of Durham British Canadian* (hereafter *PHT*) microfilm at the Archives of Ontario 26 November 1874-7 January 1875. *Port Hope Guide* (hereafter *PHG*), 26 October and 30 November 1876 Insolvent Act of 1875 notices. *Report of the Commissioner of Agriculture on the Products, Manufactures &c of Ontario Exhibited at the International Exhibition, Philadelphia, 1876* (Toronto: Hunter Rose, 1877), 149, 176 J.G. King, Port Hope, flour from winter wheat won award Group IV Class 657 Flour, crushed and ground cereals, etc.

⁷ *Journals of the House of the Commons of the Dominion of Canada, Third Session, Third Parliament, 1876,*

rectory for Durham and Northumberland Counties, he listed himself as "Grain and flour commission merchant, and grain warehouseman. General forwarding & shipping agent." Commission merchants were middlemen who competed to purchase grain from farmers on their own account, or, for a percentage of the sales price, on behalf of a major grain dealer like W.D. Matthews of To-



J.G. King. Photo by John Forde. Thunder Bay Historical Museum Society, 988.26.1.

ronto. How grain buyers like King negotiated prices for barley by weight may be found in the court testimony of farmers after charges were laid against Belleville grain dealers in 1880 by the inspector of weights and measures. Unlike most commission merchants, King acquired a grain elevator at a lake port. The grain handled at King's elevator was local, brought by farmers to the elevator, or transported

by the local railway, the Midland Railway which had erected its own grain elevators at Port Hope and Midland in 1880/81.⁸

Although much has been written about Ontario agriculture, relatively little is known about the infrastructure of the grain handling industry in nineteenth-century Ontario. Where did King fit in this system that developed in the Province of Canada with the con-

struction of railways in the 1850s?

Grain elevators had spread rapidly throughout the Great Lakes after being introduced at Buffalo, New York, in 1842, to facilitate the transfer of bulk grain between ships and trains. What distinguishes a grain elevator from a mere warehouse is the elevating equipment, the most important of which are the elevator legs with buckets which scoop

vol. X, Appendix 3, Report of the Select Committee on the causes of the present depression... Minutes of evidence, Flour interest 11 March 1876, pages 64-78, questioning Mr. William Lukes of Newmarket. *PHT*, 2 January 1878 p. 4 characterizes 1877 as "among the worst of the bad years." J. Spelt, *Urban Development in South-Central Ontario* (Toronto: McClelland and Stewart, 1972), 111-112, 115, 135-36, 184, 151-52, 222. D.A. Lawr, "The development of Ontario farming 1870-1914: patterns of growth and change, *Ontario History*, 44:4 (December 1972), 243-51. Felicity L. Leung, *Grist and flour-mills in Ontario: from millstones to rollers 1780-1880s* (Ottawa: Parks Canada, 1981). For wheat prices 1876, see Marvin McInnis, "The changing structure of Canadian agriculture, 1867-1897," *The Journal of Economic History*, 42 (March 1982), 195.

⁸ For American grain buyers, see Mary Eschelbach Hansen, "Middlemen in the Market for Grain: Changes and Comparisons," *Essays in Economic & Business History*, 18:1 (2000), 59-72, a study that Hansen confirms she was unable to pursue. For Canada, "Middlemen," *The Monetary Times and Trade Review Insurance Chronicle* (18 September 1874), 320. For Belleville testimony, *Report, Returns and Statistics of the Inland Revenues of the Dominion of Canada, for the fiscal year ended 30th June 1880, Seventh Report of the Commissioner of Inland Revenue on Weights, Measures, and Gas*, p. 42-59.

grain up and elevate it to the working house where it is weighed, cleaned and deposited by conveyor belts and spouts to the appropriate bin for its grade.

Grain storehouses with elevating equipment were built by Canadian railways during the Reciprocity Treaty era (1854-66), not only to process and store local grain, but also to capture some of the through traffic of American grain from Chicago, Milwaukee, and later Duluth, to Oswego and Ogdensburg, although the bulk of American grain went to Buffalo on Lake Erie in American vessels.

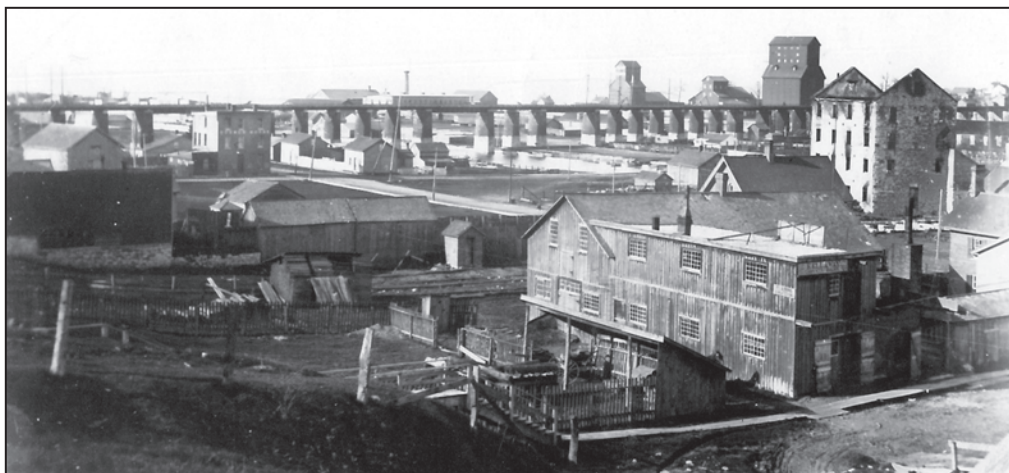
Terminal elevators were in operation at Canadian lake ports by the Northern Railway at Toronto and Collingwood in 1857, by the Great Western Railway at Hamilton in 1858 and at Sarnia in 1859, by the Welland Railway at Port Colborne and Port Dalhousie in 1859, by the Buffalo and Lake Huron Railway at Goderich in 1859/60, and by the Grand Trunk Railway at Sarnia, Toronto

and Portland, Maine, in 1862/63. Fires due to overheating of grain and the combustibility of grain dust often destroyed these wooden structures, but they were soon replaced.⁹

Entrepreneurs and commission merchants like King also built or leased smaller elevators. The first may have been that of forwarding agent Edward Berry (1817-75) at Kingston in 1854. Former Toronto mayor, Joshua George Beard (1797-1866), erected one at Toronto in 1864, William Henry Campbell (1839-1915) and lessees David Brennan and Sydenham Vandervoort at Belleville in 1870, George Downey & J.H. Preston at Belleville, Elias Robert Sculthorpe (1836-82) at Port Hope, and William Jeffs (1841-96) at Trenton in 1879. Sometimes a building was converted to a grain elevator like Flint & Holden's saw mill in Belleville in 1879.¹⁰ Large end users of grain eventually constructed their own grain elevators, flour miller

⁹ For the GWR at Hamilton and Sarnia, see *Toronto Globe*, 31 December 1858, 2; 16 August 1859, 2 Sarnia; 31 August 1860, 3 Sarnia; 19 February 1862, 2; 4 March 1862, 4 Tender notice; *Montreal Herald*, 8 May 1861, 2 Sarnia. For the Grand Trunk elevators at Sarnia, Toronto, Portland, Midland see DCB online, John Shedden (1825-73) and Alexander Tilloch Galt (1817-93); *Globe*, 30 August 1862, Important Circular, 1; 23 February 1863, 1 New Grain Elevator; 29 August 1864, 2 Fire; 11 August 1873, 1 Portland; 21 July 1881, 9 Midland; 25 April 1904, 1 Midland. For the Northern Railway elevators at Collingwood and Toronto, *Globe*, 18 February 1858, 2; 9 December 1862, 2 Canadian Items; 11-12 February 1869; 1-2 March 1870; 29 September 1870, 4; 16 October 1871, 4; 16 September 1904, 10 demolition; *The Canadian Monetary Times and Insurance Chronicle* (18 February 1869), 422; (4 March 1870), 452, 456 fire; *The Monetary and Commercial Times* (6 May 1870), Supplement, iii. *Monetary Times and Trade Review* (18 March 1881), 1091 Toronto Grey & Bruce.

¹⁰ For Berry, Kingston *Daily News*, 21 April 1854, 2; *Toronto Globe*, 30 August 1870, 4 fire. For Beard, *Toronto Globe*, 13 August 1863, 4; 6 October 1864, 2; 18 November 1874, 3 Chancery sale. For Belleville and Trenton, see *Belleville Intelligencer*, 8 November 1870 Progress of Belleville; 25 December 1879; *Toronto Globe*, 5 October 1882, 1. *Industries of Canada: Historical and Descriptive Review* (Montreal, 1886), 77 Eilbreck, 89 Downey & Preston. *Directory of the County of Hastings 1879-80* (Belleville: Intelligencer, 1879), 115, 121, 127, 407. For southwestern Ontario, see Norman N. Feltes, *This Side of Heaven: Determining the Donnelly Murders 1880* (Toronto: University of Toronto Press, 1999), 114-25.



Three Port Hope grain elevators ca. 1889 located on Lake Ontario south of the Grand Trunk Railway viaduct; left, King's; middle, Sculthorpe's; right, the Midland Railway elevator. Port Hope Archives, PHA 995-1-1-83.

Ira Gould (1799-1872) in Montreal by 1854 and distiller James Gooderham Worts (1818-82) in Toronto in 1870. Still smaller grain elevators were constructed inland along feeder railways like the George Currie-Aaron Ross elevator at Port Perry on Lake Scucog, built in 1874 on the Port Whitby and Port Perry Railway, the best documented early Ontario grain elevator, and the oldest wood crib Canadian grain elevator still standing. Floating elevators were also used at ports like Kingston, Prescott, Montreal, and Quebec.¹¹

How King managed to emerge from bankruptcy and acquire lots 369-370 on the east side of John Street facing Port

Hope harbour is unknown. Registry documents show that he was heavily mortgaged in 1883-85 and paid his creditors fifty cents on the dollar. Details about King's Port Hope elevator, which stood adjacent to the elevators of his competitors, the Midland Railway and the Sculthorpe family, appear in letters he wrote in 1886 to William Van Horne.

"I am the owner of a 70000 bush[el] elevator here but owing to the limited and decreasing trade, as well as the fact the G.T. Ry. owns one here also, the extension of my business here is prevented"... "had the elevator of the railway here been in private hands I should have secured almost the entire trade of the Midland Railway to my elevator, as it is I have all that they cannot compel to use their elevator."¹²

¹¹ J. Peter Hvidsten, *The Port Perry Grain Elevator: Canada's Oldest Wood Crib Elevator* (Port Perry ON, 2016) <https://scugogheritage.com/online_pdfs/elevatorbook.2016.pdf> (viewed 5 July 2021). The Credit Valley Railway built elevators at Wolverton, Woodstock, Orangeville and Elora in 1881, *Toronto Globe*, 7 November 1881, 9. For floating elevators at Quebec, *Toronto Globe*, 22 January 1863, 4. At Kingston, *Ottawa Citizen*, 8 November 1861, 4. *Toronto Globe*, 9 November 1863, 1; 20 October 1868, 4. At Prescott, *Ottawa Daily Citizen*, 17 April 1871, 3; *Kingston Daily News*, 6 January 1873, 1 ad. St Lawrence & Ottawa Railway.

¹² CPR Archives file 12371 King to W.C. Van Horne 23 February 1886 and 6 March 1886. The Mid-

The few statistics available confirm this assessment. Between 1885 and 1888, the Grand Trunk Railway shipped out the most grain from Port Hope harbour, with King as the second largest exporter, except for 1886 when he shipped 144,713 of the 442,009 bushels exported, almost 33% of the year's total.¹³

The grain being exported from Durham and other counties to the United States was four-rowed Canadian barley, which American brewers valued because of its high malting qualities. The trade had developed during the American Civil War and soon overtook wheat in the export market. Barley became the primary crop in the Lake Ontario counties, especially in the counties of York, Ontario, Durham, Northumberland, and Prince Edward where by 1883 they represented one quarter of the provincial barley crop. Durham County planted anywhere from

5-7 percent of the provincial acreage between 1882-91.¹⁴ U.S. commercial agent Jacob Dutcher reported that in 1883 barley exports to the United States from Port Hope represented 39 percent of the value of all exports from that harbour, exceeding even lumber. Wheat exports were valued at only \$98,783 compared to \$911,319.53 for barley.¹⁵

Grain shipments from the harbour began plummeting, until by the 1890s only lumber, shingles, and cedar posts were being shipped. In 1880, the harbour exported 716,794 bushels of grain to Oswego alone; in 1885, 497,375 bushels of grain; in 1886, 442,009; in 1887, 424,645; in 1888, 161,240; in 1889, 157,261; in 1890, 20,643; in 1891, 60,567, and in 1892, only 11,000 bushels.¹⁶

The sudden drop in grain shipments after 1888 suggests that grain was be-

land Elevator and Forwarding Company erected a grain elevator at Port Hope in late 1880 and was exempted by the town from taxes, LAC RG30-I-A-4-b, vol. 12588. The Goad fire insurance map of 1900 at LAC depicts the three Port Hope elevators. Port Hope Archives photo PHA-995-1-1-83. Archives of Ontario C287 1-0-34.1 D88 broadside 47 cm x 33 cm dated 26 August 1887 Barley! The highest price paid by the undersigned for barley delivered at King's elevator, Port Hope. W.S. Betcher, office – Williams Block.

¹³ Archives of Ontario (hereafter AO) F1874-20 Port Hope Harbour Commission (hereafter PHHC) Minutes vol. 2 passim. export statistics. See *PHG*, 7 January 1887 for 1886 export statistics.

¹⁴ Jones, *History of Agriculture in Ontario*, 217-19. Ontario Bureau of Statistics, *Annual Report* 1883, 15. Percentages computed from Ontario Bureau of Statistics. *Annual Reports* 1882-91. This is confirmed in a letter from H.R. Cockin dated 17 December 1892 to the *Toronto Globe* stating, "East Durham used to come next to Prince Edward county in the production of good barley." *Globe*, 12 November 1892, 4, "State of the Country: the *Globe's* correspondents at Port Hope."

¹⁵ LAC *Despatches from United States Consuls in Port Hope, 1882-1906* v. 1, 1 April 1882-8 December 1892. Washington: National Archives, 1962. Microcopy T-651 roll 1 (hereafter U.S. Consuls, Jacob C. Dutcher to John Davis, Asst Sec of State, 24 September 1884.

¹⁶ *Report, Returns and Statistics of the Inland Revenues of the Dominion of Canada, for the fiscal year ended 30th June 1880, Seventh Report of the Commissioner of Inland Revenue on Weights, Measures, and Gas*, Table for 1880, p. 59 Oswego. AO F1874-20 Port Hope Harbour Commission Minutes vol. 2 passim. Year end export statistics are not consistent, sometimes using the generic grain, other times breaking the statistics down by barley, rye, and wheat. Grain of any kind is not mentioned after 1892, demonstrating the impact of the McKinley tariff and other factors. However, the trade in grain would have continued by rail instead of ship.

ing diverted to Belleville by the Grand Trunk Railway after its lease of the Midland Railway (originally the Port Hope, Lindsay and Beaverton) in 1884. In June 1888, W.H. Robertson, the U.S. commercial agent at Port Hope, reported to the State Department, "the removal, during the last few months of the headquarters of the Midland Branch of the Grand Trunk Railway from Port Hope to Lindsay is indicative of the present and prophetic of the future growth of this place." "The exports of Port Hope," Robertson told the State Department, "have fallen off since 1882 from \$2,653,624 in that year to \$835,154 in 1887. Those of Cobourg likewise from \$651,253 to \$346,294."¹⁷

It is not hard to understand why commercial union with the United States seemed so attractive nor why the local Reform newspaper, the *Port Hope Guide*, played up the depression by continual attacks on Macdonald's "plunder gang" and the National Policy. The *Guide* cited with approval an account from the *Detroit News* of 16 August 1887 in connection with the growing desire in

Ontario for commercial union with the United States which the *News* claimed had originated in Port Hope at a meeting between Erastus Wiman and Congressman Butterworth:

"[Port Hope] is essentially the shipping point for the rich farming districts of Durham county behind it. It has seen none of the advantages of the so-called national policy, but with all its natural advantages the town has failed to grow. Its harbor, one of the finest on Lake Ontario, is almost without a sail. Its rich product of barley cannot be shipped across the lake, where it is wanted, thus failing to give employment to men and vessels and returns to the farmers.... It is natural, therefore, that a unanimity of commercial union sentiment should be found in these lake ports."¹⁸

It was American farmers lobbying for higher agricultural tariffs, not Macdonald's National Policy, that hindered export of Ontario's barley across the lake to American brewers. The McKinley tariff of 1890 fell with a blow on the barley trade.¹⁹ Ontario barley acreage fell 21 percent from 1890 to 1891, though only 11 percent in Durham.²⁰ In February 1889, the Port Hope Harbour Commis-

¹⁷ For the big picture see George G. Tunell, "The Diversion of the Flour and Grain Traffic from the Great Lakes to the Railroads," *The Journal of Political Economy*, 5 (1897), 340-75. On the eve of his departure for another post, Robertson proposed a reorganization of the consular district with Peterborough as the headquarters and Port Hope as subordinate agency. LAC *U.S. Consuls*, Robertson letters, 16 June, 19 December 1888.

¹⁸ *PHG*, 26 August 1887, "Port Hope's Hope." Letter writers Atkinson and Cockin dispute the assertion that there was unanimity for commercial union or annexation in Port Hope. *Toronto Globe*, 12 November 1892, 4.

¹⁹ MacGibbon, *Canadian Grain Trade*, 21-22 barley. Jones, *History of Agriculture in Ontario*, 235 "At the close of the American Civil War, most of the towns and villages along the shore of Lake Ontario were becoming noted as barley ports. They maintained their reputation till the barley trade across the lake was crippled by the McKinley tariff." Lawr, *Ontario History*, 245-46 and Spelt, *Urban development*, 152, agree.

²⁰ Barley acreage computed from Ontario Bureau of Statistics. *Annual Report* 1891, 12-13.

sion petitioned the Dominion Minister of Finance for assistance.²¹ By December 1891 a town deputation begged Premier Oliver Mowat for relief from its debt owing to “the diversion from the Port Hope harbour of the lumber and grain freight from the north. When the Midland Railway became a part of the Grand Trunk system, this trade was diverted to Belleville by the Junction Railway, to the injury of Port Hope, which is still staggering under a load of debt incurred for the Midland’s construction.”²²

King tried to stay competitive by improving his machinery for cleaning barley, but faced with a declining market, sharp competition from a powerful railway, and an inability to pay his mortgage and debts, he was waging an uphill battle. The bleak economic prospects explain why King was so persistent throughout 1885-89 in finding some alternative to staying in Port Hope. He was but one of many forced out of Port Hope as the town’s population fell 26 percent between 1881 and 1901, from 5,585 to 4,188.²³

The Canadian Pacific Railway and the Grain trade

Arrival of the Canadian Pacific Railway in Ontario was the catalyst for

a complete rationalization of Ontario’s railway system, as the Grand Trunk Railway scrambled to protect its traffic and revenue. The CPR desperately needed Ontario lines for revenue. Access to Georgian Bay ports to handle the expected grain and freight traffic to and from Manitoba and the Canadian North-West was critical. In 1883 the CPR acquired the Toronto, Grey and Bruce Railway that linked Owen Sound to Toronto. In 1884 the GTR leased the Midland Railway that connected Midland to the Lake Ontario port towns of Port Hope and Belleville via Orillia, Lindsay, and Peterborough. In 1888 the GTR took over the Northern Railway that linked Collingwood to Toronto. The Northern Railway’s grain traffic had been undermined after the United States announced in 1883 that it would abrogate at the end of 1885 article XXX of the Treaty of Washington that allowed Canadian forwarding companies to carry grain from one American port to another, provided it was carried overland in Canada part of the way. This ended Toronto’s role in the Chicago-Collingwood-New York grain trade. Collingwood and Toronto would lose out to the CPR’s Owen Sound and Montreal. Eventually the grain elevators at Midland on the GTR would handle more traffic than Owen Sound, Colling-

²¹ AO F1774-20 PHHC *Minutes* 13 Feb. 1889.

²² *PHT*, 17 December 1891 citing the Toronto *Globe* of 8 December 1891, 8, “A Port Hope Deputation.” Relief would come in 1894 with the passage by the Legislative Assembly of “An Act to Consolidate the Debt of the Town of Port Hope, and for other purposes,” *Statutes of the Province of Ontario 1894*, 57 Vict., c. 79, 356-63.

²³ *PHG*, 17 May 1889, The Exodus, reports that over 500 residents of Port Hope had moved to the U.S. Durham County reached its peak population in 1861 (39,115) declining to 36,265 in 1881 largely at the expense of the non-rural population in villages and hamlets.

wood and Depot Harbour as Midland had the shortest rail haulage to Montreal.²⁴

The Canadian Pacific Railway was then constructing a grain handling system with two terminal elevators at Thunder Bay, a transfer elevator at Owen Sound, and two export grain elevators at Montreal. Through its purchase of the Toronto, Grey and Bruce Railway, it had acquired a small Toronto grain elevator. General manager, William Van Horne, took an active role in promoting western grain standards and having a grain inspector at Port Arthur as early as July 1884. His lobbying of John Costigan, the Minister of Inland Revenue, and his deputy, Edward Miall, resulted in an amendment to the General Inspection Act in July 1885 that established grades for Manitoba Red Fife wheat for the first time and created a grain inspectorship division at Port Arthur, the port town on Lake Superior.²⁵

The prospect of capturing this civil service plum attracted a lot of attention in the Ontario grain trade including Matthew Sellers, the CPR's new superintendent of elevators at Thunder Bay, who had come there in 1884 from Toronto's Northern Railway Company elevator. The primary candidates were Frank Gibbs of Oshawa and J.G. King of Port Hope whose younger brother, Richard Norman King, had been manager of Thunder Bay's only bank, the Ontario Bank, since July 1884.²⁶

With his impeccable Conservative connections, King no doubt felt himself well placed to win the post. The Examining Board headed by A.W. Ogilvie, the Montreal grain magnate, judged King the superior candidate in September 1885. To everyone's astonishment, however, the Conservative government appointed Frank Egerton Gibbs, son of Senator Thomas N. Gibbs of Oshawa, one of Macdonald's former ministers,

²⁴ W. Kaye Lamb, *History of the Canadian Pacific Railway* (New York: Macmillan, 1977), "Conflict with the Grand Trunk: the Eastern Network," 94-103. Edward Porritt, "Canada's National Grain Route," *Political Science Quarterly*, 33:2 (September 1918), 347, notes Toronto's diminishing role as a new route developed for shipping grain. See one observer's arguments why Toronto could not be a transshipment port for grain, "The Grain Route. Why Toronto can never become the Buffalo of Ontario," *Toronto Globe*, 1 February 1899, 2. As a result, the grain elevators at Toronto and Collingwood were underused. The GTR preferred Midland over Depot Harbour, though the latter was closest by rail to Montreal.

²⁵ Jones, *History of Agriculture in Ontario*, 236-37, discusses the introduction of grain inspection in the Province of Canada 26 Vict. 1863, c.3, as does the *DCB* biography for Joseph Harris (1835-99). The first federal grain inspection act was passed in 1874, Statutes of Canada 37 Vict., 1874, c. 45. Winnipeg was added as an inspection site in May 1883, 46 Vict. 1883, c. 29, and Port Arthur in July 1885, 48-49 Vict. 1885, c. 66. Wilson, *Century of Canadian Grain*, 11, incorrectly states that it was 1886. LAC MG28-III-20 Van Horne Letter-books 1884-85 (hereafter VHLB) 7: 56-7, 72-5, 469-72, 585, 707-708, 761-65, 966-67; 8: 266-70, 363-64, 768-72; 9: 256, 301, 426-27, 436-37; 10: 166-69, 500; 12: 653, 656; 13: 4, 147-50, 295. LAC Thomas G. Shaughnessy Letter-books (hereafter SLB) 2: 386-87, TGS to Whyte 13 August 1884.

²⁶ Richard King remained as manager until December 1888. Port Arthur *Daily Sentinel* (PADS), 9 July 1884, 11 and 18 December 1888. *Fort William Journal and Thunder Bay Mining News* (FWJ), 22 December 1888. For Matthew Sellers (1842-1913), PADS, 11 August 1884, 3; VHLB 13: 321-23, VH to Egan, 11 September 1885; Fort William *Daily Times-Journal* (DTJ), 17 December 1904, 3; 14 April 1913.

and a relative by marriage of the Commissioner of Inland Revenue Edward Miall. Van Horne was disgusted. "I am afraid politics had much to do with his appointment. His record at the Board of Examiners was one of the worst." He was not alone in his disgust. A Strathroy man in an anonymous letter to Sir John A. Macdonald denounced the appointment of yet another Conservative placeman. King bore his loss bravely, "I could not," he wrote Van Horne, "consider my claims on the Government as strong as those of Mr. Gibbs who through his late father had of course heavy claims. I only hope he will prove a good inspector."²⁷ Gibbs would serve as Dominion grain inspector at Port Arthur from October 1885 to November 1911, then as chief Dominion grain inspector at Winnipeg, finally as a member of the new Board of Grain Commissioners from 1912-13.

Emboldened by his performance on the Examining Board for the Port Arthur inspectorship, King began to correspond with William Van Horne. In early 1886, he became more explicit about the prospects of an association with the company, particularly when it was rumoured that the CPR might erect an elevator at Toronto. Van Horne showed some interest in King's proposals, encouraging

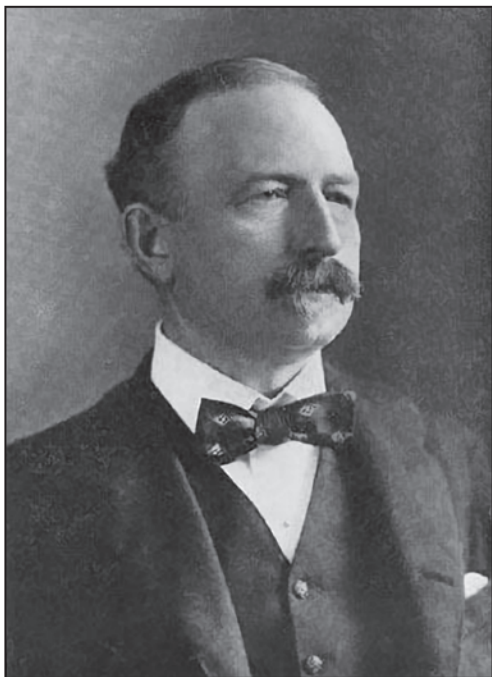
him to look into the Eastern Ontario area where the CPR was constructing its Smith Falls to Montreal line, but nothing came of this suggestion. A more detailed proposal to work up the barley trade on the CPR's Ontario system through the working of a central elevator "commanding lake navigation" interested Van Horne enough that he agreed to arrange a meeting in March with Traffic Manager George Olds to discuss King's ideas. After his loss of municipal office as a Port Hope alderman in January 1887, King's letters took on a pleading tone. He wrote the company four times that year seeking employment. Van Horne was evidently tired of him, delegating some replies to Thomas Shaughnessy, his able assistant and eventual successor, who promised in March 1887 to keep King's name in mind should any suitable position come vacant, but there was no opening for King at the Montreal elevators despite the favourable recommendation of George Olds, the CPR's general traffic manager, who had met with him in 1886.²⁸

The Keewatin Flour Mill Debacle

Undaunted by the CPR's rebuffs, King wrote Van Horne in May 1887 as soon as he heard of the possibility of a

²⁷ VHLB 13: 147-50, VH to Edward Miall, 5 September 1885; 13: 295, VH to King, 10 September 1885; 13: 296, VH to W. Worden, 10 September 1885; 13: 297, 301, VH to Alexander Mitchell, 11 September 1885; 13: 511, VH to Miall, 24 September 1885; 13: 824, VH to Mitchell, 10 October 1885; 13: 842-43, VH to Egan, 12 October 1885 quotation. VHLB 14: 18, VH to King, 20 October 1885. LAC RG26A Macdonald Papers Reel C1773 Anonymous Strathroy to Macdonald October 1885, v. 420 p. 203700-203701; F. E. Gibbs to Macdonald, 13 October 1885 v. 420, p. 203865-203866. CPR Archives file 11039, King to VH, 24 October 1885. *DCB* online, "Thomas Nicholson Gibbs."

²⁸ VHLB 15: 536-7, 2 March 1886; 15:654, 8 March 1886. CPR Archives file 12371 four letters to VH dated 26 January, 12 March, 26 May, 13 December 1887.



Thomas G. Shaughnessy (1853-1923), third president of the Canadian Pacific Railway 1899-1918, facilitated King's lease of the Port Arthur grain elevator 1891-1910. Somehow, King managed to get along with this driven, imperious, suspicious railway baron. Photo: Wikipedia.

grain elevator and mill at Keewatin on the CPR line in Northwestern Ontario. Van Horne denied the CPR's intention of building a mill at Keewatin—which was true. But it was Van Horne who had introduced Alexander Mitchell of Montreal to Keewatin's John Mather in October 1886 when Mitchell was investigating the possibility of Rat Portage

for a flour mill, and is said to have been a shareholder himself. By March 1887, the Lake of the Woods Milling Company was seeking incorporation, with members of the original CPR Syndicate of 1880 as the principal shareholders.²⁹

The mill was under construction at Keewatin from June 1887 to October 1888. King's persistence paid off when John Mather hired him as business manager of the mill 15 May 1888 at Montreal.³⁰ He proceeded to negotiate the sale of his Port Hope elevator to Oshawa grain dealer, James Odgers Guy (1828-1909) and his son Frederick Augustus Guy (1855-1932). On May 26, the citizens of Port Hope staged a farewell with address, presentations and orchestra at the Opera House.³¹

King quickly settled in to Keewatin and was even elected to the board of education for 1889, but the company ran into difficulty within a few months of

²⁹ A.E. Epp, "The Lake of the Woods Milling Company: an Early Western Industry", in *The Canadian West: Social Change and Economic Development* (Calgary: University of Calgary, 1977), 147-62. VHLB 18: 674; 19: 651 and 686; 21: 122 and 983-85; 24: 872 and 913-14; 25: 257. See *DCB* entries for Mather (1827-1907) and especially Robert Meighen (1837-1911). Neither biography mentions Alexander Mitchell.

³⁰ AO F136 MS720 reel 2 Lake of the Woods Milling Co. Ltd., John Mather diaries May 1888. King's salary was \$2,000 for the first year. The last entry for King in the diaries is a visit to Mather in Ottawa 26-29 August 1889. CPR Archives file 23904, King to VH, 27 March 1889, enclosing copies of letters from W.A. Mitchell, Montreal, to Henry Taylor and King.

³¹ Port Hope Archives registry document 7493 dated 26 May 1888 Sale to Guy family. AO F1874-20 Port Hope Harbour Commission Register of Exports shows that J.G. King shipped 32,915 bushels of barley from his elevator in four vessels 7-16 April 1888. *PHG*, 25 May 1888 Keewatin mill, negotiations to sell his elevator. *PHG*, 1 June 1888, farewell proceedings. For James Odgers Guy see Oshawa Museum website. The F.A. Guy Grain Co. Ltd. ran a 50,000 bushel feed elevator at Fort William, *DTJ*, 5 June 1916, S6 ad. photo.

the mill's start up. It was losing money according to press reports, and contractor Robert Gillespie Reid was threatening to sue the firm. In late March 1889 the *Rat Portage News* reported a falling out between Mitchell and Mather. King was removed by Mitchell who claimed King had not met his wishes in the purchasing of wheat. King wrote Van Horne seeking his assistance, but Van Horne declined to interfere. Then Mitchell was ousted from the management and replaced by Mather. Samuel A. McGaw replaced King as manager of the mill and served until 1906.³²

For the next two years, operating from both Port Hope and Cobourg, King became a travelling grain buyer and flour salesman for Toronto grain magnate Wilmot Deloui Matthews.³³ Although he attempted to integrate back into Port Hope, stumping East Durham on behalf of Conservative M.P., T. Craig Dixon in the federal election of April 1891, his life and household were in disarray. The May 1891 census records King living in Port Hope as a "traveller" with his widowed mother-in-law Mary Holdsworth, one daughter, and his wife who is listed as "unsound of mind." Another daughter was

placed with his uncle, William King, and two others with his parents at Cobourg. King had descended from being "one of the largest flour millers in Canada" in 1876 and candidate for mayor in 1887 to commercial traveller lodged with in-laws in 1891.³⁴ But King was a visionary and a fighter. He was not done with the North-West.

King's lease and transformation of the Canadian Pacific Railway grain elevator at Port Arthur into a "hospital elevator"

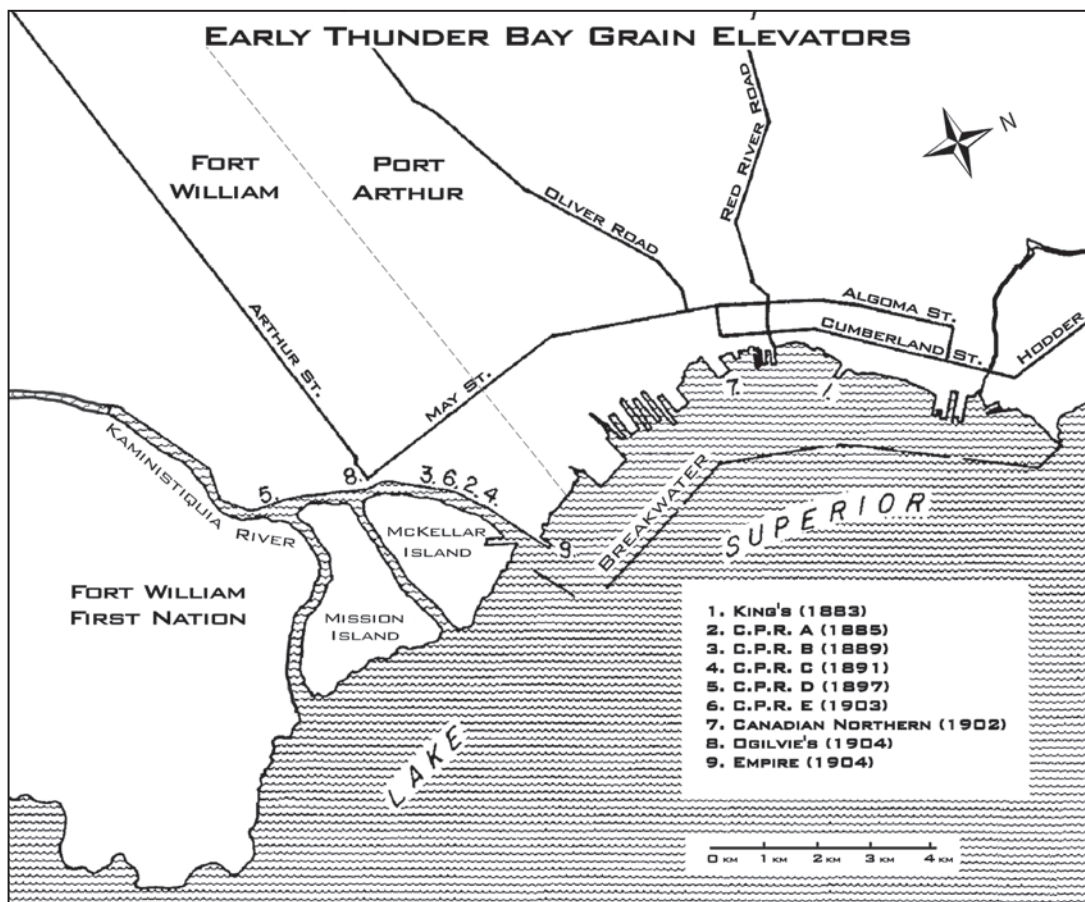
On the morning of 10 April 1891, a clerk in the Office of Assistant CPR President Thomas G. Shaughnessy date-stamped receipt of a letter from J.G. King of Port Hope, Ontario, making a proposal concerning the company's grain elevator at Port Arthur. The letter was written from Toronto the day before on W.D. Matthews & Co. stationery and read as follows:

"I understand that the C.P.Ry are not using their Elevator at Port Arthur. And I write to

³² VHLB 29: 110, VH to Mitchell, 11 February 1889; VHLB 29: 654, VH to King, 30 March 1889. *Rat Portage News*, 29 March, 7 and 24 May 1889 citing the *Trade Review*, *Winnipeg Commercial*, and *Nor'West Farmer and Miller*, 8 (June 1889), 163. McGaw (1846-1916) managed the Goderich ON Ogilvie flour mill, then the Winnipeg mill, and partnered with Joseph Harris and others to form the Dominion Elevator Company in 1897. John Everitt, Roberta Kempthorne, "The Flour Milling Industry in Manitoba since 1870," *Manitoba History*, 26 (Autumn 1993), 2-14.

³³ Wilmot Deloui Matthews (1850-1919) was an important figure in Ontario's grain, flour, and malting business, earning the sobriquet "barley king," according to Gregory Marchildon in the *Dictionary of Canadian Biography*. King's uncle William King was also a grain buyer for W.D. Matthews, see *PHT*, 1 October 1885, 4 advertisement, Cash for barley.

³⁴ *PHG*, 27 June 1890 noticed that King was staying as the guest of his mother-in-law, Mrs. Holdsworth, on Baldwin St. *PHT*, 7 May 1891, reported King had been selling flour in the Eastern Provinces.



ask—if they would lease the same for a term of years, and allow machinery to be put therein for the purpose of cleaning grain (particularly smutty wheat) & also routing delivery, & shunting facilities for handling and cleaning the grain in transit—without stop off, shunting or other

charges. What is the nominal horsepower of the engine & boiler of the Port Arthur elevator. Or would they grant a site at Winnipeg for the erection of suitable building & machinery for the prompt handling & cleaning of grain there in transit.”³⁵

³⁵ SLB 26: 539, Shaughnessy to Olds, 18 April 1891, with barely legible transcript of King’s letter. SLB 26: 630, Shaughnessy to King, 24 April 1891. CPR Archives file 18205 contains King’s original letter and subsequent correspondence. King had arranged with Toronto grain inspector Joseph Harris to go into the cleaning business together at Winnipeg in the event the Port Arthur elevator could not be leased. See King to Shaughnessy 11 August 1891; Bosworth to Olds 13 August 1891. For Joseph Harris, see *DCB* online. King was not the first to show interest in the Port Arthur elevator. In September 1890, W.D. Matthews, a CPR director since 1888, on behalf of Toronto grain merchant George Alfred Chapman (1841-1915), former president of the Toronto Corn Exchange, asked Shaughnessy if the company was willing to sell or rent the elevator. Initially tempted to lease, Shaughnessy had to decline because he was told that “the foundations of the elevator building at Port Arthur would require a considerable amount of work before the building

Why would a corporation as large as the CPR with a growing grain business consider leasing its first terminal elevator? The wooden grain elevator had been constructed over the fall and winter of 1883/84, on the model of Milwaukee grain elevators. Van Horne had turned to his former Superintendent of Elevators, James Stewart Harvey (1834-1897), to design the CPR's first two grain elevators at Thunder Bay, the 250,000-bushel Port Arthur elevator and the larger 1,000,000-bushel one on the Kaministiquia River upstream from the Fort William Hudson's Bay Company fort. Van Horne might never have built the Port Arthur elevator had conditions for building at Fort William been right in 1883, but most of Prince Arthur's Landing and the Kaministiquia River water frontage was in private hands and had been for years in anticipation of just such an event. Until he had made arrangements with local landowners and the Hudson's Bay Company and its principal shareholder Donald Smith to secure Fort William land and had convinced the federal Department of Public Works to dredge the river, Van Horne had no choice but to build a grain elevator at Port Arthur.

Senator Richard Scott, a former Ontario Commissioner of Crown Lands,

was tasked with handling the company's Ontario land negotiations. Scott concluded an agreement in 1883 with Victoria McVicar whose family held over 600 acres east of McVicar's Creek in Port Arthur and fifty acres bordering the Kaministiquia River in Fort William. And so the elevator and dock were located at Port Arthur on a water lot facing fifty acres of McVicar family land about 1,800 feet east of McVicar's Creek, quite some distance from the town core. It became operational in May 1884, months after the first shipments of Manitoba grain had been handled at the docks of the Fort William Town Plot and Port Arthur without the benefit of elevation in the fall of 1883. The CPR's Fort William Elevator A became operational in 1885.³⁶

The townspeople of Port Arthur, who thought that they had the CPR lake terminus in 1882/83 and had granted a bonus and lakefront property to the CPR, were outraged when, in 1884-85, they saw the company rerouting its main line and locating facilities along the lower Kaministiquia River on land purchased from the Hudson's Bay Company and the McKellar and McVicar families. A tax dispute over the assessment of company property took shape in 1886, culminating on the morning of 9 Decem-

could be loaded." SLB 23: 587, TGS to Matthews, 8 September 1890.

³⁶ Elizabeth Arthur, "William C. Van Horne, the C.P.R. and the Kaministiquia property: a selection of letters," Thunder Bay Historical Museum Society, *Papers and Records*, XIII (1985), 20-7. For J.S. Harvey (1834-1897) see *History of Milwaukee, Wisconsin* (Chicago: Western Historical Company, 1881), 491-92. VHLB 1: 778-79; 4: 842. SLB 1: 104, 107-108, 115, 261, 167-69, 394-96; 2: 691-92. Harry Sellers, "The Early History of the Grain Handling and Transportation of Grain in the District of Thunder Bay," Thunder Bay Historical Society *Reports of Officers and Papers 1909-10*, 20-26. See DCB entries for Richard William Scott (1825-1913), Victoria McVicar (d. 1899) and her father Robert McVicar (d. 1864). *DTJ*, 14 June 1937, Section two, 20, has a detailed history of grain handling at Thunder Bay from 1883.

ber 1889 with the seizure by the town of a CPR yard engine and cars for unpaid taxes. It would not be settled until December 1899 when agreements with both the Canadian Pacific and Canadian Northern Railways were reached.³⁷

That seizure and the manifest ill-will of the town's anti-CPR faction angered William Van Horne and his Western Superintendent William Whyte. Van Horne may never have threatened to let grass grow in the streets of Port Arthur, as legend has it, but he did threaten to dismantle the company's buildings, including the elevator, out of fear that hotheads might set fire to them. Port Arthur was to be humiliated. On the last day of December 1891, Van Horne extended the Eastern Division to the eastern limits of Fort William, "making Port Arthur a way station." He moved as much property and as many employees as he could to the lower Kaministiquia river, including package freight carried by the company's steamships. "We are not disposed to waste any sweetness" on the people of Port Arthur, he wrote contemptuously three years later to

the company's Toronto lawyers.³⁸

The consequence of this dispute on Port Arthur's elevator was that by April 1891 it had become a "source of difficulty and annoyance" to the company. The company was prepared to leave it idle if need be. In Van Horne's words, "The Port Arthur people should remember that railways as with individuals rather than pay out one dollar unjustly will pay five dollars to avoid it."³⁹

If it was the CPR's determination to be rid of Port Arthur and its vexing tax collector that gave J.G. King his opportunity, another factor, equally decisive, was whether the CPR's elevators should be cleaning, scouring or manipulating grain.⁴⁰ King's proposition precipitated the company into weighing the pros and cons of continuing to clean grain at their elevators. William Whyte, superintendent of the Western Division, who had had the Port Arthur elevator's cleaning equipment moved to the Fort William elevators and had scoured wheat for shippers, was unenthusiastic about a cleaning elevator at Port Arthur.⁴¹ Senior

³⁷ McVicar agreement, Elizabeth Arthur, *Thunder Bay District, 1821-1892* (University of Toronto Press, 1973), 216-17. For a popular account of the dispute, see George Campbell, *The Town That Arrested a Train* (Thunder Bay ON, 1981). VHLB 32: 179, VH to Whyte, 21 October 1891. VHLB 33: 236-39, VH to Whyte, 21 January 1890; 33: 357-58, VH to Thomas Marks, 2 February 1890; 33: 758-60, VH to Mayor Aaron Squier, 11 March 1890.

³⁸ VHLB 39: 514-15, VH to Whyte, 31 December 1891. VHLB 47: 220, VH to the CPR's Toronto law firm Wells & MacMurchy, 10 August 1894. See *DCB* online for William Whyte (1843-1914).

³⁹ SLB 29: 198-200, TGS to Olds, 15 October 1891. VHLB 33: 236-39, VH to Whyte, 21 January 1890.

⁴⁰ By 1891 the CPR had two large elevators A and B at Fort William and was erecting a third elevator C on the Kaministiquia river. Despite protestations, CPR elevators cleaned grain and probably had smutters, VHLB 8: 732-33, VH to J.M. Egan, 23 November 1884, "I think it will necessary to put another wheat cleaning machine at Port Arthur elevator and another of the largest size at Fort William." Egan wrote Barnard & Leas Co, Moline, IL, manufacturers of Victor smutters, advance brush & smut machine, Victor brush scourer, 3 December 1884, CPR Archives files 6747 and 20221.

⁴¹ SLB 29: 198-200, TGS to George Olds, 15 October 1891, "Whyte seems to be of opinion that it is a mistake to permit cleaning in Port Arthur, but I can see no reasonable grounds upon which to raise such an objection."

management, according to Van Horne, “finally decided that it would be best for the railway company to keep strictly clear of anything but elevating, storing and shipping.”⁴²

Thomas Shaughnessy, who handled all the negotiations with King from Montreal head office, showed enthusiasm for the scheme from the beginning. The King proposition would generate revenue from an idle property, and it would deflect criticism away from the CPR to a new middleman. Moreover, in Port Arthur, King was fully under the CPR thumb whereas in Winnipeg they could not as easily control his dealings with rivals.⁴³

King, meantime, was faced with the practical details of leasing the elevator, getting financing for the venture, and outfitting it with the necessary cleaning equipment. It is a tribute to King’s tenacity that he overcame problems which would frighten off other men. He was faced with capital expenditures for a building which the CPR was reluctant to maintain. Whereas Shaughnessy had told W.D. Matthews in September 1890 that there were problems with the founda-

tions, he now told King that although “the building has settled somewhat, I think you will find it all right for your purposes. We would not be inclined to spend any money on it.” Although the CPR Board of Directors authorized the sale of the elevator to King for \$35,000, King wisely chose to lease it, pending a thorough investigation of the elevator’s foundations. The lease terms were firmed up by October by which King was to be reimbursed by the CPR up to \$2,000 for repairs to the foundations. King signed the lease with the company on 19 October 1891. With the stroke of a pen, the railway and King had created Canada’s first “hospital elevator.”⁴⁴

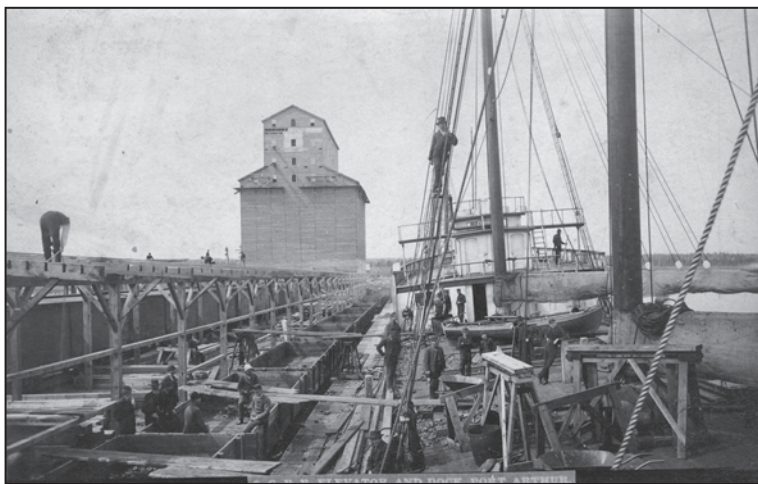
With the consent of the company, he entered into a five-year partnership with the principal business family of Port Arthur, Thomas Marks and his nephews, George Thomas Marks and Harold Andrew Wiley, commencing 1 January 1892, with two-thirds of the profits going to the Marks family, the latter agreeing that the partnership would reimburse King up to \$4,500 for his initial expenses.⁴⁵ The partnership wasted no time in acquiring machinery and customers.

⁴² Van Horne’s concern about manipulating grain goes back to 1884 when he wrote farmer activist George Purvis on the issue, VHLB 7: 578-83, 13 September 1884. VHLB 40: 751-52, VH to Whyte, 23 May 1892. VHLB 41: 912-14, VH to *Manitoba Free Press* editor W.F. Luxton, 12 October 1892, has the fullest explanation of the Company’s position on cleaning and mixing grain. MacGibbon, *Canadian Grain Trade*, 159, cites part of Van Horne’s 23 May 1892 letter but without a source for the quotation.

⁴³ SLB 28: 301, TGS to G.M. Bosworth, 12 August 1891.

⁴⁴ The term “hospital elevator” was defined after King’s death in the Canada Grain Act, 1912, S.C. 2 George V, c. 27, as “every elevator or warehouse which is used for the cleaning or other special treatment of rejected or damaged grain and which is equipped with special machinery for that purpose.” *FWJ*, 16 November 1892; 7 June 1893. SLB 26: 630, 24 April 1891; 26: 759, 14 July 1891; 28: 299, 301, 12 August 1891. Lease, SLB 28: 747-48; 29: 198-200. *Daily Sentinel*, 30 September, 3 October 1891. *FWJ*, 11 November 1891; 1 January 1892. *DTJ*, 20 April 1920, 1.

⁴⁵ Lakehead University Archives, MG5 no. 51 (Flatt collection), agreement dated 16 March 1892.



Canadian Pacific Railway's first Lakehead grain elevator and dock under construction in 1883. J.G. King leased it in 1891. Thunder Bay Historical Museum Society 973.27.43.

Eight grain cleaners were in place by January 1892, and another two were installed in July by which time he was employing twenty men. They were so busy by October 1892 that "they cannot begin to receive all the grain that is offered." Marks King & Co. fitted up the shed on No. 5 dock for the storage of grain in January 1893.⁴⁶ Partner George Marks told the Port Arthur Board of Trade that "during the year 1892 more than 1,000,000 bushels of the Manitoba crops of 1891 and 1892 were handled at this point." By April 1893 King was investigating new patent wheat dryers he had seen in Min-

nesota. The elevator was taxed to its capacity with wheat from the crop of 1895 such that the shed on No. 5 dock had to be used again.⁴⁷

King had decided by 1895 to squeeze out the Marks family at the

expiration of the lease. He entered into a secret agreement with the CPR to run the elevator in partnership with the company, Shaughnessy agreeing to put in and pay for a new stone foundation to which Marks King & Co. had to contribute \$1,000, and King an additional \$2,500 unknown to his partners.⁴⁸

The storage of grain was not King's business, except for winter storage when grain could not be shipped. He would make his money by cleaning, drying, and shipping as much rejected grain as his equipment permitted, not warehousing it. To recoup any money from

SLB 30: 205, TGS to King, 1 March 1892.

⁴⁶ The Marks dock (No. 1 dock) had a primitive steam-powered elevator used for elevating and storing the oats of railway contractors on its dock warehouse as early as 1879, so it might well be considered Thunder Bay's first grain elevator. *Thunder Bay Sentinel (TBS)*, 8 and 15 May 1879, 3. *DTJ*, 25 September 1902. *Port Arthur Weekly Herald and Algoma Miner (PAWH)*, 13 January 1893; 8 May 1896. *Fort William Daily Journal (FWDJ)*, 4 and 24 January 1896, 3.

⁴⁷ *TBS*, 1 July 1892; 15 July 1892, 1, "Extensive Industry. Marks King and Co. Grain Elevator," 28 October 1892; 7 April 1893. *PAWH*, 9 January 1892, 4; 9 July 1892; 13 January 1893; 24 February 1893.

⁴⁸ SLB 40: 533, TGS to Whyte, 7 August 1894; 40: 1042, TGS to Judge Clark, 22 September 1894; 43: 267, TGS to King, 4 June 1895; 43: 456, TGS to Marks, King & Co, 21 June 1895; 43: 464-65, TGS to Whyte, 21 June 1895; 43: 831, TGS to Marks, King & Co, 20 August 1895; 50: 699, TGS to King, 1 February 1897. *TBS*, 2 August 1894, 4.

frosted or smutted wheat, farmers and middlemen had to have the wheat dried, cleaned or scoured in large quantities so that it could be regraded. Over the next ten years, the relative importance of each function, cleaning, scouring, drying, and the disposal of screenings, would change as farming practice and grain trade technology changed.

Grain cleaning and controversy over grading, scouring and mixing grades of wheat

Long before grain elevators, wheat, and other grains had to be cleaned before milling. Winnowing does not eliminate impurities. The goal of cleaning is to remove non-wheat material such as dust, earth, sand, weed seeds, grains other than wheat, and shrunken, broken, damaged, and diseased kernels of wheat not fit for milling. Using machines to do this type of cleaning was not controversial. What was controversial was cleaning wheat infected with the fungal disease smut, and drying frosted or wet wheat so

that it could be graded and mixed with higher grades. Farmers were highly suspicious that the grading of wheat and its subsequent manipulation in grain elevators was to their detriment⁴⁹

Grain had to be weighed and cleaned to be graded. Grading at that time was subjective and unscientific, as we can see from the very simple 1863 statutory definition of No. 1 Spring Wheat as “plump and well cleaned” to the more precise definitions in the General Inspection Act of 1899 that defined Manitoba No. 1 hard as “plump, sound and well cleaned, weighing not less than sixty pounds to the bushel, composed of at least seventy-five per cent of hard Red Fife wheat.”⁵⁰

Why could grain not be cleaned by the farmer or the country elevator? At that time and into the 1920s, argues Duncan MacGibbon, it was simply too costly for them to purchase cleaning and drying equipment when a terminal elevator could handle large quantities speedily, clean the grain fully, and find a market for the resultant screenings.⁵¹

While managing the Keewatin flour mill, King had recognized how badly

⁴⁹ Chris Miller, *Importance of Grain Cleaning for Food Production* (Engrain and Kansas State University Department of Grain Science and Industry, no date) has illustrated slides that clearly show the methods and stages of cleaning grain. <https://www.grainnet.com/pdf/Grain_Cleaning_GEAPS.pdf> (accessed 7 May 2021)

⁵⁰ S.C. 62-63 Vict. 1899, c. 25. Canadian Grain Commission, *Official Grain Grading Guide*, <www.grainscanada.gc.ca> (viewed 14 June 2021). John F. Varty discusses the evolution of Canadian grading criteria in his, “On Protein, Prairie Wheat, and Good Bread: Rationalizing Technologies and the Canadian State, 1912-1935,” *Canadian Historical Review*, 85 (December 2004), 721-53.

⁵¹ MacGibbon, *Canadian Grain Trade*, “Cleaning Grain at Country Elevators,” 109-111. In 2021 Thunder Bay grain elevators still clean grain for customers when requested, despite a 1998 study that concluded it is more profitable to clean grain on the Prairies than at terminal elevators. *The Economics of Cleaning Grain on the Prairies: Final Report*, prepared by the Grain Cleaning Study Consortium, Prairie Horizons Ltd. and JRG Consulting Group (Winnipeg: Agriculture and Agri-Food Canada, Adaptation and Grain Policy Directorate, 1998). There is a large literature on the economics of grain cleaning.

smut was damaging the wheat that he received from Manitoba, a problem that worsened in 1891 and became a persistent issue throughout the 1890s.⁵² As a former malster and miller, King knew how to remove smut from barley and wheat, as he told the authorities in Ottawa in 1894 when a controversy broke out over the mixing of scoured wheat from his "hospital elevator" with Manitoba No. 1 hard, following complaints from farmers and the Montreal and Toronto Boards of Trade. "When he was in the milling business in Port Hope... he frequently purchased large quantities of smutty fall wheat, thoroughly scoured and cleaned it, and without the addition of any other wheat, made it into flour, which was inspected in Montreal as superior extra."⁵³

As agreed with the CPR in 1891, it fell to King to clean, scour and dry

rejected and diseased wheat and to defend himself against criticism. Thomas Shaughnessy reiterated this in a letter to the Canadian Fire Underwriters Association in 1895,

In our elevators at Fort William, grain is simply unloaded, elevated, transferred and shipped, and is not subjected to treatment of any kind, although we claim the right under our policy to run machinery for taking dust or smut out of the grain if we find it desirable. Port Arthur elevator is used for the cleaning as well as the storage of grain. Messrs Marks, King & Co., the lessees, use no machinery but such as is in use in nearly all elevators in the States, viz., wheat cleaning and scouring machinery which is made by Barnard & Leas, the Eureka Company, Silver Creek, and Richmond [Manufacturing Co.] of Lockport.⁵⁴

Subsequent correspondence with William Whyte suggests that the Fort William elevators did indeed clean wheat, leaving King to deal with the more prob-

⁵² "Grain Defects," *Nor-West Farmer and Miller* (Winnipeg), 10 (November 1891), 308-309. "Smutty Wheat," *Nor-West Farmer and Miller*, 11 (February 1892), 43-44. "Warning against Smut," *Nor-West Farmer and Miller*, 11 (March 1892), 69. "Smutty Wheat," *The Nor-West Farmer*, 14 (September 1895), 168. Ralph H. Estey, "Grain and Forage Crop Diseases in the Early History of Plant Pathology in Canada," In *Essays on the Early History of Plant Pathology and Mycology in Canada* (Montreal: McGill-Queen's University Press, 1994), 74-115.

⁵³ *Manitoba Free Press*, 22 October 1894, 2 "Miall's Denials," citing the *Montreal Witness*. "The Wheat Cleaning Question," *Thunder Bay Sentinel (TBS)*, 16 November 1894, 1, presents a comprehensive account of King's arguments in defence of scouring wheat. Typical of those who disagreed with King is the testimony before the Select Standing Committee on Agriculture and Colonization in June 1906, *Journals of the House of Commons of Canada*, 41, part 2, 5-6 Edw. VII, Appendix No. 2, "Eradication of Smut in Wheat," 125-26. Dominion Seed Commissioner George H. Clark said, "There is a loss through the handling of smutted wheat from the time the farmer markets it until it gets to the hands of the miller, and even after it has been converted into flour." Mr. Shaw of the Hedley Shaw Milling Co. of Toronto wrote of smutty Manitoba wheat, "none of this wheat is ground without being first thoroughly scoured and cleaned... After the wheat is thoroughly cleaned we do not consider it to be worth from 3 to 5 cents per bushel as much as it would have been had there been no smut on the wheat. The wheat that is very smutty and which is inspected No. 2 Rejected cannot be used for high grade flours, as it is impossible to clean it so that you cannot detect the smut in the flour."

⁵⁴ SLB 44: 427, TGS to Alf W. Hadrill, Canadian Fire Underwriters Association, 15 October 1895, but see SLB 60: 819, TGS to Whyte, 12 July 1898.

lematic car loads. In the fall of 1901 King was reported to have added an additional \$30,000 worth of drying and cleaning equipment, which “instead of the wheat being scoured dry, it is washed free of all dirt, smut, etc. and then dried.” He was able to clean 30,000 bushels every twenty-four hours.⁵⁵

It is far beyond the scope of this article to examine the changes which occurred between 1892 and 1910 in grain standards and grain handling, as a result of political pressure from western farmers and eastern millers. King found himself caught in these recurring battles that dogged Canada’s nascent western grain trade.⁵⁶ He would be subjected to frequent inquiries into his practices by government officials and commissions. In 1894 the assistant Commissioner of Inland Revenue, William J. Gerald, conducted an investigation into the grading and mixing of grain at Thunder Bay that resulted in a prohibition on mixing

scoured wheat with Manitoba No. 1 hard. Amendments to the General Inspection Act in 1899 prevented scoured wheat from being assigned to one of the top six grades. Good slightly damp wheat was to be reported as “no grade.” Wet, musty or badly damaged wheat was classed as “rejected.”⁵⁷ In April 1899 King and Frank Gibbs traveled to Ottawa in an unsuccessful bid to prevent Winnipeg taking control over grain inspection. They testified in 1900 at the first Royal Commission on the Shipment and Transportation of Grain which resulted in legislation requiring all elevators to take out an annual license and regulated storage, cleaning, and handling charges. In 1906 King testified before the Royal Commission on the Grain Trade of Canada. In every case he was well placed to defend himself with his extensive experience as a grain buyer, miller, and elevator operator, but the outcome was increased government scrutiny and stricter

⁵⁵ Patents, trade catalogs and photographs of nineteenth-century scouring equipment, like the Eureka Brush & Finishing Machine, may be found on websites. These smutters were first patented in the U.S. in the 1850s. “The McDaniel Wheat Washer,” *The Weekly Modern Miller* (St. Louis), 26 (22 September 1900), 21. *DTJ*, 16 January 1901, “To Study the Situation,” 15 May 1901, 3 washing plant.

⁵⁶ MacGibbon, *Canadian Grain Trade*, 157-164. Wilson, *A Century of Canadian Grain*, 25-46, chapter 2, “Producers’ Grievances and Their Redress.” Typical criticisms from millers may be found in *Daily Mail & Empire* (Toronto), 21 September 1895, 6, “The Mixing of Grain: views of the Secretary of the Miller’s Association” and *Weekly Northwestern Miller* (Minneapolis), 4 October 1895, “In the Dominion,” 551-55. In the news report, “Finding Fault with Mr. King. Grain Men Claim He is Over-riding the Inspector’s Grading,” *Manitoba Morning Free Press*, 21 October 1902, 9, King explained the practical difficulties of removing oats from wheat and how grading at different places (Winnipeg and Fort William) impacted him negatively. For King’s defence of scouring, see “The Wheat Cleaning Question,” *TBS*, 16 November 1894, 1.

⁵⁷ W.J. Gerald (1850-1923) inquiry, *PAWH*, 10 November 1894. *FWDJ*, 21 November 1894. Regulations were promulgated in early August 1895 that “No wheat which has been subjected to scouring, or brushing for the removal of smut, bunt or other fungoid growth, shall in any case be mixed with No. 1 Manitoba Hard wheat.” Orders-in-council of 8 August, 29 August, 14 October 1895, 1895-2479, 1895-2615, 1895-3019. Cancelled by OC 1896-3160, 26 September 1896 under the Liberals, amended OC 1896-3364, 5 October 1896 prevented mixing of scoured wheat with No. 1 Manitoba Hard and No. 2 Manitoba Northern grades. S.C. 62-63 Vict. 1899, c. 25.

government regulations.⁵⁸

Screenings and Dockage from cleaned grain

The cleaning of grain produces by-products (weed seeds, shrunken and broken kernels, chaff, hulls, dust, etc.) known as dockage or screenings. The screened material can be segregated into refuse and grade categories, and sold for animal feed and other uses. Sir Thomas Shaughnessy was continually asking William Whyte to determine if the screenings of the Fort William elevators could be monetized. Providing screenings to farmer Richard Smith, a former CPR boarding car provisioner, cost Matthew Sellers his job as superintendent of the company's elevators in 1903. Shaughnessy favoured selling them to King, though there is no evidence that this happened. King installed a "screening separator" in 1903 that would separate six different kinds of mixed grain, bringing each kind down in a separate spout. By March-April 1904 he had received two chopping machines "to grind all the foul seed that comes from the grain cleaned so that it will not germinate" and offered it for sale. He also installed flax cleaning

machinery in 1902 and shipped the first full cargo of flax ever shipped from the west, 7,000 bushels, in 1903.⁵⁹

In late 1907, Shaughnessy, after examining King's statement of results for the Port Arthur elevator, ventured this opinion,

While the profit is a fair one, it strikes me that it all comes from the by-products, that is, that the cleaning and scouring were done for nothing; indeed, that they would have shown a slight loss if it were not for the amount realized from what you call the by-products. Am I not right about this?

The sharp-eyed Shaughnessy was right that these screenings were valuable, not only to King, but to all elevator operators.

Excessive dockage by grain elevators was highly controversial, and in this early period was not well regulated until the Manitoba Grain Act, 1900. In 1908 elevator operators like King were required to compensate owners for the commercial value of screenings. The volume of screenings was such that in 1910 the W.P. Devereux Co. of Minneapolis had contracts to take all grain screenings from Thunder Bay elevators "which amount to from ten to twelve cargoes of 100,000 bushels to the cargo annually."⁶⁰

⁵⁸ Winnipeg taking control over grain inspection. *FWDJ*, 18-19 April, 1 May, 1 September 1899; 10 January 1902. Testimony Royal Commission on the Shipment and Transportation of Grain (Canada. Sessional Papers, 1900, no. 81-81b). *DTJ*, 23 January 1900. Testimony 1906 Royal Commission on the Grain Trade of Canada (Canada. Sessional Papers, 1908, no. 59). *DTJ*, 12 September 1906. Toronto *Globe*, 13 September 1906, 10, "The Grain Commission: Mr. King discusses mixing of grain."

⁵⁹ John R. Dymond, *Grain Screenings* (Ottawa: Dept of Agriculture, 1915) describes the composition of grain elevator screenings for the 1912 crop. Chris Miller, footnote 49, shows photographs of typical screened material and grain separators. *DTJ*, 14 August, 5 September, 28 October 1903; 15 March, 6 April 1904. Flax *DTJ*, 5 November 1902, 3; 4 November 1903. Port Arthur *Daily News* (*PADN*), 8 February 1906, 2, ad. Scourings for sale \$5 per ton.

⁶⁰ SLB 60: 819, TGS to Whyte, 12 July 1898; 83: 545, TGS to Whyte, 31 December 1903; 86: 8, TGS

Drying Grain

As farmers learned how to mitigate smut by treating their seed, the cleaning and drying of wheat became the King elevator's primary functions.⁶¹ The problem of frosted, damp, and wet wheat was an old one. An 1862 *Toronto Globe* article on the Canadian flour and grain trade of 1860-61 discussed the merits of kiln-drying damp wheat. The CPR's Winnipeg freight agent, William Harder, sent a sample of frosted wheat to Van Horne in November 1883, "It has a sort of clammy feeling even when supposed to be very dry... This wheat can at the present moment be purchased at about 30 to 40 per cent less than good wheat." His successor Robert Kerr noted that up to 24 October 1885 the grain inspector reported that forty-seven per cent of binned wheat was frosted and six per cent rejected. Statistics from 1895 suggest why the drying of grain became the focus of King's elevator. The *Daily Journal* reported that of 5,250,000 bushels received and graded at Fort Wil-

liam by November 1, 27½ per cent were frosted. Superintendent William Whyte told the *Winnipeg Free Press* that the reason for delays in shipping that fall was "due to the incapacity of the Port Arthur elevator apparatus to scour and clean the lower grades of wheat."⁶²

King took steps in 1898 to expand his drying capacity by installing in a new annex the latest American grain driers newly patented by Wynn Edward Ellis of Milwaukee.

"The grain is dried by hot air forced through it from the boiler by a blower. The boiler forces air through coils of pipe to a sieve-like machine on the top of which the grain lies in a thickness of about two inches. The hot air is forced through it, then through the cleves and then the grain is put into the elevator day and night. He will put through about fifty car loads of grain per day."⁶³

One consequence of this was a sharp increase in his energy costs. He was consuming one and a half car loads of coal per day during a February cold snap in 1899.⁶⁴ The new cleaning and drying plant caught

to Whyte, 16 December 1904; 88: 359, TGS to Whyte, 18 January 1906; 91: 837, TGS to King, 5 November 1907 (file 85797). *DTJ*, 20 August 1903, 4 Sellers. Fort William *Morning Herald*, 4 June 1910, 14 Devereux. *DTJ*, 12 May 1923, 2. Dockage legislation S.C. 63-64 Vict., c. 29 Manitoba Grain Act; 7-8 Edw. VII, 1908, c. 45, s. 10 (10).

⁶¹ *DTJ*, 20 November 1915, "Grain Experts Fully Alive to Needs of West." Two of King's former employees, John Redden and T.J. Fisher, recollected the origin of drying western grain, and the shift from scouring for smut to cleaning and drying in the 1890s.

⁶² *Toronto Globe*, 30 January 1862, 1, "The Flour and Grain Trade." CPR Archives file 2440, Harder to VH, 20 November 1883; file 11141, Kerr to VH, 3 November 1885. *FWDJ*, 7 November 1895, 2, and 3, "Ties up the Cars" citing the *Winnipeg Free Press*.

⁶³ Grain drier patent issued to Wynn Edward Ellis (1856-1913) 4 January 1898, first filed 24 January 1896. <<http://www.google.com/patents/US596655>>. *FWDJ*, 28 October, 2 November (quotation), 16 and 20 December 1898; 23 January 1899 installed in King elevator. Grain dryer patents no 80973, 81996 issued to J.G. King, 21 July 1903, first filed 11 February 1903, *The Canadian Patent Record Office* (July 1903), 1499.

⁶⁴ *FWDJ*, 10 February 1899. Even today, as two agricultural engineers have noted, "High-capacity drying equipment requires major initial capital investment, and incurs significant operating costs because of the large amounts of energy needed to operate these systems." Such expenditures were impossible for individual

the attention of the *Scientific American* and Britain's *The Windsor Magazine*, both of which devoted illustrated articles to his "wheat hospital."⁶⁵ The American trade publication *The American Elevator and Grain Trade* declared in 1903 that the grain drier had earned a place in the grain trade, not only as a benefit to the farmer, but as a money-maker for the terminal operator. Operators understood "how to dry grain without cooking the starch or bringing the grain to the brittle stage."⁶⁶

Expanding the CPR-King elevator

The 1883 elevator, like its much larger successors, CPR elevators A and B at Fort William, was a rectangular wooden warehouse, 131 feet high, clad in iron, topped by a gable-roofed cupola. The cupola was the workhouse, and below it were the square wooden bins where the grain was stored.⁶⁷ To provide sufficient draft for vessels loading grain, the Port Arthur elevator had to be built perpendicular to the shore towards the end of a long dock into Thunder Bay where box-cars could pass directly through the structure to facilitate elevation of the grain to the handling floors in the cupola.

Over the years, King added annexes

for boilers and drying equipment and installed his own dynamo for electric light during the 1890s. By 1902, to accommodate the 60,000 and 80,000 lb railway cars that were replacing the old 40,000 lb cars, King increased the size of his weigh scales, lengthened the elevator legs as well as the hopper so that the hopper extended the width of the car, allowing four men to shovel out the car in less than seven minutes.⁶⁸

A number of factors would coalesce to favor expansion of King's leased elevator. As the volume of western grain increased, plans were initiated by the CPR to expand their storage and handling facilities. In 1897 the company began building its first steel elevator, known as CPR Elevator D, at Fort William upstream opposite the Mission River branch of the Kaministiquia river, but although operational by mid-1898, the elevator did not ship out grain until a year later.

Meantime, other players were challenging the Canadian Pacific Railway's monopoly. The arrival of Mackenzie & Mann's Canadian Northern Railway in Port Arthur changed the dynamics of the grain trade. In March 1902 the CNoR opened a grain elevator (CNoR Elevator

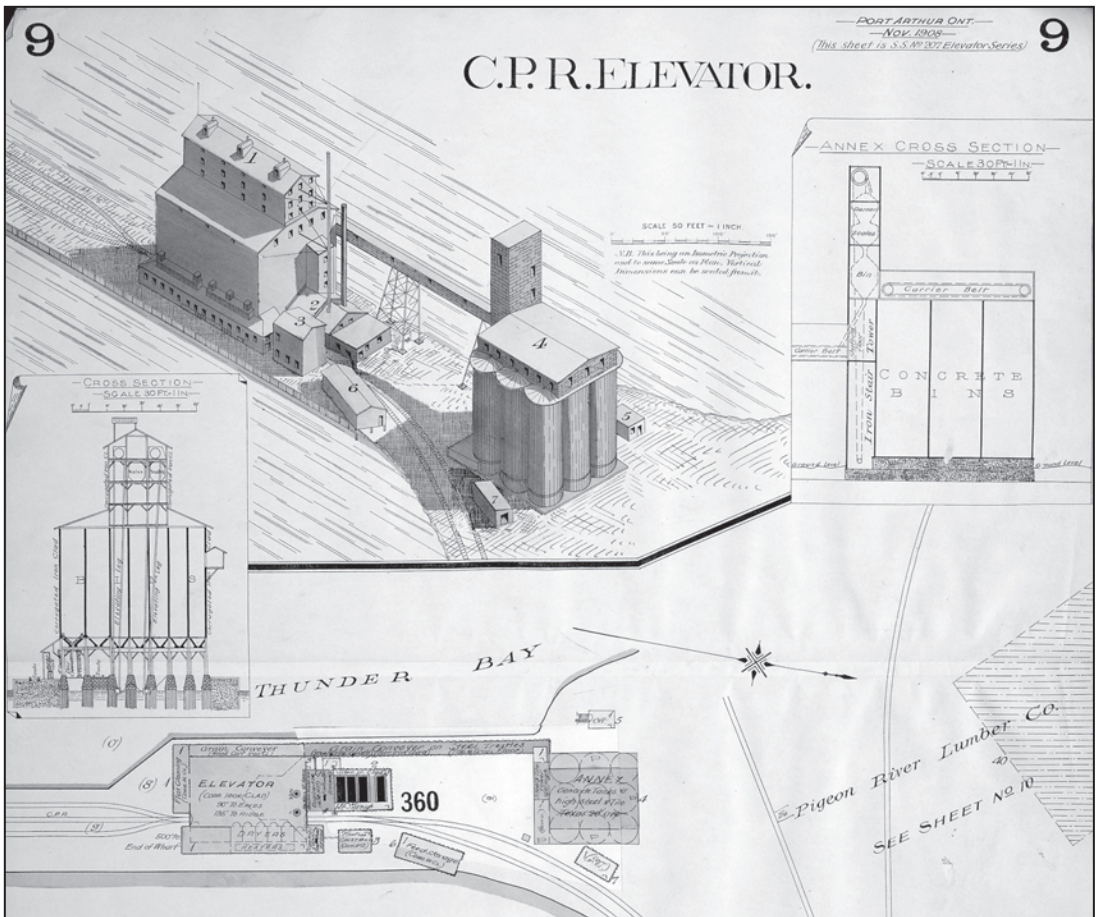
farmers. Dirk E. Maier and Fred W. Bakker-Arkema, "Grain Drying Systems," 2002 Facility Design Conference of the Grain Elevator & Processing Society, July 28-21, 2002, St Charles IL, 7.

⁶⁵ "A Wheat hospital on Lake Superior," *Scientific American*, 84, (April 27, 1901), 264-65 has six photographs. F.A.A. Talbot, "A Wheat Hospital," *Windsor Magazine* (London), 19 (1903-04), 729-34, has thirteen photographs, nine of interior equipment.

⁶⁶ "The Drying Question," *American Elevator and Grain Trade*, 22 (15 September 1903), 137.

⁶⁷ *TBS*, 9 February 1884, dimensions. Toronto Public Library Goad map Port Arthur November 1908 sheet 9. TBHMS photos 973.27.43 and 973.80.103a.

⁶⁸ *DTJ*, 3 October 1900, 3; 1 and 19 December 1900, 3; 14 October 1902, 3 "King elevator more speedy," *Manitoba Free Press*, 20 October 1902, 6.



CPR King elevator showing the original 1883 structure and the new annex with cross sections. Toronto Public Library Goad fire insurance map for Port Arthur. November 1908, sheet 9.

A, built of wood like CPR elevators A and B) and for the first time in the history of grain handling at Thunder Bay there was competition. King promptly reached an agreement with the CNoR to treat its damaged wheat after which it would be re-loaded into cars and stored in the railway's new elevator de-

spite Shaughnessy's initial opposition.⁶⁹ W.W. Ogilvie, who had built an elevator in Montreal in 1898, began plans in 1899 for a mill and elevator at Fort William. Ogilvie's death and the company's subsequent reorganization delayed its construction until 1904. A consortium of Winnipeg grain companies erected

⁶⁹ SLB 76: 405, TGS to King, 29 December 1901. *DTJ*, 7 and 19 March, 8 April 1902. It is not known if King continued to clean CNoR grain after the railway leased its Port Arthur elevators to Peavey's British America Elevator Co. in 1906.



King's Hospital Elevator, 1906. These nine cylindrical reinforced concrete bins built in 1903 using Haglin's slip-form method of concrete construction are the first known concrete silos to have been erected in Canada for a grain elevator. The 1883 wood crib elevator (at right) was demolished in May 1923. (Vervoort, 1990, below). TBHMS 975.1.597.

grain facilities at Duluth, Minneapolis, Montreal, and other places and interviewed

the Empire Elevator at the mouth of the Kaministiquia river in 1904 and installed cleaning equipment.⁷⁰

King wanted to expand his storage facilities in 1898, but was told by Shaughnessy that it was "not an opportune time." By 1900 it was recognized that expanded facilities were needed for cleaning grain, either an expansion of King's Port Arthur elevator or a cleaning elevator at Fort William. It made more sense for the CPR to centralize all its operations at Fort William where its facilities were exempt from municipal taxation under a twenty-year agreement made in 1890. For three years 1900-02, while CPR management vacillated over the site and the method of construction, King visited

engineers and contractors who were developing new methods of building grain elevators. In 1900 he met with Frederick J. Weber of Buffalo who had built Fort William's steel Elevator D in 1897. By August 1901 the CPR was leaning towards using concrete. He discussed plans and specifications with two Minneapolis experts in tile and concrete construction, Edward Doliver Mayo, engineer with elevator contractors Barnett & Record, and Charles F. Haglin, but in September 1901 the annex was postponed, while the CPR dealt with Fort William's opposition because of its 1889-90 agreement with the CPR that all the company's works were to be located there. Although CPR acting engineer-in-chief Henri-Etienne

⁷⁰ *FWDJ*, 12, 14 and 18 August 1899. *DTJ*, 8 and 29 January 1900; 11 November 1902; 20 April 1904. The death of W.W. Ogilvie in January 1900 led to postponement of construction. It was not until November 1902 that the new owners negotiated a new agreement with the town, but a contract was not signed until February 1904 with Macdonald Engineering Co. to build a 500,000 bushel steel elevator on the Kaministiquia river. Empire Elevator, *DTJ*, 14 March, 27 June, 30 July 1904.

Vantelet told the *Montreal Star* that “we have to make haste slowly” because elevator construction was in a period of transition, it was clear by March 1902 that the only question left to decide was whether the bins would be reinforced concrete or tiles strengthened with bands of steel.⁷¹

CPR management announced in April 1902 that, because of King’s agreement with the Canadian Northern and lack of space on the Kaministiquia river, it would not erect a Fort William cleaning elevator, but would build nine circular concrete storage tanks at Port Arthur with a capacity of 500,000 bushels. The choice of reinforced concrete proved fortuitous when the workhouse of the CPR’s 1897 steel elevator, supposed to be fire-proof, went up in flames on 10 May 1902, damaging the nearest steel storage tanks. The town of Fort William was pacified because of the CPR’s plans to build at Fort William an addition to steel Elevator D, and a large annex to Elevator B which became known as Elevator E.

By early 1903 the contract for the storage annex had been let to Barnett & Record of Minneapolis. It was located close to shore since vessels would be loading at the old elevator where there was sufficient draft of water. Unlike the 1883 wood

crib elevator, the nine cylindrical storage bins of reinforced concrete marked an architectural milestone, the first generally acknowledged instance in Canada of concrete silos typical of modern grain elevators. Work began in May 1903. In August the *Daily-Times Journal* described the slip-form method of concrete construction pioneered by Minneapolis architect-engineer Charles F. Haglin.⁷²

“The building of the tanks is done in an altogether novel way. A wooden form three feet high and with its inside circumference equal to the outside circumference of the tanks is placed on the foundation and the concrete filled in. As the mixture sets the forms are jacked up and more concrete poured in so that one form does for a whole tank and does away with the necessity of building a new form at each section.”

The cylindrical tanks were thirty feet in diameter and ninety feet high. Grain could also be stored in the spaces between the bins. A 90 x 60-foot steel house was built on top of the nine bins to accommodate the conveyor system to the bins. Adjacent was a 16 x 36-foot steel tower 166 feet high, with four floors, containing the elevator machinery, and a three-span steel bridge 230 feet long supported on steel towers sixty feet high that con-

⁷¹ For the rebuff, see SLB 60: 772, 8 July 1898. *DTJ*, 22 January, 3 and 19 February, 2 and 8 March, 19 September 1900; 16 January, 28 March, 15 May, 5-6 August, 11 September, 29 October 1901; 31 January, 24 February, 7 and 10 March, 16 and 23 April 1902. *DTJ*, 7 April 1902, Vantelet. *PAWH*, 29 March 1901 double capacity.

⁷² Haglin’s drawings and blueprints are housed at the University of Minnesota Department of Archives and Special Collections, N33. For his first concrete silo, Jeff Brown, “Prairie skyscraper: the Peavey-Haglin Experimental Concrete Grain Elevator,” *Civil Engineering* (February 2012), 42-43. Ruth J. Heffelfinger, “Experiment in Concrete: a Pioneer Venture in Grain Storage,” *Minnesota History*, 37 (March 1960, 14-18. For E.D. Mayo (1848-1933), *Who’s Who in Engineering 1922-1923* (New York, John W. Leonard Corp.), 857-58 digitized.

nected the annex to the wooden elevator. The bridge contained a conveyor belt to transfer grain from the drying plant to the elevator or from the elevator to vessels. At the same time King overhauled the original wooden elevator.⁷³

The annex began accepting grain into its bins in January 1904. Already 150 car loads of wheat were awaiting treatment. The plant was put to the test in May 1904 when the CPR's 1889 wooden grain elevator, Elevator B, burned to the ground. Wheat salvaged from the ruins was taken to King's elevator for drying. When the season closed in December, King had shipped 700,000 bushels of wheat and had 250,000 bushels of flax in store. There were plans to enlarge the elevator again in 1905 but nothing came of them.⁷⁴

End of an era: David Horn, the Gillespie Elevator, Manitoba Wheat Pool No. 2

Joseph King died suddenly on 30 July 1910 from a stroke "in the machinery rooms where he had spent so much of his

life and upon which he had bestowed so much of his attention." "His caution was proverbial," said the *Daily News*, understandable given his business experience. "He also had his enthusiasms, but they were tempered with extreme vigilance." The rector of St John's Anglican church called him "a man of strong convictions, some would say of strong prejudices," a man with whom he "avoided theological discussions after the first conversation." King had accumulated a fortune of close to half a million dollars "by business acumen and judicial [sic] investment in real estate." According to economist Livio di Matteo, King's probated estate was valued at \$185,945, the seventh highest of all probated estates 1885-1920 in Thunder Bay District.⁷⁵

King had a notable political life apart from grain elevators as an alderman in both Port Hope and Port Arthur, and as a Conservative partisan and candidate for the Legislative Assembly. He was an "ardent advocate of municipal ownership" and a strong proponent of the town using Current River to generate electric power. True to his English roots, he had a

⁷³ DTJ, 15-16 April, 3 June 1902; 9 October 1902, 3; 22 November 1902, 3; 6 February, 15 June, 3 July, 14 August, 5 September 1903. *Manitoba Free Press*, 10 September 1906, 1. "The Canadian Pacific Grain Elevator at Port Arthur, Ontario," *The Engineering Record* (v. 49, no. 15, 19 April 1904), 448-51 has the fullest description of the structures with engineering drawings. Milo S. Ketchum, *The Design of Walls, Bins and Grain Elevators*. 1st ed. New York: Engineering News, 1907 Chapter XIX, 346-51 digitized archive.org. See also architectural historian Patricia Vervoort's articles, "Lakehead Terminal Elevators: Aspects of Their Engineering History," *Canadian Journal of Civil Engineering*, 17, (1990), 404-412, "Lakehead Terminal Elevators: Factors Affecting Survival," Society for the Study of Architecture in Canada, *Selected Papers* (Ottawa), 5 (1982), 30-42, 404-412, and "Towers of Silence: the Rise and Fall of the Grain Elevator as a Canadian Symbol," *Histoire Sociale / Social History*, XXXIX (May 2006), 181-204.

⁷⁴ DTJ, 7 and 13 January 1904; 17 May 1904 salvage; 11 August, 12 December 1904; 11 June 1905.

⁷⁵ PADN, 1 August 1910. Livio di Matteo, "Wealth and Inequality on Ontario's Northwestern Frontier: Evidence from Probate," *Histoire sociale / Social History*, 38:75 (2005), 79-104, Table 13, 101. PADN, 9 March 1909, 1 and 6 where King vehemently opposed building a new Port Arthur high school for "an educational system that did not turn out the kind of men that the country needed."

passion for trees and gardening, promoting the boulevarding of streets and planting of trees in both towns, developing a picturesque Japanese-themed garden around his McVicar Creek home. The home and garden were offered to the city for use as a park after his death. The city turned down the offer and the garden and home deteriorated as time passed.

There is some irony that many photographs of the CPR's first grain elevator identify it as Horn or Horne's elevator, even though King leased it for nineteen years and presided over its glory days.⁷⁶ Soon after King's death, the railway company concluded an agreement with David Horn,⁷⁷ Chief Dominion grain inspector at Winnipeg, to run the elevator. He operated it until about 1918 when it was closed and left idle. In August 1921, the Gillespie Grain Company of Edmonton, Alberta, purchased the Port Arthur elevator and leased the old wooden elevators A and C on the Kaministiquia river from the CPR. The *Daily Times-Journal* reported that,

the old working house has little value and may have to be scrapped. It is still equipped

with the cleaning and drying machinery which was installed there in 1900 by the late Joseph G. King... Later development in methods of treating damaged grain have however rendered the machinery in the Horn elevator out of date.

In May 1923 the 1883 wooden elevator was demolished. A new working house was erected in 1923 and twenty-four smaller storage bins, with a capacity of 660,000 bushels, added in 1928.⁷⁸

In December 1930 the Manitoba Wheat Pool leased the concrete elevator from the Gillespie Grain Company and renamed it Manitoba Pool Elevator No. 2. A spectacular fire destroyed the 1923 workhouse in August 1936. A new workhouse designed by C.D. Howe Consulting Engineers was built by Carter-Halls-Aldinger Co. of Toronto in 1937.⁷⁹ In August 1969 a plaque commemorating the first grain elevator was unveiled on the grounds of Manitoba Pool Elevator No. 2. Joseph King is not mentioned. The abandoned 1903 and 1928 concrete bins and 1937 workhouse still stand today on Thunder Bay's waterfront.⁸⁰

⁷⁶ Typical is the photograph labelled "Horn Elevator" on page 59 of *North of Superior: an Illustrated History of Northwestern Ontario* (Toronto: Lorimer, 2010).

⁷⁷ SLB 98: 409-10, TGS to William Whyte, 4 October 1910 (file 93928). *PADN*, 4 November 1910. David Horn (1849-1933), born Glasgow, Scotland, operated a mill at Hanover, Ontario, moved to Winnipeg in 1882, became the first grain inspector at Winnipeg in 1886 and chief grain inspector in 1899. The Fort William Elevator Co., for which he was managing director, built an elevator with a storage capacity of 1,500,000 bushels in West Fort William in 1913. *DTJ*, 30-31 July, 27 September, 6 October 1913; 13 December 1933. *Winnipeg Evening Tribune*, 13 December 1933.

⁷⁸ Gillespie elevator Port Arthur *News-Chronicle* (*PANC*), 9 August 1921; 20 September 1921, 3; 30 August 1928. *DTJ*, 18 August 1921 quotation. Demolition *DTJ*, 1 May 1923; *PANC*, 11 May, 30 November 1923. Addition *DTJ*, 13 July 1928; *PANC*, 11 July 1928. C.D. Howe Ltd. records show the annex has 24 bins, 23 foot diameter, 27,500 bushels each.

⁷⁹ Manitoba Pool No. 2 Elevator. *PANC*, 9 December 1930; 24 and 27 August 1936 fire; 26 February, 25 March, 21 and 24 August, 2-3 September 1937. *DTJ*, 25 March, 3 September 1937.

⁸⁰ *PANC*, 6 August 1969. Text of plaque, "Historic Plaques," TBHMS *Papers and Records*, I (1973), 42.

Conclusion

The arrival of railways in 1850s Ontario transformed how Ontario and American grain was carried to market, giving rise to wooden grain elevators on Lakes Huron and Ontario, at the principal railway ports, such as Hamilton, Toronto, Sarnia, Goderich, Owen Sound, Collingwood, and Port Hope. Although American protectionist measures in 1866, 1885, and 1890 disadvantaged Ontario's grain ports, the opening of Thunder Bay in 1883 by the Canadian Pacific Railway as the principal port for western Canada's grain came to the rescue, particularly for transfer ports on Lake Huron, but not for small Lake Ontario ports like Port Hope, Oshawa, and Belleville, nor for Toronto, according to Edward Porritt.

In 1863 the Province of Canada authorized Boards of Trade to appoint grain inspectors and implement a system of voluntary grading and inspection, more appropriate for the bulk handling of grain in elevators, boxcars, and ships, since grain from different owners was mixed together, unlike the traditional system of grain in sacks. The Dominion government extended the system to Winnipeg in 1883 and Thunder Bay in 1885 and established grades for Manitoba wheat, incrementally tightening federal regulation over grain inspection

and elevators in response to farmers' and millers' complaints.

The dim prospects for growth in southern Ontario's mature market led grain dealers, elevator operators and employees like Joseph Harris, David Horn, Robert Meighen, Frank Egerton Gibbs, Joseph King, Samuel McGaw, and Matthew Sellers to seek opportunities in western Canada where their Ontario expertise and experience built a much larger grain trade.⁸¹ Although the basic functions of grain elevators have not changed since King ran his 70,000 bushel elevator at Port Hope, he participated in the introduction of new technologies and new grain elevator designs that produced huge productivity gains, reduced grain elevator fires and explosions, and saw the scale of the business grow enormously as the locus of the grain trade gradually shifted from southern Ontario to western Canada and its Great Lakes port, Thunder Bay, and to transfer elevators on Lake Huron.

After failures at Port Hope and Keewatin, Joseph King, a model of entrepreneurial resilience, persisted until he found a niche in the Western Canadian grain trade at Thunder Bay—the hospital elevator—a value-added innovation that benefited himself, the farmer, the grain dealer, and the railway company. He exploited the Canadian Pacific Railway's pique with Port Arthur and the com-

The plaque is now housed at the Thunder Bay Port Authority, formerly the Lakehead Harbour Commission.

⁸¹ Several biographies of men involved in the grain trade may be found in the *Dictionary of Canadian Biography* (DCB), notably Nicholas Bawlf, Thomas Clarkson, Thomas Nicholson Gibbs, Joseph Harris, Joseph Goodwin King, George Laidlaw, Daniel Hunter McMillan, John Mather, Wilmot Deloui Matthews, Robert Meighen, Stephen Nairn, William Watson Ogilvie, James Richardson, and John Simpson (1812-85).

pany's desire to avoid the controversial practices of scouring and mixing wheat, and financed the gamble by allying himself with Port Arthur's principal business family until he had made the business profitable.

But, the near monopoly that railway companies had held since 1857 over grain handling at terminal elevators was ending. Privately-owned grain

companies like Peavey's British America Elevator Company and producers' cooperatives like the Grain Growers' Grain Company were beginning to lease and run them. As for hospital elevators, the Canada Grain Act of 1912 would recognize and sanction them to rehabilitate, regrade and mix grain under the supervision of a Board of Grain Commissioners despite farmers' opposition.
