A HISTORY OF FLOUR MILLING IN Manitoba

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A History of Flour Milling in Manitoba

The processing of wheat into flour represented Manitoba's first step in becoming an industrialized society. Flour milling was practised by the province's aboriginal peoples long before Lord Selkirk's settlers engaged in the activity. When Manitoba gained provincial status in 1870, most flour mills were concentrated in the vicinity of the rapidly emerging city of Winnipeg. During the last two decades of the nineteenth century, a boom in flour mill construction occurred, paralleling the settlement of rural Manitoba for agricultural purposes. Entrepreneurs from central Canada displayed their confidence in the newly created province by building rural flour mills, at the request of the settlers. In addition to serving as a symbol of new-found prosperity and growth, flour mills supplied flour for the practical consumer needs of the district residents. By the outbreak of World War I in 1914, hammers constructing flour mills had fallen silent on the provincial landscape. Smaller rural flour mills began to cease operations as their product was replaced in the marketplace by the flour of the giant flour-producing plants in Keewatin and Winnipeg. These large-scale production facilities could produce flour cheaper than the less efficient independent mills. However, even these milling giants struggled for survival as world export flour markets disappeared.

In 1991, only three flour mills remained in operation in Manitoba. One is based in Winnipeg, the other two are located in rural Manitoba, with Holmfield's flour mill remaining as the only operational representative left from the boom period of provincial mill construction.

I. THE PRE 1870 PERIOD

The practice of converting wheat into flour has always been governed by both the practical needs of the market and the level of technology available. The origins of milling in the Province of Manitoba can be traced to the hand mortar mills of the aboriginals.¹ The mortar method of milling involved the rubbing and crushing of grain by means of a stone working backward and forward against the hollow interior of another stone.² The product was intended primarily for the miller's immediate family and extended tribal community. Milling for profit would be an endeavor reserved for the entrepreneurs migrating into Manitoba during the latter half of the nineteenth century. The pioneer millers in Manitoba were primarily involved in this

secondary manufacturing activity as a service to the community, in order to assure its growth and development.

Milling was further advanced by the arrival in 1812 of displaced Scottish and Irish tenant farmers who settled along the banks of the Red River just north of the Assiniboine river junction. Their passage and start-up costs were covered by their sponsor, Lord Selkirk.

It was recognized almost from the outset that if the Selkirk Settlement was to sustain itself on a long term basis, agricultural production would have to be successfully undertaken by its inhabitants. Recognizing the importance to the colony of growing wheat for conversion into bread, Selkirk, in a letter dated 12 June 1813, advised Miles MacDonell, the first governor of the settlement, that there were: "good mill stones to be found on the east coast of Winipic [Lake Winnipeg] among the granitic (sic) rocks." Considering Selkirk's recommendation, MacDonell hinted that a "a wheel-wright and a constructor of windmills would be great acquisitions to us." Acting on this request, a group of Kildonan Scots, who migrated to the settlement in 1814. In his article titled *Flour Milling at Red River: Wind, Water, and Stea,* geographer Barry Kaye states that the settlement's first horse-powered mill was constructed during the spring and early summer of 1815 under millwright Lamont's supervision. This first mill constructed of local timber and utilizing Lake Winnipeg millstones as recommended by Lord Selkirk, was destroyed by fire during its first year of operation.

The principal milling method during the settlement's early years was the quern, which, though hand-operated like the mortar, worked on the basis of a revolving motion rather than thrusting. The quern "was the first complete grinding machine in which the parts were mechanically combined, and succeeded loose stones." This process introduced a circular grinding motion into the art of milling, with the upper stone revolving upon the lower one. During the milling process, handfuls of wheat were poured into a hole in the centre of the top stone so that wheat passed downwards between the stones. The upper stone was revolved by hand, with the aid of a short handle, which was very heavy to turn. The flour produced by the grinding was collected in a groove in a wooden stand upon which the stones sat. This milling technology was used by the Scottish highlanders of the early nineteenth century and brought to the settlement by the new arrivals. According to Hudson's Bay Company Governor, George Simpson, writing in 1824, every second or third settler possessed a quern.

Robert Logan's house and windmill, Fort Douglas, ca. 1860. (PAM: Red River Settlement, N120115)

Situated within the confines of the Red River settlement was the defensive refuge of Fort Douglas. Fort Douglas was situated on the west bank of the Red River in what is known today as the Point Douglas district of Winnipeg. Settlement governor Colin Robertson designed the fort in 1816 as a defensive fortress against future violent incursions by North West Company employees. Fort Douglas was the site of the settlement's second horse-mill. Settlement Governor, Alexander McDonnell, ordered construction of this mill behind the fort sometime during the winter of 1820-21. McDonnell described his mill as containing millstones four feet in diameter with the capability of grinding between 12-15 bushels per day. This horse mill was arranged on the same principle as the quern mills, but it was energized by animal power as opposed to human toil. The spring thaw shifted the mill's foundation, however, rendering it permanently inoperative. In the spring that the principle is the permanently inoperative.

A. Introduction of Windmills

The next major leap forward in milling technology within the settlement occurred in 1825 with the construction of a windmill. Interestingly, it had taken at least ten years for the settlement's first windmill to begin operations. It is recorded that a windmill:

...was sent out as a model by Lord Selkirk in the early period of the settlement; it had cast rollers, and machinery capable of working two pairs of stones, but for years no one was able to set it in operation. It was even sent back to England and re-shipped. At length, ten years after its first arrival in the colony, Lord Selkirk's executors sent out one Mitchell, a millwright from Scotland, expressly to be set in order, by those exertions it commenced working in 1825. 15

With the assistance of Captain F. Matthey, an officer of the De Meuron Regiment, Mitchell's windmill commenced grinding operations on October 1, 1825.¹⁶ Located on the site of the old Fort Douglas compound on the southern edge of Point Douglas, about a mile north of Upper Fort Garry, the windmill was completed just prior to the sale of the fort property to Robert Logan, for the sum of 400 pounds, to be paid over three years.¹⁷ Logan's daughter recollected that the windmill was a "big round building like a tower - broader at the bottom than at the top, and it had great sails that flapped around when there was a good wind and there was grinding to be done."¹⁸ The windmill was praised as solid and producing fine flour, which served both the needs of the settlement and the Hudson's Bay Company.¹⁹

For the next 40 years, windmills dominated the settlement's landscape. Although windmill technology dated back to 1349, the cap type of windmill, erected during the nineteenth

century in Manitoba, was first created in 1573.²⁰ Cap mills were windmills operating with a simple gearing mechanism designed to harness wind energy in order that the motion created would be transferred into the milling process. This process would be initiated by wind spinning the 30-6- foot sail wheel, which was often constructed of cloth woven back and forth through crosspieces set about a foot apart. The sail wheel component was attached by a cylinder to a vertically situated gear wheel, which would rotate once the winds increased in velocity. The vertical gear wheel would set in motion a chain reaction of energy transfers down the shaft of the mill by first rotating a flat, horizontal cap gear at the apex of the mechanism. The energy transfers would ultimately put in motion the turning of the top millstone. During the process, the miller would pour wheat into a slim gap between the top and bottom stones as the upper stone rotated against the lower one. The end product of this manufacturing process was a crude, low quality flour used by settlers in the local community.

The windmill was dominant in Red River from 1825-70. By 1830, a second windmill was in operation and three others were under construction.²¹ "By the time of the 1838 census, the first to record the colony's millers, there were fourteen windmills at Red River."²² The number peaked at eighteen; no more mills were counted during any census year up to 1858.²³ By 1848, the settlement's landscape was dotted with windmills, which inspired one American visitor to remark, "The grain is ground by windmills which form picturesque and conspicuous objects in the landscape of the plains surrounding the settlement.²⁴

"First mill near Fort Garry" (Harpers New Monthly, 1859, *The Western World, July 1892*, PAM: Red River Settlement #5)

B. Introduction of Water Mills

To meet the need for wheat-processing facilities, the era of windmill construction coincided with that of water mills. Prairie streams were tapped by enterprising settlers. Water currents initiated the rotation of a water wheel designed with vanes set axially across its rim. As the water wheel rotated, a sprocket wheel, attached to its axis, initiated motion against a large horizontal gear wheel situated at the base of the mill house. This gear wheel transferred its energy to a small sprocket wheel connected to the bottom millstone by a cylindrical rod. The bottom millstone rotated in a circular direction against the upper stone, thereby grinding grain fed between the two stones.

Cuthbert Grant, an early leader of the settlement's Metis community, undertook the construction of Manitoba's first water mill "which was built on Sturgeon Creek, a small tributary of the Assiniboine." Grant's Mill was constructed in 1829, complete with a 240 foot dam. Unfortunately for Mr. Grant, his enterprise failed after only three years due chiefly to numerous problems with the dam. Many more water mills were built during the next forty years.

One of these mills was built in 1850 on the banks of the Seine River in St. Boniface by the father of Metis leader, Louis Riel. The elder Riel "ran a channel nine miles long from Grass Creek to the Seine River to increase his water power." According to Kaye, "In the various Red River Census prior to 1849 no more than one water mill was counted in any census year [but] by 1856 nine water mills were in operation." In 1856, milling technology would take another leap forward with the introduction of steam-powered flour mills to the colony.

Grant's Mill, constructed in 1975 on Sturgeon Creek in St. James is a conjectural reproduction of what Cuthbert Grant's watermill likely looked like in 1829. (Historic Resources Branch photo, 1991)

B. Introduction of Steam-Powered Mills

The impetus, which led to the construction of a steam-powered mill in the settlement, derived from the shortcomings in reliability demonstrated by windmills and water mills, both of which were dependent on the whims of nature. In the case of windmills, extended periods of calm weather rendered them inoperative, often leading to recurring flour shortages within the settlement. The Reverend John Back wrote in February 1856 that "the people have almost been out of flour the whole winter on account of the very calm weather." Likewise, water mills proved to be an unreliable source of flour because of their dependence on fast flowing streams, of which the Red River region had few. A second disadvantage of water mills was their seasonal character. From the time the streams froze in the autumn until the spring thaw, the mils were useless. As well, water mills could not operate during the frequent prairie droughts, which completely dried up the steams. For example, Samuel Taylor noted in his journal for 1863 that "the water mills are all dry and will not be able to grind this fall."

In an attempt to contend with the settlement's demand for flour, a group of resident entrepreneurs, headed by John Inkster, formed "the Steam Mill Company" for purposes of acquiring steam machinery. In the spring of 1856, Thomas Sinclair and five men were commissioned by the Company to purchase the following steam mill components: boiler, engine, French Burr stones, and sawing attachment. This machinery was purchased in Chicago and arrived at the settlement by flatboat in September 1856.³¹ After much delay, caused by an unfamiliarity with steam mill operations, "the first steam whistle was heard on this northern land on Christmas Day, 1856." Wood, taken from the woodlots along the Red River, was burned to heat the water in the boiler to steam, which then expanded in a cylinder to drive a reciprocating piston within the twenty horsepower steam engine. The motion from this process was then distributed throughout a gear or belt system, ultimately causing the two sets of stones to rotate, and enabling wheat to be ground between them.

The Inkster mill "posed mechanical problems and never turned a profit for the proprietors" but still proved to be a more reliable source of flour than the existing windmills and water mills.³³ The great advantage of steam power was that it was not bound to a location predetermined by natural factors. During its operation, the Inkster mill was said to have produced a "fine article."³⁴ Residents of the settlement were denied the fine flour produced from the mill after June 30, 1860, when a fire of unknown origin destroyed the enterprise.³⁵ All that

was salvageable from the catastrophe was the milling machinery, which was bought by E.H.G.G. Hay, who had arrived in the settlement in 1860 and in 1864 built a mill at St. Andrew's Rapids on the corner of the parish church lot.³⁶ Like Inkster's mill before it, Hay's mill was ravaged by fire in 1877.³⁷

Inkster's steam-powered mill blazed the trail for an unprecedented period of steam mill construction. In 1860, Andrew McDermot constructed the settlement's second steam-powered mill, "located a few yards back from the Red a mile or so north of Upper Fort Garry, close by McDermot's home of Emerald Grove." In December 1872, this mill too was destroyed by fire. 39

Steam mills began to appear beyond the banks of the Red River with the construction of one at High bluff by J.B. Homes in 1868. William L. Smith, a former resident of Winnipeg, built a mill at Portage la Prairie during the early 1870s. Steam-powered flour mills were also known to have existed at Silver Heights and St. Norbert. The Silver Heights' mill was built by Robert Tait at Sturgeon Creek in 1869. The Silver Heights, and imported new machinery, including two run of stones for the construction of a new mill at Mirey Creek. The St. Norbert steam flour mill was constructed by Joseph Lemay sometime before 1872.

By the time the inhabitants of the Red River settlement became part of the newly established Province of Manitoba in 1870, a rich milling tradition had been established. Technological innovations in the milling process had evolved from the hand-powered quern to the steam-powered mills fuelled by wood from along the rivers. By 1870, the settlement's flour demands were filled in part by a troika of wind, water, and steam mills. The introduction of steam mills to the region in 1856 soon displaced both windmills and water mills as the principal source of flour production. By the mid-1870's most of these obsolete mills had "been dismantled and their machinery taken farther west, steam mills taking their places." Steam-powered mills adapted well to the prairie landscape because it was no longer necessary for a mill to locate on a stream or depend upon unpredictable atmospheric conditions. Flexibility of site selection and assurance of an energy source made the steam mill appealing to the province's new agricultural settlers.

"Gilmore & Locke's Grist Mill at Lockport, 1960" (PAM: St. Andrews, N3535)

II. THE POST 1870 PERIOD

When control of the Canadian Northwest was transferred to the Dominion of Canada from the Hudson's Bay Company (HBC) in 1869, the land was surveyed for settlement. A proactive homestead policy was enacted by the Government to promote settlement of the vast empty prairie. The taming of the land for agricultural production was imperative if the region was to sustain itself as a viable economic unit.

The development of Manitoba's agricultural economy was sluggish during the first decade of the province's existence. While a flood of settlers poured into the last unoccupied lands of the United States, only a trickle of homesteaders migrated to the Canadian prairies. For example, Manitoba's 1871 population figure of 25,228 inhabitants had increased to 62,260 by 1881. A major hindrance to settlement during this time was the absence of a well developed transportation system in the province. Recognizing the need for a direct transportation link with central Canada, Prime Minister John A. Macdonald introduced his National Policy in 1879. Its aim was to develop western Canada as a hinterland for central Canadian manufacturers and producers. Through the National Policy, a home grown market would be cultivated in western Canada which would purchase manufactured goods produced under tariff protection in Quebec and Ontario. This captive market would in turn produce surplus foodstuffs for inexpensive export to the mother region. The plan depended upon the completion of the Canadian Pacific Railway across this vast undeveloped region to the Pacific Coast.

The Canadian Pacific Railway was completed to Brandon by December 1880 and was running as far west as Regina by the end of 1881.⁴⁷ Railway service to Manitoba proved to be relatively successful in carrying settlers to the province, as evidenced by Manitoba's population increase from 62,260 inhabitants in 1881 to 152,506 by 1891.⁴⁸ The success of the CPR inspired the construction of the Canadian Northern Railway by 1902. As these trains rolled from east to west the province's agricultural lands were rapidly settled by pioneer farmers from rural Ontario, the United States, Great Britain, Central and Eastern Europe.

Railway, land and immigration policies were the three essential ingredients in the birth of Manitoba's wheat-based economy. The economic future of the province rested primarily on the performance of its agricultural sector. This performance would be dependent upon the resourcefulness of the individual farmers and the uncontrollable variables of markets and weather. A network of villages and towns developed to furnish goods and services for the

pioneer families in each township. All of these infant trading centres depended upon the patronage of the local farm community in order to exist. During the 1880s and 1890s, a period of rapid growth for Manitoba, a fiercely competitive mentality developed in many of these new towns and villages. In what amounted to a struggle for survival, many town fathers sought to protect their investments by offering clients as many amenities as possible in order to secure their patronage. On such amenity was a flour mill which was quickly perceived to be essential in securing a town's position as an agricultural service centre.

As a result of this competitive atmosphere, many towns and municipalities attempted to induce businessmen to establish mills in their communities by offering cash bonuses and/or general tax breaks. This proved to be a widespread though controversial practice, particularly during the 1880s with the introduction of the Hungarian Roller method of milling. In 1886, The Commercial published several editorial commentaries on the practice of bonusing flour mill construction. One such article warned of "unprincipled men of a speculative turn of mind, not frequently get[ting] mixed up with these schemes, their object being to turn of the business over to a second party at a profit to themselves, as soon as the bonus is completed." This practice often led to "the establishment of inferior mills, or mills which could only turn out an inferior article of flour, and the exportation of such products [only served] to damage the reputation of Manitoba flour." Many of these early flour mills, constructed in rural Manitoba, were termed "Grist Mills" because millstones were employed instead of the more expensive roller process. The old process produced an unrefined lour or "grist."

A. Early Grist Mills

Examples of mills built in this early period of Manitoba's history include the following:

1. The Stonewall Grist

During the 1870s, rural grist mill development coincided with the arrival of settlers, construction, therefore being sporadic. In addition to the steam mills built at Portage la Prairie and those mentioned earlier lying just on the outskirts of Winnipeg, a mill was built at Stonewall in 1877. The town's founder, S.J. Jackson, entered into partnership with local entrepreneurs Hamilton and Drake to form Jackson and Company. This steam mill was built on the approximate site of the present Pool elevator and became Stonewall's first commercial enterprise. By November 1883, S.J. Jackson had sold his interest in the milling business to Mr. R.J. Forde who refitted the mill with a drying kiln and added two extra run of stones to

accommodate the milling of oatmeal.⁵² Mr. Forde also improved the mill's storage capacity with the construction of an elevator and an elevator tramway which connected the mill to the warehouse.⁵³ Forde's investment in oatmeal-manufacturing equipment made his mill the second such in the province with this capability, the other having been opened in Portage la Prairie in 1882 by the Assiniboine Milling Company.⁵⁴

2. McMillan's Flour Mill

The bulk of the grist mills constructed during the province's first decade continued to be concentrated in the Winnipeg area. In 1876, D.H. McMillan, a member of Colonel Wolseley's expedition, entered into a partnership with a Mr. Bassett for the construction of a steam-powered flour mill, which was built the same year at the end of Post Office Street (later Lombard Avenue and Mill Road).⁵⁵ Bagged flour was weighed and piled for loading onto either teams of horse drays or riverboats at the McMillan Mill docks on the Red River. The province's first shipment of wheat for export left this dock on October 21, 1876, when 857.5 bushels of wheat were shipped down the Red to Toronto via Duluth, initiating more than a century of world export trade for the entire prairie region.⁵⁶

During the late 1870s, McMillan's Mill ground 2,400 bushels of wheat per week with an increase in output to 3,000 bushels by the end of the decade. ⁵⁷ Initially, the mill housed two run of stones but was upgraded to five by 1880. In the spring of 1881, the mill was the first in the province to introduce the roller-milling process, enabling it to increase its daily output capacity to 250 barrels per day. ⁵⁸ In the following year, an elevator, with a capacity of 50,000 bushels was added. In 1882, W.W. McMillan joined his brother in the milling business and the firm became known as D.H. McMillan and Bros. The brothers continued to upgrade their mill, with an enlargement to the mill building and the addition of new machinery in 1884. ⁵⁹ Their product was sold to "local bakers, to the cart brigades going west, to the outfits of new settlers, to the survey and construction gangs on railway lines." ⁶⁰ The mill's operations were permanently silenced by fire in the fall of 1887.

3. McLane's Flour Mill (HBC Mill)

Another prominent mill during Manitoba's first decade was completed by the Hudson's Bay Company in October 1876 on the north bank of the Assiniboine River near the junction of the Red in Winnipeg.⁶¹ This location was chosen as part of a tactical move to draw business southward towards the Company's reserve, but it also allowed grain to be off-loaded directly

from the riverboat into the mill for processing. The machinery for the mill was purchased from Noye and Company, of Buffalo, New York. Soon after the mill's completion, J.N. McLane leased it from the Company and the new mill soon became known throughout the region as McLane's Mill. Begg and Nursey, writing in 1879, described the mill as follows:

It is a building 57 [and a half] x 37 [and a half] feet, and 60 feet in height to the peak of the roof. The engine house is 38 x 44 feet and the engine of 250 horse power. The main driving wheel is 12 feet in diameter and 38 - inch face. It has four run of stones and is fitted up with all the improvements ... Its capacity for grinding is 1350 bushels every 24 hours which is pretty good for a young place like Winnipeg.⁶³

In 1878, the HBC cancelled its lease with Mr. McLane and took over full control of the mill. Attempting to reduce competition in the marketplace, D.H. McMillan made a shrewd request to Company Commissioner Grahame to lease the mill but it was flatly rejected.⁶⁴ Instead, under the direction of the Company's Trade Commissioner, Joseph Wrigley, the Company pursued a vigorous policy of renovating the mill.⁶⁵

Wrigley's interest in expanding and preserving the mill's operations lay in its potential to attract "settlers to the company land holdings and a market for grain offered in trade." Ideally, the flour produced beyond the local market was used to supply northern trading posts and to fill lucrative government contracts. By 1884, the Company had invested in a network of mills at Edmonton, Fort Garry and Riding Mountain, "none of which had lived up to expectations." During the early 1880's, these mills failed to keep up with the latest technological innovations in flour manufacturing. These mills lost markets and contracts due to the poor quality of the flour produced and the lower output capacity of steam-powered millstones. Wrigley knew that if the Winnipeg mill had a fighting change of survival it had to be renovated to include the roller method. The Company's Board agreed to the mill's changes and the mill was ready to commence operations by March 1, 1885. 68

"McLane's Flour Mill, 1870's, Junction of Red & Assiniboine Rivers" (PAM: Mills 1 – W11845)

The renovations were contracted out to the Pray Manufacturing Company of Minneapolis who added, "five double sets of Livingston rolls, six Geo. T. Smith Purifiers, six Kirk &

Fender's peerless Dust Catchers, four Pye Centrifugal reels, one Richmond Bran Duster, and one Morgan Scourer." The daily output capacity of the mill was raised to 150 barrels, resulting in head miller in the plant and he was assisted by Mr. Hughes, who had formerly worked in the Crookston, Minnesota roller mills. Each of these men had an assistant and two men handled the packing duties. The flour was packed in both 98 and 25 pound sacks. ⁷⁰

Unfortunately for Wrigley, his milling venture proved to be an unmitigated failure. First, the HBC mill operated at a competitive disadvantage compared to other mills in the city because it was not exempted from city taxes as was the case for other city mills. For example, McMillan's saved \$40,000 in taxes up to 1886 while Ogilvies pocketed \$140,000 in savings up to that year. Only after many years of lobbying was Wrigley finally able to negotiate a twenty-year tax exemption from municipal taxes in 1886. The HBC had already lost many years of possible tax savings through the delay in granting this concession. Secondly, the mill was damaged by a fire sometime prior to June 1886, and suffered a loss of business while closed for renovations. Thirdly, the local flour market was saturated with an abundance of flour and supply simply outweighed demand. In fact, during the summer of 1886, the mill was "shut down half time on account of dullness of trade [but planned to resume] resume operations fulltime at an early date providing a change occurs in the markets." But the final blow to the mill's fortunes was its competitive disadvantage to other city mills with regard to transportation costs.

The HBC mill operated at a locational disadvantage because it was not connected by spur line to a railway system as was Ogilvie's Point Douglas mill. Without a spur line connection, locomotives were forced to remain on the opposite bank and cars were drawn to the mill by horses. Finally, after much negotiation between the HBC and the Canadian Pacific Railway, it was agreed that a branch line would be built to the mill, but only if a bridge across the Assiniboine was furnished by HBC Land Commissioner Brydges' private bridge contracting firm. In return for land and right-of-way where needed, the PCR built a branch line and a bridge was built across the river in exchange for the right to charge a toll on all rail traffic. Soon disagreement developed between Wrigley and Brydges as to the price charged on the railcars. Eventually the Company's Board of Governors ruled that full cars crossing would have to pay \$1.75 while empty cars would pay \$0.50.76 Wrigley wanted to pay the Bridge Company an annual fee to cover right-of-way and maintenance costs but this request fell on deaf ears. Wrigley was adamant that the bridge tolls placed the mill at a enormous disadvantage when

competing for contracts. While he acknowledged that production costs were a major factor in the price of flour, he recognized transportation costs were also a significant component.⁷⁷

During the mill's first year of operation it incurred loses of \$1,911.⁷⁸ Its losses during 1886 were even more alarming, totaling \$15,499.⁷⁹ After analyzing the mill's competitive position with respect to the state-of-the-art Ogilvie mill and to the never-ending maintenance expenses, the Company's Board of Directors in 1889 agreed to dispose of the Company's mills could no longer compete with the numerous small mills that were springing up across the Manitoba frontier. Not until 1907 was the Winnipeg mill finally sold to the Canadian Northern Railway Company and subsequently demolished.⁸⁰ Despite its conversion to the roller method in 1885, the mill couldn't compete with the well-planned Ogilvie mill and the many mills that followed.

B. The Introduction of the Roller Method

The roller-processing method, which revolutionized the Manitoba flour-milling industry by setting the standard for rapidly produced quality flour, was first introduced to Winnipeg at McMillan's Mill in 1881. The completion of Ogilvie's roller-mechanized mill in 1882 set a precedent across the rest of the province for excellence in milling. In order to compete with the fine quality flour produced by the state-of-the-art Ogilvie mill at Winnipeg, obsolete steam mills using millstones were forced to either adapt or face closure. The dark and spotty flour produced by the stone-grinding process no longer suited consumers, who preferred the brilliantly white, powdery flour created by the roller method.

The steam-powered millstone method had depended upon setting the millstones close together and running them at high speed, thus reducing grain into flour at one grinding. The roller method depended upon a gradual reduction process, designed to constantly refine the grain into a superfine white flour. This was made possible with the invention of the "Purifier" by La Croix in 1870.⁸¹ The Purifier separated the bran from the wheat berry through use of a shaking screen and air current, thus allowing the middling, or floury part of the wheat berry, to be refined by further reduction rather than by pulverization. This invention served as a great stimulus to the development of Western Canada by increasing the demand for spring wheat for milling and rendering the crops of Western Canada more valuable.

The roller reduction method was first used by Jakob Sulzberger in 1834.⁸² It soon became known as the "Hungarian Roller Method* because it was utilized on a large scale by

millers in the Austro-Hungarian Empire. The roller method involved a highly integrated system of components working in concert. First the wheat was weighed and deposited on the vertical pocket belting which carried it to the storage bins to await processing. Before being grounded, the wheat was thoroughly cleansed by huge separators which served to filter out all foreign matter such as sticks, weeds, and twine. The wheat then moved to the scourer where all dust was removed from the wheat kernels. Next the wheat was dampened, so that the bran or outer skin of the kernel would peel off more easily. Then it was passed under ninety-degree heat to dry before it was fed into a series of corrugated steel rollers and scalpers where the second phase of the milling process began.

Cross Section of a Modern Flour Mill

"Ogilvies Mill, Winnipeg, ca. 1883" (N.W. Farmer & Miller, 1883 Special edition, pg. 20)

The second phase involved the actual separation of middlings from the bran of the wheat kernel. The wheat moved through a series of corrugated break rolls and break scalpers in order to facilitate this middling extraction process. At each set of rolls additional flour was produced and promptly taken to the top of the mill by conveyor belts and allowed to filter downward again through a grading reel which was fitted with wire or silk mesh to sift out the various grades of flour. The middlings underwent further cleaning and purifying as they passed through the purifiers, sifting, and air current chambers. Finally, the middlings entered a flour bolter which served to separate flour from the purified middlings. The flour was then collected and stored in a cylindrical flour bin until it was ready to be deposited in a barrel or bag. From time the wheat entered the mill, every operation was carried out by machinery. At no time during the milling process was there need for the flour to be touched by a human hand.

Ogilvie's Mill, Winnipeg, ca 1883"

The Ogilvie Milling Company's decision to construct a state-of-the-art flour mill at Winnipeg was greatly influenced by the profit-generating potential of the venture. The A.W. Ogilvie Company of Montreal had been in the milling business since 1801 with the erection of their first mill on the Lachine Rapids. In 1877, the company became directly involved in Manitoba's wheat economy by purchasing wheat to supply their existing eastern mills at Goderich, Seaforth and Montreal. The bulk of Manitoba's early wheat exports were processed into flour at Goderich, Ontario because transportation costs, although relatively expensive, were lowest to this port centre. The export route taken involved an overland and water journey through the United States. Wheat was loaded on a Red River steamer at Winnipeg and shipped to Fargo. From Fargo, the wheat was transported on the Northern Pacific Railway to Duluth. From Duluth, the wheat was shipped across lakes Superior and Huron to Goderich.

At first, because railway transportation costs for flour were higher than those for wheat, the Ogilvie Milling Company found it more cost efficient to transport the wheat to its eastern processing facilities than to manufacture the flour near the source of the raw material. Consequently, the aim of the company was to minimize the mileage that flour needed to travel. His production strategy remained cost efficient as long as the lour markets were concentrated in the eastern half of North American and Europe. However, during the latter half of the nineteenth century, new markets to the south and west of Manitoba began to emerge. At that point the

Ogilvie Milling Company decided that production costs would be reduced if a western processing centre was constructed to supply the needs of the western market. By 1880, Winnipeg was connected by rail with Minneapolis which served as a terminal for connections with such major markets as Chicago and St. Louis. During 1881, the Canadian trans-continental railway was completed to Regina. This transportation link not only provided access to markets in western Canada but made it possible to export flour to the nations of the Pacific rim. Induced by the actions of Winnipeg's City Council in exempting the proposed new flour mill from taxation for twenty years, the company selected Winnipeg as the location of this facility. ⁸⁵ Winnipeg was also selected because it was the most rapidly growing centre in the Canadian Northwest. ⁸⁶

Mr. Ogilvie set the wheels in motion for the construction of the mill when he purchased from Mr. McTavish a 4.5 acre site on the Red River at Point Douglas, for \$4,000.00.⁸⁷ The site was strategically located in relation to the Canadian Pacific Railway mainline, and a spur line was built to give the mill easy access. Construction commenced on the mill in early August 1881. The mill structure was enclosed by December 25, 1881 and operating in June 1882.⁸⁸

The original Ogilvie mill was a brick, six-storey structure, $50 \times 100 \text{ ft.}$ (15.25 x 30.5 metres), on a stone foundation. Attached to it was a brick engine and boiler house, $80 \times 50 \text{ ft.}$ (24.4 x 15.25 metres). From this powerhouse a smoke stack with an 18 ft. (5.49 m) base jutted up 101 ft. (30.8 m).

In order to remain competitive in the Canadian flour industry the mill building was renovated many times during its 108 years on the Winnipeg landscape. The first substantive renovation took place in 1886 with the additions of a boiler and two wheat heaters. ⁹⁰ By 1887, a giant grain elevator, 70 x 50 (21.35 x 15.25 m), with a storage capacity of 140,000 bushes, was added to the north side of the mill. Between the elevator and the mill, a six-storey building, 30 x 50 feet (9.15 x 15.25 m), designed to store feed and offal, plus house a twenty-horsepower engine which powered the elevator, was erected. Also, a two-storey, 120 x 60 foot (35.6 x 18.3 m) packing and storehouse

"Ogilvie Flour Mills Co. ltd., Winnipeg, \$3,000 bbls, daily capacity" (PAM: Winnipeg)

facility, capable of storing 30,000 sacks of lour, had been built on the other side of a railway spur line.⁹¹ The packing and storage facility was connected to the main milling building by means of a conveyor belt which would transport the processed flour for packaging. The packaged flour would then be placed (at a rate of 300 sacks every eight minutes), in waiting railway boxcars.⁹²

By 1905, a seventh floor was added to the original six-storey mill, and a flat warehouse facility was built across from the packing and storage facility. In 1090, cylindrical concrete storage tanks were added to the north side of the grain elevator. The original elevator was later demolished and in 1918 replaced with a reinforced concrete eleven-storey elevator and cleaning facility. Despite the upgrading of grain and flour storage capacity, the mill site's structural layout has remained basically intact since 1918.

Within the mill itself, each floor provided a particular processing function in the production of flour. The first floor served as an extra packing and storage room on occasions when all other storage facilities were filled to capacity. The second floor contained 40 double sets of Gray rolls, 9 x 8 ft. (2.7 x 2.4 m), manufactured by the Miller Bros. and Mitchell Company of Montreal. Hade of porcelain, these reduced the wheat into flour. The third floor contained storage bins, bran dusters, and dust collectors. The fourth floor contained the "purifying room", with nine middling purifiers, one centrifugal reel, and five bolting chests with three reels each. The fifth floor also contained nine purifiers, four four-reel bolting chests, two bran dusters and two centrifugal reels. Finally, on the sixth floor, sixteen scalping reels, twenty-two dust collectors, four centrifugal reels, two bran dusters and two graders rounded out the inventory of milling machinery.

The milling process machinery was separated from the cleaning process by a heavy brick wall running vertically from the top of the mill to its bottom. These processes were conducted in insulation from each other to reduce the threat of fire by not allowing potentially explosive dust particles into the milling chamber. This fire wall was a state-of-the-art safety feature that may have helped to preserve the mill for over a century. The cleaning of the wheat began on the first floor where the grain was received from farmers' wagons. On the second floor more wheat was received from boxcars and

all of it was weighed on scales. Once weighed, the wheat was grazed by two Richmond Brush Machines which cleansed the wheat kernels. Further purification took place on the fourth floor where two Richmond Smutters scoured the dirt off the grain. The fifth floor was home to a four-cylinder cockle machine, with separators rounding out the sixth floors' inventory. A vertical conveyor belt transferred the product back to the bottom floor where it began its second journey through the mill.

The whole process was powered by a compound Reynold – Corliss 400 horsepower engine built by E.P. Allis & Co. of Milwaukee. The steam was supplied by three horizontal boilers, 14 ft. (4.27 m) long and 60 inches (1.5 m) in diameter, and fitted with Jarvis patented furnaces. Wood was originally introduced as the principal fuel. By 1897, the mill had doubled its original boiler capacity to six and increased the engine's power to 600 horsepower. The mill was driven by the flywheel of the engine with a belt 120 feet (36.6m) long and 36 inches (.9 m) wide. 100

The conversion to electric power in 1906 allowed the company to become more efficient by reducing the intensive labour costs associated with steam mill operations.¹⁰¹ The mills' daily output capacity was gradually increased from its original production of 1,800 barrels to 4,000 barrels by 1909.¹⁰²

In 1895, in order to expand and diversify its Winnipeg milling operations, Ogilvie purchased the adjacent Stephen Nairn oat mill on Higgins Avenue. Built in 1884 near the Canadian Pacific Railway Station, the four-storey structure was constructed of stone masonry with a timber frame. Nairn's total costs for the venture amounted to \$33,000.00, which included the grounds, switches, buildings, and machinery. The mill operated on the roller process and was powered by a 60 horsepower Corliss steam engine. Strategically located next to a spur line of the Canadian Pacific Railway, exported from Manitoba to Montreal in November 1885.

After the death of William Ogilvie in 1902, the Ogilvie family sold their milling operations. The flour mills and string of 70 elevators, were sold to Montreal financier C.R. Hosmer and F.W. Thompson, Ogilvie's Western Canada Manager. The mill closed in 1990 due to increased foreign competition, outdated technology, and distance from flour markets. The oatmeal mill was destroyed by fire in 1990 and the machinery

from the main mill was removed and sold. The empty mill structure still stands on the banks of the Red River on Higgins Avenue in Point Douglas.

When it was erected, Ogilvie's Point Douglas mill represented the prototype flour mill, setting the standard for milling across the developing Province of Manitoba. The flour produced there was of the highest standard and this standard could be replicated without exception in its strategically located processing plant. It was soon evident that in order to compete with the quality flour produced in Winnipeg, roller process mills would have to be established across rural Manitoba. Steam-powered mills operating under the millstone system had been rendered obsolete. These mills were either abandoned or converted to the roller process. Their machinery was often moved hundreds of miles west to new settlements in the Northwest Territories (Albert and Saskatchewan). In Manitoba, emerging towns and villages, competing for their respective survival, deemed it necessary to encourage the construction of roller flour mills. Manitoba's "Golden Era" of flour mill construction occurred during the last two decades of the nineteenth century. This burst of construction activity during the 1880s and 1890s coincided with the settlement of rural Manitoba and the development of the province's wheat economy. 107

III. THE GOLDEN ERA OF FLOUR MILLING

During Manitoba's formative years as a wheat-producing region, a series of provincial acts, dealing with the rapidly emerging flour-milling industry, were drafted and passed into law as reactive measures to what was already occurring in the province.

The first act, known as an "Act respecting Grist-Mills and Millers" and given Royal assent July 7, 1883, was designed to regulate the rapidly developing milling industry. 108 It dealt with such critical areas as pricing, handling, and storage of flour, as well as sanctioning fines for violation of the guidelines. Limits were set on the maximum price the miller could charge the farmer for milling his grain, that being 17 cents per bushel of grain, or in lieu of cash, one-sixth part of the grain brought for milling. In order to discourage the miller from tipping the scales in his favour, the legislation now required each mill to house "accurate scales for weighing the grain and flour." Further, the Act designated the miller responsible if any grain or flour in his storage was lost or damaged. 110 Finally, the Act spelled out the penalty for violating these provisions with the words, "every miller or occupier of a public mill, or his agent or servant, so offending shall be liable to a penalty of not less than five nor more than forty dollars for every such offense." In 1886, the Act was amended to include stiffer penalties for violations of the law. The amended Act now read "every miller...so offending shall be liable to a penalty on conviction before two justices of the peace to incur a penalty of not more than one hundred nor less than twenty dollars, or in default of payment not more than two months or less than ten days' imprisonment." The Grist Mills Act remained on the books until 1937 when it was repealed by the Manitoba Legislature because it was deemed obsolete. 113 By 1937, flour mills were dramatically fewer in number than when the Act was introduced.

In order for flour mills to remain competitive in the industry, connections to transportation networks were vital. Recognizing this fact, the Government of Manitoba included a provision in the "Construction Of Certain Railway Lines Act," passed in 1888, allowing for the construction of sidings and branch lines up to six miles in length off the principal rail line.

The final Act pertaining to the Manitoba flour-milling industry dealt with the issue of municipalities attracting prospective entrepreneurs, interested in the construction

of flour mills, through the practice of bonusing. Basically, this 1890 legislation legitimized this longstanding practice. Under section 377 of the 1890 "Municipal Institutions Act," municipalities were formally given the right to "aid grist mills within the municipality and/or adjoining municipality by granting a bonus to the proprietors." This legislation provided an additional impetus for the construction of flour mills with the assurance to the prospective miller that his mill had the potential to be hooked into the vital railway transportation network even if he wasn't located directly on the principal rail line.

The final Act pertaining to the Manitoba flour-milling industry dealt with the issue of Municipalities attracting prospective entrepreneurs, interested in the construction of flour mills, through the practice of bonusing. Basically, this 1890 legislation legitimized this longstanding bonusing. Under section 377 of the 1890 "Municipal Institutions Act," municipalities were formally given the right to "aid grist mills within the municipality and/or adjoining municipality by granting a bonus to the proprietors." This permitted the municipalities to go into debt for this purpose, if so desired. Inducements for prospective entrepreneurs took the form of outright cash grants, grain grants in lieu of cash, free land for the mill, and exemptions from taxes for a specified period of time. The "Municipal Institutions Act" was simply amended to the "Municipal Act" in 1891 and in 1892 limits were placed on the length of time a municipality could exempt an industry from taxes. The revised Act now read: "The council of every city, town, village, and rural municipality may pass by-laws for exempting any industry in whole or in part from taxation for any period not exceeding twenty years."

As a result of protests from residents of certain municipalities (particularly Stonewall and Carberry) who disagreed with their municipal councils' decisions to bonus flour mills and thus raise their taxes, the Government of Manitoba introduced conditions under which a municipal council could offer the bonus. A 1914 amendment to the legislation read as follows:

The council of any city or town may pass by-laws without submitting the same to a vote of the ratepayers, for exempting from taxation for municipal purposes any manufacturing industry hereafter established, to an extent not exceeding sixty per cent of the assessed value of the property of such industry, for any period not exceeding twelve years, on condition and so long as such industry shall employ not less than fifteen workmen

for at least nine months in each and every year during such term of exemption. All by-laws exempting from taxation, in whole or in part, for a longer period or on terms more favourable to the proprietors of such manufacturing industry than the foregoing shall be submitted to a vote of the ratepayers. 118

The passage of legislation dealing specifically with flour milling denoted the important role the industry played in the development of the province's economy. The superior quality of Manitoba wheat for milling was ventured into the wheat-raising business confident that their product satisfied a market demand for bread, pastries, and pasta. The processing of wheat into flour became rural Manitoba's first secondary industry and formed a critical component of the then infant wheat-based economy.

The creation of most flour mills in rural Manitoba between 1885-1914 followed similar patterns. During the course of research for this study, over 98 different hamlets, villages, towns, and cities were identified as once having had a flour mill located in or near their vicinities. (See Mills' Inventory) Some districts contained more than one mill, making the potential scope of this discussion massive. Specific data indicates that 37 mills existed in 1881, 50 in 1891, declining to 36 by 1911. For logistical reasons, this report will concentrate attention on the case histories of three mills representative of the "Goolden Era" of milling in Manitoba. The proceeding discussion of flour milling at Virden, Deloraine, and Holmfield provides insight into common developmental features prevalent in most communities, while at the same time, illustrating three different developmental patterns encountered in the Manitoba milling experience.

The John Hykawy Mill at Winnipeg Beach. This cap-type windmill was constructed near Fraserwood, Manitoba around 1910 and moved to a park site at Winnipeg Beach during the 1970s and restored. (JRB photo, 1991)

A) The Rural Milling Experience

1. Flour Milling at Virden

The history of flour milling at Virden incorporates all of the elements typical of rural flour mill development. As in most municipalities, a core group of interested farmers initiated the process for the construction of a mill. In Virden's case, Messrs. Thompson and Bouvrie presented a petition to the Rural Municipality of Wallace calling for the Council to initiate or facilitate the construction of a flour mill in the local district. In 1884, the Council voted against a motion that a by-law be introduced for the purposes of bonusing potential entrepreneurs to construct a mill. In 1885, the councils of Wallace and Pipestone joined forces and agreed to grant a bonus of \$5,000 and an exemption from taxes for ten years to any party who would erect a grist mill at Virden. Without delay, Messrs. Willing and Dier took advantage of this opportunity and commenced construction.

By October 1885, the shell of the four-storey mill "loom[ed] up a fine landmark." Before the milling machinery was installed in January 1886, the empty grinding floor "was utilized as a ballroom on the 1st December. A large company was present and it was a great success." The machinery was supplied by William and J. Grey of Toronto, and consisted of four double stands of 9 x 18 ft. (2.7 x 5.48 m) rolls, one run of 4 ft. (1.2 m) stone, 3 purifiers, 4 silk reels, 1 centrifugal [reel], scalpers, cleaning machinery, chopper, etc. The power was supplied by a "50 h.p. Doty engine, and 60 h.p. boiler." The total construction cost for the mill was between \$15,000 and \$16,000. The mill commenced operations on February 14, 1886. The mill's daily output capacity of 75 barrels was below the agreed upon 100 barrels originally promised to the municipal council.

Beginning in April 1886, the mill exported flour to markets both east and west. 127 Almost immediately after the bonus was collected, Mr. Willing sold his share in the

partnership to Mssrs. Squair and Craig. Sometime prior to June 1886, Mr. Koester sold his share in the firm to C. Bell and the company became known as Craig, Bell, and Squair. Sometime prior to June 1889, Mr. Craig bowed out of the concern and sold his share to Mr. Hall. By the end of 1889, Squair, Bell, and Hall sold their mill to the returning Mr. M. Koester, who along with his sons Carl and Fred, assumed sole ownership of the mill for its remaining years.¹²⁸

The Koesters advertised patent process flour for sale for \$2.75 per sack and \$2.50 in ten-pound (4.5 kg) lots, delivered free anywhere in town. As well, they promised to custom grind forty pounds of flour per bushel (666 kg per tonne) of No. 1 wheat. Farmers found this offer attractive because a by-product of the milling process was 18 pounds (8 kg) of livestock feed per bushel of wheat. Koesters' business was successful enough to warrant the opening of a retail flour and feed store on downtown Nelson Street, to allow him to compete with the retail outlets selling flour from large milling companies such as Ogilvies. 129

Koesters' roller mill met its premature demise in May 1893 when fire of an unknown origin razed the entire complex. Fire was a threat to all flour mills because of the constant possibility of dust explosions, ignited by sparks from the milling machinery. Numerous flour mills in the province succumbed by fire. The Koester family sold their flour and feed store to David Fraser who stocked it with the increasingly popular Ogilvie flour. 131

The burning of Koester's mill at the height of its success left a great void in the Virden community. Petitions were presented to the village and municipal councils demanding consideration be given to the question of a new flour mill. Concerned settlers in the area managed to raise \$11,500 in the form of a joint stock company and the Virden Milling Company was born. The capital stock of the company was to be \$12,500 divided into 500 shares of \$25 each. The ratepayers of the municipality approved a by-law exempting the Virden Milling Company from taxation for a ten-year period. The first directors of the company were Mayor Kennedy, J.J. Caulfield, James Saunders, R.E. Trumbell, W.J. Wilcox, H.C. Simpson, and J.F. Frame, the local member of the Provincial Legislative Assembly. 133

Virden Flour Mill, 1888 (Pam: Virden)

The site chosen for the mill was located across the tracks from the Virden C.P.R. Station, on Fifth Avenue, between Wellington and Nelson streets. The roller mill commenced operations in the fall of 1894. The following year the company increased its storage capacity by building a 10,000 bushel (272 tonne) addition to the elevator attached to the mill. Like the previous mill the new mill was only capable of producing 75 barrels of flour per day, well below the more common 100-barrel roller mill erected in other towns during this period.

W.D. Craig became the mill's manager in 1896. The mill and elevator were sold by the Virden Milling Company to Hubbard and Brine in 1910. They were probably the last owners of the mill, which by 1916, had already been closed for a number of years. By that time a saturated flour market, economic recession, water shortages and proof crops dampened the enterprise's viability. This mill was either destroyed by fire at a later date or was dismantled. After numerous attempts to attract another milling enterprise to Virden its citizens were finally able to entice B.P. Kent to undertake a third milling venture in 1934.

A delegation consisting of C.E. Ivens, Reeve of the municipality, A.E. Higginbothan, Mayor of the town, and W.P. Wilson, were sent to Somerset, Manitoba in 1934 to interview B.P. Kent and invite him to establish a mill at Virden. B.P. Kent reached an agreement with the combined councils of Wallace and Virden. The agreement called for him to build a mill at the corner of Sixth Avenue and King Street, on Lots 1-4, Block 79. The mill commenced operations in 1934 and its success was assured with the outbreak of World War II in 1939. Kent was able to enter the export market as the mill filled urgent orders for flour from Britain and North Africa. The mill was utilized to full capacity because, unlike many others in rural Manitoba, it was a new mill with state-of-the-art machinery and storage facilities.

This demand for flour led to the expansion of the mill's capacity to 200 barrels (32.7 cub metres) per day, its products being bran, shorts, middlings, grits, whole pastry flour, and general purpose flour. Its export business peaked in 1947 at over half a million dollars, and continued to be the life blood of the enterprise, with the Soviets and Chinese being Kent's biggest customers in the 1950's and 1960's. In the 1970s and 1980s federal

Virden flour mill, interior scene, 1958 (PAM: Industry & Commerce)

B.P. Kent Flour Mill, Virden (HRB photo, 1991)

B.P. Kent Mill, Virden. Interior view showing a recent addition to the mill's line of equipment, a plastic wrap machine for bulk shipments. (HRB photo, 1991)

View of a flour purifier in the B.P. Kent Flour Mill (HRB photo, 1991)

government contracts to supply developing nations with flour represented the bulk of Kent's business. ¹³⁷

Since 1957, the company has engaged in supplying retail outlets in Manitoba and southeastern Saskatchewan with over 15 flour-related products. Two brands of flour are produced: Prairie Dawn, a high patent top quality flour, and Salvo, a high grade bakers' flour produced for the baking trade. A third Brandon of commercial grade is distributed in Northern Canada or exported.¹³⁸

When B.P. Kent passed away in 1953, his son A.R. Kent took over the mill's operations. In 1991, A.R. Kent's son, William operates the family business. The firm, employing about forty people, is one of Virden's principal industries, and is only one of three flour mills presently operating in Manitoba.

2. Flour Milling at Deloraine

The story of the flour-milling experience in Deloraine is an excellent example of what occurred in many small villages and towns across southwestern Manitoba as the town fathers strove to make their village the service centre for the surrounding agricultural community. Flour milling in the region began with the construction of a grist mill at the Old Deloraine townsite in November 1882 by brothers William and Thomas Sheppard. Mechanically, the mill consisted of three run of stone and was powered by a Gouldie-McCulloch steam engine. The oak timbers of the engine bed and the dam for water storage can still be located in the valley of NW 30-2-22, adjoining the Old Deloraine townsite. This enterprise supplied the flour and feed needs of both local and North Dakota residents.

When Old Deloraine's buildings were moved, "lock stock and barrel," to the railhead, it was proposed to move Sheppard's mill as well. The lack of an adequate water supply there, however, made this plan unfeasible. In 1887 inquiries were made as to the condition of the old flour mill at Deloraine, in the hopes of reopening it. A concerned citizen wrote to the <u>Deloraine Times</u>: "We have a large local demand sufficient in itself to keep a good-sized grist mill going, while our farmers would only be too glad of the opportunity to buy brand and feed stuffs." ¹⁴⁰

In January 1888 the old mill was purchased by Mr. Corcoran of Stratford, Ontario who considered moving it to the new Deloraine townsite. Once again the water supply

problem proved to a roadblock and the planned move was abandoned. Eventually, the mill was sold for \$150 to Messrs. Preston and McKay, who relocated the mill's machinery to neighbouring Boissevain.¹⁴¹

The demand for a roller process flour mill increased as the countryside filled with settlers. An inquiry was received in November 1895 from the Ontario Milling and Manufacturing Company of Ottawa, through local agent L.E. Thompson, for a suitable mill site along the railway between the Ogilvie and Woodworth grain elevators. Winchester Municipal Council agreed to lease parts of the road allowance west of Lovett Street to the milling concern, and negotiated with the C.P.R. to grant a serviced site in its business siding. Initially, the Council hoped that a local company could be formed in affiliation with the Ontario firm, in order to gain greater autonomy over the operation. Instead, the Ontario Milling Company responded with a request that a bonus be granted to the firm in exchange for locating in Deloraine. In June 1896, ratepayers approved a \$4000 bonus, to be given in \$200 installments over a period of twenty years or as long as the mill was operating. In the country of the country of twenty years or as long as the mill was operating.

Mr. Hughes from Leeds County, Ontario arrived in Deloraine to oversee the construction of a 42-foot, three-storey high building by W.H. Cameron. The mill was expected to be completed within six weeks, but operations were delayed due to the recurring water supply problem. Finally the Municipal Council granted permission to the milling company to lay pipes from the Deloraine well directly to the mill. The mill functioned intermittently in 1897, but by the fall of 1898 had ceased operating, leaving local citizens irate. It seemed unreasonable to them that "after putting up a bonus, farmers should have to drive to Boissevain or elsewhere to get gristing done as they have been doing all summer." Apparently the mill remained closed until march 1899 when a Mr. Smith of Regina and Mr. Synder of Calgary arrived in town to take over the dormant business. 147

Smith and Snyder opened the mill for business in early March 1899, under a leasing agreement with the Ontario Milling Company, and quickly gained a reputation as good millers, producing an excellent product. A local baker commented that the product was "No. 1 bread flour surpassed by none, I have baked since I came to the country and believe it will turn out more loaves per cwt. than any we have used." Despite

producing a high quality product, the operators both recognized that the mill was poorly built and lobbied the municipal council for funds in order to improve the existing structure and machinery. 149 The municipal council believed that they had spent enough on this disappointing venture and refused to pay the Ontario Milling Company their bonus in 1898. In Spring 1900, the former Reeve, John Renton, was appointed to arbitrate the claims of the Ontario Milling Company. He decided that the Council should pay nothing for 1898, but that it should live up to its obligations for 1899. 150 In the future, local citizens were instructed to keep watch to make sure the company honoured the terms of the bonus. This warning mattered little because the mill ceased operations in February 1901 due to both administrative and economic factors. 151 The Ontario Milling Company, as an absentee landlord, had never made the capital investments necessary to sustain it as a viable operation. The chronic water supply problem, which plagued the entire town of Deloraine, placed an extra strain on the mill operation. The Deloraine Board of Trade admitted that any plans for a new mill had to include financing to provide a water supply.

The mill property was purchased by Mr. Knowlton, who appears to have operated the mill briefly before selling it in October 1910.¹⁵² the mill was dismantled and an automotive repair shop was later built on the site.¹⁵³

While Knowlton's mill functioned sporadically during the first decade of the twentieth century, local citizens, led by the Board of Trade and the Farmers Elevator Company, began making plans for the construction of a more reliable flour mill at Deloraine. In April 1907, a mill formation meeting commissioned Mr. Bera Pinch to canvass local farmers for subscriptions to form a local joint stock company to be called the Deloraine Milling Company. That same year a contract was awarded to the Stratford Milling Company for the construction of a 150-barrel flour mill. At the time of construction, 250 farmers had subscribed \$25,000 in stock, to be paid in installments of 10% and three payments of 30% each. The formation of a joint stock company was an attractive alternative to the bonusing method used previously in the Ontario Milling Company fiasco. Now the local investors had direct control over the operation of the firm and avoided a reliance on an unknown independent operator who might ignore local needs.

The Deloraine Milling Company (*Deloraine Scans A Century*, published by the Deloraine History Book Committee, 1980, page 13.

The flour mill, warehouse and power plant were completed in November 1908, coming in at \$6,000 over the \$25,000 projected construction cost. ¹⁵⁶ In order to alleviate the added financial burden, the Deloraine Town Council passed a by-law granting the mill a five-year tax exemption. ¹⁵⁷ The Deloraine Milling Company began advertising in early December for good milling wheat, grades No. 2-5 Northern. A year later the mill was providing same day service and offering its own brand of flour, "Deloraine's Best, made from No. 1 Northern, at \$2.75 per sack." This flour was described as, "unbleached and unexcelled, a strong glutinous patent flour." ¹⁵⁸

Despite patronage from the local market, financial problems plagued the operation largely because of non-payment of the subscription installments. The mill operated only intermittently during 1909, but still showed a \$500 profit. In 1910, the mill expanded, introducing its flour for sale in local stores and managing to turn a net profit of \$27 dollars during that year. By spring 1913, carloads of flour were being shipped to other southern Manitoba towns, such as Lyleton and Crystal City. That fall the mill finally cleared its financial liabilities, and for the first time stockholders were issued stock certificates, an indication that the enterprise had finally achieved financial stability. Credit for this turnabout was given to retiring company president, W.E. Cowan, and to W.R. Beveridge, but it was miller, A. Highlander's hard work that had made the operation viable.

In fall 1914 the mill was shipping Gold Nugget Flour, not only to the local market but also to the Belgian Relief Fund. 163 The mills' business boomed during World War I due to demands for flour in war-ravaged Europe. However, shortly after the war, the mill struggled to compete with the emerging corporate flour mills who were rapidly taking over the local and regional markets. Companies such as Ogilvies and Lake of the Woods could produce and market their products more cheaply than locally-produced flour, thus putting less cost efficient local mills out of business. 164 As well the settlement frontier had moved well into Alberta, allowing new entrepreneurs to establish mills in Saskatchewan and Alberta to service the prairie market. One of these, Harrison and Sons of Minneapolis and Weyburn, purchased the Deloraine Milling Company in September 1925. 165 The new owners intended to put the mill back into the profit ledger by acquiring an electrical power franchise and establishing a power plant at the mill site. While this

was a more efficient power source than the gas plant currently used at the mill, the Harrisons were more interested in the financial gains associated with supplying all of Deloraine with electrical power. When instead, the Deloraine electrical contract was given to the Northern Engineering and Developing Company, the Harrisons sold their interest in the company to this firm. Subsequently, National Utilities Corporation purchased the interests of Northern Engineering and completed the power house. ¹⁶⁶

The mill was not reopened, however, until 1930, when the deepening Depression created a demand for custom milling from farmers who could no longer afford the fine varieties sold in local grocery stores. In that year W.H. Clendenning, whose father had earlier operated a successful mill at Carman, was hired to manage the enterprise, renamed "Turtle Mountain Mill." Soon the mill was producing and marketing Gold Nugget whole wheat flour. In 1938, Clendenning purchased the business from the utilities company who surrendered its electrical contract as well, to Manitoba Hydro in 1940. The timing proved opportune: the outbreak of World War II soon created a world-wide flour shortage. During the war and in the years immediately following, Deloraine flour was shipped to England, China and Italy. In 1947, the company had eight overseas contracts, shipping, through an export broker, flour in 25-car lots of 1000 bags each. This required the mill to operate 24 hours a day. In 1948

These lucrative contracts came to an end in 1950 when the Canadian Wheat Board, under lobbying pressure from the corporate milling concerns, refused to supply wheat for milling purposes to the small milling firms. This policy effectively drove most small milling firms out of business. Clendemning sold his company to Squire Seeds of Bottineau, North Dakota, in spring 1951. The Squires converted the property to accommodate seed-cleaning equipment, hoping to base their operation on cleaning grain, mostly barley, for local farmers. Lack of trade forced this company's closure and the mill structure was sold to an outside firm who quickly demolished it in July 1950. So ended the era of flour milling in Deloraine, as it did for many small mills across Western Canada.

3. The Holmfield Flour Mill

Unlike the mills built at Virden and Deloraine, the flour mill at Holmfield, Manitoba was neither destroyed by fire nor demolished. Remarkably the Holmfield Flour Mill has been preserved, and in 1991, remains the only fully operational roller mill remaining from the 1890s still intact, in Western Canada. This structure currently is the only representative mill left in Manitoba from the golden era of flour mill construction.

Plans for a flour mill in the merging village of Holmfield were first considered in the spring of 1897, when the village council approved a by-law granting a bonus of \$2,000 for the construction of a mill at Holmfield. This initiative was hatched by local citizens, Messrs. C. Handford and J.D. Orr, who had obtained a commitment from brothers, William and George Harrison that they would build and operate the mill. A condition of granting the bonus to the Harrison Brothers was that the by-law would be "voted on by the electors of that district after the preparation of the Voters Lists for 1897." However, it appears that this step was never taken because "arrangements for the mill [were] now so far advanced that neither the delays of the council nor legislative interference [could] check it." Evidence suggests that no district vote was ever taken and that work on the mill began without delay in May 1897.

Unlike other mills built during this time, the Council committee in charge of raising money for the \$2,000 bonus had little trouble raising the capital. The following notice was published in <u>The Killarney Guide</u>:

The committee that has been attending to the collection of subscriptions in aid of the grist mill has succeeded in raising the necessary amount and desires to thank the people, not only in our district, but in the immediate vicinity of Killarney and Cartwright, for their liberal support. ¹⁷⁵

Due to the manageability of the amount (\$2,000) and the true need for a flour mill in the district, the raising of the funds appeared to be relatively stressed free. From the outset, the mill was not burdened with the handicap of an operating deficit, which might have hampered its chances of survival. Instead, Harrison's mill operated on a sound financial footing, thanks to the support of the local patrons and the commitment to the district's farmers by the Harrison family.

Harrison Bros. Mill at Holmfield, Manitoba ca 1897 (Harrison Family photo)

By July 1897, construction on Harrison's Flour Mill was well under way. In August of the same year, the frame of the mill was raised and the stonework had commenced by Mr. R.N. Willough of Brandon, "a guard in the Asylum," who moonlighted in Holmfield as a mason, labouring for two months on the stonework of the mill. Mr. C.W. Avery of Toronto was hired by the Harrisons to install the milling machinery, which included a "Brown automatic engine". The engine in the elevator was connected to the boiler in the mill so that one firebox would run the whole plant. Mr. Avery completed this work by December 1897 and the mill began operations either in the same month or in early 1898. As part of the building program, the Harrison brothers constructed three new warehouses in 1899, designed to "give them greater convenience for shipping their flour." 178

The Harrison mill was a booming business during its early years of operation. A 1901 observer noted, "Harrison Bros. are kept busy with the mill day and night to fill orders for car loads of flour." This level of support enable the brothers to undertake numerous renovations during the following year, including completion of the stonework on the engine house and the erection of a new smoke stack. Also, the mill's power was boosted with the addition of a second boiler, and a new gangway was guilt to the entrance of their elevator. 180

Harrison's Mill was the site of a spectacular robbery attempt during the spring of 1905. According to the April 14, 1905 edition of the Killarney Guide:

Burglars visited Harrison Bros. Mill at Holmfield on Friday nite last, and forcing their way into the office literally blew to pieces the big safe. The work was evidently done by professionals at this business for the marks of the expert [were] plainly visible. Fortunately all of the money in the safe had been removed the night before and the thieves received nothing for their pains. No clue as to the guilty parties can be found. ¹⁸¹

The robbers were obviously emboldened to commit this lawless deed by the promise of cash, which they suspected the bustling milling company had in great supply. The perpetrators were never apprehended and to this day their identities remain a mystery.

The Harrison Milling and Grain Company, like all rural mills, experienced a major surge in business during the Depression, which encouraged the owners to undertake some renovations in the summer of 1934. The steam power plant was replaced by a diesel engine and "new elevating and flour tubing" was installed by Mr. Newton, a professional millwright from Winnipeg. With the exception of the substitution of electric power for diesel in 1947, no other major changes in the milling equipment have been undertaken at the mill since 1934. The equipment has been maintained by the Harrison family in its 1898-1934 condition with the help of a machine shop where worn-out parts are replaced by homemade reproductions as much as possible.

Shortly after its last major renovative experience the mill was threatened by fire, the element responsible for the demise of many mill structures in rural Manitoba. During the evening of July 26, 1934, smoke and flames were observed on the roof of the east wing of the mill. The mill whistle was blown and a large crowd of volunteer firefighters gathered. A bucket brigade was created from the well to the mill and up a ladder to the roof. The fire, which was confined to the roof of the east wing, was put out after about an hour. An investigation into the cause of this near-catastrophe revealed that it had "originated from overheating in a box above the boilers." Thanks to a favourable wind direction and the yeoman efforts of the bucket brigade, this flour mill was saved and remains today as both a extant milling operation and a potential heritage resource.

After the First World War, as more mills opened up in Saskatchewan and Alberta to serve the settlement frontier, milling lost its place as Manitoba's premier manufacturing industry. As urbanization and mechanization took place local flour needs in the rural community dropped as well. Many mills similar to Harrison's closed in this decade because their production costs could no longer match those of the flour cheaper than the smaller rural mills because of economies of scale. While costs of production per bag were essentially the same the smaller firms produced fewer bags. This inevitably led to a higher selling price than for mass-produced flour for which production costs were divided over a larger number of bags.

Harrison Bros. Mill and Elevator at Holmfield, soon after the 1901-02 additions to the structure were completed. (Harrison Family photo)

Harrison Bros. Mill, Holmfield. View from the southwest (HRB photo, 1991)

As dietary needs of his family changed, it became too laborious for a farmer to load his own wheat into a wagon, drive it to town, wait for it to be milled and take it home, considering the decreasing amount needed to feed his family. Because the mechanization of agriculture meant that a farming operation did not require the same large workforce as in the pioneering period the size of families was decreasing as well. Most farmers found it simpler to purchase a bag of mass-produced flour from the large mills such as Ogilvies', which was sold at the local general store. Not only was this flour cheaper but it was also of uniform quality and the farmer's wife was pleased by the results of her baking efforts when she used the store-bought flour.

Why did Harrisons' milling operation at Holmfield manage to survive into its second century when even the hamlet in which it is located has nearly disappeared? There are several reasons, one being the diversity of the economic activities undertaken by the Harrisons. The Harrisons were not simply millers; they were also grain buyers with an elevator located on a main CPR line serving southwestern Manitoba and Saskatchewan. Their first grain elevator was erected in Killarney in 1888; their second in Holmfield in 1892, in conjunction with the milling enterprise. Other elevators were leased at Mather and Cartwright before the brothers decided to concentrate their grain-buying operations in Holmfield, selling their elevator in Killarney in 1897.¹⁸⁵

Both George and William Harrison were expert machinists, having learned this trade in Mitchell, Ontario before migrating to Manitoba. Their milling expertise had been acquired from their other brother, Mathew, while they had worked beside him at the first Harrison mill at Wakopa from 1879-1885. The brothers and their sons operated a machine shop in Holmfield from 1898-1955, and were famous in the district for their ability to create mechanical parts for both their needs and those of farmers in the surrounding district. As well, from 1943-1972, a lumber business was part of the family enterprise. Added to these businesses were the large landholdings of the family, who as farmers, understood well the concerns and needs of their clients at the mill and elevator. So popular were the Harrisons in the district that William's son, Abraham, who with his brother Lawrence, took over management of the mill from the senior brothers, was elected as the district's representative in the Manitoba Legislature from 1943-66, serving as Speaker from 1958-63, and as a Cabinet Minister from 1963-66.

The Harrison flour mill was basically a custom-milling operation to which the farmers could bring their wheat and exchange it for flour. During the 1930s the mill worked at maximum production. In exchange for the continued benefits of high quality, locally-produced flour and the production of by-product livestock feed, the residents of the district agreed to pay four bushels of wheat for one hundred pounds of flour, in lieu of cash. This informal arrangement was put into practice because the owners were deeply committed to the welfare of the district. As residents of the district, the Harrison brothers operated their mill during tough economic times largely as a public service to the people of the district. The farmers fulfilled their end of the bargain by paying amounts owed. Transportation costs were minimal because flour sales were confined to the local area. Storage facilities in the Harrison Elevator made it possible for the mill owners to buy grain at low prices and hold it for later milling a practice utilized by large milling firms.

Having survived the economic challenge of the depression years, the owners' perseverance paid off during the following decade, as World War II temporarily took European wheat fields and industries out of production, leading to a world-wide flour shortage. Flour mills both big and small across North America were pressed into action with a mandate to produce flour for the Allied troops and civilians needing scarce foodstuffs. At its peak during World War II, the Harrison Mill produced about 50,000 bags of flour, weighing 100 pounds each.²¹⁰ During the early 1950s, overseas contracts were available while the European economy and landscape were under reconstruction. Harrisons' shipped 4,000 bags of flour overseas in 1951. The overseas market slowly disappeared as Europe recovered and the Wheat Board denied small milling firms the wheat needed to operate.¹⁸⁸

During the 1960s, 70s, 80s, and into the 90s, the mill gradually scaled down its operations to concentrate on a purely local market. Presently it runs only a few days a week. In exchange for their wheat, the farmers pick up a sack of flour. The flour is distributed locally under the brand name "Turtle Mountain Maid" and available for purchase in local retain outlets.

Abraham Harrison kept the art of milling alive by passing his father's business to his sons, William and Errick. In 1991, the two brothers continue to operate the business as an avocation to their separate professional careers. According to William, they are not

in the business to make money, but continue to mill flour because they "like it." ¹⁸⁹ By not having to rely on the mill as the sole source of income, the Harrisons have managed to keep their family business alive. In hopes of keeping the family tradition alive, William Harrison is teaching his three daughters to operate the mill.

The Harrison family's flour mill is not only the oldest of its type still existing in Manitoba, but it is the oldest fully operational mill of its kind in Western Canada. Other small mills operating on the prairies are: Byers Mill in Camrose, Albert, built in 1926; the Viscount, Alberta mill, opened in 1928; the Humbolt flour mill in Humbolt, Saskatchewan, opened in 1913; and the Kent flour mill in Virden, opened in 1934. The Harrison mill includes the original machinery of the mill and an intricate system of drive belts. The mill stands as a living example of Manitoba's early agricultural and industrial foundations.

Harrison Bros. Mill, Holmfield. Interior view showing a portion of the elaborate belt drive system. (MRB photo, 1991)

Harrison Bros Mill, Holmfield. Interior view showing the flour rolls. (HRB photo, 1991)

IV. THE DECLINE OF THE MANITOBA FLOUR-MILLING INDUSTRY

The establishment of the rural milling industry was a direct result of the confidence demonstrated by those entrepreneurs and farmers who invested their fortunes, toil, and tears in the development of the province's agricultural resources. The conversion of wheat into flour for practical consumer purposes provided evidence to investors that the region was worthy of future development. The agricultural sector provided the engine for the growth of the entire province. From the cultivation of crops and the raising of livestock, secondary industries such as flour mills, packing plants, and implement manufacturers emerged. Financial institutions profited by lending initial capital to prospective farmers. Grain companies took their place in the provincial economy as brokers between buyer and seller. Thousands of small businesses, designed to service the farmers' needs, sprang up across the province. Due to the diversity of the agricultural sector and the opportunities offered by it, many settlers were attracted to Manitoba. As a result, Manitoba's population grew from 62,260 inhabitants in 1881 to 610,118 by 1921. Four milling played an important role in this achievement.

Most mills were built at the height of the industry's growth years. This "Golden Era" of flour milling began its decline around the turn of the century and by 1911 was clearly in recession. In 1881, there were 24 flour mills operating in Manitoba and the North West Territories (Saskatchewan and Manitoba). This number increased to 68 by 1890, with 74% of these being located in Manitoba. 192 By 1900, in Manitoba alone, there had been over 100 attempts, successful or otherwise, to establish flour mills, with nearly every emerging city, town, village, or hamlet trying to attract a miller, and with his enterprise, stimulate local development. 193 Between 1882-90 there were at least 32 bonus offers accepted in Manitoba. 194 By 1911, the number of flour mills had dwindled to thirty-six; by 1947 twenty-three remained; and in 1964 only six were left. ¹⁹⁵ In 1991, only Harrison's mill at Holmfield, Kent's mill at Virden, and Winnipeg's Soo Line Mills remain operational. 196 Even the operation of Soo Line appears threatened by further rationalization of the milling industry. Soo Line owned by Weston Bakeries since 1970, was sold to Archer-Daniels-Midland (ADM) in July 1991. ADM is an American Company able to enter the Canadian market due to the Canada-US Free Trade Agreement. The Kent and Soo Line Mills were constructed in 1934 and 1936

respectively; the Harrison mill is the only representative one left from the "Golden Era" of flour milling. Based on past trends it is quite likely no flour mills will exist in the province by the end of the decade. If this is the case, there is a danger that no structural evidence will remain to indicate that this once thriving industry ever existed.

While the movement of the settlement frontier past Manitoba's boundaries was responsible in part for a decreasing market for flour from local Manitoba Mills, the decline and extinction of small independent flour mills across Manitoba can be largely attributed to the uncompetitive position in which these mills were placed by the large milling companies after the first World War. Consumers of flour gravitated toward the more inexpensive product produced by the large mills. Lack of business suffocated the independent millers and most were driven out of the business. A flour mill with a daily capacity of two hundred and fifty barrels incurred basically the same production costs as one that produced two thousand barrels per day. With less product to sell, the independent miller had to recover his costs of production over substantially fewer sales units, thus resulting in higher prices. On the other hand, the large mills were able to sell flour at a lower rate than the independents because their similar costs of production could be divided over greater sales of flour, thus resulting in a lower price.

The large milling concerns could not only undercut the price of flour that independent millers offered, but they operated at a distinct advantage because of their large reserves of capital. This capital reserve allowed the large concerns to build lines of elevators in which to store wheat purchased at low prices early in the season and held either in the elevators, or as flour in warehouses, until the annual bulge in prices made it possible to sell the product at a handsome profit. Very few independent millers could afford this luxury. The large mills also had greater funds at their disposal for advertising. Many smaller mills also lacked the capital necessary to update machinery needed to upgrade the quality of their product to the uniform standard set by the large mills.

In 1920, the large milling firms increased their domination of the Canadian market by forming their own professional organization, the Canadian National Millers Association. A western division based in Winnipeg was formed in 1936. This group consisted exclusively of the large milling companies operating in Western Canada, including: Lake of the Woods, Maple Leaf, Ogilvie, Purity, Quaker, and Robin Hood.¹⁹⁹

In 1948, the Canadian flour milling industry was subjected to a federal investigation into violations of the Combines Investigations Act. Commissioner F.A. McGregor concluded that:

Since at least 1936 there [had] been continuing efforts on the part of the principle milling companies to secure and maintain agreements amongst themselves and with others which would fix common prices for the sale of flour, rolled oats, millfeeds and coarse grains which they sold.²⁰⁰

Even though the products of Association members were cheaper than those of independent millers, the Commissioner found that their prices could have been even lower, and concluded that these companies "did operate to deprive the public of competitive pricing which would have [been] obtained otherwise." The Commissioner further stated that "evidence shows the steps which were taken to deal with each manifestation of price competition and to remove or limit its influence." The participation of these companies in illicit price-fixing activities further dampened the independent mill owners' chances of survival in an already fragile marketplace.

Small flour mills not only had to contend with an unfavourable competitive position but also experienced the negative consequences of an ever shrinking local market for their flour. Over the course of the twentieth century, Manitoba's rural population base began to decline; rural residents migrated to urban centres. Prior to 1941, more people resided in rural than urban Manitoba; after that year, the rural population steadily decreased in absolute and relative terms to comprise 29.2% of the total in 1988.²⁰³ As the exodus to the province's urban centres continued, most small rural mills experienced a disastrous drop in the local demand for flour and were forced to close their doors forever. Clearly rural depopulation had an impact on the decline of the rural flour-milling industry to the extent that only three rural flour mills remained in operation by 1964.²⁰⁴

Logistical factors also played a role in the decline and closure of many rural flour mills. The development of a more efficient transportation network of railways and highways no longer made it necessary for every hamlet, village, or town to possess a flour mill. Mills strategically located on principle transportation links stood a better

A former flour mill at Minnedosa, presently in derelict condition. (HRB photo, 1991)

chance of survival than ones not on the key nodes. Mills located on accessible transportation networks, with the ability to produce fine quality flour, complimented by a loyal consumer demand for the product, were able to survive longer than others.

Throughout the industry's evolution there has been a path of rationalization. After the boom period of flour mill construction during the 1880s and 1890s, came a period of rapid decline. Large scale, high capacity mills, employing state-of-the-art roller process machinery, were designed to dominate the emerging Western Canadian market and fill orders for overseas flour contracts. Flour-milling companies emerged as dominant players in this quest, one such being the Lake of the Woods Milling Company, which operated a high capacity plant at Keewatin, Ontario. Lake of the Woods flour soon became a popular product in Manitoba stores. Winnipeg became home to three milling giants who together captured almost the entire Western Canadian flour market. The companies, which dominated the industry throughout the twentieth century, were: Ogilvies, Soo Line, and Purity (formerly Western Canada Flour Mills). By 1991, the industry was rationalized to the extent that only Soo Line Mills remained in operation. The Manitoba flour-milling industry remains on the brink of total collapse and the principle reason for this is increasing international competition in an ever shrinking export market.

To sustain itself as a viable enterprise, the Western Canadian flour-milling industry would need to access external markets because it can not compete with eastern firms for the domestic market, which is concentrated in Eastern Canada. In 1984, more than three-quarters of the wheat flour milled in Canada was consumed domestically; the balance was exported. While Canada exported only 5% of its flour in 1881, this figure rose to 38% during the first World War, after which it steadily declined, with the exception of the second World War and post-war eras at which time Canada held 30% of the 4 million tonne world flour trade and flour represented 10% of Canadian wheat exports. In 1973, Canada's share of the international market dropped to 15%. The amount of Canadian flour exported in 1974 matched that of 1911. By 1987, Canada's share of the 5.3 million tonne world flour trade had fallen to about 7%, with flour making up only about 2% of total Canadian wheat exports. This decline in market share continues to be largely due to the export subsidies on flour provided by the United States.

and the EEC account for over 90% of the world flour exports.²⁰⁹ Although Europe was once Canada's major flour market, the two now compete directly for export markets. The dramatic increase in European production since the conclusion of World War II has been largely due to the incentive of support prices and protection provided by their Common Market Agricultural Policy. The EEC has increased its share of the world flour trade from 34% in 1966-67 to 66% in 1985-86, although in absolute terms, total EEC flour exports have also fallen.²¹⁰

The world flour market has been shrinking as increasing numbers of flour-importing countries prefer to import wheat and mill their own flour. Many nations experiencing early states of industrial development have sought to build this foundation with flour mills. Manitoba's industrial sector once developed along similar patterns. According to Alberta miller, Reed C. Ellison:

The principal reason for the decline of export business since 1952 has resulted from the construction of flour mills in many countries of the world, and some of these countries now are self-sufficient for flour. Most of them still buy wheat, but it is far cheaper to ship wheat in bulk than flour in bags. And these countries want the work for their own citizens in milling, and they also want the industry's by-products for livestock and poultry feeds.²¹¹

Many former importing nations have managed to become self-sufficient; some have even entered the world market as net exporting nations. This fact, along with the flooding of the world market with inexpensive, subsidized flour by international competitors, has resulted in a loss of market share for all Canadian millers, western or otherwise.

Up until the mid-1960s Great Britain was Canada's major customer for flour, but since her entrance into the European Economic Community, imports of flour from outside of the EEC have been heavily taxed, rendering Canadian flour uncompetitive. In 1991, Canada's only remaining commercial market is Cuba, which currently purchases 60% of Canada's exported flour. But even this market may evaporate with this nation's recent embarkation on a flour mill construction program.²¹² The remaining 40% of Canada's exports are used to fill food aid shipments under the direction of the Canadian International Development Agency.²¹³ The major recipients of Canadian flour aid

include China, the Sudan and Egypt, which received 65.0, 17.2 and 16.8 thousand tones respectively in 1991.²¹⁴

The decline in the world market share has rendered the domestic market more competitive. Consequently, the industry has continued to rationalize by concentrating operations in Central Canada. Between 1975-1985 the capacity of mills in Eastern Canada increased 25% while western capacity decreased by 16%. 215 In 1988. approximately 70% of the nation's milling capacity was located in Ontario and Quebec. 216 Since Canada's domestic market is concentrated in these two provinces logic dictated that the industry would centralize operations next door to the market. Costs of production were lower in central Canada as opposed to Western Canada, specifically in the transportation component. Western Canadian flour mills were deemed expendable by their eastern-based ownership groups. For example, Ogilvie Flour Mills Co. Ltd., based out of Montreal, closed its Winnipeg mill in 1990, while boosting the operating capacities of its three central Canadian mills to compensate for the Winnipeg plant's closure. Western mills were originally built to meet the demand for flour in the smaller western market and supplement export flour orders for principal importing nations like Great Britain. As Canada's export market share steadily declined Western Canadian mills outlived their purpose, and as a consequence, most were closed.

The entire Canadian milling industry continues to face stiff international competition for markets. In 1991, the industry began deregulation under the terms of the Canada-U.S. Free Trade agreement. It now faces direct competition for U.S. milling companies but also has access to U.S. wheat and consumers. The American penetration of the Canadian market has already begun with the purchase of Soo Line Mills by the ADM Co. As the rationalization of the industry continues, Canada's remaining 38 flour mills will face a formidable challenge to preserve their once exclusive stranglehold on the Canadian flour market. Prior to 1991, the Canadian flour-milling industry was protected from import competition by the Canadian Wheat Board, which controls the import of grains into Canada. Under this system, flour and wheat imports were permitted only under exceptional circumstances. The future of the entire Manitoba flour-milling industry may be in peril since "significant restructuring and closings could take place among segments of the industry that lack the financial resources for

technology upgrading."²¹⁸ A 1988 Government of Canada report on the industry's future went on to conclude that, "domestic market share would be lost to U.S. millers, with a smaller, more efficient Canadian industry emerging to take advantage of selected export opportunities in the United States."²¹⁹

The greatest challenge to the Manitoba milling industry definitely appears to come from the Canada-U.S. Free Trade Agreement which will probably encourage a further rationalization of the industry. Norm Humby, head of Soo Line Mills, expressed concern that with a further rationalization transpiring in the industry, smaller mills like his Winnipeg plant would have difficulty competing with larger Canadian firms and American milling giants such as Conagra and Archer Daniel Midland. His concerns proved valid as his firm recently fell victim to a merger with the latter firm. Hoping to merge into one super flour company in order to remain competitive in the Canadian flour market, two of Canada's biggest milling firms applied to the federal Competition Bureau. If the Competition Bureau approves the merger between Maple Leaf Mills and Ogilvie Mills, it would create one of the highest concentrations of a major industry in Canada. Combined with Robin Hood Multifoods Inc., the two companies would control 80 percent of the Canadian market. In the future, Manitoba's three remaining flour mills will face an increasing inability to offer flour at competitive prices in an ever shrinking market.

V. CONCLUSION

Shortly after the arrival of the Manitoba's first agricultural settlers at Red River in 1812, the erection of a flour mill became paramount. The early mills operated on the millstone process, utilizing wind and water as a power source, with steam power being introduced around the time Manitoba became a province. Manitoba's existence as a viable economic unit began with the creation of a wheat-based economy. Once cultivatable land was brought into production by the newly-arrived farmers, the foundation was laid for the growth and expansion of the entire provincial economy. The cultivation and shipment of wheat to distant centres created the necessary capital for further diversification within the province's agricultural sector. Secondary manufacturing industries, processing the primary products raised on the province's farms, soon emerged. The first such industry was flour milling. The development of the

gradual reduction process, using chilled iron rollers, revolutionized the milling industry in the world and in Manitoba. By 1890, a roller-process flour mill was considered an essential asset for the continued growth of every community, serving as a tangible symbol of new-found prosperity and progress. To increase their chances of becoming the service centre for their district, many villages and towns offered bonuses to millers to establish plants in their locale.

By 1914, most of Manitoba's arable land had been settled. The westward movement of the settlement frontier signified an end of the golden era of flour mill construction in the province. Faced with competition from large milling firms, improved transportation networks, a shrinking rural population, and changing dietary needs, flour mills across rural Manitoba began a steady period of decline. Sons no longer followed their fathers into the family business. Surprisingly the Depression brought a temporary halt to this pattern, as rural folk, short of cash but laden with grain they could not sell, exchanged it for flour and livestock feed at whichever local mills had managed to survive. Some communities, such as Virden, even managed to attract new milling enterprises to their communities during this depressed economic period. Mills with relatively modern equipment were then able to take advantage of the increased demand for export flour produced by World War II. Beginning in the early 1950s, as world flour markets began to dry up, the Canadian Wheat Board limited the amount of wheat available for milling purposes, causing all but the largest milling operations to face permanent closure. As former importing nations began to establish their own flourmilling industries and enter the world flour market as net exporters, even the larger firms began to experience a decline. International competition in a shrinking export flour market has resulted in a steady decrease in Canada's market share.

For the past two decades Canadian millers have concentrated on the domestic market, but this too is presently threatened by the entrance of American milling firms under the Canada-U.S. Free Trade Agreement. Irregardless, western firms have found it difficult to maintain their portion of the domestic market because the bulk of the market is concentrated in the East. The history of the milling industry in Manitoba can be characterized as concentrated in the large market centres.

A former flour mill at Sandy Lake has been put to re-adaptive use as a meat processing plant. (HRB photo, 1991)

"Mennonite Windmill, 8 miles NE of Morden" (N.W. Farmer, 5 February 1900, page: 85)

The built resources connected with the earliest production of flour in Manitoba consist of three grindstone mills, all located on museum grounds. Two of the three, located at Steinbach Mennonite Museum and Grant's Mill, are reproductions, while the windmill at Winnipeg Beach Ukrainian Museum is an original structure which as been renovated. The latter mill, although erected at a much later time period than its technology represents, is unique in that it is a cap mill.

From the golden era of flour milling in Manitoba, represented by the numerous roller type mills that once dotted this province, several structures, either adapted to present day use or left in a derelict condition, remain. Three of these hold some potential as heritage structures: the McCulloch Mill, built in 1897 in Souris; the Barkman Mill rebuilt in 1931 in Steinbach; and the Harrison Mill in Holmfield. The McCulloch Mill is an empty shell while the Barkman Mill sits idle but complete. Only the Harrison Mill continues to operate, much as it has since the first generation of Harrisons opened it in 1897.

There are three operating mills remaining in Manitoba. The Soo Line Mill, of St. Boniface, recently acquired by the ADM milling conglomerate, is a streamlined modern mill with little heritage value at this point in time. The Ken Flour Mill in Virden, was erected in 1934, but continues to market its flour in a regional market extending across southern Manitoba and Saskatchewan, as well as filling foreign aid orders. Harrisons' at Holmfield has specialized in producing only for the local market as well as a few tourists and health food enthusiasts. Harrisons' mill has survived while other local mills have not because of the mutual support shared between the firm and the local residents. This continues today. Representative of a time in Manitoba's history, when the first secondary industries were developing and expanding, Harrisons' mill gives Manitobans an opportunity to experience the "Golden Era" of flour milling in Manitoba.

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APPENDIX A

Inventory of Known Flour Mill Sites in Manitoba with Bibliographic references

Legend:

Nwfmm - Nor'West Farmer and Manitoba Miller

Nwfm - Nor'West Farmer and Miller

Nwf - Nor'West Farmer - American Miller

CMGE
 CMC
 Canadian Miller and Grain Elevator
 Canadian Miller and Cerealist
 HBCA
 Hudson's Bay Company Archives

MFP - Manitoba Free Press
- Canadian Grain Journal
- Community History

The following list is an inventory of provincial flour mill sites. This list is arranged alphabetically according to location:

1. ARDEN

S: <u>Nwfmm</u>, November 1889, p. 302.

"The agreement to build a 75 barrel roller flour mill at Arden, Man., has been signed by D. Moore, who undertakes the work, and the executive committee of Landsdowne municipality."

S: Nwfm, February 1890, p. 401.

"David Moore, Neepawa, Man., has gone to purchase machinery for the mill which he will build at Arden, Man., with a capacity of about 100 brls."

S: Nwfm, June 1891, p. 173.

"New roller mill built along Manitoba & Northwestern railway."

- S: Commercial, Eighth Annual Supplement, 1893, p. 634.
 - According to Mrs. Viola Foreman and Mr. Ben Foreman: "From a paper published about 1890 we find that Arden is a thriving town and has the following businesses: ... Rolling Mill and flour (burned down later);...."
 - Sketch of town layout available as remembered by former resident, p. 45.

2. ASESSIPPI

S: Nwfmm, May 1885, p. 86.

"Gill's new roller mill at Asessippi Man., has been bothered by back water on the wheel, but is now working with a full head."

S: Nwfmm, June 1885, p.

"The Asessippi Milling Company, Manitoba has now in operation a roller flour mill"

S: Commercial, March 23, 1886, p. 541

"A very fine flouring mill is that of Gill's on the Shell River at Asessippi. So excellent is the water power that the mill can run all winter. The flour is made by the roller system. The large and costly saw mill at the mouth of the river was erected at a cost of about \$50,000 and is one of the most complete mills in the Northwest. Mr. Mitchell has a large force of men in the spruce woods of the Fort Pelly country getting out logs. – Birtle Observer."

S: Commercial, 1893, p. 634.

Owner Henry Gill with 50 barrel capacity.

S.: <u>A Review of the Heritage Resources of Roblin Planning District</u>, K. Nicholson, June 1985, HRB, p. 70 with sources:

Discusses history of Asessippi mill Est. 1883 and dismantled in 1913.

3. AUSTIN

S: Nwfmm, July 1884, p. 143.

"Austin wants a grist mill, the farmers in this District are anxious to give a bonus to any practical man who will build in time for new crop."

S: Nwfm, February 1890, p. 401.

"A bonus of \$5,000 to aid in the erection and maintenance of a mill at Austin, Man., is offered."

S: Nwfm, September 1890, p. 611.

"G.C. Groves, of Fergus, Ont., who has been visiting Manitoba, has closed a bargain with the municipality to build a mill at Austin, Man. The machinery is ordered. It is the intention to have the mill running to grind this years' crop."

S: Nwfm, October 1890, p. 639.

"The Austin, Man., roller mill is being rapidly built...It is the intention of Mr. Grove to add a storey to the height making it four storeys high."

S: Nwfm, June 1891, p. 173.

Mentions new mill built along CPR line.

S: The Commercial, 8th annual supplement, 1893, p. 634.

Owner W. Clifford with a capacity of 150 barrels per day.

S: A Review of the Heritage Resources of the Nor-MacPlanning District: Post Contact Period, Tom Boreskie, 1982, HRB, pp. 57-60 with sources.

Walter Clifford purchased Austin Flour Mill in 1891.

Mill demolished in 1923.

Photo of mill.

Austin Flour Mill & The People's Elevator, Austin, 1902 (PAM: Austin, N5117)

4. BALDUR

S: Commercial, 1893, p. 634.

"At Baldur, on the Northern Pacific, McDonald & Cameron have completed a new mill

5. BALMORAL

S: Nwfmm, May 1886, p. 485.

"The Balmoral grist mill is booming, it is the only mill in the municipality and captures all the trade."

S: Commercial, November 9, 1886, p. 123.

"The grist mill at Stonewall, owned by Rutherford & Co. and the mill at Balmoral, owned by Geo. Buckpitt, will both be changed to the roller process. The bonus by-law granting \$4,000 each to the owners of the respective mills, having been endorsed by a large majority of the electors of Rockwood, within which municipality the mills are situated."

6. BEASEJOUR

S: Oral Interview, 1991

According to long-time resident Julius Hintz, the town had two flour mills in the late 1920s. Julius Hintz was born in 1899.

One mill was newly built while the other was considered to be obsolete.

One mill was demolished while the other's machinery was removed and building was converted to an apartment block across the street from the present elementary school.

7. BENITO

S: Community History, p. .

Discusses flour mill in Benito.

8. "BIG PLAIN"

S: Manitoba Free Press, March 17, 1881, p. 1.

"Townships 10-18, Ranges 13-18W, between Westbourne and Norfolk. It is reported that Mr. Armitage, of Minnedosa, intends erecting a new flour and gristing mill on the Plain this coming summer....At present we have to go to either the Portage or Rapid City."

9. BIRTLE

S: AM, March 1, 1885, p. 140.

"Mr. Barclay, of the "Brittle (Man.) Flouring Mill", returned from Minnedosa a few days ago, with several teams, bringing an excellent steam engine to be used in

driving the mill, the intense frost of the last two weeks having interfered with the working of the water-wheel...The engine is a very fine one, twenty-five horsepower, with ten-inch cylinder, and fifteen-inch stroke – BIRTLE OBSERVER."

S: Nwfmm, May 1885, p. 86.

"The mill at Birtle, Man., having been bothered by frost stopping the water wheel, Mr. Barclay, the owner, has put in a steam engine of 25 horse power, ten inch cylinder, and fifteen inch stroke."

S: AM, June 1, 1885, p. 302.

"Mr. Barclay, of Birtle, Man., has put in a 25 horse-power steam engine, ten-inch cylinder and fifteen-inch stroke."

S: Commercial, July 28, 1885, p. 1.

"Barclay, of the Birtle Mills has secured the contract from the Indian department for supplying flour to the Indians located in that district."

S: Nwfmm, February 1886, p. 387.

"The engine of the Birtle grist mill, which was added for winter use in case of low water, has been started, and the mill runs night and day."

S: Commercial, February 1, 1887, p. 371.

"A movement is on foot at Birtle to secure a roller flour mill, which is much needed at that place. It is proposed to submit by-laws asking a bonus of \$4,000 from the municipality and \$2,000 from the town to aid the enterprise."

S. Nwfmm, May 1889, p. 133.

"Marke & Clemens offer to erect and operate in Birtle, Man., a roller process mill of 80 barrels capacity upon receiving from the town a bonus of \$2,000 and tax exemption for ten years and a bonus of \$3,000 from the surrounding municipality. A public meeting has approved the assistance asked from the town, and it is expected the rural municipality will do its part."

S: Nwfmm, November 1889, p. 302.

"The Arrow Milling company, Birtle, Man., have about twenty men employed at present. The mill will be ready to commence grinding in a few days."

S: Nwfmm, November 1889, p. 302.

"The mill at Birtle, now completed, is one of the best in Manitoba. It is four storeys high, the first being a heavy, solid stone wall. The upper storeys are frame, sheeted on the outside with galvanized iron. There is a large, solid stone engine and boiler house, separate from the mill, and also stone offices. The timbers are heavy, and were brought from Ontario. It will have had a capacity of 100 barrels per day. Markle & Clemens are the projectors of the enterprise, which will be conducted under the name of the Arrow Milling Company. There is also a stone system flour mill, established at Birtle in 1882. This mill has not done much work of late years. It was operated by water power, furnished by the Birdtail."

Arrow Milling Co., Birtle, ca. 1903 (N.W. Farmer, 20 June 1903, p: 618)

S: Nwfm, February 1890, p. 401.

"The grist mill at Birtle, Man., has started..."

S: <u>The Commercial</u>, 1893, p. 634.

Owner Arrow Milling Co. with 100 barrel day capacity.

S: Leg. Lib. Man. Vertical File "MILLS"

Letter dated September 19, 1959 by J. Willis to MHS discusses Grant's Mill site.

S: CH, A View of the Birdtail: A History of the Mun. of Birtle, 1878-1974, Marion Abra (ed.), pp. 105-106.

Grant Flour Mill – William Grant and his brother Robert came about 1881 from Bruce County, Ontario to find a flour mill site on the Birdtail. Land was purchased from Mr. J.N. Dow, agreeing that the mill should be named "Downsford". A dam was built and a mill-race dug across a bend to carry water to the mill wheel.

William brought out his wife and family – John, Elsie and Christina – in 1882. House and mill were built of lumber, the first in the district. The mill had problems right from the beginning. Frosts came early in those years – in August 1888, icicles hung on the wheat heads in the fields, the market was poor for frozen grain, and the mill ran at a loss, with almost every settler for miles around on its account books. It operated until 1890s then was closed and used as a granary when William returned to farming.

Percy Grant writes: the mill was three stories in height, with a stone basement for the machinery, which was brought up the Assiniboine and hauled over the prairie by oxen. There were two burr grinders on the second floor, and the third housed the "silk" bolts for sifting the flour. Graham flour, cracked wheat, bran and shorts were also milled. Settlers came for miles from Shell River, Miniota, Shoal Lake, Rossburn, Elphinstone for the service of the mill, many of them housed overnight in the Grant home. William Waller, who had helped with the building, was also in charge of operation. Later he ran the Birtle mill, below the town on the site of the present park. The final blow to the mill's success was the change in the route of the railroad, so that Downsford disappeared as a community and the mill was left stranded without transportation.

S: Ibid, p. 116.

There was one [a grist mill] in Birtle very early, and Grant's mill built further up the Birdtail about 1882 served homesteaders in that district. Frozen wheat made dark, heavy flour, and also might gum up the mill machinery, so that the miller was reluctant to grind it.

10 BLUMENORT

S: CH, RM of Rhineland, Garhardt J. Ens, p. 40.

" There was a flour mill at Blumenort by 1877."

S: A Mennonite Community in Transition, p. 101.

"Abram M. Friesen's Diary – 1884."

"July 19 Plowed summerfallow in the morning. Repaired shoes. Picked up 10 bags of crushed oats from the mill.

August 16 Picked up crushed feed from the mill. At 89 cents per hundred pounds, 575 pounds costs \$4.88 three-quarters cents."

S: <u>Ibid</u>., p. 144.

"Henry E. Plett erected wind powered feed mill circa. 1889. Located on the west end of the village it had a 12 foot windmill, but upgraded to 16 foot wheel in 1900. The windmill was made entirely of metal except for the huge 24x20f wooden mast upon which it rested. Moved to gas powered Case tractor in 1918."

11. BOISSEVAIN

S: Commercial, April 20, 1886, p. 609.

"The residents of Boissevain are raising a bonus to assist in the erection of a roller flour mill at that place."

S: Nwfmm, April 1889, p. 100.

"The prospects for a mill at Boissevain, Man. Are good. The people have subscribed \$1,500, Deloraine municipality gives \$2,000, and it is expected to raise between \$5,000 and \$6,000 altogether."

S: Nwfmm, June 1889, p. 162.

"Preston, of Stradford, Ont., will erect a 100 bbls. Roller mill at Boissevain, Man. It will be stone, 30 x 48, 40 ft. high."

S: Nwfm, December 1889, p. 340.

"On recently leaving Stratford, On., to take charge of his mill at Boissevain, Man., Wm. Preston was presented with an address and purse.

S: Nwfm, May 1890, p.

"The Boissevain Roller Mill"

"A description of the new flour mill at Boissevain, Man., owned by Prerston and McKay, is likely to prove of interest. The main building is 30x40, 50 ft. high from the basement, built of stone, with cut stone corners, arches and sills. The engine room is also of stone, 20x30, finished off in the same manner as the main building. Both buildings are roofed with tin. The building cost over \$5,000, and is said to be one of the finest mill buildings in Manitoba. The basement of the mill is 11ft, high, and is excavated about three feet, the other eight is above ground. It is largely used for bran, flour and wheat storage and contains the boots of the elevators, the line shafting for driving the rolls, and scouring machine. The grinding floor, also 11 ft. high, contains five double sets of Allis rolls 9x24 and 9x30, a wheat separator, power packer, chop roll and scales. Next is the purifier floor, on which are their Smith purifiers, one Richmond shorts duster, two gravity scalpers and three cyclone dust collectors. The wheat and flour bins are on this floor, the stone walls being lined with ceiling to protect the wheat from frost and damp. The next floor, called the rolling floor, 18 ft. high, contains ten No. 1 George T. Smith Centrifugal Reels and Inter. Elevator bolts, one Eureka Horizontal Scourer, the elevator line and heads, etc.... A Brown automatic cut off engine runs the 125 barrel mill without a tremor or jar.

S.Kerry M. Abel, <u>Morton-Boissevain Planning District Heritage Report</u>, District Planning Study, November 1984, HRB, pp. 121-129, with sources.

- Discusses history of flour milling in Boissevain.
- In 1889, William Preston and W.C. McKay built a "roller mill".
- In 1894, Preston sold his interest in the mill to Charles J. Hurt.
- Business sold to J.W. Knittel Company in 1902.
- August 30, 1904, the mill was destroyed by fire.
- Another mill built but was destroyed by fire during the first week of August 1925
- Photo of Preston and McKay flour mill.

12. BRANDON

S: <u>Nwfmm</u>, 1883 Special Ed., p. 20.

"Captain McMillan, the Winnipeg miller, is preparing to build a model 150 barrel roller mill at Brandon. He has placed the matter of getting us the plans on the hands of C.E. Barkham his head miller, who is a thoroughly competent man." "The Brandon grist mill, run by Messrs. Kelly and Sutherland, contains at present three run of stone, and one set of rolls, which are kept going from morning till night, and turn out seventy-five barrels of flour per day. Additional new machinery to give it a capacity of 120 barrels per day is to be added in a few weeks."

S: <u>Nwfm</u>, February 1884, p. 36.

"Alexander Kelly and Co., have closed down the Brandon mills for a few weeks to put in the roller system of flour manufacture."

S: AM, February 1, 1884, p. 81.

"Alexander, Kelly & Sutherland, of Brandon, Manitoba, have contracted with Edw. P. Allis & Co., Reliance Works, Milwaukee, Vis., to remodel their mill to the roller system, and will use eight pairs of Allis Rolls in Gray's Noiseless Belt Frames. Work has commenced on the mill. This firm also have an oatmeal mill about ready for operation, and an elevator with a capacity of 30,000 bushels."

S: Nwfmm, March 1884, p. 56.

"Alterations to the roller process system in the Brandon Flour Mills are nearly completed. The new machinery will enable them to compete with any mill in the province. During the summer a new engine of one hundred horse-power will be substituted for the one at present use."

S: Nwfmm, April 1884, p. 90.

"Kelly and Sutherland's mills at Brandon are now in operation, having been supplied with gradual reduction machinery."

S: AM, May 1, 1884, p. 261.

"The new roller mill of Alexander, Kelly & Co., at Brandon is now running."

S: Commercial, May 20, 1884, p. 676.

"Operations at the Shields & Co.'s mill have already commenced: the mill this year will be in charge of J.N. Kennedy, Mr. Russell, the late manager having taken an interest in the grist mill."

S: Nwfmm, February 1886, p. 387.

"Kelly & Co.'s roller mill at Brandon, has been remodeled and fitted up at a cost of about \$12,000. A fine engine is used in the mill. It is a condensing engine of 100 h.p."

S: Nwfmm, May 1886, p. 485.

"The new engine used in Alexander, Kelly & Co.'s mill at Brandon is an imported Worswick, compound and condensing."

S: Nwfmm, October 1886, p. 641.

May of Brandon showing location of flour and oatmeal mills in Assiniboine flats (parallel to 6th and 7th Streets).

S: The New West: Wealth and Growth, 1888, p. 93.

Gives output capacity specs. On Kelly's mill.

S: Nwfm, May 1890, p. 486.

"Alexander, Kelly & Co., millers, Brandon, Man. have let the contract for the enlargement of their mill. The building will have an additional 14 feet added to its height and will have a new iron roof. There will also be 10ft. added to the front of the mill and new machinery placed in it, making it first-class throughout in every particular."

S: Nwfm, June 1890, p. 522.

"Kelly & Co.'s mill at Brandon, Man., will be remodeled to 200 bbls. Jas. Pye, of Minneapolis, will furnish the machinery. Allis rolls and Smith purifiers are to be used."

S: Nfmm, January 1891, p. 23.

Feature article describes Alexander, Kelley, & Co.'s renovated flour mill, some of the highlights include:

- A sketch of the mill site.
- Original stone mill built in 1882.
- "Even the building is new, the old one having been pulled down, and only the timbers used in the new building. Of the machinery, about everything is new except the boiler and engine."
- Ready for operation about September 1890. Capacity rose from 150 barrels to 225 barrels.
- "The mill building is frame, three stories high and basement, being stone, with solid concrete floor."
- Brown engine 150 horsepower.
- Adjoined by 35,000 bush. capacity elevator.
- Oatmeal mill connected to flour mill.
- S: Nwfm, June 1891, p. 173.

"At Brandon the mill has been rebuilt, and increased in capacity from 150 to 250 bbls per day."

S: <u>Commercial</u>, 8th annual supplement, 1893, p. 634.

Owner Alexander, Kelly and Co. with 250 barrel per day output.

S: Ibid.

Oatmeal mill owned by Alexander, Kelly & Co. with 50 barrel capacity.

S: <u>CMGE</u>, January 1912, p. 23.

"G. Edwards flour mill at Brandon, Man., has started up after being closed two years."

13. CARBERRY

S: Nwfmm, May 1885, p. 87.

"A capitalist of Chatham, Ont., has contracted to build a roller mill at Carberry, Man., of 200bbls. Capacity, to be in operation in July. It is bonussed..."

S: Nwfm, June 1885, p. 116.

The new grist mill at Carberry, Man., is going up fast."

S: Nwfmm, September 1885, p. 213.

"Machinery being installed into the Northwood Flouring mill at Carberry."

S: Commercial, September 1, 1885, p.

"Northwood, of Chatham, Ont., is building a large flour mill at Carberry. This is one of the finest grain districts in the Northwest, and the town although small, has a class of enterprising business men to whom the addition of this mill will prove of great value."

S: Nwfmm, January 1886, p. 353.

"Northwood's 200 bbl. Roller mill, at Carberry, is in running order now."

S: Nwfmm, February 1886, p. 387.

"The new 200 barrell mill at Carberry cost \$31,000."

"Mr. Auckland has resigned the head miller's position in the Carberry roller mills and is succeeded by Mr. Wm. Purdy, formerly second miller."

S: Nwfumm, April 1886, p. 448.

"The Carberry mill erected last fall is shipping flour east."

"The Carberry mills have added four wheat heaters for frozen wheat."

S: Nwfmm, May 1886, p. 485.

"Carberry roller mills has a large warehouse in front of their mill for storing flour."

S: Nwfmm, June 1886, p. 510

"The Carberry mill has a flour warehouse just completed."

S: Commercial, February 1, 1887, p. 371.

"The Carberry, Man., flour mill is undergoing repairs, from the damage caused by the late explosion of flour dust."

S: "Flour Mill Explosion" in <u>The Emigrant</u>, March 1, 1887, vol. 1, no. 10, p. 246. Describes January 6, 1887 flour mill explosion.

S: Nwfmm, April 1889, p. 100.

"At the recent Winnipeg assizes the Manitoba Milling Co., of Carberry, sued R. Muir & Co. of Winnipeg, for damages alleged to be caused by defendants' negligence in putting in certain machinery. A verdict was given for defendants."

S: NWf & Miller, November 1889, p. 302.

"The Carberry mill has restarted after a thorough overhauling.

S: Commercial, 8th annual supplement, 1893, p. 634.

Owner George Rogers & Co. with a capacity of 300 barrels per day.

S: Ibid.

"Other mills have been enlarged and improved, such as the Carberry mill, which has been completely remodeled during the year." Note: The US duty on

imported flour is \$2.00/bbl., while there was a 75 cent duty on flour imported into Canada. Ont. Millers demand up from .50 cents.

S: NWF, April 5, 1899, p. 219.

"Last year an attempt was made to secure from the ratepayers tributary to Carberry a bonus of \$10,000 to start a flour mill to replace the old one destroyed by fire. The local government is very jealous of the bonus system, and as the guarantee fund was not heartily supported by the ratepayers the scheme had to be shelved. The other day Reeve Rogers put before the local Board of Trade a statement of the loss he figures up, as resulting from the want of a local mill. There are in the district surrounding Carberry about 800 families that will consume an average of 15 sacks of flour each year, or a total of 12,000 bags that it would take 36,000 bushels of wheat to make ... making a total of \$10,000 yearly for being without a flour mill."

S: Canadian Miller & Cerealist (CMC), March 1914, p. 70.

"The Carberry Milling Co. has been organized to take over the idle plant at Carberry, Man., ... The town of Carberry will assist in the enterprise financially."

S: CH, p. 216.

Early photo of mill. Ceased operating 1907 and burned in 1916. Specs. Avail. Diagram available of early town mill site.

"Carberry Flour Mills, est'd 1887" ("Carberry Plains – Century One – 1882-1982", published by the Carberry History Committee, 1982, pg. 216)

14. CARMAN

S: Nwfm, November 1889, p. 302.

"Carman, Man., people want a grist mill."

S: Nwfm, February 1890, p. 401.

"James Pye, of Minneapolis, Minn., is at present engaged in overhauling the mill of W.H. Clendenning, at Carman, Man., and has sent H. Tromanhauser there to act as foreman. Its capacity will be 65 brls."

S: June M. Watson ed., The RM of Dufferin, 1880-1980, 1982, p. 305.

Photo of Clendenning Mill on NW 24-6-5W. taken circa 1900. Mill built in 1879.

S: Commercial, 1893, p. 634.

Owner – W.H. Clendenning & Co. with 50 barrel capacity.

S: Nwf, January 1893, p. 559.

Photo of Carman Farmer's Elevator, 1898, Capacity 60,000 bushels, was built in 1891 by a joint stock company.

S: CMGE, July 1911, p. 188.

"Clendenning's flour mill near Carman, Man., has been sold to a community of Mennonites, who will move it to Rosthern, Sask."

S: CMGE, August 1912, p. viii.

"H.J. Weins has bought the machinery of W.H. Clendenning's old flour mill at Carman, Man., and is moving it to Foam Lake, Sask."

S: K. Nicholson, <u>A Review of the Heritage Resources of Boyne Planning District</u>, November 1984, HRB, pp. 55-57 & 101-102, with sources.

- Discusses Clendenning's Mill.
- Discusses Carman roller Mills.
- Discusses 1920s era flour mill.

"W.H. Clendenning Mill, Carman" PAM photo, "Carman"

15. CARTWRIGHT

S: Nwfmm, April 1889, p. 100.

"A stock company comprising R.A. Sheppard, John Gimby, John Wallace, Geo. B. Wray, A. Davidson, T.S. Mennary and E.D. Coates, will build a small mill at Cartwright, Man."

16. CLEARWATER

S: Nwfmm, November 1883, p. 277.

AD – "Homedale, Mills

Clearwater, Man.

J.T. Coulthard, proprietors."

S: Nwfmm, April 1886, p. 448.

"It is intended to put rollers in the mill at Clearwater, owned by J. & T. Coulthard."

S: Commercial, 8th Annual Supplement, 1893, p. 634.

Lists Clearwater mill with W. Loan Co. owner and capacity of 50 barrels per day.

17. CRANDALL

S: THE CRONICLES OF CRANDALL, 1971, p. 92.

Mentions Mr. Charles Cartwright opening mill on "the west end of town." No date.

18. CRYSTAL CITY

S: Nwfmm, November 1883, p. 299.

"Crystal City mills commenced operations on the first of this month"

S: Nwfmm, February 1884, p. .

"The Louise municipal council at their recent meeting, held at Rock Lake, decided to relieve the grist mill at Crystal City, and Clearwater, from paying taxes."

S: AM, June 1, 1885, p. 302.

"The grist mill at Crystal City, Man., is to be moved to Snowflake, Man."

S: Nwfmm, June 1888, p.

"I have just finished changing a mill from burrs to roles for Cochrane and Manson, Crystal City, Man., on the short system of three reductions on wheat and three on middlings-Millwright."

S: Nwfmm, April 1889, p. 100.

"Mr. Crawford, of the Crystal City, Man., mill, will build another one at the station, larger than the one he owns at the old town site. A bonus in wheat, to be delivered next fall, is offered him."

S: Nwfm, December 1889, p. 340.

"The roller mill at Crystal City, Man., is now running."

S: The Commercial, 1893, p. 634.

Owner J.W. Cochrane with 125 barrel capacity per day.

19. DARLINGFORD

S: Nwfmm, Special Ed., 1883, p. 20.

"Darlingford, one of the rising towns on the south-western railway, is to have a \$100,000 company to erect an elevator, mill, and warehouse. The elevator will have a capacity of 50,000 bushels, while the mill will be similar to that of the Assiniboia Milling Company at Portage La prairie."

S: AM, October 1, 1884, p. 543.

"The grist mill at Darlingford, Manitoba, at present under the management of H.N. Fleming, has been purchased by Joseph Ritchie, of Nelson, Man., who will put it in thorough working order."

S: AM, June 1, 1885, p. .

"The burr mill now at Darlingford, Man., is about to be removed to Morden, Man."

S: The Darlingford Saga, p. 24.

"There were a number of business places...a saw mill and grist mill was run by Findlay brothers. Circa 1875-1882 in Old Darlingford."

S: CH, Darlingford, p. 39.

Photo 1908 of Bolton's Mill with commentary; burned May 1912.

20. DAUPHIN

S: <u>Dogtown to Dauphin</u>, Adam S. Little, p. 79.

"Pressure for a grist mill in Dauphin bore fruit in November 1898 when Sam Code established the Dauphin Milling Company along the railway siding on Mackenzie Avenue West. Unfortunately, the mill no sooner opened when Mr. Code died of Typhoid fever."

"Dauphin Milling Company, James & Thomas Shaw prop's." ("Dauphin Valley Spans The Years", published by the Dauphin Historical Society, 1970, pg. 215)

21. DELORAINE

S: Nwfmm, March 1884, p. 56.

"A man engaged in Sheppard's mill, at Deloraine became caught in the machinery and had his leg broken. Serious damage has been done in the same mill by the bursting of the boiler. Fortunately no one was hurt."

S: Deloraine Weekly Times & Turtle Mtn. Gazette, 10 November 1887.

Mentions "old flouring mill at Deloraine."

S: CMGE, August 1910, p. 194.

"The annual report of the Deloraine, (Man.) Milling Co., showed a deficit of \$3,000. It was decided, however, to keep the mill running. George Paterson was elected president."

S: CMGE, January 1913, p. 19.

"The Deloraine, Man., flour mill, which has been closed down for some months, is again in operation."

S: Beckoning Hills, p. 35.

"The old town had two implement dealers, one general store, the land office, the grist mill...."

"The Deloraine Milling Company" ("Deloraine Scans A Century", published by the Deloraine History Book Committee, 1980, p. 13)

22. DOMINION CITY

S: Nwfmm, November 1883, p. 277.

"The Dominion City Mill has changed hands once more."

S: Nwfmm, Special Ed., p. 21, 1883.

Excellent exterior sketch of Dominion City Mill available.

S: AM, January 1, 1885, p. 32.

"Waddell & McKercher have bought the mills at Dominion City, Manitoba, of the Dominion City Milling Co."

"Dominion City Mill, ca. 1883" (N.W. Farmer & Miller, 1883 Special edition, p. 21)

23. DOUGLAS

S: Nwfmm, April 1889, p. 100.

"Elton, Man., municipal council will be asked to submit a \$5,000 bonus by-law for a 100 barrel mill at Douglas."

S: Nwfm, April 1890, p. 461.

"A meeting was held at Douglas, Man., recently to consider the advisability of forming a joint stock company to build a flour mill. A letter from Mr. Plervis, of Brantford, On., was read, offering to take a \$5,000 interest in the mill, providing the company could raise another \$5,000. The majority were unwilling to take any stock in a company. A number of farmers expressed their willingness to give a reasonable quantity of wheat per year for two or three years, gratis, to some competent man who would build a mill at his own expense."

S: CH, Douglas, p. 13.

Discusses old town mill.

24. EDEN GROVE

S: Nwfmm, January 1886, p. 353.

"The steam grist mill on the Pipestone, near Eden Grove, is now running and proving a boon for the farmers in the neighborhood."

25. ELKHORN

S: Nwfmm, April 1886, p. 449.

"A large and enthusiastic meeting of farmers was held at Elkhorn lately, and it was agreed to offer 8,000 bushels of wheat and 5,000 bushels of oats to anyone building and operating a flour mill at that place."

S: Nwfmm, May 1886, p. 485.

"Elkhorn, Man., on the C.P.R., 200 miles west of Winnipeg, offers 8,000 bushels of wheat and 5,000 bushels of oats for a 75 barrel roller mill and oatmeal mill."

- S: <u>A Review of the Heritage Resources of Virden-Wallace Planning District</u>, October 1986, Karen Nicholson, HRB, pp. 112-116, with sources.
 - Discusses history of Elkhorn flour mill.
 - Mill finally opened in October 1895.
 - Mill ceased operations by 1916.
 - "The mill was dismantled at a later date."

S: CH, <u>STEEL AND GRASSROOTS</u>, 1882-1982, p. 6. (From 1905 Elkhorn Newspaper article written by Charles Duxbury).

"A flour mill with a capacity of one hundred and fifty barrels per day is in operation."

Photo, p. 15, no date.

S: Mossgiel Memories, 1981, p. 15.

Photo of old mill built in 1885.

"Elkhorn Roller Mills, est't 1885" ("Mossgiel Memories", published by the Mossgield Guild History Book Committee, 1981, p. 15)

26. EMERSON

S: Commercial, September 4, 1883, p. 413.

"The Hudson Bay Company have decided to reopen their large flour mill here. Water is to be supplied the mill from a drain from the river up which water will be forced by windmill power. A warehouse with a capacity of 12,000 bushels is to be built alongside the mill. The company will also build a 20,000 bushel elevator at the station."

S: Nwfmm, October 1883, p. 254.

"THE HBC are building a large grain storehouse next to their mill at West Emerson."

S: AM, January 1, 1884, p. 28.

"The addition to the Hudson Bay Company's mill at Emerson, Manitoba, is nearly completed. It is proposed to convey the water supply from the Red River by means of a trench to a reservoir beneath the mill."

S: Commercial, July 8, 1884, p. 805.

"The Emerson steam grist mill commonly known as Stauffer's Mill, was sold on the 2nd inst., under a foreclosure of mortgage, and was purchased by Mr. Curran for \$4,220. It will be put in operation of Monday the 7th."

S: AM, August 1, 1884, p. 430.

"Stauffer's Mill", at Emerson, Man., was sold July 2 under a foreclosure of the mortgage. It was purchased by Mr. Cuuran for \$4,220. It was put in operation July 7."

S: AM, April 1, 1885, p. 194.

"At Emerson, Manitoba, on March 30, James Watson was killed by the bursting of the fly-wheel of a grain crusher, and Mr. Van West was wounded in the arm."

S: Nwfm, January 1892, p. 24.

"Fraser & Co.'s grist mill at Emerson, Man., is running to its fullest capacity."

S: Commercial, 8th Annual Supplement, p. 634.

Owner: Fraser and Co. with 300 barrel day capacity.

S: <u>CMGE</u>, March 1910, p. 75.

"The German Milling Company has bought Pocock & Son's mill at Emerson, Man."

S: CH, Emerson 1875-1975: A Centennial History, 1975, pp. 68-69. Excellent birds eye view map depicting mill. (steam grist mill – 1880)

27. ERICKSDALE

S: <u>CH</u>, pp. 52-53.

Built circa 1912 by Jons Nord on NE 16-22-6W and "abandoned" in 1914. Windmill with stones.

28. FISHER BRANCH

According to Edward Ledohowski, the town's flour mill structure is still standing, with machinery intact although no longer running.

29. FORT ELLICE

S: Commercial, May 11, 1886, p. 1.

"The last issue of the MANITOBA GAZETTE contains three notices of by-laws to raise bonuses for the purpose of aiding in the construction of roller flour mills... Another provides for the raising of \$2,500 by way of bonus for the erection of a mill at Fort Ellice. This by-law will be voted upon May 31."

S: Nwfmm, June 1886, p. 519.

"A bonus for a roller mill is offered at Fort Ellice."

S: Nwfmm, July 1886, p. 519.

"A bonus for a roller mill is offered at Fort Ellice."

S: Nwfmm, July 1886, p. 542.

"Messrs. R. Muir & Co., Winnipeg, the contractors for the milling machinery....are under contract to build a 75 bbl. Mill for J. Stewart at Fort Ellice. The contractors are allowed to 31st Dec. but expect to have the mill in running order in October...and a smutting machine has been ordered off them for the Norquay Mills, Morden."

S: Commercial, November 16, 1886, p. 155

"J. Stewart is now at work on the grist mill at Fort Ellice, Man. The municipality gives a bonus of \$2,500."

S: Nwfmm, April 1889, p. 100.

"The HBC grist mill at Fort Ellice, Man., started some years ago, is to be completed".

30. GILBERT PLAINS

S: Canadian Miller & Grain Elevator (CMGC), February 1910, p. 54.

"Gilbert Plains (Man.) grist mill and elevator have been destroyed by fire at a loss of \$30,000, besides considerable stock."

31. GLADSTONE

S: A. BEGG, A Practical Handbook and Guide, 1877, p. 94.

Mentions "Mr. C.P. Brown's new mill at Gladstone..." Twenty HP engine.

S: Nwfmm, February 1884, p. 36.

"The grist mill at Gladstone is up for sale or to rent. The mill is situated in a good district and has two run of stones, with 40-horse power engine."

S: AM, June 1, 1885, p. 302.

"The Boardfoot Mill", at Gladstone, Man., operated by McDonald & McDougal, has been completely overhauled by Esson & Williams. It is now known as the "Golden Flake Mills."

S: Commercial, October 12, 1886, p. .

"C.P. Brown's grist mill at Gladstone is being moved to Westbourne."

S: Nwfmm, June 1888, p. .

"A little later C.P. Brown built a mill at Gladstone."

S: Nwfmm, August 1889, p. 211.

""Roller process machinery is being put in the Gladstone grist mill."

S: Nwfm, February 1890, p. 401.

"The grist mill at Gladstone, Man., was burned Jan.4, owing, it is supposed, to a defective stove pipe. Insurance \$1,000. Mr. Burpee ran the mill."

S: <u>Commercial</u>, 1893, p. 634.

Owner R Muir & Co. with 125 barrel capacity.

"Echo Milling Co. Ltd., W.J. Squares, Manager, "Manu.'s of the famous "Gold Drop" Flour, Capacity 300 barrels per day. (PAM: Gladstone #4)

32. GLENBORO

S: <u>Nwfm</u>, September 1890, p. 611.

"The council of South Cypress, Man., at their last meeting introduced a by-law to grant a bonus of \$3,000 to induce someone to build a roller mill at Glenboro. The adjoining municipality of Argyle will, it is expected, give about \$2,000 more, making \$5,000, which it is thought will secure the erection of the mill. Offers to build the mill are requested."

33. GLENMORRIS

S: American Miller (AM), January 1, 1884, p. 28.

"The mill of Mr. Hawrie of Glenmorris, Manitoba, is undergoing repairs."

34. GLENORA

S: Commercial, December 18, 1883.

"A new grist mill is being erected at Glenora, by Messrs. Blain & Reeves. It is expected to be in operation in a little over a month."

S: Commercial, May 3, 1887, p. 654.

"The settlers in the Glenora district, Turtle Mountain, are agitating for a roller flour mill, and a bonus by-law may be submitted.

35. GREGORY'S MILL

S: Nwfmm, October 1883, p. 254.

"Gregory's fine stone mill in the Souris District is now running. It has three improved rollers and is in every way a model mill."

S: Nwfm, December 1890, p. 697.

"A flour mill not much heard of in Manitoba is that owned by John Gregory, and located on the Souris River, eight miles from Wawanesa. It has water and steam power. The mill is roller process, and was established in 1882, making it one of the first mills of the kind in this province. The building is stone. Though not of large capacity, the mill has cost over \$40,000, including cost of water power."

S: Beckoning Hills, p. 41.

"The building of Gregory's Flour Mill on the Souris River about six miles north of the site of Margaret Village, provided a limited market for wheat, and a convenient source of flour for the years it was in operation. This mill was operated by water power developed by the building of a mud dam across the river."

S: Beckoning Hills, p. 48, as told by Allen J. Haight.

"And again, the experience of Mr. James McKnight, when the family ran out of flour in midwinter, walked to Gregory's mills on Souris River..."

36. GRETNA

S: Nwfm, January 1890, p. 372.

"The flour mill erected at Gretna, Man., by D. Peters & Co., has commenced operations. It has a capacity of 100 bbls. Per day, is furnished with the latest improved machinery, and will be a great accommodation to farmers."

S. Commercial, 8th annual supplement, 1893, p. 634.

Owners J. Fraser and son with a capacity of 100 barrels per day.

S: CH, Ridgeville's Story, p. 6.

"The virgin soil grew fine samples of grain, which they had ground into flour at the Gretna Mill, and later at either the Hudson Bay or Pocock Grist Mills at Emerson or the Hutterite Mill at Dominion City."

S: Gary Enns, Gretna, p. 73.

"August Katol worked as miller in David Peters' new mill when it opened in 1889. He was joined by C. Fischer of Rockwell, Texas in June of the following year."

S: Gerhard John Ens. The RM of Rhineland, Volost, and Mun., p. 64.

Photo "By 1890 Gretna had...a steam grist mill". Photo, Friesen's, p. 66.

"J.P. Friesen & Son Flour Mill, est'd 1889" ("Gretna: Window on the Northwest", by F.G. Enns, published by the Village of Gretna History Committee, 1987, p. 73)

37. GRISWOLD

S: CH, p. 8.

"The Griswold Milling Company Ltd. Produced its own brand of flour which was known as "Lady of the Snows." The Milling Company was located near where Mr. Brown's house is situated. Mr. Cawthorpe was the operator in 1905. In 1911, the flour mill, which could no longer be operated because of a shortage of water, was pulled down and shipped to Grayson, Sask."

38 HAMIOTA

S: Manitoba Free Press, May 23, 1903, p. 18.

"The Flour Mills" – "The Hamiota steam flour mills were erected in 1895. Messrs. Basler & Bridgeman are the proprietors. The mill was erected by Messrs. Armstrong & Basler. Mr. Armstrong retired in 1900 and the present partnership was formed. The business is under the management of Mr. G.A. Basler, who came to the district in 1894, and in addition to his interest in the mill and grain business, owns 1, 280 acres of land, which he rents as shares. The "Major" brand, manufactured by Basler & Bridgeman, has already established for itself a reputation and it is the housekeepers' favorite. The firm, in addition, do a large grain business. They have two elevators of 40,000 bushels capacity and are always open to buy wheat and other grain at the highest market price."

S: <u>CH</u>, pp. 140-144.

Details Basler's mill, photo p. 142.

39. HARTNEY

S: <u>The Mere Living: A Biography of the Hartney District</u>, 1957, Hazel McDonald ed., pp. 166-170.

Built 1893; torn down no date; details in article; photo – no date.

S: <u>CH</u>, pp. 6-7.

Photo/discusses demise of mill.

"James Innes Milling Co., ca 1905, Hartney" (PAM: Hartney)

40. HIGH BLUFF

S: Commercial, March 2, 1886, p. 1.

"The High Bluff Milling and Elevator Company give notice in the last Manitoba Gazette of an application for a charter of incorporation. The capital stock is to be \$50,000. The purposes for which the incorporation of the said Company is sought is to purchase the present flour mill at High Bluff and to erect the necessary buildings for carrying on a general milling and elevator business. The directors are Tidsburry, Owens, Rose, Wilton, Greenlay, Bailey, Dilworth, and Cuthbert."

S: Commercial, February 1, 1887, p. 371.

"A bonus by-law to aid the proprietors of the High Bluff, Man., flour mill to the extent of \$6,000, in putting in roller process machinery in their mill, has been carried by a vote of 80 to 20. The mill will be given a capacity of 75 barrels per day."

S: Commercial, May 3, 1887, p. 654.

"A protest has been entered against the flour mill bonus, passed at High Bluff, Man, and the by-law will probably be invalidated. The objections raised are, that the terms of the petition and by-law were different, and that the by-law did not receive three-fifths of the resident votes, as required by-law."

S: Nwfmm, April 1889, p. 100.

"About \$1,000 has been subscribed at High Bluff, Man., to assist Mr. McLeod in converting his mill into a 50 barrel roller mill."

S: Nwfm, October 1890, p. 639.

"Mr. Cahoon, of Winnipeg, has bought the old mill at High bluff. He expects to have it in operation this month."

"The old style flour mill at High Bluff, Man., is being fitted up with modern machinery. A Leitch has the contract."

S: Nwfm, November 1890, p. 671.

"The old mill at High Bluff is now running with new machinery."

S: Commercial, 8th Annual Supplement, 1893, p. 634.

Owner of flour mill is A.E. King with a 75 barrel daily capacity.

41. HOLLAND

S: Nwfmm, March 1887, p. 771.

"On the day I was there a meeting was held in Pentland's hall, of the leading farmers of the district at which it was resolved to form a joint-stock company, who will in the next season build a flouring mill of 75-barrel capacity, and as the subscribed stock is already over \$10,000, its future is pretty certain to be a real success. The share list has over 40 subscribers, and the directors are the strongest men in the section with Dr. Baldwin, Norquay, as president. This joint stock plan of action is much preferable to the bonus system which has got badly into disrepute in a few good places of late."

S. Nwfmm, January 1889, p. 15.

"Holland, Man., has a new roller mill, finished last spring, but it has not run much, as water is hard to get. There is plenty of surface water in shallow wells, and the mill has been running for part of the time on water from such a well....The mill is owned by the Holland Milling Co., of which John Moir is managing secretary, and Dr. Baldwin, of Norquay, president. It has 50 to 60 bbls capacity."

S: Commercial, 1893, p. 643.

Owner – J. Moir with 50 barrel day capacity.

S: CMC, August 1915, p. , Article by John Moir.

"Milling in Manitoba", The Holland Mill, Holland, Man."

"The flour milling in Manitoba dates back to the earliest days of settlement in the Province, for in the early eighties when the districts around the Red, Assiniboine, and Souris Rivers were being settled, several small mills were built. As in the case now, power was the principle obstacle, but sufficient was found available to fill the early needs. In the Holland-Wawanesa district of the Province several stone mills were built on 1880-81, the first being that known as Gregory's Mill, situated on the Souris a little west of Wawanesa and about 40 miles west of Holland. The ultimate fate of Gregory's mill I am not aware of, whether it shared the usual fate of these mills, that is, was destroyed by fire or was removed to

another locality, I cannot say, but it stopped operations. Subsequent to this, mills were established at Norquay and St. Leon, distant about nine and twenty miles south and east of Holland respectively. On account of the mills, these were thriving villages in the old days, before the advent of the railway, but not both mills and villages have almost entirely disappeared. At Norquay the first mill was burnt and was rebuilt. A second mill was moved to Manitou, was converted to a roller process and is still operating.

In 1887 after the advent of the railway a number of the farmers and businessmen of Holland and district met and organized the Holland Milling Company. They secured a bonus of \$3,000, and exemption from taxes for twenty years from the Municipality for the erection of a 50-barrel mill. The contract was let to Robert Muir and Company, Winnipeg, and the machinery was supplied by J. and J. Grey of Toronto. The company ran the mill, but a very short time when unforeseen difficulties presented themselves, the principal one being lack of water. The company took cold feet and was glad to hand over their interests to the writer, who assumed their liabilities and thus became proprietor of the Holland mill [John Moir].

Water was piped in a distance of nearly one-half mile, and the water supply was solved. The mill from the start has always given good satisfaction to its patrons and has enjoyed a good custom trade, even when mills of larger capacity were established at Treherne and Glenboro, ten and twenty miles distant from Holland, respectively.

In 1893 the Manitoba Government erected a building and made an exhibit at the World's Fair, Chicago... In subsequent conversation with Mr. Atkinson, of Messrs. Roblin and Atkinson, he informed me that the judges, experts from Kansas, pronounced the Holland flour the best and strongest they had ever seen.

No credit is due to the writer for this award, as he is not a practical miller, but to Mr. Thomas Robertson, who was then in his employ, and is now of the Holland Mill.

Considerable improvements have been made in the mill since Mr. Robertson became proprietor. Some old reels have been thrown out and plainsifter installed and everyday flour is being sent out to its consumers just as good as that which secured the first prize and the plaudits of the judges at the World's Fair.

42. HOLMFIELD

S: Killarney Guide, April 2, 1897, p.1.

"Mill By-Law"

"Council met on Saturday last to consider the advisability of passing a by-law to give a bonus of \$2,000 for the erection of a grist mill at Holmfield on application of Harrison Bros. The Chief promoters in the scheme on behalf of the town of Holmfield were Messrs. C. Handford and J.D. Orr. The bill passed on the first and second readings and will be voted on by the electors of that district after the preparation of the voters Lists for 1897."

S: Killarney Guide, April 23, 1897, p.7.

"The arrangements for the mill are so far advanced that neither the delays of the council nor legislative interference can check it."

S: Killarney Guide, May 14, 1897, p.1.

"We are pleased to have a gala here in the future, the occasion being the laying of the corner stone of the mill."

S: Ibid., p.4.

"The committee that has been attending to the collection of subscriptions in aid of the grist mill has succeeded in raising the necessary amount and desire to thank the people, not only in our own district, but in the immediate vicinity of Killarney and Cartwright, for their liberal support."

S: Ibid., p.4.

"Since the erection of a mill has become a certainty, there is a lively demand for building lots."

S: Killarney Guide, Fri. July 16, 1897, p.4.

"Construction on Harrison's Grist Mill is well under way."

S: Killarney Guide, Fri. August 13, 1897, p.4.

"The stone work on the mill is progressing."

S: Killarney Guide, Fri. August 20, 1897, p.4.

"Holmfield" – "The frame of the mill was raised on Monday last and is fast approaching completion

S: Killarney Guide, Sept. 10, 1897, p.4.

"Holmfield" – "Harrison Bros. Grist Mill is fast approaching completion and will be running in about six weeks. The building is strictly first-class in every respect and the machinery is the best that can be procured, including the latest improvements. Their plant will be run by a Brown automatic engine, and will run "condensing." A mill thus equipped and managed by a first-class practical miller should prove a boon to many who are anxiously awaiting the time when it commences to run."

42. HOLMFIELD cont'd

S: Killarney Guide, Sept. 24, 1897, p.4.

"Holmfield" – "Mr. R.N. Willough by who has been for the past two months doing the mason work of Harrison Bros. Mill returned to Brandon on Saturday last to resume his duties as guard in the Asylum."

S: <u>Ibid.</u>, p.4.

"M.C. Avery millwright of Toronto is engaged putting in the machinery in the mill."

S: <u>Killarney Guide</u>, Dec. 17, 1897, p.4.

"Holmfield" - "Harrison Bros. have connected the engine in the elevator with the boiler in the mill and will run the whole plant with one fire."

-"Mr. C.W. Avery having completed the millwright work at the mill, left for Boissevain on Wednesday where he will spend a few days with friends prior to his return east."

S: Killarney Guide, October 6, 1899, p.8.

"Messrs. Harrison Bros. have commenced the stone work for three new warehouses which will give them greater conveniences for shipping their flour."

S: Killarney Guide, December 6, 1901, p.6.

"Harrison Bros. are kept busy with the mill day and night to fill orders for car loads of flour."

S: Killarney Guide, August 22, 1902, p.4.

"Harrison Bros. are now enlarging their steam power by placing in position another boiler."

S: Killarney Guide, September 19, 1902, p.1.

"Harrison Bros. are now busy building a new gangway to the entrance of their elevator."

S: Killarney Guide, October 17, 1902, p.1.

"Harrison Bros. have erected a new smoke stack on their engine house for the purpose of conveying smoke from the two steam boilers."

S: Killarney Guide, April 14, 1905, p.1.

"Burglary at Holmfield"

"Burglars visited Harrison Bros. Mill at Holmfield on Friday night last, and forcing their way into the office blew literally to pieces the big safe. The work was evidently done by professionals at this business for the marks of the expert was plainly visible. Fortunately all of the money in the safe had been removed the night before and the thieves received nothing for their plans. No clue as to the guilty parties can be found."

S: CMGE, Dec. 1911, p.317.

"W.S. Harrison has taken over the mill at Holmfield, Man., owned by Harrison Brs."

S: Killarney Guide, Thur. July 19, 1934, p.1.

"Holmfield Mill is Re-Modeled"

EXTENSIVE IMPROVEMENTS MADE – UP TO DATE MACHINERY INSTALLED

After a lapse of nearly three months, in which time the milling department of the Harrison Milling and Grain Co. underwent a thorough renovation, energy was again applied for a test run on Thursday last, July 12th, with very satisfactory results. This was quite an extensive outlay as times are not good and merits some commendation to the proprietors. Some of the older units were discarded and replaced by up-to-date machinery. Several different alignments became necessary and new elevating and flour tubing installed. A professional millwright, in the person of Mr. Newton, of Winnipeg, had supervision of the work, taking on a number of local assistants.

There is no doubt the new improvements will improve the quality of the product considerably, besides providing more efficient operation all round. The public will, no doubt, appreciate the energy and progressiveness of the proprietors, and show their approval by a liberal patronage."

S: Killarney Guide, August 2, 1934, p.1.

"Mill at Holmfield Threatened by Fire"

"Thursday evening, July 26th, Harrison's Mill at Holmfield was in serious danger of being destroyed by fire. About seven o'clock smoke and flames were observed on the roof of the east wing of the mill. The mill whistle was blown and soon a large crowd of volunteer fighters had gathered. A bucket brigade lined up from the well to the building and up a ladder to the roof. The fire was soon under control, as a great amount of water was poured over the burning roof by members of the bucket brigade and several fire extinguishers that had been brought into play. After an hour's intensive fighting, the fire was extinguished and the mill saved. The fire was confined to the roof of the east wing so that little damage was done beyond the destruction of much of this roof.

The people of Holmfield are very thankful that the mill was saved. They were very lucky indeed, for, if there had been much wind, it would have been almost impossible to save anything. The fire originated from over-heating in a box above the boilers. The mill had just started running again, after having the machinery completely overhauled and much of it replaced."

S: Photos of Interior and exterior of Mill

-In folder

42. HOLMFIELD cont'd

S: Canadian Grain Journal, Nov. 1949, p.16.

"A.W. Harrison Re-elected"

"A.W. Harrison, miller of Holmfield, has been re-elected to the Manitoba legislature. Contesting Killarney riding as a Progressive Conservative supporting the coalition government, Mr. Harrison was returned with a comfortable majority over his Liberal Progressive opponent. Mr. Harrison is well known in milling circles in the west and has been active in the Western Millers Association. He has served on the executive of the association and was recently elected secretary of that organization."

S: Killarney Guide, May 31, 1951, p.8.

"Harrison Milling and Grain Co. have completed a 4000 bag contract of flour for shipment overseas."

S: CH, <u>By the old Mill stream</u>: A <u>History of the Village of Holmfield and District, pp.14-18</u>.

- -Photo of mill by stream, p.14.
- -Harrison's Flour Mill: History of Harrison Family
- -Present mill erected in 1897.
- -The mill bonused for \$2,000.
- -In 1899, stonework completed.
- -Originally powered by steam, 1930's by diesel engine, electric power in 1947.
- -In Dec., 1902 elevator built.
- -Photo of mill and elevator, p.17.
- -In 1934 mill almost destroyed by fire.

S: Winnipeg Free Press, Sept. 28, 1990, p.2.

"Holmfield mill old, but it's no museum: Farmers still bring grist, take home flour", by Ian Bell.

-Mill built in 1898.

43. HURON HUTTERITE COLONY

S: CH, Treasures of Time: The RM of Cartier, 1985, pp729, 730.

-Photo/Details re: mill machinery etc. est. 1922-destroyed?.

44. KILLARNEY

S: Commercial, March 2, 1886, p.1.

"The people of Killarney offer a free site and exemption from taxation for nineteen years, to the part or parties who will build a roller flour mill at that place, of not less that 100 barrels capacity."

S: Nwfmm, May 1886, p.485.

"Killarney in southern Manitoba wants a good roller mill at that station and will give inducements to any parties wishing to build."

S: Commercial, May 3, 1887, p.654.

"A public meeting was lately held at Killarney, Man., in the interest of securing a roller flour mill at that place. It is proposed to request the council of Turtle Mountain, in which municipality Killarney is situated, to submit a bonus by-law in aid of the project."

S: Commercial, 1893, p.634.

"At Killarney, on the Deloraine Brance, a new mill of 100 barrels capacity, has recently been put in operation by Young Bros. & Buck."

S: MFP, Sat. Apr. 18, 1903, p.18.

"Young & Buck, Millers. One of the most important institutions in an agricultural country is the flour or grist mill. The town of Killarney is fortunate in possessing one of the best country mills in the province. The mill, which is a full roller process one, was erected in 1892. The leading brands of flour turned out are Peerless, Comfort and Strong Bakers, and these have established for themselves a reputation as high-class products throughout the district. The surplus stock is shipped to distant points. The firm also does a large business in chopped feed, bran, shorts, etc., and shipping wheat and other grain. Young & Black are regarded as on of the solid concerns of the province."

-Mr T.H. Buck—moved from Boissevain in 1892 "where he was engaged in milling and farming."

S: CH, <u>Reflections 1882-1982</u>, <u>A Community History of the RM of Turtle Mountain and the Town of Killarney</u>, 1982, p.33.

-photo no date

45. LADYWOOD

S: CH, <u>They stopped at a good place: A history of the Beausejour, Garson, and Tyndall</u> Area of Manitoba: 1875-1981, Michael Czuboka, ed.

-"The first flour mill in the area was started by the Barski Brothers of Ladywood, and was located in Ladywood. It was steam-operated and ran until about 1920. The second mill started in the Madden building..."

46. LA RIVIERE

S: Nwfmm, July 1886, p.542.

"There is a movement on foot to build a roller flour mill at La Riviere, on the Southwestern branch of the C.P.R."

47. LAUDER

S: CH, The Rise and Fall of a Prairie Town, GG Phillips, 1973, p.12

- -Discusses politics in acquiring mill and the story of the mill.
- -Includes town layout sketch.

48. LOWER FORT GARRY/NORTH ST. ANDREWS

S: A. Begg, A practical handbook and guide, 1877, p.93.

"... St. Andrew's, E.H.G.G. Hay, ... 2 run" (capacity of mill)

S: Nwfmm, June 1885, p. .

"The Hudson's Bay Company's old steam grist mill at Lower Fort Garry, which ceased running five years since, and was dismantled, is being taken down."

S: Nwfmm, June 1885, p. .

"The boiler of the steam grist mill at North St. Andrews, Manitoba, still lie where the mill was burned five years ago."

49. MCGREGOR

S: Commercial, Feb. 1, 1887, p.371.

"There is a movement on foot to offer a bonus for the erection of a roller flour mill at McGregor station, Man."

S: Nwfmm, Feb. 1890, p.401.

"The roller mill at McGregor, Man., was burned late on December 30, after the hands had left. It was owned by Mr. Whitelaw, Woodstock, Ont., and run by Geo. Rogers. The estimated loss of the mill is about \$12,000, with insurance of about \$6,500. Mr. Rogers lost heavily. He had about \$1,800 of flour and grain in the mill, with only small insurance. He also lost his books and a number of valuable documents."

S: Nwfmm, Oct. 1890, p.639.

"A carload of machinery has arrived for the new flour mill at McGregor, Man. A.J. McKay, millwright, is busily engaged with a gang of men placing it in the building."

S: <u>Nwfmm</u>, Nov. 1890, p.671.

"The new mill at McGregor, Man., completed and owned by R. Whitelaw, of Woodstock, Ont., commenced running Oct. 22. It has a capacity of over 100 barrels."

S: Nwfmm, June 1891, p.173.

-Mentions new mill being built along the CPR line.

S: Nwfmm, Sept. 1891, p.253.

"The McGregor Mill" – "The new flour mill at McGregor, Man., which has been erected this summer by Mr. Whitelaw of Woodstock, Ont., in place of the one which was burned last year is one of the best in the province. The building on the ground floor is 32 x 70 feet, four stories high, and is of wood and is to be covered with sheet iron. On the second floor are five double sets of rolls, chopping mill, aspirator, four flour packers, bran and shorts bins. On the third floor there are six of the latest improved round floor dressing reels, one centrifugal reel for low grade, two large purifiers, one aspirator, three sieve scalpers, and stock hopper. The fourth floor is occupied by a machine for cleaning chop feed, bran reel, a reel for grain middlings, a wire reel through which grain runs after being elevated from the bins. There are 14 elevators running from the floor to the peak of the roof, in all about 45 feet in height, and three short elevators. The boiler is 85 horse power and the engine 75. The engine is a Buckeye of the latest make. The mill is run by Mr. George Rogers and is busy night and day. His brother Harry is head miller. The capacity is 125 barrels, and the quality of the flour is A1. The C.P.R. has built a spur into the mill, so that cars can be loaded without any trouble.- Portage la Prairie Liberal".

S: <u>Commercial</u>, 8th Annual Supplement, 1893, p.634.

- Owner George Rogers & Co. with a capacity of 125 barrels per day.

S: <u>Trails old and new</u>, Rupert Leslie Taylor, ed., 1967, (Writer Richard Armistead p.13). "In 1889, George Rogers built a flour mill on the site of the present Pool elevator. It burned the same year. A second mill was built, with two elevators, at the east end of Hampton Street, where the creek bends, and was managed by George Rogers. Mr. David Hird was the carpenter who built the mill, and Mr. Wm. McMunn was the millwright. It was taken over by Ed and Harry Rogers, but the mill and one elevator were raised by fire in 1903."

S: A Review of the Heritage Resources of the Nor-Mac Planning District: Post Contact Period, Tom Boreskie, 1982, HRB, p.54. with resources.

- Discusses Roger's Flour Mill at McGregor 1889
- Owned by George Rogers and destroyed by fire in 1903
- Photo of Mill.

50. MANITOU

S: <u>Commercial</u>, Apr. 8, 1884, p.545.

"Mr. W. Thompson & Mr. Brown, have undertaken to erect an oatmeal mill, at Manitou, of 125 barrels capacity, for a bonus of 10,000 bushels of oats, to be completed and running by the 1st of November next."

S: Nwfmm, Dec. 1889, p.340.

"A meeting was recently held at Manitou to discuss the advisability of trying to induce A. Watts and Co., of Brantford, Ont., to move their grist mill from Norquay to Manitou. After discussion and conference to canvass the town and district for subscription for a bonus of \$600 to pay the expenses of moving the mill. The mill can be in running order by May 1 next."

S: Nwfmm, March 1890, p.433.

"The building at Manitou, into which the machinery of the Norquay Grist Mill is to be removed, is about completed, and the mill will soon be running."

S: Nwfmm, Apr. 1890, p.461.

"The boiler for Manitou, Man., grist mill has arrived there from Brantford. Work on the mill is progressing rapidly under the management of Geo. Ullyott."

S: Nwfm, June 1890, p.522.

"The new mill being built at Manitou will have five set of rolls. J.D. McIntosh has purchased an interest in the mill and with his brother will manage the business."

S: Nwfmm, June 1890, p.173.

- Mentions new mill built alongside the CPR line.

S: Commercial, 8th Annual Supplement, 1893, p.634.

- Owner A. Watts and Co. with 60 barrels per day capacity.

S: CMGE, Dec. 1911, p.317.

"R.A. McIntosh has sold his flour mill at Manitou, Man., to D. Oke and L. Whiteford."

51. MARQUETTE

S: Commercial, Dec. 11, 1883, p.254.

« The Marquette mills are being fitted up by Mr. Pratt, with machinery for the roller process of milling, and expect to have it in operation this week."

S: AM, Feb. 1 1884, p.81.

"The flour mills of Marquette, Manitoba, are being fitted up rolls. Mr. Pratt is doing the work."

S: Nwfmm, Jan. 1886, p.354.

"E.G. Hay, a miller of Marquette, Man., has had his hand badly crushed in the machinery in the mill at that place, one finger being taken off. Inflammation set in and it was feared he would lose the hand, but fortunately later reports say the injured part is better."

52. MELEB

S: CH, MPC Flashbacks, Anne C. Yanchychyn, p.67.

- Old grist windmill near Meleb owned and built by John Hykawy circa 1916.
- Currently sits in Ukrainian pioneer homestead near Wpg. Beach.
- Photo, p.68.
- John Zaluski Millstones, photo p.70 and located SE 18-20-2E.

53. MELITA

S: CMGE, Feb. 1912, p.31.

"T.R. Lamont \$ Sons, Melita, Man., has started up after being closed for two years."

S: <u>CMC</u>, Jan. 1914, p.26.

"The flour mill at Melita, Man., was reopened on Dec. 1, and the business which was formerly carried on by T.R. Lamont & Sons, will be continued by the newly incorporated Melita Milling Company, Ltd."

S: CH, Our first Century, Town of Melita & Mun of Arthur, 1983, pp.356-358.

- photo no date
- discusses detailed history of the mill
- Built 1893; dismantled 1930s.

"Melita Flour Mill, est'd 1893" ("Our First Century – Town of Melita & Municipality of Arthur", published by the Melita-Arthur History Committee, 1983, pg.356.)

55. MILLFORD

- S: <u>CMC</u>, Aug. 1915, p. , by John Moir.
 - From the article "Milling in Manitoba"

"There was also a small portable mill prior to 1887, at a place called Millford, on the Souris where the railway crosses between Stockton and Treebank. The mill only worked a short time when it was burnt, and the village of Millford moved to Stockton and Glenboro Stations on the C.P.R. Such is the early history of the milling industry prior to 1887. Not so full or exact as I would like to have made it, but facts are even now hard to get at."

56. MILLWOOD

S: Nwfmm, Feb. 1890, p.401.

"The grist mill at Millwood, Man., is again running, but it is uncertain for how long."

- S: Commercial, 8th Annual Supplement, 1893, p.634.
 - Owners Mitchell & Bucknell with 75 barrel capacity per day.
- S: A Review of the Heritage Resources of Russell-Binscarth Planning District, Karen Nicholson, Nov. 1987, HRB, pp.237-242, with sources.
 - J.L. Bucknell and H. B. Mitchell erected grist mill on the banks of the Assiniboine in 1888.
 - Mill sold to G. A. Davenport in 1900.
 - Mill sold to George Cartwright in Sept. 1902.
 - Mill runs into operating troubles in 1908.
 - Mill destroyed by flood waters on 24 May 1912.

57. MINNEDOSA

S: Nwfmm, 1883 Special Ed., p.20.

"The Minnedosa mills are doing much better work since being rented to Mr. J.F. Boyd, who is pushing the business to its utmost."

- S: Nwfmm, May 1885, p.86.
- -Mentions grist mill at Minnedosa.
- S: Nwfmm, Oct. 1886, p.637.
- -Map of Minnedosa shows saw & grist mill of Main St. between 1st St., Mill St. E and Water St. W.

- S: Commercial, July 25, 1887, p.889.
- "Jas. Jermyn will have his mill at Minnedosa, Man., changed to the roller system at once."
- S: <u>Commercial</u>, Sept. 5, 1887, p.988.
 - Jas. Pye of Minneapolis awarded machinery contract.
- S: Nwfmm, Nov. 1889, p.302.
- "E. & H. Pearson have bought the Jermyn flour mill, Minnedosa."
- S: Commercial, 8th Annual Supplement, 1893, p.634.
 - Owners F & E Pearson with 75 barrel per day capacity.
- S: CH, Minnedosa Memories: A History of Minnedosa and Surrounding Districts, Minnedosa Women's Institute, 1958.
- "Mr. Armitage's brother operated the first Grist Mill as the early settlers were having to go back on the trail, to Palestine for flour. They burned wood in the flour mill engine..."

58. MORDEN

- S: Nwfmm, Feb. 1884, p.36.
- "We understand that Messrs. Anderson and McLean, two practical men, have accepted the bonus offered by the district and will erect a mill at that point, which will have three run of stones and four sets of rollers."
- S: Commercial, Aug. 11, 1885, p.905.
- "Ritchie & Lundy's flour mills, at Morden has been completed and is now in full operation."
- S: Nwfmm, Nov. 1885, p. .
- "The flour mills at Morden, Man., owned by Ritchie and Lundy, are in full work."
- S: Nwfmm, Jan. 1886, p.353.
- "Lundy & Ritchie, the millers operating a store mill at Morden, Man., have dissolved partnership. Mr. Lundy continues business alone, Chas Hurd is the miller."
- -"A. E. Hughes has left the Hudson's Bay Company's mill, and has taken charge of the new mill at Morden, Man."

S: Nwfmm, Jan. 1886, p.335.

"Mr. Jas H. Fraser, the proprietor of the Nelson flour mills, decided last summer to erect a first-class roller mill in Morden, Man., and for that purpose contracted with the Pray Manufacturing Co.,, of Minneapolis, Minn., for a complete outfit for a mill of 75 bbls capacity, and in the mill as completed, this well known firm have more than sustained their reputation as builders of first class mills. Mr. Jas Pye superintended the starting of the machinery on the 17th Dec. Everything moved off in a smooth and satisfactory manner.

The machinery consists of a 40 horse power engine and boiler, 10 pairs of six-inch Livingston rolls, 3 Pye centrifugals, 3 Smith purifiers, 3 Pring dust catchers, 8 scalping and flouring rolls, Eureka flour packer, Kurth cockle machine, Morgan horizontal scourer, etc. The mill will be run to its full capacity night and day, there being a large local and western trade for flour of all grades.

Mr. A. E. Hughes, formerly with the Hudson's Bay Co., Winnipeg, Man., is the head miller, with L.W. McDonald as second."

S: Nwfmm, Feb. 1886, p.387.

"Chas Hurd, the miller at Ritchie Mill, Morden, Man., has quit milling for farming."

S: Nwfmm, Feb. 1886, p.387.

"Mr. Ritchie, the proprietor of the stone grist mills at Morden, Man., has taken a partner. The firm is now Ritchie & McIntyre."

S: Nwfmm, Apr. 1889, p.100.

"J.H. Fraser, of Morden, Man., is adding new machinery from Minneapolis."

S: Commercial, 8th Annual Supplement, 1893, p.634.

Owner J.H. Fraser with 100 barrels per day capacity.

S: CH, Morden, Morden Centennial Committee, 1981, p.634.

Photo c.1900 destroyed by fire in 1941 (caption).

"Morden Flour Mill. Built ca.1900, destroyed by fire 1941" ("Morden, Mort Cheval, Pinancewaywinning, Lake Agassiz", published by the Morden Centennial Committee, 1981, pg.350)

59. MORRIS

S: Nwfmm, Jan. 1886, p.353.

"The mill at Morris is still idle."

S: Nwfmm, May 1886, p. 485.

"A.E. Hughes has purchased the engine, boiler, etc., in the Morris mill."

"Morris Flour Mill, owned by Friesen & Weibe in the 1940's, later destroyed by fire" ("Furrows In The Valley – The Rural Municipality of Morris 1880-1980", published by the Morris History Book Committee, 1980, pg.95)

60. NEEPAWA

S: Nwfmm, Dec. 1885, p.313.

"The Neepawa flour mill is again in operation after a thorough overhauling."

S: Nwfmm, Feb. 1886, p.387.

"Neepawa merchants and farmers are agitating for a roller mill of about 50 to 73 bbls capacity with a wheat elevator, to be erected at that place, the small stone grist mill formerly in operation there being shut down."

S: Nwfmm, Apr. 1886, p.449.

"The Neepawa flour mill is now running full time and turning out a good Winnipeg."

S: Nwfmm, Feb. 1890, p.401.

"A company is being organized to build a mill at Neepawa, Man., with the following directors: J. Wake, P.M. Stewart, D.A. Stewart, J. Smith. The capital is \$30,000. R.C. Ennis, recently general merchant at Neepawa, holds a controlling interest and has been appointed manager. The intention is to erect a mill of 100 brls capacity, and have it ready for next season's crop. The town is to be asked for tax exemption for 15 years and the surrounding rural municipality for a bonus."

S: Nwfm, April 1890, p.461.

"Neepawa, Man., grist mill has arrived there from Brantford. Work on the mill is progressing rapidly under management of Geo. Ullyott."

S: Nwfm, Nov. 1890, p.697.

"The Beautiful Plains Milling Co., Neepawa, Man., have commenced grinding, and are now turning out 100 barrels of flour a day. The building and machinery are entirely new."

S: Nwfm, Dec. 1890, p.697.

"The Beautiful Plains Milling Co's mill at Neepawa, Man., is completed and is now running... Ten set of rolls, the four purifiers and the reels are all of the Geo T. Smith make. In the stone engine house is found a fine looking Brown-Corlisss engine of 65 horse power. The building is to be heated by steam, but the fittings are not in yet."

S: MFP, April 25, 1903, p.21.

Photo of "Mill & Elevator of the Manitoba Milling Company, Neepawa."

S: Ibid, p.21.

The Manitoba Milling Co. organized in 1900 to take over the business of the Beautiful Plains Milling Co.; "full Hungarian roller process one, equipped with the most modern improvements;" 400 barrel/day capacity; ship tp parries, B.C., Australia & U.K.; Products: "Hungarian, Ralent, Strathacona, Straight Bakers & Strong Bakers;" has elevators at various points on C.P. and C.N. lines; managed by J.H. Davidson... came to Man. In 1872, Neepawa in 1881; "He was for many years engaged in the general store business with his brother the Hon. John A. Davidson, now provincial treasurer. Mr. David McBean is secretary treasurer of the company." P.19.

S: Nwfmm, June 1891, p.173.

- Mentions new roller mill at Neepawa built alongside Manitoba & Northwestern railway.

S: <u>Commercial</u>, 8th Annual Supplement, 1883, p.634. Owner- Beautiful Plains Manufacturing Co. with 100 barrel capacity.

S: CH, <u>Heritage: Neepawa land of plenty</u>, 1883-1983, p.37. Photos of mill-1.1889, 2.1906, 3.1897 all found in PAM.

"Flour Mill and grain elevator, B.P. Milling Company, Neepawa, 1899, R.C. Ennis Prop'r."

(PAM: Neepawa)

61. NELSON/NELSONVILLE

S: MFP, March 2, 1881, p.1.

"Nelsonville News"- "Mr. Fraser, of the late C.P.R. firm of Fraser, Pitblado & Co., has purchased the mill and is coming to reside here at once."

S: Ibid., March 7, 1881, p.1.

- price \$8,000; Co. above was C.P.R. contractor; "steam grist mill."

S: Nwfmm, Nov. 1883, p.277.

"The Belmont Mills, at Nelson, owned by James H. Fraser, Esq., having recently refitted and improved, are now in full blast."

S: Nwfmm., Jan. 1886, p.354.

"The Nelson, Man., flour and saw-mill, owned by Mr. James Fraser, was burned to the ground lately. The damage was \$10,000 with slight insurance. The cause of the fire is unknown, the mill having been shut down nearly twelve hours when the fire was discovered."

S: Nwfmm, Feb. 1886, p.388.

"The flour and saw mills which were burned here recently were old landmarks in Southern Manitoba. The property of Mr. Jas. H. Fraser, they were, until recently, the leading mulls of that section of the country and commanded the trade of 100 miles of fair farming country.

The flour mill contained three run of stone and the saw mill had a daily capacity of 10,000 feet of lumber. They were erected by Messrs. Duncan Bros. and Stevenson under the firm name of the Nelson Milling Co. in 1879. Mr. Fraser purchased them in 1881, the price paid being about \$8,000.

The fire was discovered about 5 a.m., but having made considerable headway, resulted in a total loss.

The cause of the fire is unknown, but it is supposed to have originated in the engine room

The insurance amounted to \$2,500, and the loss is estimated at \$10,000."

62. NORQUAY

S: AM, Apr. 1, 1884, p.202.

"Watts & Co. have started up their new grist mill at Norquay, Man."

S: See Holland, Man., CMC, Aug. 1915, insert.

63. OAK BANK/SPRINGFIELD

S: Nwf, July 20, 1903, p.812.

- photo of Oak Bank flour mill available.

"Oak Bank Mill, R.M. of Springfield" (N.W. Farmer, 20 July 1903, pg:812)

64. OAK LAKE

S: Nwfmm, May 1885, p. .

"Oak Lake, Man., is to have a 125 bbl. Mill if the municipalities of Woodworth and Sifton will vote \$4,000 each as a bonus which they are disposed to do, but Virden is trying for the same mill, though there is room for both."

- S: AM, June 1, 1885, p.302.
- "A 125-barrel mill will be built at Oak Lake, Man., if the municipalities of Woodworth and Sifton will vote \$4,000 each as a bonus."
- S: Commercial, July 28, 1885, p.1.
- "D. Moore & Son millers, Oak Lake, have bought the necessary machinery for their mills and intend putting in an extra run of rollers increasing the capacity of their mill from 125 to 150 barrels per day."
- S: Nwfmm, Sept. 1885, p.213.
- "D. Moore & Son are erecting a roller flour mill at Oak Lake, Man., having a capacity of 125 barrels per day."
- S: AM, Oct. 1, 1885, p.628.
 - "The mills at Oak Lake and Virden, Man., are ready for machinery."
- S: Nwfmm, Nov. 1885, p.286.
- "Virden and Oak Lake Mill buildings are now completed and ready for the machinery to be put in."
- S: Nwfmm, Dec. 1885, p.313.
- "Robt. Minn. & Co. supply D. Moore & Sons, Oak Lake with the following machinery- cockle machine, smutter and brush machine 3 double set 9 x 24 rolls, 2 double set 9 x 18 rolls, 22 in stone, 1 chop stone, 4 purifiers, 1 aspirator, 6 reels, 3 centrifugals, 50 scalpers, packers and necessary ironwork the above machinery of the Grey pattern. Also 60 horse power "Doly engine and boiler."
- S: Nwfmm, Apr. 1886, p.448.
 - "The Oak Lake grist mill is expected to be in operation in a short time."
- S: Nwfmm, May 1886, p.485.
 - "D. Moore & Son's mill at Oak Lake is started up and is running nicely."
- S: Nwfmm, Jan. 1888, p.18.
- "December 18, 1887" "The Oak Lake mill, owned by Leitch Bros., was totally burned at 19 o'clock to-night. It was worth \$18,000; insurance on building, \$12,000. Eight or ten thousand bushels of wheat and five hundred bags of flour are said to be burned."
- S: <u>Commercial</u>, 8th Annual supplement, 1893, p.634.
 - Owner Leitch Bros. with a 250 barrel capacity.
- S: Nwf, Dec. 12, 1900, p.929.
 - Photo of Leitch Bros. Mill available.

S: CMC, July 1913, p.140.

"Leitch Brothers, operating flour mills at Oak Lake, Man., are now in their twenty-sixth year under the same management and have completed arrangements whereby their milling capacity and output will be increased to 800 barrels per day."

S: CMC, March 1914, p.66.

"Malcolm Leitch, the head of the company is also the head of the Kootenay Lumber Company, and the Passburg coal mines."

S: CH, Ox trails to blacktop, 1982, pp. 36-37.

- Discusses ownership of mill- Moore sold to Leitch Bros. in 1886.
- Ceased operation in 1923; photo available.

"Leitch Brothers Mill, Oak Lake, ca.1900" (N.W. Farmer, 5 Dec. 1900, pg:929)

65. OTTERBURNE

S: <u>Nwfmm</u>, June 1885, p. .

"There is a good opening at Otterburne, Man., for a grist and saw mill, on the Rat River, and a free site is offered to anyone who will build there."

66. PILOT MOUND

S: Nwfmm, Apr. 1889, p.100.

"A joint stock company is being formed for the erection of a large flour mill at Pilot Mound, Man."

S: Nwfmm, May 1889, p.133.

"T. McKay, J.B. Baird, Jno. Hiebert, W.A. Donald, Jno. M. Fraser, Jno. Knox, J.B. Gordon and W.C. Burns, of Pilot Mound, Man., are applying for incorporation as the Pilot Mound Milling Company, with power to carry on at Pilot Mound and elsewhere in Manitoba, a milling, flour, grain and elevating business. Capital \$16,000. An American firm offer to supply the company with machinery for a roller flour mill. The price asked is \$7,327. In addition the engine will cost \$1,575, without boilers. The mill to be 75 bbl capacity. Another firm at Minneapolis offer to provide all the machinery required, including engine, for \$10,000."

S: Nwfmm, July 1889, p.187.

"Letters patent have been issued incorporating T. McKay, [et al.], as the Pilot Mound Milling Co., Limited. Capital \$16,000.

-"The new roller process flour mill at Pilot Mound, will leave the old one unused for making flour, and as there are the building, stones and machinery..."

PILOT MOUND, cont'd

S: Nwfmm, Jan. 1890, p.372.

"A public meeting was recently held at Pilot Mound, Man., to consider the proposal of Mr. Messner to move the St. Leon mills there. It was stated the buildings & machinery would be moved to Pilot Mound if farmers would assist with their teams in the removal. A bonus of \$1,000 would also be required. The well and ground owned by the Pilot Mound Milling Co., would be taken as part of the bonus. The establishment consists of a stone flour mill, a barley and oatmeal mill."

S: Nwfmm, Apr. 1890, p.461.

"Pilot Mound was one of the earliest places in the province to have a grist mill, and has always been a first rate centre for such a business. The mill from the old town was moved over among other buildings when the new town was started, but was behind the requirements of the times, and business difficulties prevented its being successfully operated. At last Mr. Fraser, the pioneer of the settlement, made an arrangement with Mr. Whitelaw, of Woodstock, Ont., to move his flour mill from Darlingford and the oatmeal mill from St. Leon, to be located on the site provided by the joint stock company last year. Besides giving a site and well free, the town gives \$500 bonus when the machinery is laid down, \$500 more when the mill is completed and \$700 more in March, 1891. The roller mill will make over 60 barrels of flour a day, and the oatmeal mill will have the same capacity. Stones for chopping will also be put in, and as fuel is reasonably low and the district well settled a first-rate business may be relied on... Farmers have been busy hauling the oatmeal mill machinery from St. Leon, a distance of 25 miles, and the work will be pushed rapidly to completion."

S: Nwfm, June 1890, p.522.

"R. Whitelaw of Woodstock, Ont., is having plans prepared for the new mill which he will erect this year at Pilot Mound, Man."

S: Nwfm, Oct. 1890, p.639.

"The new engine and other machinery for the Pilot Mound, Man., flour and oatmeal mills has arrived. Millwrights from Ontario are placing it in position."

S: Nwfm, Nov. 1890, p.671.

"The Pilot Mound, Man., mill is nearly ready for grinding."

S: Nwfm, Dec. 1890, p.697.

"The Pilot Mound, Man., grist mill is completed and has commenced running. It has a daily capacity of 75 barrels."

S: Nwfm, June 1891, p.173.

- Mentions new mill alongside CPR line.

S: <u>Commercial</u>, 8th Annual Supplement, 1893, p.634.

- Owner G.C. White with 50 barrel capacity.

S: WINNIPEG TRIBUNE, July 23, 1909.

"New Elevator – The Dow Cereal & Milling Co., Pilot Mound, Man., are building a 30,000 bushel elevator at Newdale and Strathclair, to enable them to procure sufficient oats for their rolled oat mill, situated at Pilot Mound."

S: CH, Memoires of Pioneer days at Pilot Mound, William Reid, 1930, p.15.

"A flour and grist mill was built on the banks of the creek by T.P. and Ben White."-c.1882.

67. PLUM CREEK

S: Nwfmm, July 1884, p.143.

"The water-power mill at Plum Creek is working fulltime on grist work. It has at present the run of trade from the Turtle Mountains, Heaslip, Antlers and Souris districts."

68. POINT de CHENE

S: A. Begg, A practical handbook and guide, 1877, p.93.

"From Mr. Smith we have obtained his estimate of the grinding capacity of the mills of the province for this season's harvest:- Point de Chene, Wm. Smith, 1 run...."

69. PORTAGE LA PRAIRIE

S: CH, Portage La Prairie as I Remember it in 1874, by Robert McDermott, p.45.

"This 4x flour was ground in Portage. Billy Smith was owner of the mill and in it my father was engineer."

S: A. Begg, A practical handbook and guide, 1877, p.93.

"Portage la Prairie, Wm. Smith, . . . 3 run. .. »

S : <u>Ibid</u>., p.93.

« Mills in Manitoba »

« Crops and Mills- Mr. W. Smith, miller of Portage la Prairie, is in the city... Mr. Smith is adding another run of stones and a new boiler to his mill at Portage la Prairie, making now three run with capacity for grinding 1,000 bushels in twenty-four hours. His mill at Point de Chene is being pushed to completion, and will be ready for grinding early in the fall."

S: Ibid., p. .

"An excellent sample of flour from the Marquette Milling Co., Portage la Prairie, stated by competent judges to be equal to any XXXX in the market, has been brought into the city. This mill is running full time, and a large quantity of its flour is finding its way here. A third run of stone is being put into Billy Smith's mill at the Portage. This mill is now running night and day."

S: HBCA, D. 20/16, C.J. Brydges to J.A. Grahame, 17 May 1880, fo.178.

- McTavish & Brydges looked at site chosen for granary & warehouse; approves of site; suggests 100' x 40' bldg., at least; anticipates large quantity of grain; "Pratts building, & also the one at High Bluff, have both broken & are propped up;" "I advise that nothing be done about a grist mill at the Portage at present. I think we had better wait and see the development of events."

S: HBCA, D. 20/23, Jas. Thomson (P. la P.) to J.A. Grahame, 20 June 1882, fo.163.

- wheat being bought up by Ogilvie Milling Co. of Wpg; price 90-95 cents/bushel; Portage Milling Company also mentioned.

S: Commercial, Oct. 3, 1882, p.8.

"The Portage Milling Co. have erected a large flouring mill on the roller principle, with the capacity of turning out from 300 to 400 barrels per day, also an elevator which can be stored 100,000 bushels of grain. The Capital Stock of the Company is \$100,000, and owned by men deeply interested in the advancement of Portage la Prairie."

"Portage la Prairie, ca.1883" (N.W. Farmer & Miller, 1883 Special edition, pg:33)

S: Nwfmm, Special Ed., 1883, p.33.

-Goes on to describe processing functions of every floor:

1st floor: Four cleaning machines, 1. Cleaner 2. Cockle machine 3. Separator 4. Brush. Separator located in the storage elevator. A Chopper also on this floor.

2nd floor: Stones and Rolls, "On the second floor are two four-foot stones for middlings, four double sets of rolls and two single sets, and three flour packers."

3rd floor: Stock Hoppers & five large purifiers.

4th floor: Double sixteen-reel bolting chest, Bran duster.

5th floor: Magnets & Separating reel.

- "The engine for driving the mill is rated at 100-horse power, and is supplied with steam from two boilers, each fourteen feet long and sixty inches in diameter, set up in the most improved manner, with heavy iron front, hiding the boilers and all the brick work in front."
- "The mill and elevator are thirty-seven feet apart, and are connected by an iron spout, through which grain passes from the elevator to the mill. All grain

is first taken to the elevator, and then goes to the mill through this spout; and bran passes from mill to elevator through this same spout. The elevator is 45 x 80 feet on the ground and ninety-seven feet high."

- Hon. F. Ogletree President of Portage Milling Co., and A.P. Campbell managing director.
- "The cost of building and machinery was \$65,000."

S: Nwfmm, Special Ed., 1883, p.33.

- Excellent exterior sketch of Assiniboine Mills avail.
- Assiniboine Mills: "The main mill building is 40 x 56 feet and seventy-two feet high. It is five stories in height and all the floors are laid on joists 3x12, and sixteen inches apart."

S: <u>Commercial</u>, June 12, 1883, p.773.

"A second oatmeal mill is offered to be built in town, by J.W. Pratt, on the same advantages being granted him, as were granted to the party making a similar offer some time ago. The question is now before the town council whether to accept Mr. Pratt's or Mr. Johnson's offer. The council have agreed to allow the ten year's exemption from taxation of the elevator proposed to be erected by Messrs. Ogilvie & Co."

S: Nwfmm, Sept. 1883, p.238.

"D. Johnson's oatmeal mill at Portage la Prairie will soon be completed."

S: <u>AM</u>, Feb. 1, 1884, p.81.

"The oatmeal mill at Portage la Prairie, Manitoba, is now in full working order. This is the first oatmeal mill built in the Northwest."

S: Commercial, July 4, 1887, p.838.

"The Pioneer Oatmeal Mills at Portage la Prairie were closed on Friday last. The present machinery and the whole interior of the mill will be renovated and a large amount on additional mechanical facilities, including a new engine, will be placed in position."

S: Nwfmm, June 1888, p.158.

"Two mills were established at Portage la Prairie by Wm. Smith and Logan & Edgar respectively." [This is circa. 1871].

"Portage la Prairie, 1898" (N.W. Farmer & Miller, April 1898, pg:141)

PORTAGE LA PRAIRIE cont'd

S: The New West Wealth & Growth, Winnipeg, Man., Canadian Historical Publishing Co., 1888.

From p. 79 – "Among the representative mills in Canada we take pleasure in mentioning the Assiniboine Roller Mill, which was built in 1882. The capacity of the mill is 300 barrels of flour daily."

"The mill is supplied with all the latest improved machinery – rollers, purifiers, bolting machinery, bran dusters, etc. – driven by engines of . . . horse power."

"An elevator of 115,000 bushel capacity is attached to the mill to facilitate operations. The officers of the Mill Company are H.M. Campbell, President, R.S. Thompson, Secretary, and Jas. McLenaghen, Manager."

S: Nwfm, Aug. 1890, p.580.

"The Portage la Prairie Milling Company are putting in a dynamo in their mill and this fall they will light their premises by electricity."

S: Nwfm, June 1891, p.173.

- Mentions oatmeal mill just built to replace the one burned in fall, 1890.

S: The Manitoba Liberal, Feb. 13, 1892, p.1.

"THE OATMEAL MILL"

"An Old Industry Revived"

- Article discusses history of "Pioneer Oatmeal Mill"
- "The history of the Pioneer Oat Meal mills date back to the year 1883. In 1892 Mr. D. Johnson made a flying visit to Manitoba..."
- The proprietors Johnson and Russell commenced operations of their mill on "the first of Dec. [1883] the first oat meal ever made north and west of the great lakes was manufactured..."
- Fire destroyed mill on the "last night in Oct. 1890, when by some unknown cause, it was discovered to be on fire."
- Mr. Johnson rebuilt the mill on the same site in 1891.
- Goes on to describe the equipment in the mill at length.

S: <u>The Commercial</u>, 8th Annual Supplement, 1893, p.634.

- Owner Lake of the Woods Milling company with a 800 barrel per day capacity.

S: Ibid.,

- Oatmeal mill owned by Martins with 75 barrel per day capacity.

PORTAGE LA PRAIRIE cont'd

S: Ibid.

"... the large mill at Portage la Prairie, the property of the Lake of the Woods Milling Company, which was built to replace a smaller mill of about 300 barrels capacity."

S: Ibid. p.662.

- Full page advertisement for Lake of the Woods Milling Company, Portage.
- Photo of Portage Mill available in ad.

S: Ibid., p.663.

- Article on Portage mill: Built Aug. 1892, 800 barrel capacity, elevator system, etc.

70. RAPID CITY

S: <u>Commercial</u>, Dec. 25, 1883, p.245.

"Farmers in the neighborhood of Rapid City are organizing a joint stock company with a capital of \$50,000 to build flouring mills."

S: AM, Feb. 1, 1884, p.81.

"The farmers in the neighborhood of Rapid City, Manitoba, have organized a joint stock company, with a capital of \$50,000 to build flouring mills at that place."

S: AM, Apr. 1, 1884, p.202.

"While Robert Higginbotham was oiling the machinery in Lee's grist mill at Rapid City, Man., recently, his right arm was caught in the gearing, and became entangled in the cogs. He struggled hard to release himself, but did not succeed in doing so until all his clothing were torn from him but his boots. The flesh was torn from his arm from the wrist to the elbow in a frightful manner."

S: <u>Commercial</u>, Sept. 1, 1885, p.1.

"G. Balkwell is putting steam power into his flour mill at Rapid City, with the view of running it all winter."

S: AM, Oct. 1, 1885, p.522.

"Mr. G. Balkwell is putting steam power into his flour mill at Rapid City, Man., with the view of running it all winter."

S: Nwfmm, Oct. 1885, p. .

"Mr. G. Balkwell is putting steam power into his flouring mill... The boiler arrived lately."

S: Nwfmm, Feb. 1886, p.387.

"One of the Rapid City flour mills is advertised for sale."

S: Nwfmm, Apr. 1886, p.448.

"L.L. Head advertises has Rapid City mill for sale. It possesses a water power."

S: Commercial, May 11, 1886, p.1.

"The municipality of Saskatchewan will vote on a bonus to assist in the erection of a roller flour mill at Rapid City. McCullough, of the Plum Creek Mill, will likely undertake the enterprise."

S: Ibid.

"The last issue of the MANITOBA GAZETTE contains three notices of by-laws to raise bonus for the purpose of aiding in the construction of roller flour mills. The first one at Stonewall has already been voted..."

S: Nwfmm, June 1886, p.510.

"Rapid City is anxious for roller mill honors, and will bonus a good one."

S: <u>Commercial</u>, June 15, 1886, p.781.

"The bonus by-law to aid McCullough & Co. to the extent of \$10,000 in the establishment of a roller flour mill, and woolen mill at Rapid City, has been carried by a large majority of the voters of Saskatchewan municipality. The water power of the Little Saskatchewan will be utilized to run the mills."

S: Nwfmm, July 1886, p.542.

"Rapid City has passed a by-law granting \$10,000 to McCullough & Herriot, the well-known millers of Plum Creek, to assist them in the erection of a roller and woolen mill at that point."

"McCullough's Flour Mill, Rapid City, ca.1903" (PAM: Rapid City)

S: Commercial, May 3, 1887, p. .

"The new mill at Rapid City, Man., was put into operation last week, and was found to work satisfactorily."

S: Commercial, July 4, 1887, p.838.

"Balkwells stone flour mill at Rapid City continues to hold out against the new roller mill. The <u>Spectator</u> of that place says: "This mill continues to do a good business, as a great many farmers prefer stone ground flour to the roller process. Balkwell is putting in some improvements and intends to turn out good work in future."

S: Nwfmm, Nov. 1889, p.302.

"The mill is solid stone, 60 x 50, four storeys. The walls are massive, five feet through at the base, three at the second storey, and a half for the balance. The mill has a capacity of 150 barrels per day. The machinery was manufactured by Goldie and McCullough, Galt, Ont., and is full roller process... The woolen mill adjoining the flour mill on the opposite side from the elevator. It is frame with stone basement, 70 x 30, three storeys. This is filled with machinery for the manufacture of yarns... The engine room, with power sufficient to run both flour and woolen mills, is in the basement of the woolen mill, built in with solid stone around the engine and boilers. The mills also have the advantage of water power, furnished by the Little Saskatchewan, which gives power sufficient to run both mills for seven to eight months of the year... The product of the flour mill is shipped east, in addition to the local trade- COMMERCIAL."

S: Commercial, 8th Annual Supplement, 1893, p.634.

- Owner G. McCullough and Co. with 150 barrel per day capacity.

S: Manitoba Free Press, May 30, 1903, p.18.

"Dams have already been constructed across the river at three points within the town limits. The upper one, which is now in the course of construction, will produce 400 horse power; the middle dam develops 80 horse power, and is used to drive the flour mill of Geo. McCullough & Co., and the lower dam is capable of developing 300 horse power."

S: <u>CMGE</u>, May 1911, p.130.

"The Rapid City Milling Co., Ltd., Rapid City, Man., incorporated with a capital stock of \$100,000, will take over the mill of W.J. Lindsay & Co. in that place and will increase its capacity from 200 to 500 barrels. W.J. Lindsay will still retain an interest in the business. The manager will be H.W. Harvey."

S: CH, <u>Our past for the future: Rapid City and District</u>, Rapid City Historical Society, 1978, Friesen Printers, p.7.

-"G. Balkwell, realizing the potential for water power and the need for a grist mill and a saw mill, returned to Ontario in order to purchase machinery for such a venture. In 1978, he began operation and according to a letter he wrote in July of the same year, he had worked very hard but had never felt better."

S: Ibid., [In 1906], p.27.

-"G. McCullough & Co. owned their own flour mill and H. Ross worked as an agent with the Ogilvie people. Around 10,000 sacks of Rapid City flour was ordered, hailed for Glasgow, Scotland and the rest for South Africa. (A sack bearing the name of Rapid City Milling Co. Ltd., can be seen at the Rapid City Museum courtesy of Ozzie Stone)."

S: <u>Ibid</u>., [1909], p.29.

-"The McCullough mill was sold to Wm. Lindsay of Winnipeg and E. Short and J. Higet of Oak River."

S: Ibid, [1911], p.29.

-"The Rapid City Milling Company purchased the business from W. Lindsay & Co. and J. Higet & Son. The new owners intend to increase the capacity of the mill while at the same time offering shares to the public at \$100 each."

S: <u>Ibid</u>., [1914], p.32.

-"The flour mill was back in the news. Since its lease had expired, the president, W. Lindsay, announced its closure. Two old country millers, Weaver and Rolfe, suggested a plan whereby they could rent the building and operate the business providing they could raise \$15,000. There were no takers since money was scarce. Also an interest in such matters was waning as World War 1 had begun."

S: Ibid., [1917], p.34.

-"The flour mill question again made the news in early 1917 when Mr. Innis presented proposals to Rapid City citizens at a meeting. Most people listened politely to suggestions that the mill would be capitalized at \$20,000 with half that amount raised by local initiative and half raised by G. McCullough & Sons, but there was no great rush to open pocketbooks. Perhaps the people were tiring of the mill question."

S: Ibid., [1919], p.34.

-"After years of service and uncertainty, the old flour mill was demolished; one of the buildings was moved to a farm while a part of the warehouse was taken elsewhere. Other buildings were torn down, the elevator razed an machinery was scrapped."

S: <u>Ibid</u>., [1920], p.34.

"The town council notified the grist mill management that the building was certainly unsafe. A fitting description, especially after a spring windstorm removed part of the north wall. Later in the year, the old grist mill was dynamited by D. McRae."

S: Ibid., p.15.

-photo of Rapid City Mill c.1900

S: <u>Ibid</u>, p.13

- Thos. Parker poem about old grist mill.

S: Ibid, p.134.

-Brief history of Rapid City Mills provided.

71. RIDING MOUNTAIN HOUSE

- S: Bruce Donaldson's notes from HBCA, 1881-1884.
 - Correspondence between HBC executives.
- S: CH, Our Story to 1970, 1970, R.M. of Strathclair, p.10-17.
- -"A Hudson's Bay trading post (Riding Mountain) was established we understand on what is now section 34-18-21. Records of this post were supplied to J.R. McMurachy in 1961, from the Hudson's Bay Company Archives." P.10.
- -"By a letter dated Montreal, 8 November 1879, James A. Grahame, the Company's Chief Commissioner, informed McDonald that it had been decided to set up a flouring mill at Riding Mountain. Clerk David Armit succeeded Clerk James C. Audy in charge of Riding Mountain in the fall of 1880 and on 20 December 1880 the grist mill there, described as a substantial building, started running." p.12.
- -"In 1886 the mill burned down and was never rebuilt and in the ensuing year the houses were torn down and moved away." P.17.
- S: Over the River: A Review of the Heritage Resources of the South Riding Mountain Planning District, Ed. Ledohowski, HRB, Dec. 1980.
 - Robert Lockheed's Grist Mill 1876-1886.
 - Discusses Strathclair settlement grist mills 1878-1886.

72. ROBLIN

S: <u>A Review of the Heritage Resources of the Roblin Planning District</u>, Karen Nicholson, June 1985, HRB, pp.70-74 with sources.

- Discusses Asessippi and Shell R. mills.
- Discusses Roblin Flour Mill.
- Established 1923 and owned by Harry Farion.
- Original mill building still in use.

S: Shell River Mun., Century One 1884-1984.: Memoires of Roblin & Rural Districts, 1986

"Roblin Flour Mill- D. Rostacky proprietor in 1927." P.73

"Fire at 4 o'clock in the morning of Sunday, 28th Oct. The damage amounts from \$8,000 to \$10,00 with no insurance.

73. ROCK LAKE

S: <u>Commercial</u>, Jan. 22, 1884, p. .

"Messrs. Watson & Cowie are moving the machinery from the grist mill at Pembina Crossing, to the mill now being built by them at the head of Rock Lake."

S: AM, March 1, 1884, p.137.

"Watson and Cowie are establishing a mill at the head of Rock Lake, Man., the machinery for which is brought from the grist mill at Pembina Crossing, which is now dismantled."

S: Nwfmm, Dec. 1885, p.313.

"The Glenora saw and grist mill at Rock Lake, owned by Blain and Co., was burned to the ground at 4 o'clock in the morning of Sunday, 28th Oct. The damage amounts from \$8,000 to \$10,000 without insurance."

74. ROSENORT

S: A. Begg, A practical handbook and guide, 1877, p. .

"A new grist mill has recently been erected in the heart of the Mennonite settlement, about fifteen miles from Rat River. It is a two and a half storey building, 26x34, and has one run of stone, the motive power being supplied by a twelve horse power engine. The builders are Messrs. Maud & Co., of Berlin, Ont., and the machinery was procured from Gouldie & McCullough, of Galt. The mill will cost about \$4,000, and is expected to be in running order shortly. Mr. Weins, a Mennonite, is the proprietor."

S: Nwfm, Dec. 1889, p.340.

"The grist mill at Rosenort, near Morris, Man., is offered for sale."

S: CH, pp.25-26

- Photo p. 26 of windmill
- Est. 1879 on Scratching River by Isaac Loewen, Jacob Toews, and Frank Froese.
- Dismantled in 1920.

75. ROSSBURN

S: CH, On the Sunny Slopes of the Riding Mtns.: A History of Rossburn and District, pp.223-224.

- built in 1916 by Mr. and Mrs. George Spearman
- dismantled in 1952
- photo of mill and millers' residence.

Rossburn Flour Mills"

("On the Sunny Slopes of The Riding Mountains- A History of Rossburn and District", published by the Rossburn History Club, 1984, p.224.)

76. RUSSELL

- S: Nwfmm, Apr. 1889, p.100.
- "A by-law to grant \$2,500 bonus for a grist mill at Russell, Man., was carried by a large majority March 12."
- S: Nwfm, Nov. 1889, p.302.

"Russell, Man., voted a bonus in aid of a roller flour mill, but the parties having the scheme in hand backed out. Other proposals to build the mill have now been made by J.J. Walterhouse, of Winnipeg."

- S: Nwfm, Dec. 1889, p.340.
- "A meeting was recently held at Russell, Man., to organize a joint stock company to build a grist mill for which a bonus of \$5,000 was granted to the municipality. Major Boulton presided and strongly advocated the scheme."
- S: Nwfm, Jan. 1890, p.372.

"Capital stock \$10,000, in shares of \$25 each, fifty shares were at once taken by farmers present."

- S: Nwfm, Feb. 1890, p.401.
 - "The contract has been awarded for building a grist mill at Russell, Man."
- S: Nwfm, May 1890, p.486.
- "Mr. Boulton has the whole of the material on the ground for the grist mill at Russell, Man."

RUSSELL cont'd

S: Nwfm, June 1890, p.522.

"The roller mill being built at Russell, Man., by J.G. Boulton, will be supplied with machinery from the Hercules Manufacturing Co., Petrolia, Ont. It will have a capacity of 60 to 70 barrels, and is to be completed by August."

S: Nwfm, July 1890, p.552.

"The buildings of the grist mill at Russell, Man., are ready for the machinery which will be placed in position at once."

S: Nwfm, Sept. 1890, p.611.

"As G. Boulton's new flour mill at Russell, Man., was not quite ready for starting on August 1 as per contract, the question of paying the \$5,000 bonus by the municipalities has again to be submitted to the ratepayers to be voted on."

S: Nwfm, Nov. 1890, p.671.

"The bonus to J.G. Boulton for erecting a mill at Russell, Man., having lapsed owing to the completion being a few days late, the ratepayers have again voted in its favor."

S: Nwfm, Dec. 1890, p.697.

"J.G. Boulton's grist mill at Russell, Man., started work Nov. 15."

S: Nwfm, June 1891, p.173.

- Mentions new roller mill alongside the Manitoba & Northwestern railway.

S: Commercial, 8th Annual Supplement, 1893, p.634.

- Owner – J.G. Boulton with 60 barrel per day capacity.

S: <u>A Review of the Heritage Resources of Russell- Binscarth Planning District</u>, K. Nicholson, Nov. 1987, HRB, pp105-108 with sources.

- J. Graham Boulton accepted bonus and built grist mill in 1889.
- "Boulton sold the mill to V. Schwalm of Birtle in October 1896."
- Mill sold to Bird and Johnson in November 1906.
- "On 21 August 1907 the flour mill and elevator were destroyed by fire.

77. ST. FRANCOIS-XAVIER

- S: CH, Our first hundred years: History of St. Francois-Xavier, 1980., p.22.
 - Discusses acquisition of mill
 - 1896 possible date mill was built.

78. ST. JEAN BAPTISTE

S: CMGE, March, 1910, p.75.

"A new flour mill has been opened at St. Jean, Man."

S: CMGE, March, 1911, p.86.

"N.H. Roy's grist mill at St. Jean Baptiste, Man., has been sold to K. Harder."

79. ST. LEON

S: See Holland, Man., CMC, Aug. 1915

- Discusses St. Leon mill.

80. ST. PAULS

S: A. Begg, <u>A practical handbook and guide</u>, 1877, p.93. "St. Paul's parish, H. Pritchard, ...2 run..." (grinding capacity)

S: Nwfmm, June 1885, p. .

"Mr. Pritchard's mill at St. Paul's, Manitoba, has been completely overhauled, having rollers and other improvements put in. It began running May 5th. Its daily output is seventy-five barrels."

81. SANDY LAKE

S: <u>CH</u>, Sandy Lake Historical Society, p.48.

-"As the early 1930's began, the flour milling business began with the efforts of Paul Boyko, also called "Rimmer." He chose as his site a part near Beaufort Lake and constructed a mill partially in the bank. At the shoreline was Billy Watson's steam engine to drive the mill."

-"Nick Melnyk, from Sifton, Manitoba, then constructed a flour mill about 1932 where the present locker plant now is.... In 1948, Peter Yaniw scrapped all the machinery and converted the flour mill into a locker plant. Sandy Lake has not had a flour mill since."

82. SELKIRK

S: A. BEGG, A practical handbook and guide, 1877, p. .

"Twelve lots were recently purchased at the Town of Selkirk, by Mr. Martin Hoover, of Port Elgin, Ontario, who intends erecting on the property a large grist mill of four run in stones. Mr. Hoover left for Ontario yesterday to complete the necessary arrangements."

S: Ibid.

"Selkirk is to have a new grist and steam saw mill and sash and door factory."

S: HBCA, D. 20/22, J.J. Hargrave to J.A. Grahame, 2 Feb. 1882, fo.106.

"The machinery ordered from Minneapolis for the Selkirk Mills, left that place on 31st ult. Mr. Esplin expects to have the packer for Selkirk Mills in operation within three (3) days after its arrival."

S: AM, March 1, 1884, p.56.

"The Selkirk flour mill at Selkirk, Man., Connel & Comber proprietors, is now in first-class running order."

S: Nwfmm, March 1884, p.56.

"The mill contains two runs of stones, smut machine, middlings purifier, double bolting chest, etc., and is capable at present of turning out sixty bags of flour a day. The engine is of twenty-five horse power."

S: Nwfmm, June 1885, p.56.

"The grist mill at West Selkirk, Manitoba, has been idle for some three months. There is some talk of putting in rollers."

S: Nwfmm, June 1886, p.510.

"A miniature cyclone visited the town of Selkirk lately about 6 o'clock and unroofed the large mill belonging to Messrs. McArthur & Boyle, of Winnipeg."

S: Nwfmm, July 1886, p.542.

"It is reported that R. Comber has purchased the Selkirk grist mill, which has been idle for some time, and will fit it up with a view to commencing operations at once."

S: Nwfmm, Nov. 1889, p.302.

"The old flouring mill at Selkirk, Man., has been fixed up and will be operated this season."

S: Commercial, 8th Annual Supplement, 1893, p.634.

- Owner E Comber of West Selkirk mill with capacity of 25 barrels per day.

83. SHELL RIVER

S: Commercial, Aug. 14, 1883, p.967.

"The Shell River Colonization Company have commenced the erection of a grist mill on their property, which is expected will be in operation this fall."

S: Commercial, Nov. 20, 1883, p.145.

"The Russell grist mill at Shell River is now completed and on operation."

S: Nwfmm, Apr. 1889, p.100.

"Shell River, Man., people will bonus a mill, Mitchell and Bucknell's having shut down."

84. SHOAL LAKE

S: Nwfmm, Feb. 1886, p.387.

"The people of Shoal Lake want a mill built there and are offering inducements to that end."

S: Nwfmm, Feb. 1886, p.388.

"A large meeting of residents and farmers of Shoal Lake, Man., was held on 19th January to arrange for raising a bonus to support any parties who would supply the town with a first-class roller mill. A subscribed bonus of cash, wheat, and wood, was decided upon. Mr. A. Findlay and a committee of three appointed to correspond with any one desiring to locate here, and ascertain terms and details of the business. This is a fine location for a small mill. Late reports say the preliminary steps have been taken for erecting a mill next summer."

S: Nwfmm, Apr. 1886, p.448.

"Shoal Lake offers \$2,000 bonus for a good roller mill."

"Mr. McMillan's feed mill at Shoal Lake is in running order."

S: Nwfmm, May 1886, p.485.

"A.H. Smith has concluded arrangements with the Shoal Lake municipality, for a roller mill."

S: Commercial, May 11, 1886, p.1.

"The last issue of MANITOBA GAZETTE contains three notices of by-laws to raise bonus for the purpose of aiding in the construction of roller flour mills... The third notice is for the purpose of assisting A.H. Smith, of Winnipeg, to the extent of \$3,000, in the erection of a mill at Shoal Lake, and will be voted upon on the 25th inst."

S: Nwfmm, June 1886, p.519.

"The bonus at Shoal Lake was voted on and carried."

Shoal Lake Cont'd

S: Commercial, June 8, 1886, p.749.

"The by-law to grant \$3,000 to aid in the establishment of a roller mill at Shoal Lake, has been carried."

S: Nwfmm, July 1886, p.542.

"Messrs. A. Timewell & Son will be the architects for A.H. Smith, superintending the erection of the mill and elevator at Shoal Lake [Wpg., based architects]."

S: Commercial, Oct. 12, 1886, p.54.

"The electors of the municipality of Shoal Lake, Man., will vote on a by-law to bonus a flour mill and elevator to the amount of \$5,000, on the 25th of October inst. A bonus by-law was recently passed by the municipality for the same purpose, to the amount of \$3,000, but it has since been nullified through the party who undertook to build the mill not coming to time."

S: Nwfmm, May 1887, p.838.

"R. Muir & Co., report that they have built a 100 barrel flour mill and 25,000 bushel elevator for Shoal Lake Milling Co. A bonus of \$5,000 has been given to this company by the municipality. The flour mill has been running for a month back. W.H. Squire is the miller in charge."

S: Commercial, 8th Annual Supplement, 1893, p.634.

"The mill at Shoal Lake has been moved to Gladstone and rebuilt on a larger scale."

85. STEINBACH

S: CH, Hanover: One Hundred Years, Lydia Penner, 1982, p.96.

- Photo of "P.T. Barkman Sons Flour Mill."

S: "Historic Steinbach feed mill razed," in Winnipeg Free Press, Lorna Dueck.

- Steinbach's oldest business
- 110 years old
- Fires: 1892, 1929, and 1931
- Milling machinery intact
- Threat of mill being demolished

"Steinbach Flour Mills Co., ca.1956" (PAM: Steinbach)

"P.T. Barkman & Sons Flour Mill, Steinbach"

("Hanover: One Hundred Years", published by the R.M. of Hanover, 1982, p.96.)

86. SOURIS

S: Nwfmm, Apr. 1889, p.100.

"G.A. McCulloch & Co., are remodeling their mill at Souris, Man."

S: Commercial, 8th Annual Supplement, 1893, p.634.

- Owner McCulloch & Herriot with a 150 barrel per day capacity.

S: Nwf, Nov. 1898, p.500.

"One of our representatives was in Souris last month, and called around to see how the new grist mill, which is in course of construction, was coming on. The main part of the building, 40 x 70, five stories high, was completed, as was also the engine and boiler house, and a wing on one end, 65 x 50 feet. A warehouse, 80 x 50 feet, three stories high, at the other end of the main building, had the walls almost finished. The whole building is of solid brick and presents a most imposing front of over 200 feet. A 200-horse-power engine was being put in. The capacity of the mill will be 300 barrels per day. The owners, Messrs. McCulloch & Herriot....grinding will be commenced about Christmas."

S: CMGE, March 1913, p.59.

"The ratepayers of Souris, Man., have passed a by-law exempting the Glenwood Milling Company, owned by George McCulloch & Sons, from taxation on everything above \$25,000. The capacity of the mill is to be doubled this year."

S: CH, <u>The Souris Storey</u>, 1979, pp.57-58.

"George William McCulloch and William Herriot, established the Glenwood Roller Mills on the bank of Plum Creek."

S: Ibid.

- Colonizer W. H. Swoden believed to be first person est. mill in area.
- In 1881, George William McCulloch and William Herriot est. the Glenwood Roller Mills on the bank of Plum Creek.
- This mill was steam powered.
- In 1887, this original mill was demolished to make way for a "brick and stone structure four storeys high and 250 feet long."
- Said to have produced 800 barrels of flour a day in 1914.
- The depression years saw the mill close.
- "Part of the mill still stands on the banks of Plum Creek."
- Photo early 1880's.

Souris cont'd

S: David Firman, 1991.

-Mill structures with some milling machinery still standing on bank of Plum Creek.

87. STONEWALL

S: Commercial, Nov. 13, 1883, p.134.

"Mr. S.J. Jackson has sold out his interest in the milling business, which has been carried on under the firm name of Jackson & Co., to his partner, Mr. R.J. Forde. Mr. Forde has had the mill put in fine order for the present season's business, and is also putting up a drying kiln and two run of stones for the manufacture of oatmeal. The elevator tramway, now under course of construction, connecting the mill and warehouse, will be a great improvement in the way of handling grain, flour,... "

S: Commercial, March 25, 1884, p. .

"The oatmeal mill at Stonewall is completed and starts operations this week, this makes the second industry of this kind in this province. There is room for more."

S: Nwfmm, Jan. 1886, p.353.

"Anderson & Reid proprietors of the feed mill at Stonewall report a rushing business in their line."

S: Nwfmm, Feb. 1886, p. .

"The building for Reid and Anderson's crushing mill, Stonewall, Man., is now completed."

S: Nwfmm, Apr. 1886, p.448.

"Stonewall wants a flour mill and will give \$10,000 for one, if Russell County will bear part of the expense of raising the above sum as a bonus."

S: Nwfmm, May 1886, p.485.

"The \$10,000 bonus is being strenuously opposed at Stonewall, Man."

S: Nwfmm, May 1886, p.485.

"Stonewall will give \$10,000 to anyone building a 100 bbl., mill and a 20,000 bushel elevator, providing the same are clear of encumbrances on completion."

S: Commercial, May 11, 1886, p.669.

"The by-law to grant a bonus of \$10,000 for the erection of a roller mill at Stonewall, has been carried by a large majority of the electors of Rockwood."

S: Nwfmm, June 1886, p.519.

"The old stone mill at Stonewall is for sale."

STONEWALL cont'd

S: Nwfmm, June 1886, p.510.

"The vote on the bonus for a roller mill at Stonewall, in the Municipality of Rockwood, resulted as follows:

| | FOR | <u>AGAINST</u> |
|-------------|------------|----------------|
| Grassmere | 97 | 2 |
| Rockwood | 26 | 15 |
| Brant | 20 | nil |
| Ridgway | 16 | 6 |
| Victoria | 10 | 3 |
| Greenwood | 20 | 30 |
| West Dundas | nil | 10 |
| East Dundas | nil | 28 |
| | | |
| | 189 | 94 |

S: Nwfmm, July 1886, p.542.

S: Nwfmm, Sept. 1886, p.559.

"A petition is in circulation in Stonewall asking the council to grant a bonus of \$4,000 to Rutherford & Toombes to aid them in the construction of a flouring mill."

S: Commercial, Oct. 5, 1886, p.1.

"Two bonus by-laws have been prepared by the municipality of Rockwood, for the purpose of granting J. B. Rutherford & Co. and Geo. Buckpitt \$4,000 each to aid them in putting in roller process machinery in their flour mills at Stonewall. This municipality recently offered a bonus of \$10,000 for the erection of a roller mill of a certain capacity, but the offer was not taken up."

S: Commercial, Nov. 9, 1886, p.123.

"The grist mill at Stonewall, owned by Rutherford & Co. and the mill at Balmoral, owned by Geo. Buckpitt, will both be changed to the roller process. The bonus by-law granting \$4,000 each to the owners of the respective mills, having been endorsed by a large majority of the electors of Rockwood, within which municipality the mills are situated."

S: Commercial, 8th Annual Supplement, 1893, p.634.

- Owner J B Rutherford & Co. with a 120 barrel capacity.

S: Southern Interlake Heritage Report, Gerhard Ens, HRB, Feb. 1982.

- Discusses Stonewall grist mill built in 1877 by Hamilton, Drake, and O.P. Jackson, the mill burnt down in 1883 and immediately rebuilt.

[&]quot;The Stonewall stone mill was recently sold at auction."

88. SWAN LAKE

- S: CH, Memories of Lorne, 1880-1980, 1981, (W. Livingston submission, 1970).
 - Photo, 1914 of mill and elevator.
 - "It was built in 1905 and the farmers had a ready market for cordwood which was burned in the mill boilers. It burned in 1921."

89. SWAN RIVER

S: CMGE, March 1913, p.59.

"R.A. Martin has become proprietor of the Swan River flour mill and elevator at Swan River, Man."

- S: CH, <u>Lasting impressions</u>: Historical sketches of the Swan River Valley, 1984, pp.116-117.
 - est. 1902 by Mr. S. Gable and burned in 1920.
 - Photo of mill; no date.

S: Ibid, p.123.

Discusses Doukhobor flour mill. "At the village of Vasnisisennie, a few miles west of Benito, a flour mill was constructed in 1904, to serve the seventeen villages of what is known as the Thunderhill or North Colony of the Doukhobors. Another was built at the village of Pavlova on NW 3-35-31..... In the South Colony, three miles south of the village of Verigin, at Blagodadmier, another interesting mill was constructed in 1902."

90. SYDNEY

S: Nwfmm, May 1885, p. . -photo of mill; later destroyed by fire.

"Ellisons Grist Mill, Teulon, 1946" (PAM: Teulon)

91. TOTOGAN

S: A. Begg, <u>A practical handbook and Guide</u>, 1877, p.93. "Totogan, Chisholm & Bubar, 1 run."

S: HBCA, D. 20/11.

J.H. McTavish to J.A. Graham, 24 December 1878, Portage La Prairie report for quarter ending 31 October, by E.W. Gigot, fo. 404. Recommending reversal of 15 July closing of Totogan outpost "especially as it contains now the only grist mill west of here and all its people from different Western settlements will have to go there to get their flour made."

92. TREHERNE

S: Nwfmm, Jan. 1889, p.15.

"R. Muir & Co's steam mill at Treherne, Man., which is being pushed forward as rapidly as possible, will have 125 to 150 bbls., capacity, and will be four stories high. There is plenty of wood and water near the mill, which will prove a great aid to the operators. A brick engine room is being built, apart from the mill."

S: Commercial, 8th Annual Supplement, 1893, p.634.

- Owner W. J. Grey with 125 barrel capacity.

S: CH, Tiger Hills to the Assiniboine, 1976, p.22.

- A flour mill was opened in 1891 by W. and J.G. Grey of Toronto on a bonus from the town. This mill was run by a Mr. Code and Claude Somerville was engineer. This mill was taken over by Mr. C. Wiechman and operated by him until it burned down in 1905. It was replaced by a concrete block mill and it remained in operation well into the forties. Etc.

93. VIRDEN

S: Nwfmm, May 1885, p.86.

"Virden, Man., wants a grist mill, and the council is asked to bonus on with \$8,000."

S: AM, June 1, 1885, p.302.

"The town of Virden, Man., wants a grist mill. The council is asked to give a bonus of \$8,000 for one."

S: Nwfmm, June 1885, p. .

"The municipalities of Wallace and Pipestone, Manitoba, offer a bonus of \$5,000 and exemption from taxes for ten years, to any party who will erect a grist mill in Virden, capacity to be not less than one hundred barrels per day."

S: Commercial, Aug. 4, 1885, p.896.

"This does not include a new flour mill of 125 bbls., daily capacity, which will be constructed without delay by Messrs. Willing & Dier, the former from Brandon and the latter from Winnipeg. The townspeople and surrounding farmers have agreed to give a handsome bonus to this mill, and its construction will be pushed without delay."

Virden cont'd

- S: AM, Oct. 1 1885, p.628.
 - "The mills at Oak Lake and Virden, Man., are ready for the machinery."
- S: Nwfmm, Nov. 1885, p.286.

"The new mill at Virden looms up a fine landmark."

S: Nwfmm, Nov. 1885, p.286.

"Virden and Oak Lake Mill buildings are now completed and ready for the machinery to be put in."

- S: Nwfmm, Jan. 1886, p.353.
 - "The machinery for the Virden flouring mill has arrived and is being put in place."
 - "The grinding floor of the new Virden mill was utilized as a ballroom on the 1st Dec. A large company was present and it was a great success."
- S: Nwfmm, Feb. 1886, p.387.

"Willing and Dier's new mill at Virden cost \$16,000."

S: <u>Commercial</u>, Feb. 16, 1886, p.439.

"The new roller flour mill at Virden is now completed. Dier, Squair, & Craig are the proprietors."

S: Nwfmm, Apr. 1886, p.449.

"The Virden roller mill was started the 14th Feb. Mr. Robert Muir superintended the starting for Messrs. Dier, Craig & Co., the proprietors."

S: Nwfmm, May 1886, p.485.

"The first car load of flour manufactured in the Virden roller mill was shipped west on April 15^{th} ."

S: Ibid, p.485.

"The following roller mills have been recently finished and started by Messrs. Wm. & J.G. Grey, of No. 2 Church Street, Toronto, viz:..... Dier, Squair, & Craig, at Virden... D. Moore & Son, Oak Lake..."

S: Nwfmm, June 1886, p.509.

ARTICLE-. "The Virden Mill"- The Virden roller mills; Messrs. Squires & Craig, prop., are running night and day. The machinery was supplied by Wm., and J. Grey, of Toronto, and consists of four double stands of 9x18 and 9x24 rolls, one run of 4 ft., stone, 3 purifiers, 4 silk reels, 1 centrifugal, scalpers, cleaning machinery, chopper, etc. The motive power is supplied by a 50 h.p. "Doty" engine, and 60 h.p. boiler. The mill is said to have cost complete about \$15,000. The proprietors are both practical roller millers and own their own mill.

Mr. Kastner, formerly of Brandon roller mills, is night miller. The mill has been in operation two months and up to the present has given good satisfaction both to the proprietors and to the customers."

S: <u>Commercial</u>, Aug. 8, 1887, p.938.

"The Virden, Man., flour mill has changed its proprietory, Mr. Koestner having gone out of the concern. The firm is now composed of Messrs. W. Craig, C. Bell, and W. Squires."

- S: The New West: Wealth & Growth, 1888, p.100.
 - Proprietors: Koester, Craig, & Co.
 - "The mill is substantially built, having a capacity of 100 bbls., per day... The motive power is furnished by a 65 horsepower engine, and the machinery is unsurpassed for perfection of design and utility by that of any similar establishment in Manitoba."
- S: Nwfmm, June 1889, p.162.

"The roller mill at Virden, 100 bbls. capacity, is offered for sale by Squair, Bell & Hall."

- S: Commercial, 8th Annual Supplement, 1893, p.634.
 - Owner Koester & Son with a 75 barrel per day capacity.
- S: <u>A Review of the Heritage Resources of Virden—Wallace Planning District</u>, Oct. 1986, Karen Nicholson, HRB, pp.105-116, with sources.
 - Discusses history of flour milling in the Virden area.
 - February 1886, Dier, Squair, and Craig mill completed.
 - Mill sold to M. Koester and brother in Nov. 1888.
 - Mill destroyed by fire in May 1893.
 - Virden Milling Company formed and commenced running Oct. 1894.
 - VMC sold mill to Hubbard and Brine in 1910.
 - B.P. Kent flour mill commenced operations in 1934 or 1935.

"Virden Flour Mill, 1888" (PAM: Virden)

Virden cont'd

S: CH, Virden Review, p.55-56.

- In 1886, Dier, Squair, and Craig bonused to open a grist mill.
- "Dier bought out Squair, Koester bought out Dier and for some time the partnership remained Koester, Craig and Company. In 1888 George Hall bought out Craig and by 1889 it was run by Koester Bros. By May of that year it was advertised for sale but by March, 1890, and in 1891 an advertisement appeared in the Advance for the mill as being run by Koester and Son. In January 1891, an announcement appeared stating that accounts would be collected through a solicitor."
- "The building had been erected in close vicinity to the C.P.R. water tank. An early new note states that three wells had been made but a sufficient supply of water had not been found. In spite of water shortage, poor crops, difficulty in collecting accounts and competition with such big concerns as Ogilvie's, Winnipeg, and Lake of the Woods, Keewatin, Ontario, the little Virden mill continued its struggle until fire put an end to its career."
- B.P. Kent built flour mill on invitation from town and municipality in 1934.
- Brief history of B.P. Kent provided.

S: Winnipeg Free Press, by Randy Turner, c. 1990.

- Current structure built in 1934 and renovated in 1978.
- At one time 2600 mills in Canada now about 30.
- "You've had a consolidation of the industry to a few major manufacturers." Bill Kent
- Keys to survival: Keep pace with new technology and standards.
- Produces 15 flour related products.
- Marketing and technology keys to survival.

S: Free Press, Jan. 7, 1991, p.17.

- Kent mills charged with "price fixing", involving rigging bids on federal purchases of wheat flour worth about \$500 million between 1975 and 1987.

"Wasyl J. Mihaychuk Flour Mills, Vita, 1920" (PAM: Andrew Mihaychuk Col. #23)

94. WAKOPA

S: <u>Nwfmm</u>, Aug. 1883, p.218.

"It is estimated that the loss by the burning of the mills at Wakopa will amount to at least \$8,000."

Wakopa cont'd

S: Nwfmm, Sept. 1883, p. .

"Williams and Harrison Bros., who ran an extensive grist and saw mill business...., at Wakopa, have had the misfortune to lose their mills by fire. A quantity of grain was burned."

S: Nwfmm, May 1887, p.838.

"Wm. Harrison, proprietor of the grist mills at Wakopa, Man., will put in roller process machinery."

95. WAWANESA

S: Canadian Grain Journal & Monthly Seedsman, Jan. 1950, p.14.

"The Wawanesa Flour Mills was recently destroyed by fire. Damage was reported to be in the neighborhood of \$100,000. More than 20 tons of feed and 3,000 bushels of wheat went up in smoke with the old landmark."

S: CH, Light through the trees: 100 years of Wawanesa and district, 1988, p.2.

"By 1882 a small centre had been established about three miles west of Sipiweske, on the Souris River, on Sec. 16, TS 7, Range 17, now owned by Noel Fisher. It was called Souris City. Here there was a grist mill...."

S: Ibid, p.5.

- Excellent photo of mill; no date.

S: Ibid, p.22.

- Wawanesa flour mill, "built in 1895 by A.W. Snider and D.N. Russell. It was located at the east end of Park street.... It burned down on Christmas Day in 1949." – photo of Snider's mill; no date.

S: Ibid, p.182.

- Sketch of Mill in 1911.

S: Ibid, p.16.

- Photo of mill burning in 1949.

"Flour Mill, Wawanesa, 1907" (PAM: Wawanesa)

96. WAUBEESH

S: Nwfmm, Special Ed., 1883, p.20.

"The new grist mill at Waubeesh, Turtle Mountain, owned by Messrs. Brondgeest & Hurt, started up on the 19th of March, and is now in full operation. The mill structure in 36 x 64 feet, two storeys high, two run of stones, and is run by a twenty horse power engine."

97. WEST LYNNE

S: HBCA, D. 20/16 – 1880.

- J. Ogden Grahame to J.A. Grahame, 5 May 1880, fo. 139 mentions memo, re: new mill to be built there.
- C.J. Brydges to J.A. Grahame, 6 May 1880, fo. 140 re erecting mill & granary: "I am satisfied it is better than letting anyone else to do it and it will materially help your store and the place and surroundings generally."
- J.H. McTavish to J.A. Grahame, 5 July 1880, fo. 441 laid out sites for mill & granary at West Lynne; "the same as those chosen by yourself....;" Kenway rec'd only 1 tender for \$5,000 which shouldn't be accepted until estimate made."

S: HBCA, D: 20/18 1881.

- J.H. McTavish to J.A. Grahame, 23 Jan. 1881, fo. 101- not yet in operation as some machinery parts lost in shipment from Buffalo, NY.
- <u>Ibid</u>, 10 Feb. 1881, fo. 18ld, "The West Lynne Mill is not yet at work, not having been able to strike water. We have given it a trial, and the work is pronounced excellent, and the flour very fine. I am only waiting to hear that they have got water to shut down the mill here, and send the engineer and other hands to run the West Lynne Mill."

S: HBCA, D: 20/21, 1881.

- Edward R. Abell to J.A. Grahame, 17 Nov. 1881, fo. 253 – inspection of mill there; "Therefore I have concluded, judging from the aforementioned observations [very good structured & locational detail], and the general appearance of the bank of the river in the immediate vicinity of the mill, that the Mill building is situated upon an extensive land slide (something similar to the place on which the Hudson's Bay Company's warehouse was built on the Assiniboine river, near the old Fort Garry;" repairs to cost \$1,500; "successful and remunerative running can't be relied upon due to location."

West Lynne cont'd

S: HBCA, Chas. Esplin (engineer to J.A. Grahame), 25 Nov. 1881, fo. 276-279

Negative report re moving mill; suggests new bldg; "The machinery in the
present building is first class as far as it goes (except the system of driving the
millstones by gearing) but extension for either production or improved
processes of manufacture is totally prevented from want of room in the old
building."

S: HBCA, D.20/23 – 1882.

Ronald McLaren (St. Boniface) to J.A. Grahame, 15 June 1882, fo. 144 – offer to remove "flouring mill" at West Lynne & "Erect same on a new site about 300 feet from its present position as specified in advertisement;" 20 feet addition to end of bldg.; new engine room; sink well; for \$8860.00.

- fo. 149 copy of call for tenders.
- Chas. Esplin to J.A. Grahame, 17 June 1882, fos. 150-155 tender.
- D. Matherson (W.L.) to J.A. Grahame, 20 June 1882, fo. 164 Emerson mill offering 95 cents per bushel; Ogilvie Co. paid \$1 per 2000 bushels delivered at Emerson station.

S: <u>Ibid</u>, 23 June 1882, fo.169 – expects difficulty getting 1000 cords of wood @ \$5/cord; Esplin to start work next week.

- D. Matheson to J.A. Grahame, 26 July 1882, fo. 359 – endorses a letter by Esplin (fo.360) of 25 July to himself re a new engine for West Lynne Mill.

S: HBCA, D. 20/24,

- D. Matheson to J.A. Grahame, 5 Oct. 1882, fo. 282 – Esplin did work beyond contract and now requesting payment; Matheson says he should not get paid, except for expansion of engine room (damaged by ice in spring) from 16' x 25' to 21' x 36'.

S: HBCA, D. 20/25, - 1883

- D. Matheson to J.A. Grahame, 5 Jan. 1883, fos. 6 & 6d- "This fall when the mill was being re-erected I had two wells sunk to the depths of 24 and 30 ft., getting water in both cases at 12 ft., but not in sufficient quantity to run the mill and I had not the means of going deeper. A supply could have been brought from the River at an expense (before frost set in) of \$700.00, but as you were absent I did not feel at liberty of going to the expense."
- mill is idle; feels bad grain would prevent profitability in any case; "and now that grains are being run on the Pembina Mountain Branch of the C.P.R. all the Western grain hitherto sold here, will be marked at Smuggler's Point and other stations along the line."

West Lynne cont'd

S: <u>Ibid</u>, 11 March 1883, fo. 239 – suggests either an artesian well or a windmill system to get river water; suggests will only get wheat from a 10 mile radius "unless brought in from the west by rail."

S: G.F. Tennant (Mayor, West Lynne) to J.A. Grahame, 20 March 1883, fos. 266-267 – urges Co. to operate mill or leave it; present mill prevents others from operating.

S: <u>HBCA</u>, D. 20/27, -1883.

- D. Matheson to J.A. Grahame, 18 Sept. 1883, fo. 45 lowest offer for "the grain warehouse at the siding" is \$2055; bldg., at mill cost \$1600; should he accept tender?; "Grain will soon be moving and it would be well if Mr. Rowan would get to work soon to erect the pump for the mill."
- D. 14/7, J.A. Grahame to D. Matheson, 19 Sept. 1883, fo. 541 Don't commit yourself as an agreement was made with railway co. not to select a site until the "Station is laid out when the proposition of the Emerson people can again be taken up"; pump will be ready in time; well water should be sufficient for time being.
- D. 20/27, D. Matheson to J.A. Grahame, 20 Sept. 1883, fo. 71 contract for warehouse under construction at the mill is \$1400; other items, such as belts & pulleys to "elevate the grain from the hopper to the bins" will be extra.

S: HBCA, D. 20/31, 1884

- D. Matheson to J. Wrigley, 10 Nov. 1884, fo. 24 – took possession of mill on a "landlord's warrant;" to be put up for sale; engineer wishes lease transferred to him, "but he thinks the conditions are too exacting and the rent too high."

S: <u>Ibid</u>, fo. 42 – Mr. Payton ran mill before; Geo. Pocock is engineer referred to in 10 Nov. letter.

S: <u>Ibid</u>, 13 Nov. 1884, fo. 52 – key to be given to Pocock when Matheson receives lease and rent is paid.

S: Ibid, 17 Nov. 1884, fo. 60 – Pocock paid rent for first month of \$115.

S: Nwfmm, May 1886, p.485.

"It is reported that the H.B. Co's mill, at West Lynne, will be remodeled to the roller system."

98. WINKLER

S: CH, Winkler: A Proud Heritage, 1982, Friesen, p.78.

- 5 photos of Winkler Milling Co. Ltd. 1. 1933 and 2. 1946 with the three others not dated.

"Winkler Milling Company" ("Winkler A Proud Heritage" published by the Winkler Home Coming Committee, 1982, p.78)

WINNIPEG BASED FLOUR MILLS

99. INKSTER'S STEAM MILL

- S: The Nor'wester, July 14, 1860.
 - "On the 30th ult. (of June) the first and only mill driven by steam burned down. John Inkster was the principal sufferer."
- 100. Hudson's Bay Company Mill (McLane's Mill)
- S: A practical Handbook and Guide, Alexander Begg, 1877

"McLane's Mill is now busy filling a large order for flour for the Mennonites. Five hundred sacks were sent out on Tuesday."

S: Ten Years in Winnipeg, Alexander Begg and Walter R. Nursey, 1879, p.137. "In October, '76, the mammoth mill of the Hudson's Bay Co., leased by J.N. McLane, was finished and commenced running. It is a building 57 ½ x 37 ½ feet, and 60 feet in height to the peak of the roof. The engine house is 38 x 44 feet and the engine of 250 horse power. The main driving wheel is 12 feet in diameter and 38-inch face. It has four run of stones and is fitted up with all the improvements. Without exception, when built this was the finest mill anywhere west of St. Paul. It's capacity for grinding is 1350 bushels every 24 hours, which is pretty good for a young place like Winnipeg."

S: HBCA, D.20/21, 1881.

D.H. McMillan to J.A. Grahame, 24 Nov. 1881, fo.274 – offer to lease HBC mill "as my object is not so much the taking of a direct profit from the working of your mill, as that of lessening unnecessary competition."

S: <u>AM</u>, March 1, 1885, p.140. "The Hudson Bay Co.'s mill at Winnipeg, has started up. It is a roller mill."

S: <u>AM</u>, June 1, 1885, p.302.

"Last year it was decided to completely overhaul and refit with the most improved machinery the H.B. Company's flouring mill at Winnipeg. The whole work was given to the Pray Manufacturing Company, of Minneapolis, Minn., and a splendid job they have made of it. There were already in the mill five eighteen-foot reels, one Richmond Wheat Cleaner, one Kurth Cockle machine, and one run of stones, and there have been added by Mr. Pray five double sets of Livingston rolls, six Geo. T. Smith Purifiers, six Kirk & Fender's Peerless Dust Catchers, four Pye Centrifugal reels, four wire break reels, one Richmond Bran Duster, and one Morgan Scourer. The mill started up Feb. 1. The present capacity is 150 barrels daily of flour, all grades included, these being Best Patent, Strong Bakers', XXXX, and Superfine, all consumed at home – the stones being used only for reducing the fine, purified middlings. Five breaks are made and low grades are cleaned up on the scratch rolls. Mr. C.H. Steele, the head miller, is very pleased with the new machinery, it gives complete satisfaction, and he says its like being among old friends, as he has worked among the Pray machinery so much. The second miller is Mr. Hughes, late in the roller mill at Crookston, Minn. Each of them has an assistant and there are two packing. The flour being marketed is 98 – pound and 25 – pound sacks. The mill stands at the junction of the Assiniboine and Red Rivers – From Nor' West Farmer."

S: Nwfmm, Jan. 1886, p.353.

"Geo. Campbell has left the Ogilvie mill to take second miller's position in the Hudson Bay Co.'s, Winnipeg, mill."

S: Nwfmm, June 1886, p.510.

"The damage to the H.B. mill, Winnipeg, is assessed at \$2,000."

S: Nwfmm, July 1886, p.542.

"The H.B. mill in this city is shut down half time on account of dullness of trade. The company has 40,000 bushels of wheat on hand and will resume operation full time at an early date providing a change occurs in the markets."

S: Nwfmm, June 1888.

- HBC mill erected in 1876.
- The machinery for the HBC mill was purchased from Noye & Co., of Buffalo, NY.
- "It was finally sold to J.W. McLane, who erected the mill in 1876."
- "The building was made very strong and was 58 feet long, 38 feet wide and four stories high. It had four runs of stone, and claimed the most powerful engine (150 h.p.) north of Minneapolis, with all the latest improvements."
- HBC took over mill from McLane in 1878.
- About 10 steam powered grist mills in Canada around 1878.

- In 1884, the mill was adapted to the partial roller process method. "The Pray Mfg. Co., of Minneapolis, was employed to do this work."
- In 1886, the Pray Co., completely overhauled the system with a complete roller system.
- "The mill now has a capacity of 200 bbls., daily (1888)."

S: Winnipeg Free Press, Sept. 24, 1969.

"The first Full- Fledged Commercial Mill in Manitoba was McLeans Mill. It commenced operation in 1877."

S: Winnipeg Free Press, Sat. Jan. 19, 1974, by Edith Paterson

- McLane's Flour Mill.
- Opened January, 1877.
- Powered by steam.
- Was located near junction of Red & Assiniboine Rivers.
- Large & Heavily framed
- "Fitted up with the four run of stones and all the latest improvements in machinery."
- Direct loading of grain from river boat to mill.

S: <u>The Red – Assiniboine Junction: A Land Use and Structural History, 1770-1980,</u> Rodger Guinn, Parks Canada.

- Discusses History of HBC Winnipeg Flour Mill.
- Excellent photos and maps.
- Good source notes.
- "... the erection of the warehouses, grist mill and associated buildings during the early 1870s at the south end of the Company's reserve is clear. It was an attempt to direct the development of the city of Winnipeg towards their property." P.116.
- "The Winnipeg real estate market remained sluggish throughout the rest of the 1880s. Brydges tried in vain to sell the junction property but there was no demand whatsoever for it. The Hudson's Bay Company maintained a small presence there with their grist mill and a few scattered old warehouses along the banks of the Assiniboine..." P.130 (Figs. 59 & 60)
- "... the company's flour milling operations on the Assiniboine encompassed some 3.64 acres. The mill remained active until 1907, when it was sold."
- "In 1874, as part of the Company's attempt to draw business south to Fort Garry, they erected a steam powered grist mill on the Assiniboine east of the fort. The complex was renovated and modernized in 1881, and again in 1885."
- "The Fort Garry mill and its property were sold to the Canadian North Railway Company in 1907 for \$180,000."

S: Adapting to Altered Circumstances: Trade Commissioner Joseph Wrigley and the <u>Hudson's Bay Company 1884-1891</u>, Eleanor Jean Stardom, U. of Man. Thesis, October 1987.

- Discusses milling operations of HBC in the 1880's.

"McLane's Flour Mill, 1870's, Junction of Red & Assiniboine Rivers" (PAM: Mills 1 – W11845)

101. McDermot's Steam Mill

- S: Nwfmm, June 1888, p.158.
 - McDermot's Mill, the second steam grist mill built in Manitoba built around 1863.
 - Burned around 1873 or 1874.

102.McDonell's Mill

- S: New Light on the Old Forts of Winnipeg, 1955, William Douglas, p.44 with source Alexander McDonell to A. Colvile, Aug. 8, 1820, Selkirk Papers, p.6941.
- ".... The wood intended for the Block House would answer famously for a Grain Mill and Saw Mill which appears to me to be more necessary."
- S: A. McDonell to A. Colvile, Jan. 15, 1821, Selkirk Papers, p.7053.

"I have built a horse mill this winter, tho' the machinery are not yet finished the Mill Stones of which have been found in the neighborhood, and in future no Mill Stones or Grind Stones need to be sent here from any other quarter.... Mill Stones 4 feet diameter & will do for any other Mill & last a long time. I never saw better stones."

S: A McDonell to A. Colvile, Sept. 13, 1821, Selkirk Papers, p.7416.

"I have last winter built a Horse Mill, behind the Fort, the Mill Stones were found pretty near hand – they are 4 feet diameter and upon trial the Mill went on well during winter, but when the thaw came on, we found that some of the foundation gave way and in the course of the ensuing Spring, we are to arrange it again, it will grind from 12 to 15 bushels of grain per day."

103.McMillan's Mill

- S: Winnipeg Daily Free Press, Oct. 13, 1876, p.50.
 - All trails then led to McMillan's Mill beside the Red River at Post Office Street – later Lombard Street – where the bagged grain was weighed and piled for loading on a riverboat.

S: Alexander Begg, A Practical Handbook and Guide, 1877.

"At McMillan & Bassett's mills 2,400 bushels of wheat are at present ground every week; but with the new boiler which is being put in, the quantity will be increased to 3,000 bushels.

Four hundred bushels of wheat were delivered in two hours recently at McMillan & Bassett's mill, for custom work alone."

S: <u>AM</u>, May 1, 1884, p.261.

"D. McMillan & Bro., Winnipeg, Man., recently placed an order with Willford and Northway, of Minneapolis, Minn., for Victor Wheat Heaters and a lot of Gold Ribbon Bodmer Bolting Cloth."

S: AM, Aug. 1, 1884, p.430.

"McMillan's Mill, at Winnipeg, Man., was recently enlarged, and new machinery added. The improvements were superintended by Mr. Cook, a milling expert from Minneapolis, Minn."

S: <u>Nwfmm</u>, June 1888, p. .

".... Was established in 1876 by D.H. McMillan. Mr. McMillan came from Colingwood, Ont., in 18770, in command of a company of volunteers under Col. Wolseley. The mill was on a small scale at first, consisting of two runs of stone, but was gradually increased in capacity, until in 1880 it had five runs. In the spring of 1881 the mill was changed to the roller process, and given a capacity of 250 bbls. In the following year, an elevator was erected, with a capacity of 50,000 bus. In 1882, W.W. McMillan was taken into partnership under the firm name of D.H. McMillan & Bro."

- Fire destroyed mill during fall, 1887.

S: S: Man. Free Press, Apr. 12, 1873, pp.5, 8; & W.L. Morton, Manitoba: A History, U of Toronto Press, 1967, p.169.

"By 1875 flour-milling was overtaking the lumber industry and Andrew McDermot's old mill was overshadowed by the great warehouse and towering smokestacks of McMillan's. The millers were soon to introduce the new "patent process" with which chilled steel rollers and silken bolts could grind a superfine white flour from the hard spring wheat of the Red River Valley. The flour went to local bakers, to the cart brigades going west, to the outfits of new settlers, to the survey and construction gangs on the railway lines."

McMillan's Mill cont'd

- S: Grant McEwan, <u>Illustrated History</u>, p.51.
 - site of 1st export flour transfer
 - used to be plaque on Stone at former site of McMillan's Mill, unveiled in 1932, but was removed by vandals.
 - Stone buried as it became part of 1950 flood dike

104.Muir Flour Mill – Winnipeg

S: Nwfmm, Feb. 1886, p.398 & March 1886, p.430. (art and diagram of roller mill in ad).

"Robert Muir & Co. 21 McWilliam St. East, Winnipeg."

105.Nairn's Oatmeal Mill

S: Commercial, June 3 1884, p. .

"Stephen Nairn, a veteran Ontario miller, is making arrangements for the speedy construction of an oatmeal mill of 100 bbls., a day capacity. The mill will be fitted with new and improved machinery, and by next fall, will take its place among the prominent industries of Winnipeg."

S: AM, Feb. 1, 1885, p.86.

"Work has commenced in Stephen Nairn's oatmeal mills, at Winnipeg, which are situated near the railway station, not far from Main Street. The erection of this mill was begun last June. The mill building, composed of stone masonry and frame of strong timber firmly built together, is four stories high. A large part of the machinery, including the engine, is from the establishment of Inglis & Hunter, Toronto. The millstones and some other portions of the machinery were imported from Scotland. The mill contains all the various cleaning, grading and purifying processes, and is now provided with admirable facilities for unloading the grain or loading on the C.P. Railway cars. A siding is provided for that purpose. With the machines for making the round or granulated oatmeal, there are four run of millstones. The whole is drawn by a sixty-horse power Corliss engine. The intention is to increase the mill's capacity as well as the storage. The total cost so far has been about \$33,000, which includes grounds, switches, buildings, and machinery."

S: AM, March 1 1885, p.140.

- Article taken from Winnipeg Free Press details physical description of oatmeal mill. Includes: \$15,000 to build mill, 60 horse-power engine, and floor by floor description of milling process.

Nairn's Oatmeal Mill, cont'd

S: Commercial, Dec. 1, 1885, p.185.

«The first carload of oatmeal exported from this province was shipped to Montreal on Sunday last, from the Winnipeg oatmeal mills."

106.Ogilvie's Flour Mill

S: Nwfmm, Special Ed., 1883, p.20.

"Ogilvie's Mill"

- Features: "A visit to the engine room reveals a Reynolds-Corliss of 400 horse-power. This is a magnificent looking piece of mechanism, and was the first of its kind ever turned out. It was made in Milwaukee, and has a fly-wheel twenty-feet in diameter, and weighing in twenty tons. The boilers are three in number, and are of large dimensions. Wood is at present used entirely, but after this summer the company propose using coal."
- Goes on to describe milling functions of every floor.
 - o 1st floor: Packing and Shipping
 - o 2nd floor: "... Nine different kinds of rollers... reducing wheat into flour."
- Rollers made out of porcelain
 - o 3rd floor: Full of bins
 - o 4th floor: The "purifying room", where are to be seen twenty-two large purifiers
 - o 5th floor: Contains purifiers and "a couple of cockle separators."
 - o 6th floor: Separators and Dust Catchers.

S: Nwfmm, Jan. 1886, p.353.

"Messrs. Ogilvie's mill is closed down to permit another boiler being put in, and other improvements being made to increase the capacity of the mill"

"The Ogilvie Milling Co., have lately placed wheat heaters in their mill, frozen wheat is especially benefited by being run through a heater, without one the bran pulverizes badly."

S: Nwfmm, Sept. 1887, pp.955-956.

- Title "A prosperous Winnipeg Industry" describes in great detail the Ogilvie mill.

Ogilvie's Flour Mill, cont'd

- S: <u>Nwfmm</u>, June 1888, p. .
 - "In August, 1881, work was commenced at the large Ogilvie mill at Winnipeg. The mill was completed the following summer, about the same time McMillan's mill was ready for operating under the roller system."
 - "The year 1882 it will be seen marks the introduction of roller process milling in Canada."
- S: The Dominion Illustrated, July 6 1889, pp.6-7, 10.
 - Photo of W.W. Ogilvie available.

S: Ibid.

- Discusses growth of Canadian milling industry up to 1888.
- Sketches of the 5 Ogilvie mills, including Winnipeg mill.
- S: Commercial, Eighth Annual Supplement, 1893.
 - Full page Ogilvie ad
- S: Nwf, Oct. 1897, p.353-354.
 - Sketch of Ogilvie Mill site in Winnipeg as well as detailed explanation of production process in mill.
- S: Nwf, October 1897, pp.353 & 354.
 - Sketch of Wpg. Ogilvie Mill
 - Article titled "Manitoba Milling, Past and Present:" discusses history of Winnipeg based mills with special attention paid to Ogilvie's mill.

"Ogilvie's Mill, Winnipeg, ca.1883" (N.W. Farmer & Miller, 1883 Special Edition, p.20)

S: Free Press, Thursday, Dec. 6, 1906.

"With the advent of unlimited electrical energy for manufacturing purposes in Winnipeg some of the larger plants have deemed it advisable to use this power for their mills. Among those who have installed electrical plants for large operations is the Ogilvie Milling Co., manufacturers of the Royal Household brand of flour and one of the oldest milling companies in the west. There has been no change in machinery unnecessary, but the motor building erected at the back of the mill is a very spacious structure. It is 50 feet square, built of brick, and consists of one storey 50 high, giving plenty of room for the machinery and good ventilation. The electric plant is the most up-to-date possible and will not only save a great deal of labor, but will lessen the expense of furnishing power for the mill."

S: Telegram, Sept. 25, 1909.

GREATEST FLOUR MILL IN EMPIRE

Ogilvie Company Will Double Grinding Capacity in Winnipeg Now F.W. Thompson, vice-president and general manager of the Ogilvie Mills, Limited, announced at Fort William yesterday, that the firm intend to double the capacity of the Winnipeg mill. This will render it the biggest mill in the British Empire, with a capacity of 8,000 barrels a day.

The present mill was erected in 1881 with a capacity of 1,800 barrels and enlarged at different times until now when it can produce 4,000 barrels per diem.

Owing to the immense business the company is transacting the plant for some time has been run practically continuously at full stretch.

The Ogilvie's largest mill at present is the Royal of Montreal, which can turn out 6,000 bushels a day, the Fort William mill has a capacity of 3,000 and the Glenora mill of Montreal, the same. The firm thus has a capacity of 16,000 barrels for the whole Dominion or 96,000 barrels per week, an output that places this firm third in the list of the great milling companies of the world. The two leading concerns being, the Pillsbury-Washburn Flour company of the United States. The Winnipeg mill will, however, when the capacity is doubled, be probably the biggest in the world, the famous Heker-Jones-Jewell Mill of New York not being larger than this.

The Ogilvie company is at present rushing to completion a concrete enforced wheat elevator capable of storing 300,000 bushels in connection with their Winnipeg plant.

It is a matter of common recognition that the Canadian millers in the quality of their flour and the perfection of their equipment now set the standard for the world.

Ogilvie's Flour Mill, cont'd

At the local offices, yesterday it was thought that the capacity of the Winnipeg mill – known as the Palace mill of the world – could be doubled by adding a storey and placing the rollers closer together, but it was deemed extremely likely that a new building altogether will be erected."

"Ogilvie Flour Mills Co. Ltd., Winnipeg" 3,000 bbls, daily capacity" (PAM: Winnipeg)

S: <u>Telegram</u>, Sept. 27, 1909.

OGILVIES INTEND BUILDING AT ONCE

Extension Includes another Eight Storey Structure
Two Floors to be added to Present Building-Staff will be Doubled – other mills to be
erected in western cities

F.W. Thompson, the president of the Ogilvie Milling company, arrived in Winnipeg on Saturday and has given some interesting details regarding the doubling of the capacity of the local plant.

The present mill, now a six-story building, is to be augmented by a couple of stories and another eight-story mill is to be erected on the ground at present occupied by the old steam plant at Point Douglas. The company owns eight acres on its site on Higgins avenue and will therefore have ample room for the extension. H. W. Chalfant the company's architect, is ready at work upon the plants, and building operations will be commenced next spring, and it is expected that the doubled capacity will be ready to grind next year's crop. The additional machinery will require a doubled staff.

The additional plant will give a minimum capacity of 6,000 barrels a day and a maximum of 8,000. It will render Winnipeg the greatest milling city in the Dominion and one of the greatest in the world.

Other Mills West

Mr. Thompson will leave for the west on Thursday to look over sited for new mills in other western cities. He has offers from a number of municipal authorities between Winnipeg and the mountains and the various proposals are to be considered....

Turning to his visit to Winnipeg, Mr. Thompson remarked he was always glad to be back in the city that from his nineteen years of residence here he still called "home". "Winnipeg has more than fulfilled my most enthusiastic predictions, yet in days gone by I was regarded as one of the wildest sort of optimists.

Ogilvie's Flour Mill, cont'd

H.S. Holt left Mr. Thompson at Fort William to return to the east. He in one of the directors of the Ogilvie company and is also president of the Royal Bank of Canada, president of the Montreal Light, Heat, and Power Company and other important interests.

S: <u>An Historical Souvenir Diary of the City of Winnipeg</u>, compiled and ed., by Fred C. Lucas, 1923, p.150.

- Entry for August 9, 1881.

"The action of the City Council in exempting the proposed new flour mill from taxation for twenty years was not long in bearing fruit, for the next day Mr. Ogilvie purchased from Mr. McTavish a site on the Red River near Fort Douglas, containing four and one half acres, purchase price being \$4,000.00. Foundations were straight away laid out, the plans having been previously prepared, and the following day, August 9 1881, excavations were commenced."

107.St. Boniface Flour Mills

S: AM, Feb. 1, 1884, p.81.

"Joseph Sanderson has rented "St. Boniface Flour Mill", St. Boniface, Man., from the trustees of the Malloch estate, and is doing a gristing business."

S: <u>AM</u>, Sept. 1, 1885, p.466.

"The first grist mill run by water power in the Canadian Northwest was built in 1850 by Louis Riel, father of the rebel leader. It stood on the Seine River at St. Boniface, Man. Mr. Riel ran a channel nine miles long from Grass Creek to the Seine River to increase his water power."

S: Nwfmm, Feb. 1886, p.399 & March 1886, p.429, (AD).

For Sale – St. Boniface Flour Mills

"Situated on Emerson Branch of the C.P.R., adjoining St. Boniface Railway Station, and within one mile of the City of Winnipeg."

"Engine, Boiler, and all machinery, consisting of 3 run French Burr Mill Stones, and everything requisite was manufactured by Goldie & McCulloch, Galt, Ont., and has been only a short time in use..."

S: MFP, Aug. 10, 1906, p.11.

- Big write up on Western Canada Flour Mills Grand opening.

"Western Canada Flour Mills Company Ltd., Purity Flour, St. Boniface, 1955: (PAM: St. Boniface)

108. Soo Line Mills

S: Canadian Grain Journal, Nov. 1951, p.4.

"Obituary"

"Samuel Kanee veteran western miller, president of Soo Line Mills, Limited, and Kanee Grain Company, Limited, died in Winnipeg recently."

"Mr. Kanee was born in Russia and came to Canada in 1905. He lived at Melville and Weyburn, Sask., where he operated milling businesses. In 1937 he came to Winnipeg and organized the Soo Line Flour Mills."

S: Canadian Grain Journal, pp.6-7.

- "Modernizing Program for Winnipeg Mill"
- Describes "new" Pneumatic system for flour milling.
- "Soo Line Mills Limited have in the past exported approximately 50% of their products to the United Kingdom, Tangiers, West Indies, Venezuela, and Columbia."
- "Soo Line Mills Limited was originated in 1917 with a mill at Weyburn, Saskatchewan. However, in 1936, Mr. Sam Kanee, veteran western miller, transferred activities to Winnipeg. Following the death of Mr. Kanee Sr., in 1951, his two sons, Sol and Abe Kanee, continued as owner managers of the mill."

S: Canadian Encyclopedia.

- Soo Line Mills on of the three operational mills left in Manitoba in 1991.

"Soo Line Mill, Winnipeg" Soo Line Photo.

109. Sturgeon Creek Mills

S: W.O. 55/ (B -2829) vol. 882, f.260.

- "Memo of observations made during and Exploring Tour up the Assiniboine River to Old Brandon House,.... From the 16th October to the 20th November 1847 by William Chessell..."
- F.260 "6 or 7 miles above the Forst is Sturgeon Creek & running into the Assiniboine, crossed by a bridge a short distance from its mouth, near which an attempt has been made to construct a Mill Dam, but for want of skill it entirely failed."

S: Alexander Begg, A Practical Handbook and Guide, 1877.

"Another Mill – Mr. James Spence, of this city, has purchased the remains of the Tait mill at Silver Heights, and imported new machinery including two runs of stones, and is now engaged in the erection of a first-class grist mill on the Mirey Creek, just east of the Manitoba Brewery, which he expects to have in running order by the first of October next."

S: Alexander Ross, The Red River Settlement, 1856, p.144.

"All the other windmills were made with the materials of the country, iron excepted, and finished by the workmen of the settlement, at an average cost, everything included of 150 sterling. Their ingenuity has been equally successful in the construction of watermills, the first of which was built on Sturgeon Creek, a small tributary of the Assiniboine nearly midway between the Forks and the White Horse plains, by Mr. Grant, chief of the half-breeds..."

S: Winnipeg Sun, May 26, 1986, p. .

- Discusses Grant's Old Mill on Portage Ave.
- Cuthbert Grant built watermill in 1829.

110.Other Manitoba Flour Mill Source Data

S: Alexander Ross, The Red River Settlement, 1856, p.144.

"The eye of the stranger would have been arrested also by the great number of windmills in the neighborhood. One of these was sent out as a model by Lord Selkirk in the early period of the settlement; it had cast rollers, and machinery capable of working two pairs of stones, but for years no one was found able to set it in operation. It was even sent back to England and re-shipped. At length, ten years after its first arrival back on the colony, Lord Selkirk's executors sent out one Mitchell, a millwright, from Scotland, expressly to set it in order, by whose exertions it commenced working in 1825, having cost altogether no less than 1,500 pounds; soon afterwards it was sold to Mr. Logan, a gentleman in the colony for a fifth part of that sum, and he, having some knowledge of machinery himself, turned the mill to good account, especially as it remained for several years the only one in the settlement."

Other Manitoba Flour Mill Source Data, cont'd

- S: J.C. Hamilton, The Prairie Province, Toronto, 1876, p.41.
 - Map of Wpg., showing 6 mills.

S: <u>Nwfmm</u>, July 1887, p.901 by D. Wylie Buchanan, from the <u>Dominion Mechanical & Milling News</u>

"The very first Red R. Settlement mill was est., about 1820 by Mr. Bird of the HBC... It was arranged on the same principle as the hand mills, but was worked by horse power."

- The very first windmill est., 1827 by the settlers. "The timbers, lumber, etc., for the mills were sown by hand, and the stones were brought from a point on Lake Winnipeg, known as Grindstone Point, where stones suitable for grinding were known to exist." From this place they were brought in York boats large, flat, open yawls. The stones used were usually 48 inches measurement.
- The 1st steam powered mill est., 1856 (25 H.P. engine & two runs of stone was a combined Grist & Saw mill).
- Location of Drewry's Brewery.
- Burned in 1862.

S: <u>Manitoba</u>: <u>History of its Early Settlement, Development and Resources</u>, 1890, Robert B. Hill.

- 1859, E.H.G.G. Hay built first steam powered grist mill in the Red River Settlement (near St. Andrews).
- Fire destroyed this mill in 1887.

S: Nwf, Oct. 1897, pp.353-354.

- Article entitled "Manitoba Milling, Past and Present" discusses milling in the Red River Settlement.
- S: Northwestern Miller, Sept. 8, 1926, by Aubrey Fullerton.
 - Article entitled "Flour Centennial in Western Canada" discusses history of flour milling at Red River Settlement.
 - Sketch of old windmill at Fort Garry in 1846.
 - Good history of mills of the RRS.

S's: The Tribune, 9/25/28 & The Country Guide, Jan. 15, 1930, p.4. by Colin Inkster.

- 1840 census indicates 18 windmills and 2 water mills.
- 1856 "The Steam Mill Co." formed.
- Began operation Dec. 25, 1856.
- Burned 1860.

¹ Col. George D. Rogers, *History of Flour Manufacture in Minnesota*, Collections of the Minnesota Historical Society, Volume X, Part I, (St. Paul 1905), p. 35.

² John Storck and Walter Dorwin Teague, Flour for Man's Bread, (St. Paul 1952), p. 145.

- ³ Lord Selkirk to Miles Macdonell, 12 June 1813, Selkirk Papers, Provincial Archives of Manitoba, Winnipeg, Volume 2, p. 663.
- ⁴ Miles Macdonell to Lord Selkirk, 17 July 1813, Selkirk Papers, Provincial Archives of Manitoba, Winnipeg, Volume 3, p. 787.
- ⁵ Barry Kaye, Flour Milling at Red River: Wind, Water and Steam," Manitoba History, Number 2, 1981, p.
- ⁶ Miles Macdonell to Lord Selkirk, 24 July 1815, Selkirk Papers, Provincial Archives of Manitoba, Winnipeg, Volume 63, pp. 17, 115.
- Winnipeg Free Press, Flour from Canada's Far North West, "Winnipeg Free Press, special supplement," 1907, p. 10.
- ⁸ R.S. Carey, Flour Milling: Manitoba's Pioneer Manufacturing Industry (Winnipeg 1928), p. 5.
- ⁹ Lord Selkirk to Miles Macdonell, 12 June 1813, Selkirk Papers, Provincial Archives of Manitoba. Winnipeg, Volume 2, p. 663.
- ¹⁰ George Simpson to Andrew Colvile, 31 May 1824, Selkirk papers, Provincial Archives of Manitoba. Winnipeg, Volume 26, p. 8232.
- Martha McCarthy, Fort Douglas, Historic Resources Branch Report, p. 9.
- ¹² Kaye, op. cit., p. 12.
- 13 Alex Macdonell to Andrew Colvile, 13 September 1821, Selkirk Papers, Provincial Archives of Manitoba, Winnipeg, Volume 23, p. 7416.
- ¹⁴ McCarthy, op. cit., p. 12.
- Alexander Ross, The Red River Settlement: Its rise, progress, and present state, with some account of the Native races and its general history to the present day (London 1856), p. 144.
- ¹⁶ Kaye, op. cit., p. 12.
- ¹⁷ McCarthy, op. cit., p. 18.
- W.J. Healy, Women of Red River (Winnipeg 1923), p. 142.

 19 George Simpson to Andrew Colvile, 14 June 1826, Selkirk Papers, Provincial Archives of Manitoba, Winnipeg, Volume 27, p. 8439.
- ²⁰ Storck and Teague, op. cit., pp. 120-122.
- ²¹ Alexander Ross to James Hargrave, *Red River Settlement*, 18 December 1830, in G.P. de T. Glazebrook (ed.). The Hargrave Correspondence, 1821-1843 (Toronto 1938), p. 61.
- ²² Kaye, op. cit., p. 13.
- ²³ Ibid.
- ²⁴ David Dale Owen, Report of a Geological Survey of Wisconsin, Iowa, and Minnesota (Philadelphia
- ²⁵ Alexander Ross, The Red River Settlement, op. cit., p. 145.
- ²⁶ Ibi<u>d</u>.
- ²⁷ American Miller, 1 September 1885, p. 466.
- ²⁸ Kaye, op. ci<u>t.</u>, p. 15.
- ²⁹ John Black to James Ross, Kildonan Manse, 9 February 1856, Alexander Ross Family Papers, Provincial Archives of Manitoba, p. 163.

 Samuel Taylor's Journal, Provincial Archives of Manitoba, September 1863 and May 1864.
- ³¹ Colin Inkster, *The First Steam Grist Mill* in The Winnipeg Tribune, May 9, 1928 or September 5, 1928.
- ³³ Kaye, op. cit., p. 18.
- ³⁴ John Swanston to George Simpson. 5 January 1857, Hudson's Bay Company Archives, Winnipeg, D 5/43, fo. 20.
- ³⁵ Nor'Wester, 14 July 1860.
- ³⁶ Inkster, op. cit.; Kaye, op. cit., p. 18.
- ³⁷ Ibid., p. 18.
- ³⁸ Nor'Wester, 15 November 1860.

- ³⁹ Alexander Begg and W.R. Nursey, Ten Years in Winnipeg (Winnipeg 1879), pp. 38, 75.
- ⁴⁰ Nor'Wester, 31 July 1868: Globe, 21 September 1869.
- ⁴¹ Begg and Nursey, op. cit., pp. 31, 55, 70-71; Manitoba Free Press, 11 January 1873.
- ⁴² Globe, 21 September 1869.
- ⁴³ Alexander Begg, A Practical Handbook and Guide, (1877), p. 94.
- ⁴⁴ Kaye, <u>op</u>. <u>cit</u>., p. 18.
- ⁴⁵ J.C. Hamilton, <u>The Prairie Province</u>: <u>Sketches of Travel from lake Ontario to Lake Winnipeg</u> (Toronto 1876), p. 38.
- ⁴⁶ J.L. Finlay and D.N. Sprague, The Structure of Canadian History (Scarborough, Ontario 1984), p. 236.
- ⁴⁷ J.A. Rodger Letourneau, Manitoba's Railways, Historic Resources Branch Report, no date, p. 1.
- ⁴⁸ M.C. Urquhart and K.A.H. Buckley (eds.), <u>Historical Statistics of Canada</u> (Toronto 1965), p. 14.
- ⁴⁹ The Commercial, 13 July 1886; 14 September 1886.
- ⁵⁰ The Commercial, 2 August 1886, p. 400.
- ⁵¹ Gerhard Ens, Southern Interlake Heritage Report, Historic Resources Branch Planning District Report, February 1982.
- ⁵² The Commercial, 13 November 1883.
- 53 Ibid.
- ⁵⁴ Nor'West Farmer and Manitoba Miller, 25 March 1884; Special Edition 1883, p. 33.
- Winnipeg Daily Free Press, 13 October 1876.
- ⁵⁶ Winnipeg Daily Free Press, 23 October 1876.
- ⁵⁷ Alexander Begg, A Practical Handbook and Guide (1877).
- Nor'West Farmer and Manitoba Miller, June 1888.
- ⁵⁹ American Miller, 1 August 1884, p. 430.
- ⁶⁰ W.L. Morton, Manitoba: A History (Toronto 1967), p. 169.
- ⁶¹ Rodger Guinn, The Red-Assiniboine Junction: A Land Use and Structural History, 1770-1980, Parks Canada Manuscript Report Number 355 (1980), p. 142.
- 62 Nor'West Farmer and Manitoba Miller, June 1888.
- ⁶³ Begg and Nursey, op. cit., p. 137.
- 64 D.W. McMillan to J.H. Grahame, 24 November 1881, Hudson's Bay Company Archives, Winnipeg, D 20/21, fo. 274.
- ⁶⁵ Winnipeg Free Press, 20 January 1885.
- ⁶⁶ Elaenor Jean Stardom, *Adapting to Altered Circumstances: Trade Commissioner Joseph Wrigley and the Hudson's Bay Company, 1884-1891.* Unpublished M.A. Thesis. (University of Manitoba 1987), p. 200. ⁶⁷ <u>Ibid.</u>, pp. 200-201.
- 68 American Miller, 1 March 1885, p. 140.
- ⁶⁹ American Miller, 1 June 1885, p. 302.
- ⁷⁰ Ibid.
- ⁷¹ Stardom, op. cit., p. 202.
- ⁷² Wrigley to Armit, 22 June 1886, Hudson's Bay Company Archives, Winnipeg, D. 1818, fo. 57d.
- ⁷³ Nor'West Farmer and Manitoba Miller, June 1886, p. 510.
- ⁷⁴ Nor'West Farmer and Manitoba Miller, July 1886, p. 542.
- ⁷⁵ Stardom, <u>op</u>. <u>cit</u>., p. 205.
- ⁷⁶ Ibid., pp. 223-224.
- ⁷⁷ Ibid., p. 224.
- ⁷⁸ Joseph Wrigley, Report, p. 12-13. Hudson's Bay Company Archives, Winnipeg.
- ⁷⁹ <u>Ibid</u>.
- 80 Guinn, <u>op</u>. <u>cit</u>., p. 142.
- ⁸¹ Rogers, op. cit., pp. 45, 47-49; Corey, op. cit., p. 6.
- 82 Storck and Teague, op. cit., pp. 223, 225-227.
- ⁸³ The Dominion Illustrated, 6 July 1889, p. 6.
- 84 Ibid.
- 85 Stardom, op. cit.
- ⁸⁶ Census of Canada, 1871-1886; Alan Artibise, Winnipeg: An illustrated History (Toronto 1977), p. 32.
- ⁸⁷ Fred C. Lucas (Ed.), A Historical Souvenir Diary of the City of Winnipeg (Winnipeg 1923), p. 150.
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<sup>91</sup> Ibid., September 1887, p. 955.
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94 City of Winnipeg, Assessment Records. #914100, Ward 2, PC 46, Permit No. 841, 1909.
<sup>95</sup> Ibid., Permit 582, 1918.
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97 Ibid.
98 <u>Ibid</u>.
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<sup>100</sup> The Nor'West Farmer, October 1897, p. 354.
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<sup>103</sup> American Miller, 1 February 1885, p. 86; 1 March 1885, p. 140.
<sup>105</sup> Commercial, 1 December 1885, p. 185.
Bill Redekop, History of Winnipeg Millers a colorful, fiery one, Winnipeg Free Press, 29 May 1990.
Statutes of the Province of Manitoba, 46 & 47 Victoria, 1883, Chapter 35, pp. 333-334.
<sup>109</sup> Ibid., p. 333.
<sup>110</sup> Ibid., p. 333.
<sup>111</sup> Ibid., p. 334.
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<sup>119</sup> Census of Canada, 1880-81, (Ottawa, 1883), Volume 3, p. 361. See Table; Census of Canada, 1890-91,
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<sup>122</sup> Ibid., November 1885, p. 286.
<sup>123</sup> <u>Ibid</u>., January 1886, p. 353.
124 Ibid., June 1886, p. 509.
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