CONSOLIDATION

1897 - 1917

Consolidation Era (1897 – 1917)

he few years before the turn of the twentieth century, and the first 10 years of the new century, saw Manitoba's brick-making industry attain new heights of production and operational sophistication. It was during these years that the largest and most technologically advanced operations in the history of the industry were attained (except for the very late entry of Lockport's Red River Brick and Tile into the fraternity in 1971). And production was phenomenal.

The first few years of this period were defined by two interconnected developments. The first was the inauguration of two new railway lines in Manitoba: the Canadian Northern (CNo, begun in 1896 in Manitoba and greatly expanded north and west through 1897 and 1899), and the Grand Trunk Pacific (begun in 1903 with construction to the west, via a more northerly route, beginning in 1905). Both of these new transcontinental lines brought even more opportunity for growth and development to Western Canada, and CNo was instrumental in opening the Parkland and Interlake regions of Manitoba to agricultural settlement, and thus a whole new market for southern brick-makers.

The other development concerned immigration. With the success of Wilfred Laurier's Liberals in the election of 1896, a new Manitoba Member of Parliament, Clifford Sifton (representing Brandon North) was appointed Minister of the Interior, and he quickly inaugurated a major new immigration policy. Seeking to populate the west with capable farmers, he had immigration agents reach out to Americans, people from Scotland and the North of England, and Eastern and Central Europe. And over the next 15 years, millions of people flooded into western Canada, with the new railway infrastructure ensuring ease of access, along with ready routes to import and export of goods and products – like bricks.

Communities in the south, including of course Winnipeg and Brandon, but at least

200 other bustling urban centres, continued to grow, and prosper. Winnipeg's population had almost doubled between 1881 and 1896, from about 20,000 to nearly 38,000; it would soar to nearly 200,000 by 1914. And the province as a whole had likewise swelled – from 62,000 in 1881, to 190,000 in 1896 and about 550,000 by 1914.

Along with these population surges came the desire to replace first-generation buildings—seen by many at best as utilitarian and at worst as primitive—with larger and more sophisticated buildings, in a range of elegant new styles. Brick was nearly de rigeuer at this point for nearly all building types – commercial and government buildings, churches and of course houses, even modest ones. This amazing new demographic, economic and cultural environment meant that Manitoba brick-makers would become busier than ever.

The obvious success of the province, and of the ever-growing demand for brick, enticed large-scale business interests to build industrial-scale operations. Several of these used shale, and we see new production and kiln technologies finally being developed here. And of course all of this activity came with astronomical production levels.

The use of brick was not just an aesthetic or economic issue – it also came to be intimately connected to safety. Fires in jampacked commercial areas, where a small blaze in just one light-frame wooden building could quickly consume a whole block of buildings, were getting to be a grave concern. Fires in Ottawa-Hull (1900) and Toronto (1904) were the most notorious such conflagrations in Canada. Communities across the country gradually brought in regulations during this period requiring that certain kinds of public buildings be of masonry construction. Even in a small community like Holland Manitoba, in 1903, the local council passed a by-law requiring all buildings within the town-site adhere to strict limits on chimney construction, which were mandated to be "built of brick, tile, stone or concrete with a flue, and be not less than four inches wide and eight inches long, and at least three feet clear of the roof." The invariable masonry choice for chimneys was brick.

Various professional, institutional and governmental agencies were also turning some attention to aspects of brick-making and brick construction. For example, architects and engineers subscribing to *Construction* magazine would have found occasional articles on the latest developments in brick manufacture and related activities, with a few of the headlines from issues of 1908 including: "Pressed Brick and Roman Stone," or "Indian Bond for Brickwork – A Method of Laying Brick Which Produces a Strong and Durable Wall," or "Fernie Brick Company Opens New Factory," or "Damp Course and Their Treatment – Methods Adopted in the Construction of Brick and Stone Structures to Prevent Moisture from Permeating Walls," or "Sand-Lime Brick Production."

The Federal government was by this time providing a great deal of technical information on clay deposits across Canada, via reports of its Department of Mines and Geological Surveys Branch. For example, in 1912, Heinrich Ries and Joseph Kerle developed the "Preliminary Report on the Clay and Shale Deposits of the Western Provinces." Reports like this no doubt would have been used by large operations as they reconnoitred the most opportune sites for factory locations.

At the Manitoba Agricultural College (precursor of the University of Manitoba), a course on practical brick-making was introduced in 1906, as part of the program's Engineering and Mechanics course. That course certainly would have produced graduates who went on the work in the local industry.

But this period also saw the beginning of the end for many firms involved in Manitoba's brick industry. Trouble began with a mild recession of the so-called "Panic of 1910-11," followed by a full-blown recession of 1913-14, in which North American production and incomes declined. The effect was naturally felt in the brick-making industry, with fewer building projects, and thus a greatly reduced call for brick. Charts developed for this project (in Appendix 3) suggest the situation, with 46 yards active across Manitoba in 1904 and 1905, but only 30 yards by 1914.



View of students mixing clay for placement in a small brick press, one of the hands-on activities of a course on practical brickmaking offered at the Manitoba Agricultural College (Courtesy University of Manitoba Archives) But these economic turmoils, which certainly curtailed growth of the industry, were nothing compared with the tremendous upheaval caused by World War I, from 1914 to 1918. That cataclysm not only removed healthy young men from the workforce, to send them to the trenches of Belgium and France, but the war also disrupted nearly all construction activity. And so by 1916, at the height of hostilities, there were only 14 operations producing any brick in Manitoba.



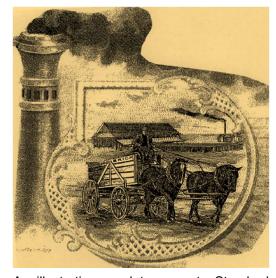
A view of Winnipeg's warehouse district from ca. 1900 suggests the significant number of large buildings in that area, and of the enormous number of bricks required in their construction. (Courtesy Archives of Manitoba)

Brick Making in Winnipeg 1897-1917

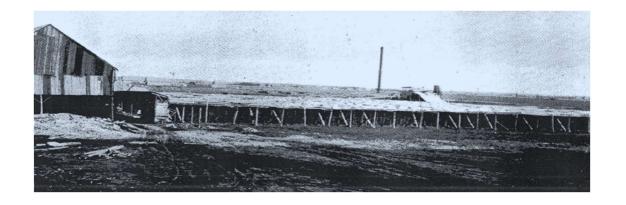
Brick-making activity in Winnipeg from 1897 through 1917 was no longer characterized by the hit-and-miss and often short-lived nature of previous periods. During this 20-year span, there were really only three going concerns, each quite large, and each defined by revisions in corporate names over their lifespans. The yard north of Kingsbury and east of McPhillips (now the site of Garden City Shopping Centre) was at first known as Standard Brick and Tile Company and then later as Gate City Brick Company; in total this operation chugged along for 12 seasons (1904-1915). A second yard was first called Winnipeg Brick (for a time also affiliated with Eli Sandstone) and then Winnipeg Sandstone Brick; it was at the southeast corner of Osborne Street and Mulvey Avenue (near the Red River), and in total went for about 30 years (1904-1930s). The third operation was east of Arlington and north of William (where the National Microbiology Laboratory is now located), and had three names attached to it over its 25 year (1912-mid-1930s) lifespan: Birds Hill; Alsips and Wood's Brick Company, Ltd. Newspaper and journal coverage of these three Winnipeg brick factories provides some typical technical observations.

Standard Brick and Tile / Gate City Brick

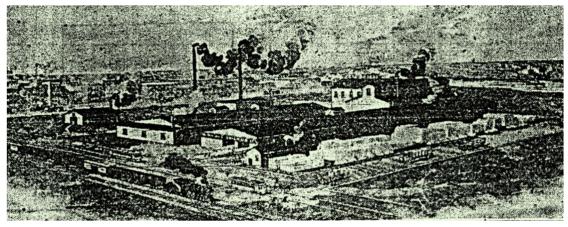
Standard Brick and Tile was incorporated in 1904, and developed a 45 acre site with access to nearby CPR lines. According to a Dominion Government report on the mining industries of Canada, this plant had a capacity of 80,000 bricks per day, using two Henry Martin machines powered by a 60-horsepower Brownell engine, and a 40-horsepower Nagle engine. It also had a cable brick carrier, and employed 80 workers and 15 teams of horses. Its product was a white clay brick, of which there were 8 million produced in 1906. The following year was curtailed somewhat because of a fuel shortage, when only two million bricks were produced. This firm went bankrupt in 1909, but was revived in 1910 as the Gate City Brick Company. One of its principal officers was brick-maker Arthur C. Osborne, who had been the manager of Standard Brick. It is believed that Gate City Brick Works out of business in the summer of 1915.



An illustration used to promote Standard Brick and Tile's operation, ca. 1910, showing a team of horses hauling a load of brick. In the background can be seen the factory itself, with a brick-making factory on the left, extensive drying sheds on the right and a smokestack that likely was attached to the kilns. (Courtesy City of Winnipeg Archives)



The extensive drying racks that dominated the Standard Brick and Tile / Gate City Brick operation just off McPhillips. (Courtesy Ries and Keele, "Preliminary Report on the Clay and Shale Deposits of the Western Provinces." Dominion Printing Bureau, 1912, p. 20)



This feature advertisement advised potential customers that the operation had "high grade sandstone, granite and face bricks – all Made In Winnipeg." It also advised that "as manufacturers of the best brick on the market, this company had attained leadership in the west. Winnipeg brick is being specified by architects in the construction of homes and commercial structures because of its appearance, longevity and its structure. It has become a building standard. President Hugh Sutherland and Manager W.D. McFarlane have built up a business that has become a recognized civic asset."

A sketch of Winnipeg Brick / Eli Sandstone/ Winnipeg Sandstone Brick site, at Osborne and Mulvey. The image is not very clear, but it is still possible to discern the brick plant on the right, drying sheds in the middle foreground, finished brick stacks to the right, and towering smokestacks that mark the site of kilns. Note also the railway tracks and engine at the lower left. (Courtesy *Winnipeg Tribune*, 25 September 1915, p. 60)

Winnipeg Brick / Eli Sandstone / Winnipeg Sandstone Brick

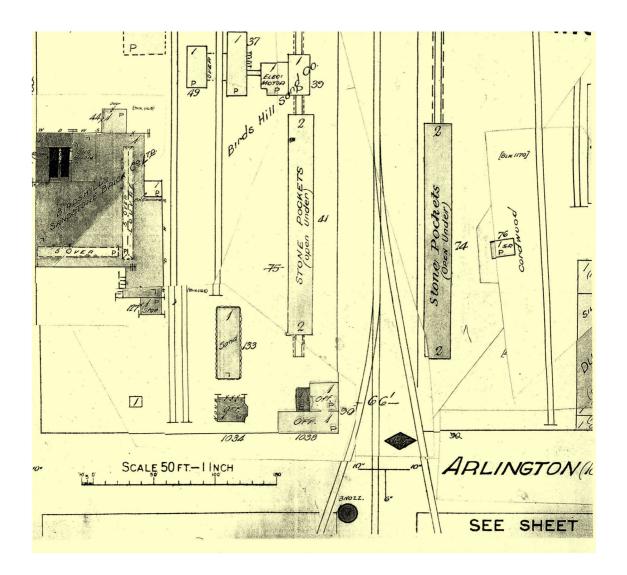
A plant at the southeast corner of Osborne Street and Mulvey Avenue was a very active and productive operation for about 30 years. The site began as a later version of the Winnipeg Brick Company, and with an affiliated firm, the Eli Sandstone Company, which constructed a brick plant on the property in 1910 at a cost of \$50,000. Eli Sandstone appears to have essentially taken over the site shortly after that. The firm formed sand and lime into a pressed brick which they claimed was superior to other bricks for durability. In June 1912 they sank a barge load of bricks in the river behind their plant, retrieving some a year later. Some of those bricks were sent for testing at the Canadian Inspection and Testing Laboratories in Montreal, along with the bricks of other makers. The tests showed the greater crushing strength of the Eli Sandstone's products. By 1911, Eli Sandstone had evolved into the Winnipeg Sandstone Brick Company, and manufactured "High Grade Sandstone, Granite and Face Bricks." By 1921 it had two plants, the one at Osborne and Mulvey, and one at Beausejour. Winnipeg Sandstone Brick remained in business until the 1930s.

Birds Hill / Alsips / Wood's Brick

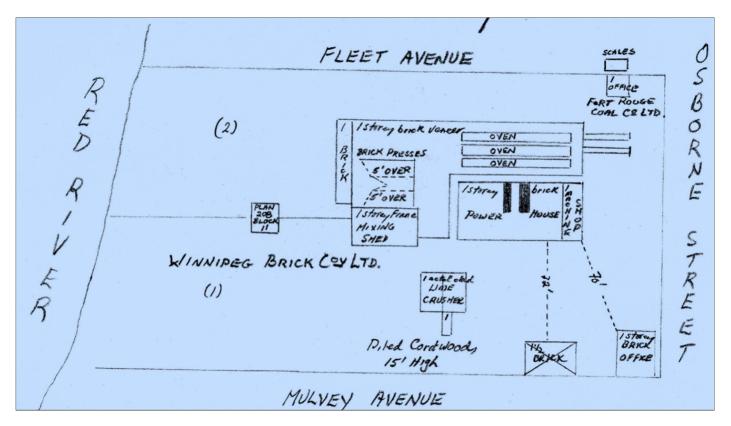
The Birds Hill Brick Company was reorganized in September of 1912, having formerly been known as the Alsip Sandstone Brick Company, Ltd., formed in May of 1911. It is believed that ownership of the new firm was shared by Alsip family members along with building contractor D.D. Wood. William Alsip was listed as the firm's president, with E.F. Hutchings, formerly of the La Riviere brick yard (and a major Winnipeg manufacturer), as Vice-President. The operation manufactured common and face brick, in white, red and buff colours, with product available in any quantity up to 10 million. The firm changed its name in 1920 to Wood's Brick Company, Ltd. It is not entirely clear when brick-making ceased at the site, but it is presumed by the mid-1930s.



An advertisement for Wood's Brick Company, ca. 1920. Note the option to purchase "White – Red – Buff" with the emphatic reminder: "up to 10,000,000 – ten millions." (Courtesy Western Canada Contractor, June 1920, back cover)



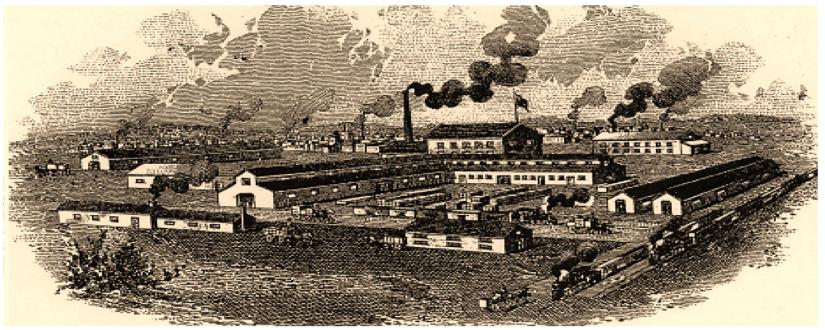
Site Plan of Birds Hill Brick Company, Ltd., 1914, at Arlington and Elgin (present side of the Federal Microbiology Laboratory) traced from the original Charles E. Goad's Fire Insurance Plan of Winnipeg, November 1914. Sheet 136; north is to the left. This is the site that was also variously known as Alsip Sandstone Brick Company and Wood's Brick. The plan shows at far left the brick-pressing plant, a fenced area labelled "Sand" (used to temper the clay) along with offices facing onto Arlington, with spur lines running at that point into the site. The two long buildings (noted as being 2 storeys in height and labelled "Stone Pockets") were the tunnel kilns that fired the bricks. There is also an area of the site at far right labelled "Cordwood," which would have been the fuel source for the kilns. Note also other rail track lines on the site, providing ease of movement of material in the various aspects of brick production.



Site Plan of Winnipeg Brick Company plant (Osborne and Mulvey), traced from the original Western Canada Underwriter's Insurance Plan of Winnipeg, January 1919. Sheet 410; north is to the bottom-left. What is visible here is a neatly compacted operation, with two main buildings – the main one containing a mixing shed, brick presses and three tunnel kilns, here called ovens. The other building was the power and machine house. The site also featured a lime crusher, a brick storage area, and a brick office building facing onto Osborne Street (a second office building noted here was attached to an adjacent coal storage facility). There is not much room here for brick-drying sheds, so it is presumed that this was a dry-press operation, which did not require that step.

A footnote to Winnipeg brick production from this period concerns a site called Canadian Petrified Brick and Stone. It appears that this operation was not actually a brick-making operation—maps of the site show no kilns—but was instead a sales and distribution site. Its "plant," which had a Canadian Pacific Railway spur track, was located at the southwest corner of Stadacona Street and Poplar Avenue (in Elmwood, near St. Boniface operations), and it is thought that its clay, cement and stone supplies were brought in from various locations via the spur track. The site was active from 1904-08.

This impressively detailed image shows why many people thought Canadian Petrified Brick and Stone was a brick manufacturing site – with its grand buildings, spewing smokestacks and criss-crossing rail tracks. But maps of the site show none of these accoutrements, but instead reveal it more as a supply yard. (Courtesy City of Winnipeg Archives,)



Brick Making in St. Boniface 1897-1917

St. Boniface had been the real hot bed of brick-making activity in the metropolitan Winnipeg area since the early 1880s. And several of the firms established at that time had even weathered the bust of 1882, and were still going strong through the 1890s, and even beyond. Where Winnipeg itself had only three major operations during this period, St. Boniface had six. Three of these had intricate familial and/or corporate relationships—Cartier & Lamontagne, Couture Brothers, and Couture & Marion—with three other firms quite distinct and separate operations: Kelly Brothers, A. McCutheon & Company and Alsip Brothers. A seventh operation established in this period, Canadian Enamel, Concrete, Brick and Tile Co., (north side of Marion Street at St. Mary's Road) only lasted four seasons, and nothing is known of its activities or production. A good deal of information is available on the three stand-alones.

Kelly Brothers

The Kelly Brothers (Thomas, Michael and Martin) got into the brick-making business at St. Boniface in the spring of 1882 (see that earlier entry), with a yard that was highly productive, with five brick machines and expecting to burn three million bricks that season. By the early 1890s, they took over the St. James-area brick yard of T.J. Jones and Company, 68 acres in extent by 1899. But by the spring of that year, with that site depleted of clay, the Kellys finally consolidated all their efforts at the St. Boniface site. In 1903, they renamed themselves the Manitoba Construction Company, then Kelly Brothers and Mitchell, Ltd in 1905, and finally Thomas Kelly and Sons, Ltd. in 1908. Throughout this period the brick-making end of the business was almost inseparable from the rest of the firm's building contracting efforts, and was likely their main supply source in contracting. The brick-making arm of the firm finally faltered by 1919, although they were still noted in business directories until 1926 as distributors of brick. No production numbers are noted for the St. Boniface operation, but it is assumed, given its longevity, to be at least a two-million-brick-a-year operation.



Thomas Kelly, 1855-1939. (Courtesy Archives of Manitoba) Kelly was a major figure in Manitoba's construction industry for many years, and the Kelly Brothers firm was a major producer of bricks for more than 30 years. Thomas Kelly was connected to a 1915 scandal associated with the construction of the Legislative Building, and after serving a jail sentence moved to the United States.

A. McCutcheon & Company

Albert McCutcheon had operated a brick yard in St. Boniface beginning in 1884 (see earlier entry for details), on the north side of Mission Street. It is interesting to note that for all the presumably available clay in this part of St. Boniface that McCutcheon, during the 1890s, used clay from a source he had in the Souris Valley to produce a light red brick. These bricks did not take as much burning as his St. Boniface-sourced clay, and were hard and tough in quality. Details about the technologies or production of the McCutcheon yard are not available. Like the Kellys, however, it is assumed that his was at least a two-million-brick-a-year operation. He later became interested in other ventures, including the brick plants at Morris and Whitemouth, and left the St. Boniface brick-making fraternity around 1910.

Alsip Brothers

The longest-lived corporate entity in Manitoba's brick-making history was started in the spring of 1898, when two Americans, from Grand Forks, North Dakota-Joseph Callender and William Alsip—opened a 10-acre yard in St. Boniface. Experienced brick-makers, Callender and Alsip immediately began constructing the necessary structures for their operation, and by mid-May two carloads of brick machinery had arrived. Callender quickly left the business in the hands of Alsip by the 1899-1900 season. While the Alsip firm owned the original 10 acres of land on the east side of Watt Street and on the south side of Nairn's Road (now Avenue), they also leased another 100 acres east of the present-day Gray Street over to Kent Street, a second major clay bed. By 1901, Alsips had assumed the role of the Manitoba brick yard with the largest capacity, with an estimated 1903 output of 8 million bricks. In November of 1905 the Alsip Brick, Tile and Lumber Company, Ltd. was incorporated. Alsips claimed, on their letter-head, a capacity of 25 million bricks per year. This seems not to have been an exaggeration: a 1907 inspection by a Dominion Government geologist pegged the capacity at 22 million per year, along with 2.5 million hollow blocks and 500,000 drain tiles. A 1907 report had a total of 17 million bricks. Alsips had five brick machines at this time, along with a machine for hollow block and drain tile. With this level of production, it is not surprising that the Elmwood part of the brick property

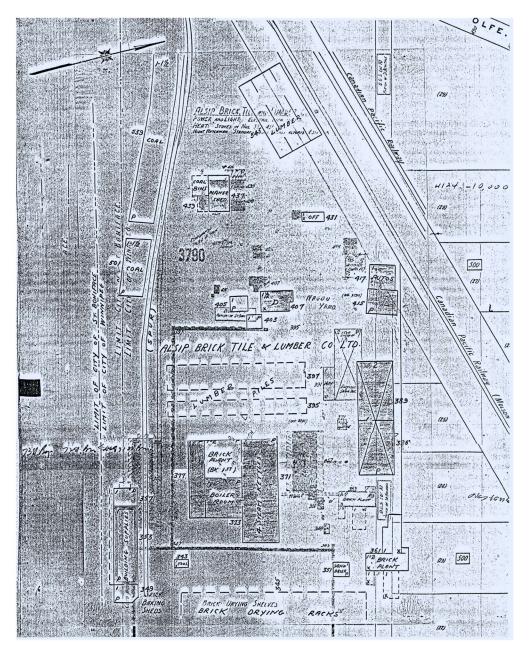


This letterhead image, used by Alsip Brick, Tile & Lumber Company, from 1906, shows the stupendous output of the brick operation – with three long drying sheds on the left and stacks of finished brick on the right. Although not quite accurate in its locational perspective, the image also shows the Red River with the City of Winnipeg on the opposite shore. (Courtesy City of Winnipeg Archives)

was "played out" by 1909. It is not clear how ongoing and productive the firm was after that date. It is likely that production slowed during World War I, but by March of 1919 newspaper articles indicated renewed production. It is likely that at least some brick production was conducted into the early 1920s.

This impressive rendering shows the Alsips yard at the height of its brick-making activity, ca. 1919. The view is looking northwest, with the City of Winnipeg in the distance, and the CPR mainline running along the bottom of the image. The rendering shows a host of buildings and structures, the largest ones both being for mixing, brick-pressing and kiln-burning. Brick-drying racks are on the far left of the image. Other buildings were used for sand drying, stables and miscellaneous production and storage purposes. (Courtesy City of Winnipeg Archives)





The site Plan of Alsip Brick, Tile and Lumber Company, Ltd., 1917, shows the enormous extent of the yard. North is shown via the arrow at top left. The CPR mainline stretches diagonally across the right side. Main buildings toward the bottom of the drawing were used for clay-mixing, brick-pressing and kiln-burning. Brick-drying racks were situated along the lower edge shown here. (Courtesy Manitoba Archives, Western Canada Underwriters Insurance Plan of Winnipeg, September 1917, Sheet 379)

The three interconnected St. Boniface firms—Cartier & Lamontagne, Couture & Marion, and Couture Brothers—were in the same general area, and may in fact have shared space at various times.

Cartier & Lamontagne / Couture & Marion

The oldest of this triumverate was the yard of Eugene Cartier and Modeste Lamontagne, begun in 1882, and located on Youville (see earlier entry). Cartier appears to have dropped out of the partnership in 1888, leaving Lamontagne on his own. Nothing is known of the plant's activity or output, beyond that it was in business until at least 1904, and that it was advertising itself by the 1900s as "The Oldest Brickyard in Manitoba." Given its longevity it must have been productive, and once again it is safe to assume this was at least a two-million-brick-a-year operation. When Lamontagne died in 1904, former employees Zoel Marion and his son Joseph, along with brother-in-law Elzear Couture, bought out the Lamontagne Estate, and continued production at the site under the corporate name Couture & Marion. In May 1910, Zoel Marion reflected that he had seen the start of the Seine River brick-making area, and had followed it to a point where the St. Boniface yards were producing 38,000,000 bricks annually. It appears that the Couture/Marion yard was being depleted of clays though, and in 1910 they bought out the Landry brick yard at Somerset, with that clay yard then becoming the source for the Couture & Marion plant production at St. Boniface. Elzear Couture retired from the firm in 1916, and the firm became J.A. Marion in 1919, and remained that way until it was shut down in 1937. It was sometimes known as the "Marion Brick Company," and continued to use the slogan "The Oldest Brickyard in Manitoba."

Couture Brothers

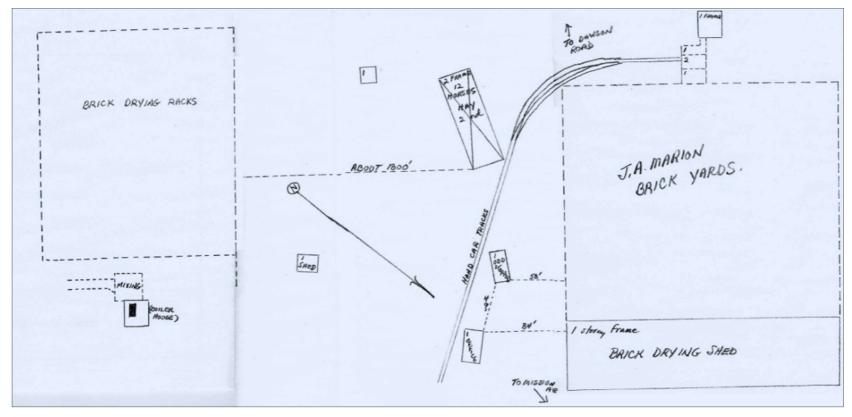
Brothers John and Gideon Couture started their St. Boniface yard about 1898. Although its precise location is unknown, it is recorded that by the summer of 1904 its clay was exhausted, having made 50 million bricks – thus necessitating a new site nearby. By 1905, Couture Brothers were sharing yard space with the Cartier/Lamontagne brick yard, which at that point was being bought out by the firm



An advertisement for the Marion Brick Company – claimed here as "The Oldest Operating Brick Yard in Manitoba." The ad noted the availability of "uniform common brick," and also advised that the firm had "Railway Trackage Facilities for Prompt Shipment to Outside Points." (Courtesy Western Canada Contractor, August 1930, p. 33)

of Couture & Marion (it is not known if the various Coutures were related). Late in 1905, the Couture Brothers' yard was noted as being on the northwest corner of Tissot and Archibald. They appear to have closed up during 1906.

Site Plan of the S.A. Marion plant, traced from original Canada Underwriter's Insurance Plan, April 1919, Sheet 1910 (Courtesy Manitoba Archives). This large put simple yard features typical aspects of a brick operation of this period — with large areas for brick drying sheds (left and right of image), a mixing and boiler house (left) and a two-storey stable for horses (top centre). The yard also features hand-car tracks.



Small Urban and Rural Brick Making 1897-1917

Eleven of the small-urban and rural brick-making operations that were discussed in the previous section were still going strong into the early 20th century (see the list at the close of this section). And there was a firm established in the pioneer era, that of W. Lockey in Portage la Prairie, set up in 1881, that was also still part of the brick-making fraternity at this stage, producing until 1906. But where Winnipeg and St. Boniface added only six new brick yards to the industry over the 20 years covered in this section (admittedly large operations), there were about 60 new rural and small-urban operations added, bringing the total number of Manitoba brickyards active around 1910 to about 80.

As was still characteristic of the industry, at least 23 of the new operations were short-lived, only active for a season or so. Very little newspaper coverage attended any of these brief operations, and it is assumed that they were of modest production, likely serving local needs. The availability of brick via the ever-growing rail connections made it difficult for local operations to compete with larger yards throughout the province. And of course the easy availability of American brick was also a factor in some local situations. At the same time, at least one account (for a Cypress River yard) yields the kind of typical (but useful) information about yard operations at this time. And the account of what was presumed to become the largest brick-making operation in the province, at Carman, is also worth an entry here.

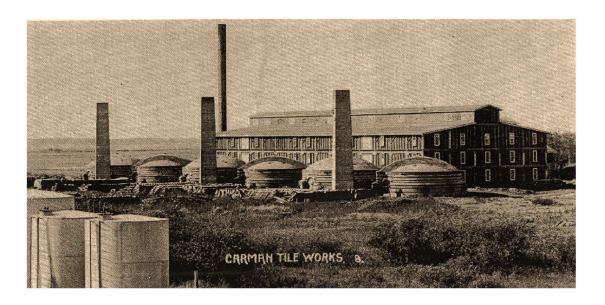
At Cypress River, attention to the yard of T.A. Foster & Co. provides some good data and numbers for production. Foster's operation, on 40 acres near the Methodist Church, produced a salmon-coloured brick from one clay stratum, with white brick from another stratum. The yard employed a Monarch brick machine with a capacity of 45,000 bricks per day, and had a complement of 16 men. In its only season, 1907, the Foster yard made 180,000 bricks. It was served by a CPR spur line, and had a mill, drying sheds and kiln, along with open pits near the adjacent slough.

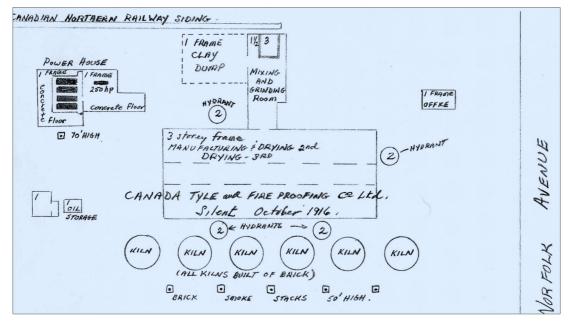


A ca. 1906 brick from the Balmoral Brick Company. (Courtesy *Balmoral*. 1872-1977, p. 27)

The Canada Tile and Fire Proofing Company, in Carman, promised to be the largest and most productive brick-making operation in Manitoba at this time. In December 1912 the company was incorporated by a number of Winnipeg businessmen, and during late February of 1913 public meetings were held at Carman to acquaint the public with the firm's plans. The new plant was to have two phases. The first was to cost \$100,000 and employ 40-50 men. A second phase would come when expansion warranted, in a couple of years, and would cost \$175,000 and employ 60 more men. As there was no usable clay at Carman, the firm's beds lay at Leary, some 18 miles west, and would be brought to the plant over a Canadian Northern Railway line. The firm also relied on a 20-acre site on the outskirts of Carman that had to be brought into the town's corporate limits in order to obtain town water.

In May 1913, good progress on the plant was reported, as several rail-cars of brick arrived for the buildings. By July a public vote on a by-law in aid of the scheme saw a 136 to three majority. The plant was to enjoy tax-free status for ten years, provided it gave local men employment. That summer the plant went up quickly, with the huge, three storey factory building forming the centrepiece. Six large beehive kilns went up south of this building, and to the northwest was the powerhouse with its 250horsepower Corliss engine. The main building was to be brick-veneered once brick production started. The plant began production in late March of 1914, and the firm decided to proceed with phase two of their plan. But in July of 1914 World War I commenced, and Carman's foray into the big leagues of brick production was over – after only a little more than a year. The firm was certainly greatly hampered by a loss of manpower, with young men enlisting in the armed forces. But issues with the overly-long supply lines for raw clay, corporate financial problems, and a provincewide construction downturn were also factors. The factory site was finally sold to (unnamed) owners in 1923, who proceeded to knock down the 10-year old complex. The Town of Carman bought \$1,000 worth of brick to rebuild its power plant, and in 1924 also took plant demolition waste, mostly brick, to fill in Carman's streets.





Top: View of the ill-fated Canada Tile and Fire Proofing Company plant, ca. 1914. The large clay-mixing and pressing building is in the background, with the six kilns and their chimneys in the foreground. (Courtesy *Up to Now*, p. 173)

Below: Site Plan of Canada Tile and Fire Proofing Company plant, traced from original Western Canada Underwriter's Insurance Plan for Carman, October, 1916, Sheet 4. (Courtesy Archives of Manitoba) The huge and well-planned yard is clearly expressed via this drawing.

Seventeen rural and small-town operations kept business going for longer periods, between four and seven seasons, and thus with the kind of reasonable outputs and acceptable quality that ensured some success. Little is known about processes or production at most of these sites, but it is presumed that they would have recalled the typical situations at other small-town and rural yards of the day – thus with 10-12 employees, effective brick-making machinery and scove kilns capable of burning 100,000 bricks at a time, and thus with about 500,000 a season (April to September). Three of this family of operations – Melita Lumber and Manufacturing Company, Sidney Brick & Tile and Rapid City Brick Works – had important and interesting anecdotes and information that add to our knowledge of the evolution of the industry in Manitoba.

Melita Lumber and Manufacturing Company

In the late winter of 1905 local entrepreneur John Dobbyn announced that he would be starting a brick yard on a recently discovered source of brick clay near the town. The octogenarian Mr. Dobbyn was in the process of ordering a brick plant and would be forming a joint stock company for the exploitation of the site. In mid-April 1905, the Melita Lumber and Manufacturing Company, Ltd. was formed. In the spring, Dobbyn and his sons Richard, John and Charles brought in a Winnipeg brick expert named McDonald to run the yard. Mr. McDonald had been in charge of one of the St. Boniface brick yards, and apparently had been around the business since he was a boy. The brick machinery arrived by mid-May and the first bricks were made by mid-June, although a kiln was still being built. That summer the Dobbyn yard burned at least two kilns of brick. The year 1907 appears to have marked the peak of this yard's fortunes. When it opened that spring Dobbyn already had orders for one million bricks to go to Regina. The Melita yard was turning out 20,000 bricks per day and had an additional order for a half million bricks by late May. The product apparently had good bright red colour and was nicely finished, being selected also for its durability. The yard had orders for a large number of brick and had a supply on hand to fill demand, but 1910 marked its end, with depletion of the clay bed.

Melita Brick



We have now on hand a large stock of

FRESH BURNED BRICK

of the best quality ever turned out of the Melita yard. If you contemplate building let us quote you a price. Just as cheap and better than lumber.

For information enquire at the office of the Melita Lumber and Manufacturing Co., who will in future handle our brick.

Melita Brick & Tile Company,

MELITA, MAN.

An advertisement in the *Melita Enterprise* (from August of 1909) includes a dubious claim that their wares were "just as cheap and better than lumber."

Sidney Brick & Tile

In the spring of 1909 a new (and well-financed) player arrived in the Sidney area, already well known for its clay beds and fairly active brick production (see above). Named Sidney Brick & Tile Company, Ltd., the operation was under the management of Albert Edward Hilder (see entries for the Canada Tile and Fireproofing plant at Carman and the Reliance Brick Plant (later Winnipeg Clay Products) at Winnipeg). The brick-maker was George Stenhouse. Work on the new plant began in April, with a well being dug, and several cars of lumber arriving shortly afterward. It took 10-12 men to build the brick racks, while the yard machinery arrived in late April. Sidney Brick & Tile began operations in early June. A siding was built into the yard by mid-August, and by that time the firm had burnt its first kiln of 140,000 bricks, while its machine produced 25,000 more bricks every day. So successful was its first year that early in January of 1910 Sidney Brick & Tile was able to declare a 10 per cent dividend that was equal to 20 per cent of the moneys invested. A new boarding house for the employees was one of the features of the 1910 season at this yard, and by late May it was reported to be in "perfect running order." Sidney Brick & Tile kept chugging along, presumably with good results until the outbreak of World War I in 1914. This particular Sidney plant was shut down in the spring of 1915, after six seasons of operation.

Rapid City Brick Works

In January 1900 an announcement was made in a Rapid City newspaper that a practical brick-maker from Winnipeg had purchased from McKellar and Gosset-Jackson the Rapid City brick yard property (see above). The purchaser was Robert Dorrell Hales, fresh from the manager position for the Lac du Bonnet brick plant. Hales was a brick-making veteran, who had learned his craft in his native England, coming to Manitoba in 1887. He had also worked in the St. Boniface brick yards for a period of time. Evidently, he had connections, for he was starting his Rapid City yard by securing favourable freight rates from the various railways then serving the community. He even went to Brandon in late February in order to solicit orders for 200,000 bricks. He brought in new machinery, along with his family, which arrived in



Buildings at Sidney Brick & Tile, ca. 1912. (Courtesy Manitoba Historical Society) This was obviously a major enterprise, with large brick buildings.



Sample of a Sidney red brick. (Courtesy Manitoba Historical Society)

mid-March, and by early April he expected to employ 30 hands. By early June the Hales yard shipped out several rail-cars of brick to fulfil its many orders. In late August Rapid City Brick Works had produced one million bricks. With this success in mind, Hales planned more improvements to double or treble its capacity. In August of 1902 it was noted that he had orders for 1.4 million brick. During the 1903 season the Hales yard turned out 500,000 bricks, producing 87,000 in one week alone. In 1904 the operation burned 1,148,500 bricks, and Hales had built a large brick house for his family in Rapid City. The Rapid City operation was closed down in 1906, after seven productive seasons, with the local clay beds exhausted.

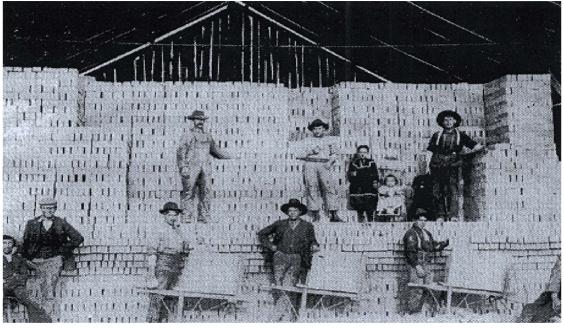


Below Left: A view of the clay pits at the Rapid City Brickyard of R.D. Hales, ca. 1905. The clay deposit was obviously a major one. In the middle background can be seen the many drying racks and behind those the scove kiln and gable-roofed building housing the brick presses. (Courtesy *Our Past for the Future*, p. 14)

Below: A view of the large scove kiln at Rapid City, ca. 1905. (Courtesy *Our Past for the Future*, p. 14)







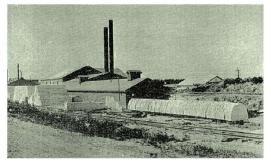
Top: View of the yard of Mr. Longbottom at Somerset, ca, 1905. (Courtesy *Reflections-Reflets-Somerset*, p. 163)

Below: Workers at Mr. Longbottom's Somerset yard showing off the thousands of burned bricks removed from the kiln, ca. 1905. (Courtesy Reflections-Reflets-Somerset, p. 163)

Another group of nine brickyards from this period were productive for nearly a decade or more. In order of longevity and entrance into the fraternity they were: at Carman, Percy Allen (1900-1907); Somerset, Mr. Longbottom (1901-08); Gilbert Plains, Mr. Rowlett (1905-12); Morris, Wilton/Morris (1907-14); Gilbert Plains, Mr. Eastment (1902-12); Neepawa, Mr. Benson (1905-15); Balmoral, Mr. McClure (1905-15); Beausejour, George Bradbury (1905-15); and La Riviere, E.F. Hutchings (1902-13). Two of these important operations—at Morris and La Riviere—were well-covered in the local media of the day, with good information for present purposes.

Morris Brick Manufacturing Company

Brick-making at Morris was revived in 1907, when tests were made on clay found on the property of John Wilton and others at the north end of town. Plans were announced that a 40,000 brick-per-day factory was to be established under the supervision of a Winnipeg brick expert, Mr. Windsor. In mid-June the Morris Brick Manufacturing Company Ltd. was incorporated, and the firm had all its equipment in place, including 1,400 feet of brick racks. Mr. Windsor was also off to Estevan, Saskatchewan to investigate the possible use of soft coal in place of wood as fuel in the kilns. The Morris Brick Company began production in the spring of 1908, completing its first kiln in late June. The product was said to be of a clean, rich colour, with a metallic hardness. By early August the firm was burning another kiln of 250,000 bricks under the supervision of a new master, a Mr. Dubreuil of St. Boniface. By early 1909 there seemed to be trouble on the horizon, for the firm was reorganized, with 51% of the shares being sold to a group of "practical" men headed by Winnipeg brick-maker Albert N. McCutcheon, well known from his St. Boniface yard. The group planned in install an up-to-date brick plant worth \$7,000 that featured two machines - one for ordinary brick and the other for hollow tile. Work had begun on a CPR spur track into the facility, and by mid-May workers were reinstalling the 40 rows of brick racks, with their 405,000-unit capacity. The mill equipment had also arrived. The kilns were 36 feet x 320 feet in size, with a capacity of 1.8 million bricks from an output of 45 to 50,000 bricks per day. It is not stated what kind of kilns these were, but it is assumed they were tunnel kilns. The yard was to employ 40 to 45



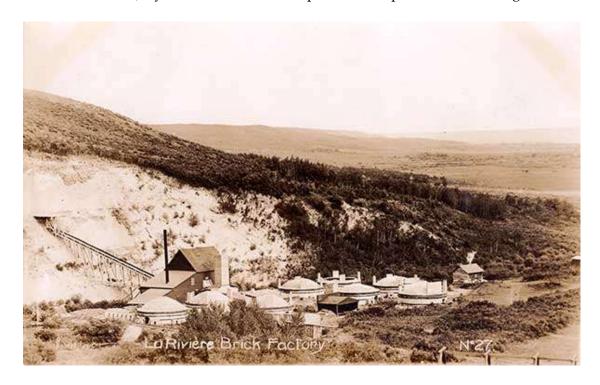
View of the Beausejour Brick Plant. (Courtesy Beausejour 50th Jubilee)

workers. By September of 1910 the yard had shipped 50 carloads of brick to various points, and appeared to be a major success. It is known that the yard operated at full capacity in 1912, as the firm had a contract with the Grand Trunk Pacific Railway for three million bricks. After that time, however, operations slowed and virtually stopped. The plant was certainly shut down during World War I. It reopened sometime in the spring of 1920, when it was said that there was now an urgent demand for brick. The firm was reorganized as the Western Brick Company, Ltd. by a group of Winnipeg businessmen, with Mr. McCutcheon still in charge of local operations. Its final year seems to have been 1921.

La Riviere Press Brick & Tile Company

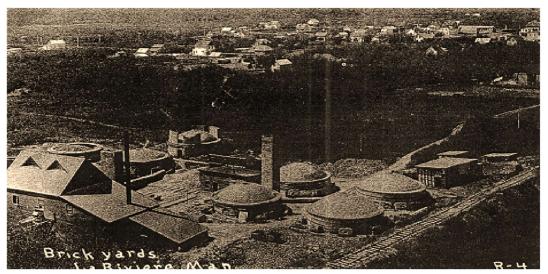
The establishment of a brick yard in La Riviere was first made public in 1902, when tests made on local clay and shale deposits proved positive, and a deal was stuck for the preferred site, just to the east of the town. The firm was called the Press Brick & Tile Company, Ltd., and was under the leadership of Elisha Frederick Hutchings, a wealthy Winnipeg entrepreneur. It was quickly determined to go ahead with the \$20,000 brick plant. A manager was found in Minneapolis in May, and by the following month local workers were being hired. By July, when Hutchings visited the site, men had installed a brick yard dam, and a railway spur to the site was nearly complete. Early in September the plant made its first brick. The American manager, J.W. Carmichael, had the plant running "full blast" by mid-month, with a kiln of 250,000 bricks being burned and another 250,000 awaiting the fires. The following season (1903) saw the firm invest \$10,000 in erecting four new beehive kilns and other improvements. Eleven cars of machinery were ordered, including an engine, numerous castings, a blower, 100 dryer cars, and other equipment. By late May the kilns were nearly complete, including an arched subterranean passage linking all four. The large dryer with its numerous brick divisional walls only lacked a roof at the time, but had a 40-foot high stack. Four more kilns were under construction by mid-June. Later that month the newly-installed machinery was tested. During mid-July, shale was being taken from the hillside source by night blasting, and then put on a carrier that took it down to the crusher where it was pulverized into clay. Reports

from the spring of 1905 show most of the old employees back at work, and improvements included a remodelling of the oldest kilns and the construction of a "lofty and strong" trestle from the mill across the creek to the shale ledge. In January 1905, a number of men were at work at the brick yard, sorting out and shipping the one million bricks on hand at the plant in preparation for the coming season. But something had happened with the firm's financing, and the plant was suddenly up for sale on 20 July 1906. William Brydon, an unknown commodity, acquired control, and the next six years of the plant's operations are somewhat shadowy. In 1910 samples of brick "of a beautiful colour and finish" were on display locally, and an advertisement in July 1910 showed that the plant had acquired a new manager—



A view, ca. 1905, looking southeast showing the extent of La Riviere's Press Brick & Tile Company. The shale deposits on the hillside were drawn by rail cars down to the mixing and brick-pressing building and then burned in one of the eight beehive kilns. (Courtesy Archives of Manitoba)

James Johnstone—as well as a new name: The Phoenix Brick-works. In April 1911 it was noted that the plant machinery was being fitted up, and a kiln was filled; given that there were at least eight kilns, this appears to be a modest production schedule. In June, Dominion Government geologists visited the plant, and observed that the brick-making process then included a disintegrator along with two short pug mills and a Bradley and Craven semi-plastic brick machine. Evidently some type of production was happening that summer, for it was also noted that salmon-coloured to dark-red bricks were being produced. It is not clear if the plant was in operation in 1912. It certainly was sold in 1913, to a Mr. Martin, who intended to renovate the complex, install new machinery, and place it on a sound footing. But that did not occur, and the plant was abandoned by 1914, as so many Manitoba plants were with the oncoming war.



A view, ca. 1903, looking west showing the mixing and pressing building on the left and the kilns of La Riviere's Press Brick & Tile Company. (Courtesy *Turning Leaves. A History of La Riviere and District*, frontispiece)



A view, 1908, looking up to the shale deposits on the hillside, and showing track and kilns of the L Riviere site. (Courtesy Archives of Manitoba, G.T. Barber Collection)

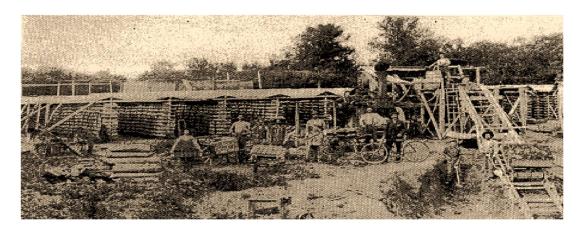
The last grouping of small-urban and rural brick operations from this period is a small one – just 10 sites: Virden, Wainewright/Gyles (14 seasons, 1902-15); Edrans, Mr. Blackwood (15 seasons, 1901-15); Pilot Mound, Mr. Dearlove (16 seasons, 1897-1912); Gladstone, Mr. Wilson (17 seasons, 1897-1913); Learys, George Leary (18 seasons, 1900-17); Lac du Bonnet, Lac du Bonnet (18 years, 1902-19); Brookdale, B,J, Hales (21 years, 1905-25); Hartney, Sackville/Kirkland (22 years, 1898-1919); Portage la Prairie and Gilbert Plains, J.A. Snyder (28 years, 1907-ca1935); and a second operation at Portage la Prairie, Harry Stephens (30 years, 1899-1928).

These 10 operations were amongst the longest and most active of yards ever in the province. Some may not have been particularly large or sophisticated, but they were still producing quality products that served the enormous demand for bricks in Manitoba and across the West. Some useful details about several of these plants suggest the nature of manufacturing at these operations.

For example, at **Brookdale**, the operation began with an investment from B.J. Hales (last seen at Rapid City, above) of \$15,000 for a brick plant. In 1908 Hales formed a joint stock company to raise \$40,000 to enlarge the plant and install more machinery in order to manufacture hollow brick, tile and sewer pipe. Hales employed 30 men each season, and one notable order came for 100,000 bricks for the Ninette Sanatorium. The **Gladstone** operation of Magnus Wilson saw the first season firing three kilns. Wilson typically employed 18 workers and shipped bricks along the Manitoba and North-western Railway to Dauphin. He also shipped some carloads to Winnipeg when, according to A.T. Andrew, the contractors in that city wanted an especially good article. Wilson's brick was probably used in 75% of the buildings in Gladstone, but the showcase was his house on the island on which his brick operation was also located. In 1905 he developed a special brick mould and produced the distinctive brick used there. The yard at Gilbert Plains was still using a number of scove kilns, each capable of burning 250,000 bricks at a time. And the 1907 output for the **Hartney** operation of William Kirlkand was said to be one million bricks, all produced in scove kilns. During 1913 Kirkland had maintained production at around



An advertisement for the Virden products of Wainewright & Gyles. (Courtesy *Virden Advance*, 22 September, 1904, p. 1)





Top: View of the Gladstone yard of Magnus Wilson, 1899. Shown here are the drying sheds and pug mill on the far right. It is notable that the pug mill was fed with small cars loaded with clay and pulled up to the pug mill. (Courtesy *Gladstone Then and Now*, p. 78)

Below: View of the Wilson House, built in 1905. For his own house, Magnus Wilson Winnipeg commissioned renowned architect James Chisholm, and the resulting building is unique, but also unparalleled in small-town Manitoba history. Inspired by the castles of his native Scotland, the Wilsons got an exceptional Queen Anne-style manor, complete with corner tower and various other features and details typical of that highly popular style. Of greater interest, the house is clad with unique bricks that were specially fired for this place, looking more like small stones than bricks.

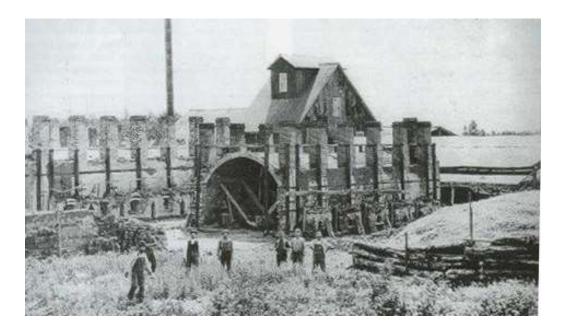
one million bricks, most of which were shipped to Regina for use in the new Legislative Building. At <u>Lac du Bonnet</u>, in 1902, the plant was in full swing, making 40-50,000 bricks per day, both of the pressed and soft-mud varieties. The 50-ton press in use apparently produced a hard and beautifully moulded brick. The huge, beehive kilns produced an even, light buff colour, but certain other local clay beds would produce other colours such as old rose, pink, and ordinary red. Firing of the kilns was done with sawmill wastes.

All of the inventory entries (in Appendix 2) focusing on these operations are worth reading, with four selected here for focused coverage, given greater available information and typical situations: Edrans, Learys and two firms in Portage la Prairie.

Edrans / Edrans-Brandon Press Brick Company

J.A.C. Blackwood established a brick yard at Edrans (about 10 miles north of Sidney) in the summer of 1901. By September the new yard was rushed with orders, shipping its first carload of brick in early October. When it closed for the season, a month later, this first year was considered a success. Blackwood was back for 1902, burning his first kiln of bricks by mid-July, and regular production continued for the next two years. Late in 1904, L.J. Oakes, a Nova Scotia brick expert, made tests of the Blackwood clays, sending the samples to the Boyd Press Brick Company of Chicago where a few test bricks were make. The results were apparently of the highest standard. The tests were perhaps in anticipation of the creation of a new firm which would exploit the Edrans clays more efficiently. This ultimately took the form of the Edrans-Brandon Press Brick Company Ltd. which was incorporated at Brandon in July 1905. Members of the Blackwood family were principals in its organization. While its business office was at Brandon, the plant was built at Edrans. The new plant was constructed in the summer of 1905 on the 12-acre site with its "remarkable clay formation" which was a mound about 40 yards long by 180 yards wide. The yard was served by a CPR siding, and initially bricks were made on site in order to build the large, permanent kilns – images suggest these were tunnel kilns. A 60-horsepower engine was installed for power, along with a 60-foot high smoke stack, as well as a

large shed for clay storage. The main building was about 50 feet high and covered with corrugated sheet metal. The new plant, with its capacity of 20,000 pressed bricks per day, was fired up for the firm's Board of Directors on 3 November 1905. Production started in earnest in the spring of 1906, when the first of four kilns were finished. These kilns were unique, each with 14 chimneys. When completed the plant entered an era of regular production. During 1914, the yard was fixed up after a short period of closure, and was once again producing "good quality bricks." The Edrans plant was likely shut down early in World War I, but was back in operation in 1924. New owners, National Clay Products Company, Ltd., had its headquarters in Winnipeg, but was actually a creature of the Hales brick-making family, which had operated earlier plants at Rapid City and Brookdale. In this case, W. E. Hales, the son of the founder, was the President of National, and kept the operation going until at least 1931.



The yard at Edrans, ca. 1910. In the foreground is the raw clay, held in place with a rough log fence, a group pf workers and the impressive tunnel kilns, each with its distinctive line of chimneys along the length. In the background is the mixing and pressing building, whose tall form and steeply-pitched roof suggest vertical movement of material within the building. See next entry on the Leary operation for a possible explanation. (Courtesy *Brookdale Local History*)

Learys / Boyne Valley Brick Works / Leary's Brick Company

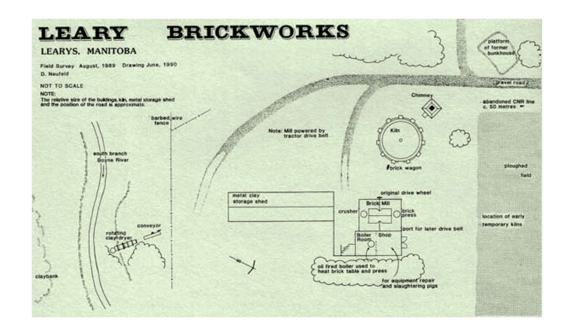
The brick plant at Leary, or Leary Siding as it was sometimes known, is the only surviving old-time brick factory left in Manitoba. Part of this is dependent on the isolation of the site, but its survival had chiefly come about because of the dogged determination of the Leary family. The founder, George Leary, was well-known throughout south-central Manitoba many years prior to his attachment with brickmaking. He was involved in the life of the community, sending in crop reports to a Winnipeg newspaper, running for political office (and losing), as well as being appointed one of the provisional directors of the Manitoba and South-Western Colonization Railway. Over the years Leary became well-known in farming circles and as a grain buyer. During the 1890s he spent some time in Ireland as a Dominion Government immigration agent. He also developed a partnership with a relative by marriage, to Rodmond P. Roblin (later Premier of the province), as he pursued a career as a grain dealer at the Grain Exchange. Leary's interest in brick-making was first noted in the fall of 1900, when the Manitou newspaper reported of his plans to start a large brick and cement business on three sections of land which he had bought six miles north of Altamont and located on Boyne Creek. In March of 1901 the Boyne Valley Brick Works Company, Ltd. was incorporated, and in April all the machinery was said to be in place with brick ready to burn. During 1902 a Canadian Northern Railway spur track was mooted to run from Altamont over to the site. Leary hoped to sell his brick for \$8.00 per thousand from his two varieties of clay. In 1903 more brick machinery was shipped to Leary's factory, which was superintended by Mssrs Snowdon and Carmichael. With this, yard operators hoped to make a half million bricks that summer. A visit to the plant by federal government geologists in 1907 stated that the plant turned out red dry-pressed brick from an 1897 Boyd dry-press machine. This report is a reminder that the Leary operation, like that at nearby La Riviere, exploited shale, rather than clay, for its brick production. This kind of situation required a crusher (which is still installed at the Leary site) that reduced the shale to a powder. The 1907 output was 1.7 million bricks, and the operation employed many men whose wages averaged \$2.00 per day. After 1910 Mr. Leary and his sons operated the factory as Leary's Brick Company, which managed to hold on



View of the Leary Brick Factory, ca. 1910. (Courtesy Ina Bramadat) The brick plant, seen to the left of the chimney, enclosed the crusher and press, on either side of the main floor. The building's height and roof design were required by the use of an elevator to move raw shale within the system.



A Leary brick. (Courtesy Manitoba Historical Society)



Top: Site plan of the Leary Brick Factory; north is to the bottom right of the image. The drawing shows the shale bank on the left, dryer and conveyor further right, and then a concentration of buildings on the right: storage shed, crusher/boiler room/ shop/ brick mill, kiln and chimney. The illustration also shows the location at the upper right of an old workers' bunkhouse and CNR line further west. (Courtesy Ina Bramadat)

Below: Letterhead used for Learys shows the buildings and sitings, along with an imagined large storage building seen behind the chimney. (Courtesy Ina Bramadat)



through the early years of the World War I, finally closing up in 1917. But this was not the end of the Leary saga. A son, William Leary, would by the late 1930s regain control of the family plant, and along with a relative, Rod Ager, worked through most of the summer of 1947 putting the plant and its machinery back in order. That November the fires in the 80,000-brick kiln were ignited once again, and Leary's went back into small-scale production. Some 7,000 bricks from this first kiln were delivered to Carman that summer to be used in the new vault extension for the Bank of Commerce. Leary's brick plant operated on a part-time basis for the next several years, and became the last of the old time brick plants to do so. But Ager died in 1952, and William Leary himself died in 1953, and after some further (failed) brick attempts and alternate ownership, the old brick site finally reverted back to Leary family descendants.

Portage la Prairie - Harry Stephens

Two Portage la Prairie brickyards were amongst the most successful in Manitoba history – long-lived, productive and highly respected. Harry Stephens started his Portage la Prairie Brickyard Company about 1899, and between 1902 and 1904 the capacity of his yard had trebled to meet the demands of the western Canadian building boom. The Stephens plant was about a quarter mile east of town, and had a capacity of 40,000 bricks per day with two soft-mud machines in use. By 1906 Stephens had 12 "furnaces" (beehive kilns) for burning brick, with each one holding 100,000 bricks. 8.5 million bricks were produced in the 1909 season. Stephens employed 80 workers and had his own CPR spur track. A 1911 visit by a Dominion Government geologist found this to be "one of the largest and best managed [brick companies] in Manitoba." In 1912 Stephens acquired a new yard in the vicinity, and was able to produce 14 million bricks between the two yards annually. 1912 appeared to mark the height of production for Stephens, whose operation, like all others, was beginning to feel the effects of a construction decline, and would certainly suffer during and after World War I. Stephens Brick, however, carried on in a much-reduced form until 1928, when its incorporation charter was finally cancelled.

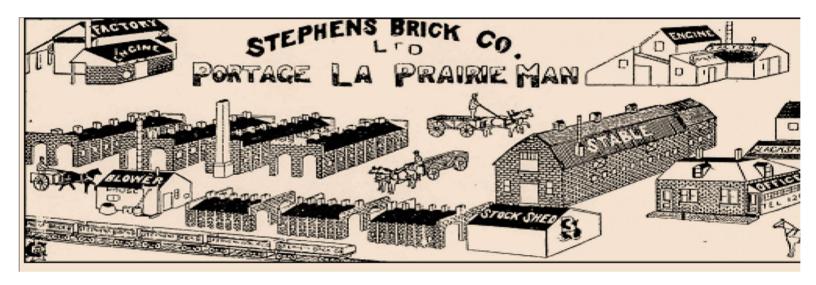


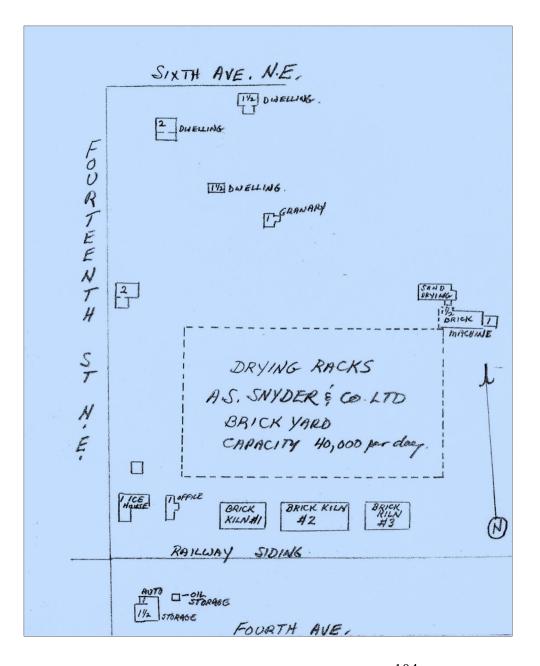
Sample of a brick from the John Snyder yard at Portage la Prairie. (Courtesy Manitoba Historical Society)

Portage la Prairie - John Snyder

A capable competitor for Harry Stephens was John Alexander Snyder and his familyoperated brick yard. Indeed, the Snyder name would outlive that of Stephens in local building supply circles until its affairs were taken over by Winnipeg's Alsip Brick & Tile in 1945. In turn Alsip would remain on the Portage la Prairie scene until 1972, when it appears to have ceased manufacturing brick. If this was the case, then the old Snyder yard at Portage la Prairie was one of the longest-running brick plant from its outset, at 68 years, beginning in 1904. Initially known as Snyder Brothers, by 1907 the firm was renamed A. Snyder and Company, with 200 acres of land. Its Martin brickpress was capable of producing 40,000 bricks a day, and the site required 35 workers. Its output that first year was a very impressive 3,250,000 bricks. The Snyders acquired a second yard at Gilbert Plains in 1907, and by 1912 that yard was burning in its several scove kilns about 250,000 bricks per kiln, to a total of about 5 million bricks a year. The Gilbert Plains operation was silent during World War I but was active again in 1919, and was intermittently operational until 1929. The whole Snyder empire was renamed Snyder Brick Yards, Ltd. in 1930, and the Portage operation continued under Mr. Snyder, until his death in June of 1937.

Drawing of Harry Stephens's Brickyard, Portage la Prairie, ca. 1909. The image shows four large tunnel kilns, three smaller kilns, a large brick stable, brick office building and engine and factory buildings. (Courtesy Archives of Manitoba)





Site Plan of A.S. Snyder's Portage la Prairie brick plant, traced from original Western Canada Underwriter's Insurance Plan, June, 1920, Sheet 56. (Courtesy Archives of Manitoba) The drawing shows a large area for brick-drying, three brick kilns (presumably of the tunnel variety), a sand-drying site and beside it the brick-making factory. A railway siding was situated to the south of the kilns, to facilitate easy unloading of the kilns onto freight cars.

Holdovers from 1881-1896

As was noted at the opening of this section, there were 11 small urban and rural brick-making operations that were discussed in the previous section that were still going strong into the early 20th century:

Sampson yard in Brandon (started in the 1890s and going to 1917); Mr. Ruston's Cypress River yard (from 1896 to 1904); Mr. McGarvey's Deloraine yard (from 1896 to 1909); Mr. Payne's Hartney operation (from 1895 to 1901); Dagg & Mawhinney in Holland (1894 to 1904); Mr. Church in Killarney (1896 to 1901); the Marion yard at Oak Lake (1893 to 1900); the two Davis yards near Sidney (E., from 1893-1910 and H., from 1895-1900); Squire Sowden's Souris yard (from 1892 to 1901); and in Wawanesa the Naismith/Town yard (from 1896 to 1904).



The fine main street of Hartney, ca. 1910. (Courtesy WikiCommons) Most of these buildings were put up with brick from one of three local yards: Harry Payne's (1895-1902), George Sackville's Hartney Brick and Delft (1898-1902) or William Kirkland's Hartney Brick Works (1897-1914).

Conclusion – The State of the Industry at 1917

Over the course of 20 years, from 1897 to 1917, Manitoba's brick-making industry had matured into a solid, stable, reliable enterprise. Major operations, with industrial-scale production and the most up-to-date machinery, kilns and processes were attendant on several of the province's biggest yards – at Portage la Prairie (Harry Stephens and John Snyder), La Riviere, Sidney, Edrans, Morris and Carman, and in Winnipeg (Birds Hill Brick and Standard Brick) and St. Boniface (Alsips, McCutcheon, Kelly Brothers, Cartier/Lamontagne and Couture/Marion). Ever-growing demand for brick, for the thousands of new buildings that were replacing the first generation of smaller and often more modest structures, ensured that the province's brick-makers were busier than ever. And there was even major demand for Manitoba brick in the new provinces of Saskatchewan and Alberta (added to the Confederation in 1905) – during 1913 the yard of William Kirkland at Hartney sent 1,000,000 of its bricks to be used at the new Legislative Building in Regina.

Throughout this period, 15 of the yards started in earlier years were still going strong, and at least 60 new operations entered the fraternity. Six of these newcomers were in Winnipeg and St. Boniface, with the other 54 in small-urban and rural situations. And while the trend to short-lived operations continued during this period, with 23 closed a year or two after formation, 37 were more enduring. The area around Mission/ Archibald/Youville in St. Boniface was still a major area of brick-making activity, with concentrations of yards outside the city in a rectangle of clay and shale beds that included Portage la Prairie on the east, La Riviere on the south, Gladstone on the north and Sidney/Edrans to the west.

The familiar levels of production noted in the previous era—25 to 50,000 bricks a day and a million bricks a year—were repeated at many of the yards active between 1896 and 1917. And typical ongoing improvements to brick-making machinery were certainly attendant at many yards at this time. But we are much more commonly hearing of 10 and 20 million-brick-a-year operations: at for example Standard Brick,

Birds Hill, and Alsips in Winnipeg/St. Boniface, and at La Riviere and the Portage la Prairie yard of Harry Stephens.

There are occasional references to the costs of capitalization of a new brick plant, with values not dissimilar from those noted in earlier periods: \$20,000 for the plant at La Riviere (equivalent to half a million dollars in 2018), \$50,000 for the Winnipeg Brick facility (\$1.2 million in 2018), and \$100,000 for the Canada Tile plant in Carman (\$2.5 million in 2018, with the expectation of \$175,000 for a phase 2 – and thus an additional \$4 million).

The exploitation of shale beds (rather than the more familiar clay beds) was undertaken in south-central Manitoba, notably at La Riviere, Carman and Learys, with new extraction and grinding technologies, and of course new dry-pressing brick manufacturing processes which typically produced more fine-edged and harder brick.

The most obvious change on many brickyards was the introduction of new kiln technologies and attendant forms. The most apparent was the beehive kiln, which was to be seen at many of the larger yards, with its evocative domed shape made entirely of brick. New tunnel kilns were also being used at many yards – the yard at Morris Brick claimed a tunnel kiln that was 36 feet wide and 320 feet long.

Even with greater sophistication of operations, the hugely increased demand meant that most yards still required a significant staff contingent, and so there are consistent observations about dozens of men working at most yards of any size – at least for the typical season, still from April to October. Some of the larger yards required even greater workforces – 50 men at Canada Tile in Carman, 40-50 men at Morris Brick, and 80 men at Standard Brick in Winnipeg (which also had 15 teams of horses as part of the yard's activity). The great size of some of these operations obviously translated into great profits. As was noted in the previous section, with prices per thousand still averaging \$12.00, it would be possible for some of the owners of larger yards to earn net profits of \$100,000 or more.

It was during this period that the new Manitoba Agricultural College in Winnipeg, opened in 1905, began to offer a course in "practical brick-making," ensuring a greater level of local knowledge of brick-making processes.

Media attention to the brick industry declined through this period; the novelty and interesting claims had diminished by this time. But there were other venues for information on the activities of the larger yards, and for the technical aspects of an increasingly sophisticated industrial enterprise. Articles and studies in institutional and government magazines and reports ensured that information, data, images and reliable drawings were available to architects, engineers, contractors and brick-makers across the country.

For 15 years, from 1897 to 1912, the brick industry in Manitoba appeared to know no bounds. There were huge investments in places noted above. Manitoba clay and shale deposits seemed sure to keep the industry going, and growing, for years to come. There must have been quiet jubilation amongst the growing brick fraternity. Perhaps the best was yet to come.

But 1912 marked the high watermark of Manitoba's brick industry. By 1913, and through to 1914, the province, like other places, was upended by two successive recessions, which knocked many smaller brick companies out of the industry. But these economic turmoils, which certainly curtailed growth of the industry, were nothing compared with the tremendous upheaval caused by World War I, from 1914 to 1918. That cataclysm not only removed young men from the workforce, but the war also disrupted nearly all construction activity. Some of the larger rural and small-town operations were closed or moth-balled: Edrans, La Riviere, Carman and Morris. As was noted in the introduction to this section: by 1916, at the height of hostilities, there were only 14 operations producing any brick in Manitoba.

Things certainly seemed bleak for the once mighty Manitoba brick industry.