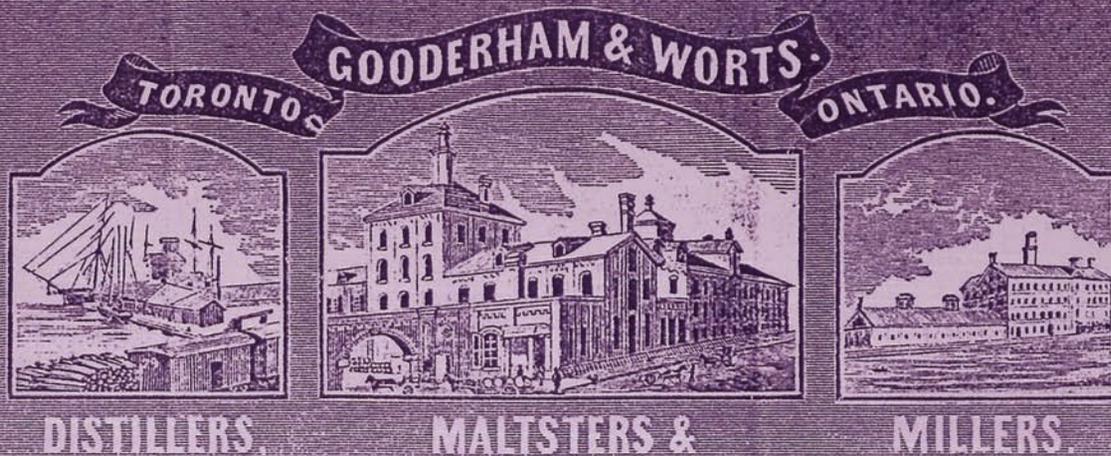


Gooderham & Worts

Heritage Plan

Report No. 4



Inventory of Archival Sources

Stephen A. Otto

March 1994

GOODERHAM & WORTS

HERITAGE PLAN

REPORT NO. 4

INVENTORY OF ARCHIVAL SOURCES

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March 1994

Gooderham & Worts Heritage Plan
LIST OF REPORTS

This is Report No. 4 of the Gooderham & Worts Heritage Plan which is composed of a series of co-ordinated reports as listed below.

HISTORY/ARCHEOLOGY

1. *Aboriginal and Early European Settlement*
Stephen Otto/du Toit Allsopp Hillier, 1994
2. *Gooderham & Worts Distillery*
Stephen Otto, 1988
3. *Oral History*
Historica Research Limited, 1994

ARCHIVAL RECORD

4. *Inventory of Archival Sources*
Stephen Otto, 1994

INDUSTRIAL ARCHEOLOGY AND INTERPRETATION

5. *Heritage Equipment Registry*
David Nasby & Associates, 1994
6. *Industrial Heritage Assessment and Interpretation Programme*
Historica Research/David Nasby & Associates, 1994

LANDSCAPE

7. *Landscape History, Inventory and Guidelines*
du Toit Allsopp Hillier, 1994

ARCHITECTURE

8. *Photographic Record*
Spencer R. Higgins, Architect Incorporated, 1994
9. *Architectural Description*
Spencer R. Higgins, Architect Incorporated, 1994
10. *Architectural Drawings*
Roger du Toit Architects Limited, 1989 -1994
11. *Conservation and Adaptive Re-use Guidelines*
Reprinted from Polymath and Thermaturge Inc., 1990
12. *Schematics for Adaptive Re-use*
Roger du Toit Architects Limited, 1994

TABLE OF CONTENTS

Preface and acknowledgements	
Sources	vii
Introduction	1
I. GOODERHAM & WORTS MILL AND DISTILLERY, TORONTO	
A. Early Maps and Plans	page 7
B. Site Plans	9
C. Property Grants, Deeds and Mortgages	14
D. Paintings, Sketches and Engravings	18
E. Photographs	21
F. Motion Pictures and Videos	28
G. Newspaper Reports and Magazine Articles	28
H. Books, Studies and Pamphlets	32
I. Architectural and Equipment Plans	35
J. Specifications	40
K. Municipal Assessment Records	40
L. Drainage Permits	41
M. Building and Demolition Permits	42
N. Incorporation and Board Records	44
O. Contracts, Leases and Legal Documents	48
P. Correspondence	51
Q. Finance	54
R. Operations	55
S. Personnel	56
T. Marketing, Advertising and Public Relations	57
U. Awards, Citations and Addresses	59
V. Records of Affiliated Companies	60
II. GOODERHAM FAMILY	
A. Family Tree	63
B. Biographies	63
C. Obituaries	64
D. Portraits	65
E. Photographs	67
F. Correspondence and Private Papers	68
G. Books and Essays	68
H. Newspaper Reports and Magazine Articles	70
I. Architectural Drawings	72
J. Drainage Permits	73
K. Building Permits	73

continued over

III. WORTS FAMILY

A.	Family Tree	75
B.	Biographies	75
C.	Obituaries	75
D.	Portraits	75
E.	Newspaper Reports and Magazine Articles	76
F.	Architectural Records	76

APPENDIX A	79
------------	----

APPENDIX B	87
------------	----

APPENDIX C	113
------------	-----

APPENDIX D	131
------------	-----

ILLUSTRATIONS

PREFACE AND ACKNOWLEDGEMENTS

Undertaken as part of the Heritage Master Plan for the Gooderham & Worts property, this study has created an inventory of archival records located on the site and elsewhere. As a detailed finding aid, it should be useful to anyone interested in the history of the distillery--archaeologists, architects, archivists, exhibit designers, **geneologists** historians of all stripes, journalists, leasing and marketing specialists, members of the Gooderham and Worts families and the general public. By bringing together, on paper at least, the materials available in more than two dozen archives, libraries and private collections it goes well beyond what is usually available for other historic sites and subjects. But also, by providing listings at an item-level this inventory supplements the catalogues in some of these repositories.

Within the limitations of budget and time, every effort has been made to ensure that the result was comprehensive and organized in a way helpful to the user. To those who use the Inventory is left the judgement of whether or not its objectives are met in the main. Generally speaking, chronology was the guiding rule for the order of the sections and items within them. For example, in Part One, the first eight sections establish a general context for the next five, which document the building process; the remaining sections deal with facets of the operating life of the company. Titles have been bolded to make scanning the listings easier; dates have been made to follow as closely after the title as possible. Inevitably, the imposition of standard rules for the listings here has meant some editorial changes in the way items are catalogued by their custodians, for which an apology is made.

Perhaps a word is in order about the references that appear below to the appendices and illustrations. Since it was not possible to reproduce or illustrate everything in the listings, in most cases the only materials appended or illustrated are ones that are hard-to-find, inaccessible, or good examples of a particular record series.

More work remains to be done among the records left on-site when the distillery closed in 1990. Unlike the materials examined in other collections, the on-site records had not been catalogued previously. It was necessary, therefore, to spend many hours compiling lists of the often-unrelated contents of cartons before they could be organized by function, at least on paper. Until the process of listing is completed there can be no final decision on how best to organize the records physically and no assignment of reference codes.

It would not have been possible to prepare this inventory without the timely assistance of the following custodians of the archival record: Dennis **Boulé**, Ed Dahl, Brian Hallett, Patricia Kennedy Patrick **McIntyre** and Stephen Salmon (National Archives of

Canada); Wayne Duford, Dana Johnson and Colin Old (Parks Canada, Ottawa); Eva-Katrin Cooper and Christine Niarchos-Bourolias (Ontario Archives); **Allan** Day (Ontario Ministry of Natural Resources); Victor Russell, Patrick Cummins and Steve **McKinnon** (City of Toronto Archives); Alan Walker (Metropolitan Toronto Reference Library); Michael Moir (Toronto Harbour Commission Archives); Raymond Peringer (Arts & Letters Club Archives, Toronto); Doreen Livingstone (Archives of Little Trinity Church, Toronto); Donna Murphy (Manulife Archives); Mildred Pulleyblank (Toronto-Dominion Bank Archives); and Felicity Pope (Toronto Hospitals Archives).

Many members of the Gooderham and Worts families were generous and unflinchingly gracious in answering questions and helping to locate materials, including July Craik, Stephen Gooderham, Joanna Gooderham, Ian Macintosh, Enid Maclachlan, Donna and Dan **McNeill**, Yolande Moses, Tom Symons, David White, Robert White and Douglas Worts. Introductions to their trusted advisors, Robert Kellough and Leo Knowlton, were much appreciated.

Dean **Beeby**, Steven Evans, Mike **Filey**, Mary Finley, Mark **Fram**, Bill Gray, Ralph Greenhill, Robert Hill, **Mima** Kapches, Marion **MacRae**, Kent **Rawson**, David Ritchie, Karolyn Smardz, Robert Stacey and Joan **Winearls** gave freely of their expertise to enrich the inventory, for which I am grateful. I want to acknowledge too the co-operation of Paul **Allsop**, Judy Bortolotti, Percy Frith, Art Jahns and David **Stainton** at Hiram Walker, **Windsor**.

Lastly, I wish to thank my colleagues on this project--Chris Andreae, John Carr, David Dennis, Roger du **Toit**, Spencer **Higgins**, David Nasby and Jim White--for their suggestions and assistance.

Stephen A. Otto

LIST OF ABBREVIATIONS USED FOR SOURCES

CTA	City of Toronto Archives, City Hall, Toronto
G&W	The Gooderham & Worts On-site Collection is located in the former distillery, 2 Trinity St., Toronto
HW	The Hiram Walker Archives, Collection and Legal-Secretarial Department are located at the head office of Hiram Walker & Sons, Riverside Drive, Walkerville, Windsor
MTRL	Metro Toronto Reference Library, 789 Yonge St., Toronto
NAC	National Archives of Canada, Wellington St., Ottawa
NMC	National Map Collection, National Archives of Canada, Ottawa
OA	Ontario Archives, 77 Grenville St., Toronto
OMNR	Ontario Ministry of Natural Resources, Information Branch, 90 Sheppard Ave. E., North York
THCA	Toronto Harbour Commission Archives, 60 Harbour St., Toronto

INTRODUCTION

Because there is no book-length history of Gooderham & Worts in print at present, it may be helpful to give here a brief outline of the **company's** development as a context for the inventory of records that follows.

Thanks largely to E.B. **Shuttleworth's** book, The Windmill and its Times, parts of **G&W's** early story are well known, beginning in April 1831 with the arrival in York [Toronto] of James Worts. By the time in July 1832 that William Gooderham, his brother-in-law and business partner, arrived Worts had completed construction of a brick windmill near the mouth of the Don River and was well along in installing the machinery. For the first two years of the enterprise's existence it was known as Worts & Gooderham. It was renamed William Gooderham, Company, in 1834 following **Worts'** suicide a fortnight after the death of his wife in childbirth. In 1837, Gooderham added a distillery to his milling operations to make use of surplus wheat. As they say, the rest is history.

Shuttleworth noted in 1924 that the **firm's** early account books were in numbered boxes 'in a room over the present offices of Messrs. **Gooderham,**' and drew heavily on these records to write his book. Since they cannot be found today it may be they have been destroyed. Almost the only surviving evidence from the firm's first dozen years, apart from property and assessment records, are a rare survey of the site, a newspaper account noting the manufactures of **mill's** first steam engine, a single invoice and two views, including Thomas Young's splendid 1835 lithograph showing the windmill.

The company was restyled Gooderham & Worts in 1845 after William Gooderham took his nephew James Gooderham Worts, then aged twenty seven, into a junior partnership. Some records survive for the years from 1845 until Gooderham's death in 1881, mostly surveys, architectural drawings, newspaper reports, paintings, property deeds and municipal assessments. They are useful in understanding the physical development of the site but are not representative of the range of correspondence and records the business would have generated. The exceptional survival of a series of letters from Gooderham & Worts to Lanman & Kemp, a customer in New York City, provides a sad measure of what has been lost and destroyed.

Meanwhile, about 1850 William Gooderham's third son, George, joined the business. In August 1856 when he and his cousin James G. Worts became full partners, the company became a tripartite partnership and remained that way for more than twenty-five years. It is far from clear, however, how responsibilities were divided among the partners, notwithstanding George is given credit in contemporary accounts for planning the new distillery of 1859-60 and for superintending production there subsequently.

While William **Gooderham's** other seven sons found employment at the distillery and in other businesses controlled by the firm, they were never full-fledged partners.

Gooderham & Worts' first expansion beyond Toronto occurred in 1845 when it leased a grist mill at Norval on the Credit River. The lease was not renewed when it expired in 1859. In the following year, however, the firm acquired Francis **Silverthorne's** large mill further down the Credit at Meadowvale, which it operated until 1882. Also about 1860 it bought John William Gamble's mill at Pine Grove, on the Humber near Woodbridge, and remained in business there some twenty years before selling out. In some of these places Gooderham & Worts had general stores, sawmills, tanneries and small distilleries too, just like many other country millers.

Meanwhile, in 1865 Gooderham & Worts joined W.D. Perine, Brothers, of **Doon**, to create the Streetsville Linen Manufacturing Company, investing more than \$100,000 in converting a former water-powered grist mill into a steam-driven flax mill making grain bags and rope. After only two years, however, production had to be suspended putting 150 people out of work when no dent could be made on a market dominated by cheap cotton bags. Barely two and a half months later the mill, still idle, burned to the ground and was not rebuilt.

In Toronto, Gooderham & Worts operations were concentrated at Trinity and Mill streets with two notable exceptions. In the **1840s**, a cooperage was established 'at a short distance from the **mills**,' probably because the manufacture of barrels required a lot of space. By 1850 a third of the **firm's** employees worked in the cooperage. It was located then on the north side of Front Street, east of Cherry. During the 1860s there was a second cooperage at the distillery for repairing and cleaning barrels returned from the firm's customers. All new barrels, however, continued to be made on Front Street until 1906, when a new cooperage was built on the east side of Trinity Street north of Mill Street. The land on Front Street was incorporated in 1916 into a yard for the Canadian Northern Ontario Railway.

The second off-site operation was animal-feeding. Shuttleworth records that in 1838 William Gooderham bought pigs to feed on the 'slop' or spent mash from the distillery, and that in 1843 he acquired a herd of 22 cows as well as four heifers and a few calves. By 1850 the British Colonist counted 108 cattle at the distillery, and reckoned more than three hundred cattle could be fattened annually. The byres were located on the east side of Trinity Street until 1866, when they were relocated to the east side of the Don River to make room for expanding the distillery. Although the byses were built by Gooderham & Worts, the land was held under a lease. By 1862, Gooderham & Worts had contracted-out the whole feeding operation. Slop was pumped through a pipeline

to the byres, which were enlarged at intervals until eventually they could hold 1800 cattle and 240 pigs. Milk and butter from the herd were sold in the city. No records have been found to show when the cattle-fattening operations were closed, although as late as 1917 the byres continued to appear in photographs.

Several members of the Gooderham and Worts families had houses in the immediate vicinity of the distillery, which was offered as evidence of the **area's** general healthiness. William Gooderham lived on the south side of Mill Street west of Trinity; his son William on the north side opposite; James Worts on the northeast corner of Trinity and Mill; George Gooderham on the southeast corner of Trinity and Front; and Henry at the southwest corner of the same intersection. Worts later erected on a portion of his front lawn a pair of semi-detached dwellings for his son and a married daughter. In his personal capacity William **Gooderham** owned five small houses along Mill Street, which were rented to employees like his gardener, watchman and miller, but there is only one report in the 1866 newspapers of his acquiring any other houses for rent. Presumably there was no significant number of houses owned by the firm and rented to its employees.

Equally unclear is the involvement of the partnership (apart from that of the partners in their individual capacities) in the Bank of Toronto, the Toronto, Grey & Bruce Railway and the Toronto & **Nipissing** Railway. As Gooderham & Worts was the latter railway's most important customer, it would have wielded great influence in any event but the records are not available to confirm any equity interest.

Within a year of William Gooderham's death in 1881 James G. Worts died too. George, now the sole surviving partner, wasted no time in concluding an agreement with Worts' executors and heirs to incorporate the company. This lengthy document dated 1 August 1882 has been found in photocopied form, giving hope that some key records have escaped destruction. In 1886 George is said to have bought out Worts' heirs for \$1,000,000 plus a bonus in each of the four succeeding years if the company was profitable.

At probate in 1881 about ninety percent of William Gooderham's estate or roughly \$1.4 million was invested in the distillery and its lands. Allowing for the interests of his partners, it seems reasonable that Gooderham & Worts Limited was capitalized at \$2 million in 1882. Yet when George died in 1905, a much wealthier man than his father, only about a third of his estate of \$9.3 million was tied up in the company, which he owned outright. Obviously, he had been very astute in investing the profits from Gooderham & Worts, which were substantial. Also, relative to what he invested in other enterprises, he had put back little into the distillery.

After a burst of physical expansion on the site between 1887 and 1891 the most notable development in the company's history in the period up to the First World War was the establishment of The General Distilling Co. in 1902 as a partnership among Gooderham & Worts, Joseph **Seagram**, Hiram Walker's Sons, Wiser's, **Corby's** and the Hamilton Distilling Co. It was located in newly-erected buildings along the south side of Mill Street west of Trinity. The land was sold to General Distilling by Gooderham & Worts in 1903 and bought back in 1919 when the joint venture was being wound down. Within the Gooderham family it is said that General Distilling was created to compete with Mortimer Davies who was producing cheap alcohol in Montreal. General's first president was George Gooderham; Franklin Walker was vice-president and W.G. Gooderham the managing director.

On George **Gooderham's** death in 1905, his will provided for the management of the distillery by his two eldest sons, William G. and Albert, and gave them the first right to purchase it at the end of ten years. W. G. assumed the presidency; Albert became the managing director. Their father's other offices were divided up and shared with Ross, a younger brother. Albert was president of the Dominion of Canada Guarantee and Accident Insurance Co. Ross made the Manufacturers Life his special interest, although William G. was the president until his death in 1935 when Ross succeeded him. Eventually Ross owned fifty-two percent of the common stock in the Manufacturers Life. After his death in 1951 when the company was mutualized to avoid control of it passing outside Canada his executors were paid over \$20 million for their stock after special legislation was passed enabling them to sell.

W. G. Gooderham, became President of the Bank of Toronto. The Gooderham family held almost eighteen percent of the **Bank's** common stock. Their position was buttressed by the 4.7% interest of **W.G.'s** brother-in-law, Thomas G. Blackstock, and the 7.4% interest of the Beatty family who were also allied to the Gooderhams through marriage. And because the Bank of Toronto at that time was closely associated with the Canada Permanent Mortgage Corp. W.G. Gooderham became its president too following the retirement of W.H. Beatty in 1910.

The shortage of operating records for Gooderham & Worts continues through 1916, when the distillery and that of General Distilling were 'patriotically placed . . . at the disposal of the British Government, free of charge, for the duration of the war.' Under the direction of Col. Albert Gooderham the plants, renamed British Acetones Toronto Limited, were devoted to producing acetone and cordite ketone--both vital components in making explosives. At intervals throughout this period Col. Gooderham had the plants photographed. The result was an unmatched series of 168 views of the exterior and interior that complemented a 692-page book he wrote describing British Acetones' operations. It was published in 1919. Today the photographs are found in the

City of Toronto Archives. Only two copies of the book have been located in public collections, both in Ottawa.

Prohibition had been introduced in 1915 as a special wartime measure but was extended and strengthened after the armistice. It wreaked havoc upon the distilling industry and created an unsavoury environment that weighed heavily in the 1923 decision by George Gooderham's heirs to sell out for \$1.5 million. The buyout was masterminded by Harry C. Hatch and involved a series of manoeuvres involving the establishment of a new company, The Old Windmill Limited, to hold all assets of Gooderham & Worts Limited while a new company with the same name was formed to acquire the trademarks and selected assets. Many agreements related to the sale are among the on-site records, as are some early lists of shareholders.

A measure of how quickly the outlook for distilling changed as prohibition was repealed in province after province is that in 1927, only four years after acquiring Gooderham & Worts for \$1.5 million, Harry Hatch and his associates paid \$14 million for Hiram Walker's Sons. The price reflected also the condition of Walker's distillery, its proximity to the large, bootleg market in the United States and the strength of the Walker trademarks there. In November 1927 a merger of Hiram **Walker's** and Gooderham & Worts was effected through an exchange of shares to create Hiram **Walker-Gooderham** & Worts Ltd., although Gooderham & Worts Limited was continued for operating purposes.

A number of production and marketing records survive in the **on-site** collection from the period 1923-60; personnel and public relations records tend to be stonger after 1950. The real-estate and photographic record is augmented considerably by materials in the archives of the Toronto Harbour Commissioners. There were extensive negotiations with the Commissioners over various works along the waterfront that cut Gooderham & Worts off from the water except for a pipeline leading underground from a short section of dock to the large steel tanks at the west end of the distillery site.

The collection of records on-site documents also some interesting **intitatives** and joint ventures by Gooderham & Worts. The first was the establishment in 1928 of radio station CKGW: it had a history of conflict with the Canadian Broadcasting Corporation that in 1944 was carried right to the Privy Council. The second was a joint venture with the Liquid Carbonic company. As early as 1929 Gooderham & Worts had decided to manufacture carbonic acid gas as a by-product of distilling; the gas is used extensively in the making of soft drinks. In 1931 the buildings on the south side of Mill Street occupied formerly by General Distilling were leased to Dominion Carbonic, probably an affiliate, but in 1934 they were sold to Liquid Carbonic Canadian Corp., a subsidiary of an American company. Hiram Walker-Gooderham & Worts had a minority

interest in the latter venture and appointed a representative to its board of directors until after Liquid Carbonic sold the Mill Street property back to **G&W** in 1968 and moved away. The former Liquid Carbonic buildings were then demolished. The third series of records relates to Consolidated Alcohols, formed in 1957 with Corby's to manufacture and market industrial alcohols.

Except for the corporate and financial records held by Hiram Walker's there are relatively few company records covering the last three decades. The thread of **G&W's** story in the 1980's was complicated by acquisitions and takeovers; no summary of those events will be attempted here. Suffice it to say, as the idea of closing the distillery gained momentum after 1980, more honour was accorded Gooderham & Worts, more studies were made and more pictures of the buildings taken than ever before, all of which have been noted below.

PART ONE

GOODERHAM & WORTS MILL AND DISTILLERY, TORONTO

A. Early Maps and Plans

While a large number of maps drawn between 1788 and the present have depicted Toronto harbour, only a few have included specific or unique information on the G&W site and its immediate environs. The more important of these are listed below.

1. Alexander Aitken, Plan of the Harbour of Toronto with a proposed Town and Settlement, 1788. At the eastern end of the harbour is a '**Grass** Bank 20 feet high.' The water offshore from the site is no more than 1-1½ feet deep. (NAC, NMC 0022816; see detail illustrated on p. 139)
2. Joseph Bouchette, Plan of Toronto Harbour with the rocks, shoals and soundings thereof . . . 15 Nov. 1792. A similar map, also by Bouchette, is found in the National Archives as NMC 4436. Both plans locate an Indian hut in the area of the site. (NAC, NMC 0043214; see detail illustrated on p. 141)
3. Samuel S. Wilmot, **A Plan Showing the Survey of the land Reserved . . . East end of the Town of York &c.,** Feb. 25, 1811. This shows the creeks west of the Don's mouth and vegetation in the area. For example, southeast of the site is a "Natural Meadow which may be Mowed." Also given are the compass bearings of the allowance for the "Road from York to the [Gibraltar Point] Light House" along the shore in front of the site. (OMNR, micro 390, H-26)
4. George Williams, R.M.S.D., Sketch of the Ground . . . [at] York, Upper Canada, [November] 1813. A brickyard is shown in the vicinity of the site and a 'Merchants Ship Yard' on the shore in front. (NAC, NMC 22819; see detail illustrated on p. 143)
5. George Williams, R.M.S., Plan of the Town and Harbour of York, 27 July 1814. During the American invasion of York in April 1813 both Fort York and the Parliament Buildings at Berkeley and Front Streets were burned. The walls of the latter structures (marked '**u**' and '**r**'), which had been

Early Maps and Plans

left standing, were **reroofed** as temporary barracks. In the area of the site this map shows a Bake House (marked 's') to supply the soldiers with bread. (NAC, NMC 0021771; see detail illustrated on p. 145)

6. James G. Chewett, Plan showing the Survey of part **of** the Park east of the Town of York into $\frac{1}{2}$ Acres Lots . . . , June 21, 1830. The area south of King Street between Parliament Street and the Don is shown in rich detail, including things predating the survey such as fences, paths, buildings and brickyards. Also noted are the names of some early grantees. (OMNR, micro 394, file H-26; see detail illustrated on p. 147)
7. William **Hawkins**, Plan of building lots situate at the east end of Toronto, Township of York, 11 May 1835. An inset of the properties abutting Trinity Street south of Mill provides compass bearings for the street-lines as well as lot-dimensions. Also shown are the windmill and two buildings facing Mill Street. One at the southeast corner is identified as a log house; that at the southwest corner may be the home of William Gooderham. (OMNR, micro 347, H-24; see detail illustrated on p. 149)
8. James Cane, Topographical Plan of the City and Liberties of Toronto in the Province of Canada, 1842. Engraved and printed by Sherman & Smith, N.Y. Scale seven chains to one inch. (City of Toronto Archives)
9. John G. Howard, Chart of the North Shore of Toronto Harbour and Plan of the Wharves and Storehouses **&c.** &c., 1846. Shown are soundings out into the harbour along the Windmill Line and in a straight line off the end of Gooderham's Wharf. (OMNR, micro 410, H-24)
10. Charles Unwin, Registered Plan 108, filed 25 January 1855. Depicts the Toronto Hospital Property, formerly the Government Park. Based on original plans in possession of the Trustees of the Toronto Hospital in 1855. Covers area between Parliament Street and the Don River south of Carlton Street. (Toronto Land Registry, 20 Dundas St. West, Toronto, 2nd floor)

Early Maps and Plans

11. William Kingsford, Plan of the proposed location of the right of way for the Grand Trunk Railway in front of the City of Toronto, 13 Nov. 1855 (OA, RG 22, Acc. 14065, GTR Roll 38; see detail illustrated on p. 151)
12. W.S. and H.C. Boulton, Map of the City of Toronto, [1858], Lithographed and Published by Jno. Ellis, 8 King Street. [Toronto]. Scale 1 inch to 100 feet. (MTRL, Baldwin Room)
13. Charles E. Goad, Insurance Plan of the City of Toronto, 1880, vol. 1, plate 11 (MTRL, Baldwin Room)
14. ----- Atlas of the City of Toronto and Vicinity, Mar. 1890, Second Edition, plate 29. (MTRL, Baldwin Room)
15. ----- Atlas of the City of Toronto, 1910. Third edition. plate 29 (MTRL, Baldwin Room)
16. ----- Insurance Plan of the City of Toronto, Mar. 1909, rev. May 1917, vol 1, plates 10-11 (NAC, C-13996)

B. Site Plans

1. T.B. Tate, civil engineer, Three plans of parts of Ogdensburgh, NY, 1857. Scale 100 feet to one inch. Ink on linen. Shows lots owned by James Greenwood and William P. Howland (G&W On-site)
2. A.E. Williamson, P.L. Surveyor, Plan of property belonging to Wm Gooderham, Esq., Toronto, c. 1870. Scale 60 links equals 1 inch. Ink on paper. (G&W On-site)
3. Unwin, Browne & Sankey, P.L. Surveyors, A site plan of Messrs. Gooderham & Worts Distillery, 8 Nov. 1882. Scale 30 ft. equals one inch. Photocopy. Attached to agreement to incorporate Gooderham & Worts dated 1 Aug. 1882 between George Gooderham and the trustees and beneficiaries under the will of the late James Gooderham Worts. (G&W On-site; also in HW Legal-Secretarial and HW Archives, Boxes 11, 12)

Site Plans

4. [Unwin, Browne & Sankey], **A** site plan of Messrs. Gooderham & Worts Distillery showing buildings, c. 1882. Scale 30 ft. equals one inch. Ink on linen. This unsigned and undated plan is identical to that described in the preceding entry, including the designation of buildings by letters referred to in the agreement of 1 Aug. 1882. (**G&W** On-site)
5. Unwin, Browne & Sankey, Plan of subdivision of the Clark Estate, pt. lot 13, broken front concession, York, 9 Feb. 1883. The area was bounded by Queen Street (then called Kingston Rd.), **McGee** Street and Eastern Avenue. (**G&W** On-site)
6. Kivas Tully, Cut from Don Channel to marsh, 11 Jun. 1883. Scale [**1:3 600**]. Watercolour on blueprint. Plan of waterfront south of King Street between Parliament and **D'Arcy** streets, showing course of Don River and proposed cut to Ashbridge's Bay. (THCA, PD 2/1/2967)
7. Plan shewing proposed diversion of Don River and enlargement of Keating's Channel, [**188?**]. Scale [**1:2 400**]. Ink and watercolour on linen. (THCA, PD 2/1/2949)
8. Unwin, Browne & Sankey, P.L. Surveyors, Plan of property of Gooderham & Worts Ltd. on Trinity and Mill Streets and water lots in front of same in the City of Toronto, 16 Sept. 1884. Scale 40 ft. equals 1 inch. Ink on linen. (**G&W** On-site)
9. Plan of Distillery, Messrs. Gooderham & Worts Ltd., Toronto, Ont., c. 1890. Scale 50 feet to the inch. Lithographed by Rolph, Smith & Co. Paper with applied wash. With insets of the cattle byres and cooorage. (**G&W** On-site, three copies; a photo is held by THCA as PC **15/3/4**)
10. Grand Trunk Railway, plan of Don Yard, 1892, Scale 40 **ft.** to an inch. Shows the slop pipeline to the cattle byres on the east side of the Don, which was carried over the river suspended below a GTR bridge. (NAC, NMC, RG **30M**, 90137, items 5, NMC 141827-4 and NMC 141827-5)
11. Unwin, Browne, Murphy & Esten, Plan of part of lot 11, Con. One and B.F. Con., **c.1900**. Area shown is from **Ashbridge's** Bay north to Queen Street between Caroline Avenue and Leslie Street. (**G&W** On-site)

Site Plans

12. Plan showing buildings, c. 1895-1900 (**G&W** On-site)
13. Plan showing the feedlot at the mouth of the Don, c. 1895-1900 (**G&W** On-site; two copies)
14. Unwin, Murphy & Esten, [**1902**], Plan of lands belonging to Gooderham & Worts to be occupied by General Distilling Co., two nearly identical copies, one dated 4 Nov. 1902 (**G&W** On-site)
15. Unwin, Murphy & Esten, two copies of Plan of lots 14 and 15, Broken Front Concession, Toronto, and marsh in front, 21 Jul. 1903. Scale 60 ft. equals one inch. Ink on linen with wash. Showing the layout of the cattle byres and feedlot south of Eastern Avenue. (**G&W** On-site)
16. Plan of proposed diversion of Don Channel, [**190?**]. Blueprint. Scale [**1:600**]. Plan of proposed channel south of the railway bridge, through property used by Gooderham & Worts for cattle byres, to connect with Keating Channel. (THCA, Dwg. PD **2/1/10742**)
17. Land as patented around mouth of Don River, [**1912?**]. Scale [**1:2 400**]. Ink on linen with three diazo prints. Shows property ownership between Parliament Street and Don River, south from Mill Street to Keating Channel; location of G&W cattle byres and storage buildings; shoreline as of June 1912; and cribbing along north side of old Don Channel as indicated on survey by Charles Unwin dated 16 July 1903. (THCA, File C-6-1, A-2; with deed 26 **Dec.** 1911 transferring City's waterfront properties to Toronto Harbour Commissioners)
18. W.A. and W.H. Browne, Plan showing water lots, 21 May 1914. Scale 50 ft. to an inch. Ink on linen. (**G&W** On-site)
19. Toronto Harbour Commissioners, Plan showing old Don Channel between Parliament and Cherry Sts. being **waterlot** applied for, 26 May 1914. Scale [**1:1 200**]. Ink on linen. (THCA, File E-5-6, Drawing 4144)
20. Toronto Harbour Commissioners, Plan to accompany proposition to Gooderham & Worts, re: the opening up of Saulter Street, 19 Jan. 1917. Scale [**1:1200**]. Photocopy. (THCA, File F-3-6, **Dwg.** 3807)

Site Plans

21. Toronto Harbour Commissioners, Plan showing part of Gooderham & Worts' fence removed for the erection of street railway on east Don Esplanade, 17 Sept. 1917, Scale [1:480]. (THCA, File F-6-2, Dwg. 5303)
22. Toronto Harbour Commissioners, Condition plan of area from Parliament Street to east of Trinity Street, and south of Mill Street to National Iron Works property, Nov. 1920, Scale [1:480]. Shows existing conditions, including buildings operated by G&W and water mains along streets. (THCA, File C-6-1, E-11, Dwg. 6307)
23. Toronto Harbour Commissioners, Proposed location of oil pipelines of the British American Oil Co. Ltd. on Keating St. to the Gooderham & Worts property east of the Don River, 11 Apr. 1924. Scale [1:2 400]. Diazo print, with ink and pencil crayon. (THCA, Dwg. PD 2/1/8163)
24. Toronto Harbour Commissioners, Soundings: vicinity of Prince's St. to Trinity Street, 22 Jun. 1925, Scale [1:480]. (THCA, File C-14-4, Dwg. 8502)
25. Toronto Terminal Railways, Plan of land required for Toronto Viaduct, July 1925. Revised Nov. 1925. (G&W On-site)
26. Speight & Van Nostrand, Plan showing lands of G&W Ltd. north of the C.N.R., Trinity and Mill sts., Toronto, 6 Feb. 1926. Scale 1 in. equals 100 ft. (G&W On-site)
27. Toronto Harbour Commissioners, Details of proposed intake chamber for Gooderham & Worts, 11 Aug. 1926, rev. 2 Sept. 1926. Scale [1:8]. -- Scale [1:24] (THCA, File K-5-17, Dwg. 8722)
28. Toronto Harbour Commissioners, photocopy of Proposed extension to Gooderham & Worts' intake, 9 Nov. 1926. Scale [1:96]. (THCA, File Z-10-2, Drawing 8942)
29. Toronto Harbour Commissioners, Plan showing shore lines and general conditions of north-east section of harbour, from Princess Street to east of Cherry Street, and location of Don River in 1847, 27 Dec. 1930, Scale [1:1 200]. (THCA, File B-5-11, Drawing 9594)

Site Plans

30. [Toronto Harbour Commissioners], Bulkhead wall from Yonge Street easterly, [193-?], Scale [1:1 800]. Ink on linen. (THCA, PD 2/7/38)
31. [Toronto Harbour Commissioners], Bulkhead wall, section E-F, at foot of Parliament St., built in 1926-7 for Gooderham & Worts Ltd. [193-?]. Scale [1:24]. Ink on linen (THCA, PD 2/7/42)
32. Toronto Harbour Commissioners, Suggested diversion of Gooderham & Worts' intake pipe, 2 Feb. 1939. Scale [1:48]. (THCA, File K-5-17, Dwg. 11163; copy in G&W On-site Collection)
33. [Toronto Harbour Commissioners], The Toronto Harbour Commissioners and Victory Mills Limited, 17 Nov. 1944; rev. 19 Feb. 1947. Scale [1:720]. Ink on linen. Shows lands leased to Victory Mills Ltd. and G&W; location of intake pipe, waterworks tunnel, railway trackage and rights of way. (THCA, File EN-9, Dwg. 11792 B)
34. Margison, Babcock & Associates Ltd., Windmill, Parliament and Fleet Sts., Toronto. Structural, foundation details and site plan, 15 Oct. 1953. Scale [1:96]. Copy. (THCA, File E-7-9, Dwg. 13989)
35. Margison, Babcock & Associates Ltd., Windmill, Parliament and Fleet Sts., Toronto. architectural, elevation, plans & details, 30 Oct. 1953. Scale [1:24]. Copy. (THCA, File E-7-9, Dwg. 13989)
36. Toronto Harbour Commissioners, Suggested relocation & widening of Parliament Street & **realignment** of railway trackage, Queen's Quay to Fleet Street, Study No. 1, 8 Mar. 1955. Scale [1:480]. (THCA, File Z-1-1, Dwg. 13395)
37. Toronto Harbour Commissioners, [Suggested relocation & widening of Parliament Street], Study No. 2, March 1955. Scale [1:480]. (THCA, File Z-1-1, Dwg. 13395)
38. Toronto Harbour Commissioners, Suggested relocation & widening of Parliament Street & **realignment** of railway trackage, **Queen's** Quay to Fleet Street, Study No. 3, 9 Mar. 1955. Scale [1:480]. (THCA, File Z-1-1, Dwg. 13395; copy found in G&W On-site)

Site Plans

39. Plan of Dock area, 28 Jan. 1959, General layout of Marine Terminals 15, 16 and 17, Railway Trackage and other facilities on the Queen Elizabeth Docks at Parliament Street and Queen's Quay. (**G&W On-site**)
40. Gooderham & Worts Ltd., Extension of 10" molasses pipeline to dock #17, 7 May 1959, rev. 20 May 1959. Scale [**1:240**]. (THCA, File K-5-17, Drawing 13847)
41. Toronto Harbour Commissioners, Gooderham & Worts Limited and the Toronto Harbour Commissioners, 8 Feb. 1961. Scale [**1:240**]. (THCA, File EN-15, Drawing 13976)
42. Toronto Harbour Commissioners, photocopy of Proposed division of old Parliament St., from Queen's Quay to Lakeshore Blvd. E., August 1964. Scale [**1:240**]. (THCA, File **Z-1-1, Dwg.** 15684)
43. City of Toronto, City Surveyors Dept., copy of Compiled plan of lot 10, parts of lots 11, 25 and 26, Reg'd. Plan E-694, Part of Block **A, Reg'd.** Plan E-674, Part of the Marsh Lands and Part of the **Waterlot** (Patent to Harbour Commissioners, Nov. 4, 1925) re: relocation of Parliament Street, south of Lake shore Blvd. East, 31 Jan. 1967, rev 3 Apr. 1967. Scale [**1:240**]. (THCA, File 1-1-1, Dwg. 15684; copy also in G&W On-site)

C. Property Grants, Deeds and Mortgages

The first twenty-eight items below were received by Gooderham & Worts Limited from The Old Windmill, Limited on 23 Jul. 1926, and are transcribed as they appeared on a contemporary list. It appears they were handed over for examination to the company's solicitors (**Rowell, Reid, Wright & McMillan**) who returned them on 5 Jan. 1928, together with an additional eleven items, shown as nos. 29 to 40. Today nos. 20, 32, 33, 35 and 39 are missing from the **G&W** On-site Collection, where all other items listed below are found.

1. Deed, 10 **Dec.** 1847, Toronto General Hospital to William Gooderham for lots 2, 3, 4 and 5, south side of Mill Street

Property Grants, Deeds and Mortgages

2. Deed, 14 Jul. 1834, Rev. John Strachan and others to William Gooderham for lot 6, south side of Mill Street. Framed. There is also a notarized copy.
3. Deed, 10 **Dec.** 1847, Toronto General Hospital to William Gooderham, lots 7 and 8, south side of Mill Street
4. Deed, 29 Jan. 1877, Mrs. M. A. **Fitzhenry** to William Gooderham, lot 9, south side Mill Street. With earlier deeds, other papers and a list of these dated November 1890.
5. Deed, 19 Jun. 1847, William Stark to J.G. Worts, west half lot 10, south side Mill Street
6. Deed, 12 May 1866, Grand Trunk Railway to William Gooderham, east half lot 10, south side Mill Street
7. Deed, 6 Feb. 1854, James Stock et **ux.** to J. G. Worts, west half lot 11, south side of Mill Street
8. Deed, 20 Jan. 1853, Toronto General Hospital to J. G. Worts, east half lot 11, south side of Mill Street
9. Deed, 27 Jul. 1848, Toronto General Hospital to J. G. Worts, lots 7, 8 and 9, north side of Mill Street
10. Deed, Toronto General Hospital to William Stark, west half lot 10, north side of Mill Street
11. Deed, 8 Nov. 1849, Toronto General Hospital to J. G. Worts, east half lot 10, north side of Mill Street
12. Abstract **of** title, for lot 10, north side of Mill Street
13. Deed, 4 Apr. 1889, Edward B. Osler to Gooderham & Worts Ltd., lots 7, 8, 9, 10 and 11, north side of Mill Street
14. Agreement and lease, 5 Feb. 1889, between Gooderham & Worts Limited and Canadian Pacific Railway

Property Grants, Deeds and Mortgages

15. Deed and copy, 31 Jan. 1882, between William Gooderham and Grand Trunk Railway regarding right of way
16. Deed and copy, 25 Jun. 1889, between Grand Trunk Railway and Gooderham & Worts Limited regarding right-of-way and transfer of lots 11 and 12, south side of Mill Street
17. Release, 31 Jan. 1902, Gooderham & Worts Limited and Canadian Pacific Railway
18. Deed, 31 Jan. 1902, between Gooderham & Worts Limited and Canadian Pacific Railway re lots on the north and south side of Mill Street; also regarding height of building permitted to be erected on lot 2, south side of Mill Street
19. Agreement, 4 Sept. 1900, between Canadian Pacific Railway and Gooderham & Worts Limited re lands on Mill Street
20. Notice, 30 Oct. 1901, between Ontario & Quebec Railway and Canadian Pacific Railway and Gooderham & Worts Limited re payment due.
21. Deed, 6 Oct. 1884, William G. Gooderham to Gooderham & Worts Limited re distillery lands
22. Deed, 18 **Dec.** 1882, George Gooderham to Gooderham & Worts re distillery lands
23. Deed, 18 **Dec.** 1882, George Gooderham to **Gooderham** & Worts Limited re distillery lands
24. Deed, 3 Nov. 1881, executors of William Gooderham and J. G. Worts to George Gooderham
25. Bargain and sale, 1 Feb. 1868, William Gooderham to Gooderham & Worts re distillery lands, etc.
26. Deed, 8 May 1903, Gooderham & Worts Limited to The General Distilling Co. Ltd. re property on south side of Mill Street
27. Deed, 1 **Dec.** 1919, General Distilling Co. Ltd. to Gooderham & Worts Limited, transferring back lands referred to in #26 above.

Property Grants, Deeds and Mortgages

28. Agreement, 9 Mar. 1915, between National Iron Works, Limited, and Gooderham & Worts Limited re slop pipe and crib in Toronto Bay
29. List, prepared by The Old Windmill Limited to cover documents 1 through 28 above.
30. Certified copy of License in Mortmain, 10 July 1925. Included with it are a license dated Feb. 1963 which renewed a license of 1948, and some correspondence of **Dec.** 1962.
31. Copy of charter of incorporation of Gooderham & Worts, Limited, 28 December 1923. This is the corporation formed to hold certain assets being sold to H.C. Hatch and associates by The Old Windmill, Limited, a company created by renaming the original Gooderham & Worts Limited. The six Gooderham vendors signed the charter.
32. Declaration, 23 Jul. 1926, by W.G. Gooderham in regard payment of mortgage
33. Declaration, 15 Jul. 1926, by W.G. Gooderham in connection with title
34. Grant, 21 Jan. 1851, Crown to William Gooderham, water lots in front of lots 4 and 5. Registered as No. **4386-E.S.**
35. Patent, 12 Jan. 1848, registered as No. 4385-E.S.
36. Grant, 11 Feb. 1889, Crown to Gooderham & Worts (Limited) covering water lots. Registered as No. 4384-E.S.
37. Grant, 12 Jul. 1858, Crown to William Gooderham, water lot 4, south side of Front Street. **Reg'd.** as No. 4387-E.S. Framed. Notarized copy exists also.
38. Quit claim, 11 Jul. 1913, by H. M. the King to Gooderham & Worts Ltd. of water lots in City of Toronto. Unregistered.
39. Agreement, W.G. Gooderham and H.C. Hatch, 22 December 1923
40. Conveyance, 10 Jul. 1926, The Old Windmill Limited to Gooderham & Worts, Limited. Registered as No. 9891-E.P.

Property Grants, Deeds and Mortgages

41. Mortgage, **Dec.** 1923, Gooderham & Worts Limited to Gooderham & Worts Ltd.
42. Mortgage, **Dec.** 1923, Gooderham & Worts Limited to The Old Windmill Ltd.
43. List of Conveyances, Mortgages, etc., taken by H.C. Hatch, 3/11/27, with those returned checked off.
44. Deed, 20 Jun. 1928, Toronto Harbour Commissioners to Gooderham & Worts Limited, for dock site at foot of Parliament Street. Copy plan attached.
45. Deed, 30 Jul. 1934, Gooderham & Worts Limited to Liquid Carbonic Canadian Corp. covering lots 2, 3 and pt. 4, south side Mill Street
46. Affidavit and deposit, 2 Aug. 1934, by W. G. Gooderham in matter of title to water lots 2, 3, 4, 5 and 6, Registered Plan 108
47. Deed and declaration, 3 May 1961, Gooderham & Worts Ltd. to Toronto Harbour Commissioners for part of dock property.
48. Deed, 8 Jul. 1968, Liquid Carbonic to Gooderham & Worts Limited transferring back the land described in #45 above. Also included is correspondence; copy of 1934 agreement between G&W and Liquid Carbonic; 1940 plan of southeast corner of Mill and Parliament streets and 1949 plot plan.

D. Paintings, Sketches and Engravings

1. Thomas Young (**c.1805-1860**), General View of the City of Toronto, U.C., 1835, lith. by N. Currier, New York. The view is taken across the water from east of the windmill, seen along the right edge. (MTRL, T-10247; see illustration p. 153)
2. John George Howard (**1803-1890**), New Gaol and proposed Courthouse, Front and Berkeley Streets, Toronto, c. 1838, watercolour on card. The windmill with its sails or sweeps still in place is seen in the background. Some evidence points to their having been removed in 1846. (MTRL, T-11968; see illustration p. 155)

Paintings, Sketches and Engravings

Francis Hincks Granger (1829-1906), Toronto in 1849, pencil with touches of purple ink on seven sheets of wove paper joined, 1849. At the right end of the panorama appear **G&W's** storehouse and mill-distillery; also William **Gooderham's** house. (MTRL, T-33315; See illustration p. 157)

4. William Armstrong (1822-1914), **View of the Mill and Distillery from the east**, painted c. 1855, watercolour, signed lower right. (HW Collection; see illustration p. 159)

William Armstrong (1822-1914), **View of the Windmill**, painted c. 1855, watercolour, signed 'WA,' lower left. Based on **Young's** engraving of 1835; Armstrong did not arrive in Canada until 1851. (HW Collection; see illustration p. 159)

David D. Robertson (fl. 1854-70), **Views of the Distillery of Messrs. Gooderham & Worts, Toronto**, The Canadian Illustrated News [Hamilton], No. 24, April 25, 1863, pp 282-3 and Supplement. Twelve woodcut engravings: No. 1 - Boiler House; No. 2 - Engine Room; No. 3 - Machinery, first half; No. 4 - Stone Floor, Grinding; No. 5 - Machinery, second section; No. 6 - Mashing Room; No. 7 - Fermenting House; No. 8 - Still Room, one section; No. 9 - Rectifying Room, one section; and three unnumbered plates: Front View; Store House, Wharf and Grain Elevator; Distillery, Malting House, Old Wind-mill - View of North Side. (MTRL; **Baldwin** Room; see illustrated as part of Appendix B, pp. 94-99. Some images are covered by a paper patch holding a tear together until conservation can be undertaken)

View of the Streetsville [G&W] Flax works, The Canada Farmer, 2 Jul. 1866, vol. III, p193.

8. **Views of the buildings and wharf on the company's letterhead, c.1868**. (MTRL, **Baldwin** Room, S24; see illustration on front cover. Other examples, closely trimmed, are found in scrapbooks in the HW Archives and **Baldwin** Room)

The extensive **Lanman & Kemp** correspondence at MTRL covers a period from 1864 to 1879, and allows the introduction of this letterhead to be identified with fair accuracy as having taken place in April 1868. The heading in previous use proclaimed G&W as '**Distillers**,

Paintings, Sketches and Engravings

Millers, Maltsters and Linen Manufacturers.' However, the burning of **G&W's** flax mill at Streetsville in January 1868 and decision to not rebuild dictated a new letterhead.

In the central panel the malt house is shown with only one kiln tower at the far end, while the structure between the malt house and building south of it is one storey in height, rather than two as it was later. In late 1868 the letterhead was altered slightly to accommodate "Established" across one end of the panel and "A.D. 1832" on the other.

9. Gooderham & Worts, 1855, oil on canvas, attributed to John Colin Forbes (1846-1925). Forbes was too young to have made the painting in the year depicted. It is based on Armstrong's work : above. (HW Collection; see illustration p. 161)
10. Gooderham & Worts Distillery, established 1832. Burnt 26 October 1869-at work 4 months afterwards, Oil on canvas, painted c. 1870. The stone **mill-**distillery and adjacent fermenting cellar are seen ablaze. The malt kilns at the right edge of the picture are still at their original height. (HW Collection; see illustration p. 163)
11. Gooderham & Worts Distillery, established 1832. Restored building - 1st of May 1870, oil on canvas, painted c. 1870. This is from the same point of view as the preceding canvas, and was probably by the same artist. One detail, however, is different between the pair and jars the eye: in the fire-view the porticoed building right of the arch in the low wall is a brick colour, but is stone in the later painting. It has always been brick. (HW Collection; see illustration p. 163)
12. Gooderham & Worts, 1870, oil on canvas, painted between 1872-77. At the right edge is a storehouse completed in 1872, but dormer windows that lit the attic of the distillery by 1877 do not appear. (HW Collection; see illustration p. 165)
13. Gooderham & Worts Distillery, plate 74 opposite page 348 in J. Timperlake, Illustrated Toronto: Past and Present, Toronto: Peter A. Gross, 1877. Dormer windows light the attic in the distillery building. (MTRL, **Baldwin** Room)

Paintings, Sketches and Engravings

14. William D. Blatchly (1838-1903), Gooderham & Worts Distillery, 1884, watercolour. In this panoramic view from the water, the north end of the malt kilns has been rebuilt to a substantially greater height, and a fourth storey and cupola have been added to the two central bays of the Pure Spirits building. (HW Collection; see illustration p. 165)
15. Arthur Henry Hider (1870-1952), Gooderham & Worts, Ltd. Toronto, [1896], colour lithograph on wove paper, Toronto Lithographing Co. (MTRL, T-30536)
16. H. Oswald Stacey (1909-1968), Winter Morning, York, 1832. c. 1950. Oil on canvas. Reproduced on a Christmas card sent by G&W. (HW Collection; see illustration p. 167)
17. H. Oswald Stacey (1909-1968), Winter Fete on Toronto Bay. c. 1950. Oil on canvas. Reproduced on a Christmas card sent by G&W. (HW Collection; see illustration p. 169)
18. Anon., View of Gooderham & Worts, oil on canvas, likely painted in 20th century. Similar to and probably derived from H-9 above, attributed to Forbes. (MTRL, Baldwin Room)

E. Photographs

1. Employees, early 1900s, original print. Shows 80 to 100 employees in front of east wall of malt house; sign over door includes Royal cypher 'ER' for King Edward VII. (HW Archives, Box 12-A)
2. Trinity Street, looking south across CPR towards Mill St., c.1907 (MTRL, T-30222)
3. Trinity Street, looking north across CPR tracks above Mill St., c.1907. Visible on the east side of the street beyond the crossing are two semi-detached houses at 53-55 Trinity Street built by J.G. Worts in 1876 and the G&W cooperage erected in 1906. (MTRL, T-30223; see illustration p. 171)
4. View of Gooderham & Worts' property from the Inner Harbour, 21 Nov. 1912, by Arthur Goss. (THCA, PC 2/139)

Photographs

5. Truck and trailer loaded with bottled water turning into yard south of cooperage on Trinity Street, in Canadian Courier, V. XVI, no. 5, Jul. 4, 1914, p. 7, 'Vogue of the Motor Truck,' by Britton B. Cooke. At the time of the article George Edgar Gooderham was the manager of a G&W subsidiary, "York Springs." Its offices are listed in directories at 49 Wellington St. E.
6. Album of views of head office, **Hiram Walker & Sons**, Walkerville, c. 1910 (G&W On-site)
7. Mouth of the old Don, Gooderham & Worts Dock and Grain House, Tank Car B.A.O.X. 141, 2 October 1915 (NAC, Merrilees Collection, Neg. PA-136358)
8. Photographs of the Distillery of Gooderham & Worts Limited, Toronto, Canada, operated by British Acetones Toronto Limited (Imperial Munitions Board), 1916-18. Dates noted on each print. Photographer unknown. (CTA, SC-583; see Appendix A, p. 79, for a listing and description)

This collection of 168 photographs is without equal as a pictorial record of the distillery during an important time in its history. Complementing the photographic record is a book, Report of the British Acetones Toronto Limited, May 1916-November 1918, by Col. A.E. Gooderham, who was managing director of British Acetones.

9. N.E. Section of harbour, Gooderham & Worts wharf, 29 Mar. 1916 (NAC, Merrilees Collection, Series C-012736, item 941)
10. Construction of Toronto Street Railway line to Port Industrial District, 19 Jul. 1917, by Arthur Beales. View looking southeast from point D, showing cattle byres of G&W in background. (NAC, Merrilees Collection, PA-167067; copy held by THCA as PC 1/1/2199)
11. Gooderham & Worts's elevator, coal shed and distillery, 19 Nov. 1918, attributed to Arthur Beales. Horses and carts are being used to dump fill materials along western edge of National Iron Works' property. (NAC, Merrilees Collection, Neg. PA-136346; copy held by THCA as PC 1/1/3391)

Photographs

12. View looking northwest at National Iron Works' buildings, with G&W wharf and central waterfront in background, 19 Nov. 1918, attributed to Arthur Beales. Horses and carts are being used to dump fill materials along western edge of National Iron Works' property. (NAC, Merrilees Collection, Neg. PA-136347; copy held by THCA as PC 1/1/3390)
13. Gooderham & Worts, Toronto, Dec. 16, 1918 (NAC, Toronto Harbour Commissioners Collection, Neg. PA-096856)
14. **Gooderham's** Distillery, 19171 (CTA, William James Collection, Neg. 3061)
15. Old building, Gooderham & Worts Distillery, 1924, by F.J. Brooks (NAC, Merrilees Collection, Series C-020416)
16. **G&W (Men's)** Baseball Team, 1925, Winners of Intermediate division, T.I.A., by Mackintosh Studios, Toronto. Card-mounted, with names. (G&W On-site)
17. **G&W Ladies Softball Team**, 1925, by Mackintosh Studios, Toronto, Card-mounted, with names. (G&W On-site)
18. Wooden pilings for stone levee at the foot of Parliament Street, 28 Sept. 1926, by Arthur Beales (THCA, PC 1/1/7195)
19. View looking southwest from roof of gasometer near corner of Front and Trinity Streets toward Toronto Grade Separation, Parliament Street subway, and progress of reclamation south to bulkhead wall, by Arthur Beales, 14 May 1928. (NAC, Merrilees Collection, Acc. 1980-149, Group C, Sub-series I, Pt. I, item 7849; copy in THCA as PC 1/1/7849)
20. Looking south from Gooderham & Worts, Toronto, 14 May 1928, attr. to Arthur Beales (NAC, Merrilees Collection, Neg. PA-136482)
21. Mill at Meadowvale, [Ont], July 4, 1931, taken under Eric Arthur's direction. (OA, Arthur Collection, 43-E-1(1); see illustration p. 173)
22. View looking east from top of gasometer near corner of Front and Trinity Streets, by Arthur

Photographs

- Beales, 22 Oct. 1931. (NAC, Merriless Collection, Acc. 1980-149, Group C, Sub-series I, Part I, item 9640; copy at THCA as PC 1/1/9640)
23. View looking east from top of gasometer near corner of Front and Trinity Streets, by Arthur Beales, 22 Oct. 1931. (NAC, Merriless Collection, Acc. 1980-149, Group C, Sub-series I, Part I, item 9641; copy at THCA as PC 1/1/9641)
 24. People seen in Window, 1934. Employees at distillery (HW Archives Box 12-A)
 25. Double-header C.N.R. train passing Gooderham & Worts, 10 Oct. 1934 (NAC, Merrilees Collection, Series C-010730, item 10730)
 26. Gooderham & Worts Distillery, established 1832, n.d. (NAC, Merrilees Collection, Neg. PA-136485)
 27. Truck, Gooderham & Worts Ltd., n.d. (NAC, Merrilees Collection, Series B-005244, item 5244)
 28. G&W Long Service Men who were entertained at luncheon, 1 Feb. 1937. Two new G&W delivery-trucks are seen in background. (G&W On-site)
 29. Ice in Parliament Street Slip, with buildings of Gooderham & Worts in background, 24 March 1939, by Arthur Beales. (THCA, PC 1/4/56-2)
 30. Ice in Parliament Street Slip, with buildings of Gooderham & Worts in background, 24 March 1939, by Arthur Beales. (THCA, PC 1/4/56-3)
 31. Scows at Gooderham & Worts' dock, 11 Sept. 1941, by Arthur Beales. A tug and scow C.M.C. No. 10 are in Parliament Street slip to discharge cargo into pipeline to distillery. (THCA, PC 1/1/11710)
 32. Scows at Gooderham & Worts' dock, 11 Sept. 1941, by Arthur Beales. Scow C.M.C. No. 10 is in Parliament Street slip discharging cargo into pipeline to distillery, seen in background. (THCA, PC 1/1/11711)
 33. Scows at Gooderham & Worts' dock, 11 Sept. 1941, by Arthur Beales. A tug and scow C.M.C. No. 10 are in Parliament Street slip to discharge cargo into pipeline to distillery. (THCA, PC 1/1/11712)

Photographs

34. View looking north toward Gooderham & Worts' dock and Parliament Street subway, [194-], by Arthur Beales (THCA, PC 1/2/302)
35. Pensioners' and Long **Servicemens'** Dinner, 29 Mar. 1946. (G&W On-site)
36. Long-service employees, with names. In The Evening Telegram [Toronto], 7 Mar. 1947
37. Aerial view looking west from Cherry Street across East Bayfront, showing progress of reclamation south of Queen's Quay, [Sept. 1949?], by Gilbert Milne (THCA, PC 1/3/279)
38. Six low-level aerial views of Gooderham & Worts Distillery, c. 1950, (OA, Northway-Gestalt Collection, C-30, nos. ES 4-200 to 202 and ES 4-234 to 236; see illustration p. 175)
39. G&W operations conference at Walkerville, 1953; G&W sales meeting c. 1950; Christmas party; **O.D. Johnston** (HW Archives, Box 12-A)
40. Gooderham & Worts, foot of Trinity Street showing replica of windmill, 11 April 1954, by J.V. Salmon (MTRL, Baldwin Room, S 1-430)
41. Seven aerial views of Distillery and Old Windmill, c. 1955, nos. A 23618-1 to A 23618-7 (G&W On-site)
42. High level aerial view of waterfront looking northwest from Cherry Street, c. 1955, (OA, Northway-Gestalt Collection, C-30, ES 6-171)
43. General low-level aerial view of Toronto looking west from Fleet Street and Don River, [1958] (OA, Northway-Gestalt Collection, C-30, ES 10-781)
44. Herb E. Hatch congratulating William H. Deller, 1960, on fifty years' service to G&W (HW Archives, Box 12-A; also G&W On-site)
45. **Herb E. Hatch** and O.D. Johnston congratulating James Barry and Norman Hardy, 1960, on fifty years service to G&W (HW Archives, Box 12-A; also G&W On-site)
46. Group of a dozen men; presentation ceremony, c. 1960, by Pringle & Booth. Copy negs. (G&W On-site)

Photographs

47. Replica windmill being demolished, Globe & Mail, 21 Mar. 1960, p. 9
48. Approx. 25 **informal** pictures taken at retirement dinner in Walkerville for O.D. Johnston, president of **G&W**, 8 Sept 1960. Also negatives. (G&W On-site)
49. Low level aerial view of **Gardiner** Expressway pathway, Woodbine to Cherry Street, Apr. 1962 (OA, Northway-Gestalt Collection, C-30, ES 16-638, 639)
50. Low level aerial views of **Gardiner** Expressway under construction near Cherry Street, Nov. 1962 (OA, Northway-Gestalt Collection, C-30, ES 18-226 to 241)
51. Low level aerial views of **Gardiner** Expressway at Don River under construction, Jul. 1963 through Jul. 1965 (OA, Northway-Gestalt Collection, C-30, ES 19-389 to 399, 415 to 424 and 711 to 721; ES 20-438 and 820 to 829; ES 21-79; ES 22-37)
52. **G&W** Employees, 1965, approximately 10 pictures. (HW Archives Box 12-A)
53. Approx. 85 exterior views, 1972-74, by CIHB recording teams. 35 mm, b+w format (Parks Canada, CIHB, geocode 06101004500002, buildings A to M)
54. Aerial view looking northeast from Inner Harbour across Queen Elizabeth Docks and Keating Channel, 27 Dec. 1979, by Les Baxter. (THCA, PC 14/14205)
55. Herb C. Hatch, former president of G&W, 27 May 1982, speaking at the 150th year Reception at the Plant (G&W On-site)
56. George A. Wilton, v.p. of G&W Ltd., 27 May 1982, speaking at the 150th year Reception at the Plant (G&W On-site)
57. Four company officers, 27 May 1982, at the 150th year Reception at the Plant. Names and titles on reverse (G&W On-site)
58. Four large aerial views in colour, 1982, by Larry Turner, Engineering Division, Hiram Walker & Sons, Walkerville. (G&W On-site)

Photographs

59. Approx. 30 exterior views in colour, 1984/5, by Frank Mascarin, Engineering Division, Hiram Walker & Sons, Walkerville. (G&W On-site)
60. Barge San Juan and tug Atomic at Gooderham & Worts' dock at foot of Parliament Street, 21 June 1988, by Michael Moir. (THCA, PC 21/57)
61. Molasses being pumped from barge San Juan into Gooderham & Worts¹ pipeline at the foot of Parliament Street, 21 June 1988, by Michael Moir. (THCA, PC 21/58)
62. Several views, 1988, taken to illustrate report, Gooderham & Worts Distillery Complex, #1988-38, for the Historic Sites and Monuments Board of Canada. (Parks Canada, Ottawa, Architectural History Branch files)
63. 108 coloured views of exteriors in 8 x 10 format; and 546 coloured views of exteriors and interiors in 4 x 6 format; one large panoramic view from the CN Tower, May 1988, by Percy Frith, Hiram Walker & Sons, Walkerville. (CTA, SC-411; other sets as well as the negatives, are in the G&W On-site Collection)
64. Five large format views of exteriors in colour, commissioned July 1989 by G&W from Steven Evans, Toronto, for a poster (Steven Evans Studio)
65. 735 exterior and interior views as detailed below, 1991-92, by Heritage Recording Services, DPW, for the Canadian Inventory of Historic Building (CIHB, Parks Canada, Ottawa, HRS-0908)
 - 5 b+w exteriors, 35 mm, 1991
 - 6 coloured-slide exteriors, 35 mm, 1991
 - 185 b+w exteriors, 35 mm, 1992
 - 401 b+w interiors, 35 mm, 1992
 - 112 coloured-slide exteriors, 35 mm, 1992
 - 20 coloured-slide interiors, 35 mm, 1992
 - 6 exterior transparencies, 4x6" format, 1992
66. 538 exterior and interior views as detailed below, plus assorted floor plans and moulding profiles, 1993-94, by Heritage Recording Services, DPW, for

Photographs

Canadian Inventory of Historic Building as part of the Designated Building Recording Program (CIHB, Parks Canada, Ottawa, HRS-0908)

468 b+w views, 35 mm
40 coloured slides, **35mm**
30 photogrammetric plates

F. Motion Pictures and Videos

1. Red Brick and Pure Spirits, Produced by Polymath & Thaumaturge Inc. with YYZ Pictures. 15 minutes. Toronto Historical Board, 1990. (video).

G. Newspaper Reports and Magazine Articles

1. 'Steam Engines,' Colonial Advocate [York], 4 July 1833, p. 3
2. "Mr. Faulkener, engineer to Gooderham & Worts, exhibited a small high-power engine at the Fair of the Toronto **Mechanics'** Institute." The Globe, Oct. 21, 1848.
3. '**Messrs.** Gooderham & Worts, City Steam Mills and Distillery,' The British Colonist [Toronto], 16 Apr. 1850, p. 2. See Appendix B, p. 89.
4. ". . . Breweries and distilleries are numerous. Messrs. Gooderham & Worts, for example, employ from 20 to 30 men, in their different departments. They make about 800 gallons of whiskey a day, and grind about 300 bushels of wheat. They commenced business in 1831. The firm ship annually about 325,000 bushels of wheat to Britain, from their wharf at the east end of the city. . . ." The Globe [Toronto], 13 Dec. 1856, Supplement, p. 4. Produced in support of **Toronto's** bid to be chosen as the capital of Canada, this supplement is rare and does not appear on most microfilms of The Globe. A copy is found in MTRL, **Baldwin** Room.

'New Steam Mills and Distillery,' The Globe, 11 July 1859, p. 2. See Appendix B, p. 90.

Newspaper Reports and Magazine Articles

'Annual review of the Trade of Toronto for 1861: Distillery of Messrs. Gooderham & Worts,' The Globe, 7 Feb. 1862, p. 1. See Appendix B, p. 91.

'Street Architecture: The Building Trade in Toronto-New Malt House &c., for Messrs. Gooderham & Worts,' The Globe, March 26, 1863, p. 2. See Appendix B, p. 90.

'Description of the Distillery of Messrs. Gooderham and Worts, Toronto, Canada West, April 1863,' The Canadian Illustrated News [Hamilton], April 25, 1863, pp. 282-3 and Supplement. See Appendix B, p. 94-99.

View and description of the Streetsville [G&W] Flax works, The Canada Farmer, 2 July 1866, vol. III, p. 193

10. 'Building in Toronto - Cattle Buildings,' The Globe, 3 Nov. 1866, p. 1
11. 'Building in Toronto - More Cattle Sheds,' The Globe, 23 Jul. 1867, p. 1
12. 'Cattle Fattening in Toronto,' The Globe, 3 Oct. 1867, p. 2. See Appendix B, p. 100.
13. 'City News - Flax Mills Closed,' The Globe, 7 Nov. 1867, p. 2
14. 'Destructive Fire at Streetsville. Gooderham & Worts' Linen Mills Burned Down,' The Globe, 27 Jan. 1868, p. 2
15. Letter to editor, objecting to G&W's pollution of the Bay. The Globe, 11 July 1868, Supplement, p. 1
16. 'Progress of Toronto - St. Lawrence Ward,' The Globe, 1 Dec. 1868, p. 1
17. 'Destructive Fire: Burning of Messrs. Gooderham & Worts' Distillery last night,' The Globe, 27 Oct. 1869
18. 'Disastrous Conflagration. Gooderham & Worts' Distillery Destroyed - Immense Destruction of Property - The City brilliantly Illuminated - Spirits on fire on the Bay - No Insurance - Loss over \$100,000," The Daily Leader, 27 Oct. 1869

Newspaper Reports and Magazine Articles

19. 'Messrs. Gooderham & Worts' Distillery,' [the speedy pace of reconstruction], The Daily Leader, 29 Nov. 1869, p. 3. See Appendix B, p. 101.
20. 'Progress of Toronto - St. Lawrence Ward,' The Globe, 3 Jun. 1871, p. 4
21. 'Canadian Manufactures - No. IV, One of the Largest Distilleries in the World: Gooderham & Worts, Toronto,' The Mail [Toronto], 23 Apr. 1872, p. 2. See Appendix B, p. 102.
22. 'City Improvements, St. James and St. Lawrence Wards, Messrs. Gooderham & Worts,' The Mail, 5 Dec. 1872, p. 4
23. 'Progress of Toronto - St. Lawrence Ward,' The Globe, 5 Jun. 1873, p. 4. See Appendix B, p. 101.
24. Article in The Gazette [Montreal], 1877. Quoted in entry on William Gooderham in "The Canadian Biographical Dictionary and Portrait Gallery of Eminent and Self-Made Men, Ontario Volume." Toronto: American Biographical Publishing Company, 1880.
25. 'The Builders - St. Lawrence Ward: The Marsh,' The Globe, 27 Nov. 1880, p. 8
26. 'The Building Trade - St. Lawrence Ward,' The Globe, 15 Oct. 1881, p. 6. "An addition to distillery, owned by Gooderham & Worts; cost \$2,000."
27. Contract Record, v. 41 (19 Jan. 1927), p. 47. A warehouse [Bldg. #74] is to be built for G&W at cost of \$75,000, V.L. Gladman, architect.
28. 'Contracts Awarded,' Contract Record, v.41 (16 Feb. 1927) p. 48. To Dickie Construction for a warehouse for G&W [Bldg. #74].
29. 'Contracts Awarded,' Contract Record, v.41 (6 Apr. 1927) p. 54. To Dickie Construction for a rack warehouse for G&W [Bldg. #75].
30. 'Two Old Firms Joining Hands Means No Change of Name,' Evening Telegram, 14 Oct. 1927

Newspaper Reports and Magazine Articles

31. Contract Record, v. 43 (4 **Dec. 1929**), p. 1428, "Mainly Constructional . . . Officials at Hiram Walker-Gooderham & Worts have made the announcement that the company will begin the manufacture of carbonic acid gas. This gas is a product of the distillery and is used in the soft drink business. A \$300,000 plant for this purpose will be erected at their works in Toronto . . ."
32. The Hiram Walker Club News, May 1939 - **Dec. 1939** passim. Published by Hiram Walker, Peoria, Ill. (HW Archives)
33. The Barclay Family Magazine, March 1945 - July 1952 passim. House journal of Jas. **Barclay** & Co. Ltd., an affiliate that co-occupied the G&W site c. 1941-50 (HW Archives)
34. '**Old Times at the East End of the Bay**,' by C.H.J. Snider, The Evening Telegram, [Toronto] 4 Jan. 1947
35. Canadian Motorist, March 1947, p 59, illustrated. **G&W**, the producers of Hot Shot antifreeze, feted 100 long-serving employees at the Royal York and marked the retirement of president Herb E. Hatch.
36. '**Industry Leaders: Gooderham & Worts, Ltd.**' The Monopoly State Review, vol. 7, no. 6, July 1948, p. 11
37. '**Gooderham & Worts Limited**,' by William Prentice, Canadian Beverage Review, May-June, 1949. See Appendix B, p. 106-112.
38. The Roundtable, **Mar/Apr 1956 - Feb/Mar 1974** passim. (HW Archives)
39. The Spirit, monthly 1952-58; daily 1958-92; now weekly, passim. House journal of Hiram Walker-Gooderham & Worts Ltd. (HW Archives)
40. '**Famed Mill at Meadowvale Razed**,' by Clifford Bowers, Globe & Mail, 8 Apr. 1954
41. 'Windmill Reproduced Close to its Original Site,' by J.C. Boylen, Globe & Mail, 10 Apr. 1954, p. 17

Newspaper Reports and Magazine Articles

42. Hotel and Tavern, May 1954, article on Oswald D. Johnston, president of **G&W**, 1947-1960.
43. '**From** Bags to **Barrels**,' The Telegram, 22 Jun. 1967
44. 'Wheezing and coughing -- but with style,' by Sid **Adelman**, Telegram, 7 Feb. 1970
45. 'The manufacturers that stayed **put**,' by Susan Goldenberg, Globe & Mail, 9 Feb. 1973, p. 29
46. 'Distillery replaced Windmill,' by Donald Jones, Toronto Star, June 14, 1975, p. **G7**
47. '**Bay** Street Marriage of the **Year**,' Toronto Star, 13 Apr. 1980
48. The Ambassador, semi-annual 1982-88; thrice-yearly 1988-93; now quarterly, passim. House journal of Hiram Walker-Allied Vintners. (HW Archives)
49. 'Oldest Distillery Has Spirit after 150 Years,' by Frances Kelly, Toronto Star, 27 Jul. 1982
50. 'Chasing after old windmills,' by Mike Filey, The Sun [Toronto], 17 Apr. 1983, p. S26
51. 'High Spirited Industry - A Waterfront Landmark,' Port of Toronto News, v. 31, no. 4, 1984, pp. 8-9,
52. '**More** than just spirit retained at North **America's** oldest **distillery**,' Real Estate News, 19 May 1989, p. A3
53. '158-year-old distillery is running out of **spirits**,' Toronto Star, 25 Aug. 1990
54. '**Vintage** Spirits,' by John Barber, Globe & Mail, 6 Aug. 1992, Design Section, p. D6

H. Books, Studies and Pamphlets

1. Dun & Bradstreet, Reference Books for Canadian Business, 1864-1983 (OA, MS-489) These published books contain summary ratings. More interesting are the fuller and more candid handwritten-reports sent in periodically by **Dun's** agents, which were

Books, Studies and Pamphlets

used to set the ratings. Those for 19th-century Canada are available in the Baker Library, Harvard Business School, Cambridge, Mass.

Illustrated Atlas of the County of Peel, Toronto: Walker & Miles, 1877, p. 61

Timperlake, J., Illustrated Toronto: Past and Present, Toronto: Peter A. Gross, 1877, pp. 271-3

Robertson, John Ross, Landmarks of Toronto, Toronto: J. Ross Robertson, 1894-1914, v. I, p277; v. II, 642-4, 812-3; v. V, 532-4, 583-5; v. VI, 499, 500.

Kribs, Louis P., Report . . . in connection with the investigation held by the Canadian Royal Commission on the liquor traffic, Toronto: Murray Printing Co., 1894.

Canada. Report of the Royal Commission on the Liquor Traffic, Ottawa: S.E. Dawson, 1895

Spence, Francis Stephens, The Facts of the Case: A Summary of the Most Important Evidence and Argument Presented in the Report of the Royal Commission on Liquor Traffic, c. 1895 (no copy located in Toronto libraries)

Gooderham, A.E., Report of the British Acetones Toronto, Limited, Toronto, Canada, May 1916-November 1918. Toronto: University of Toronto Press, 1919. **xxiii**, 692 p., **[10]** leaves of plates. The only copies of this rare work that have been located are in Ottawa in the National Library and the Canadian Institute for Scientific and Technical Information. The book contains detailed descriptions of **G&W's** buildings and equipment.

Nordyke & Marmon Co., Flour and Cereal Milling Machinery and Mill Supplies. Price book No. 2520. Indianapolis, Ind. **c.1920**. Several pieces of equipment illustrated in this publication can be found on-site today. (**G&W** On-site)

10. Shuttleworth, E.B., The Windmill and Its Times; A Series of Articles Dealing with the Early Days of the Windmill, Toronto: University of Toronto Press, 1924.

Books, Studies and Pamphlets

11. Carnegie, David, The History of Munitions Supply in Canada, 1914-1918, Toronto: Longmans, Green & Co., 1925
12. Symons, Harry L., The Windmill: Notes and Digests from E.B. Shuttleworth's Book. Toronto: Designed and printed by Rous & Mann for G&W to mark its centennial, c. 1932.
13. Gooderham & Worts Ltd., Alcohol in Industry, Toronto, 1938. 26 p., illus. Designed and produced by Brigdens Limited, Toronto.
14. Higgins, Alex, Boiler Room, Questions and Answers, New York: McGraw-Hill Inc., 1945. (G&W On-site)
15. Denison, Merrill, The Barley and the Stream, The Molson Story, Toronto: McClelland and Stewart, 1955
16. Canadian Manufacturers Association. Industry '67, Centennial Perspective. May 1967, pp. 205-07
17. Reaman, G. Elmore, A History of Vaughan Township, 1971, p. 115
18. Ruggle, Rev. Richard, Norval on the Credit River, Erin, [Ont.], Printed br Press Porcépic, 1973, p. 59
19. Rannie, William F., Canadian Whiskey, The Product and the Industry, Lincoln: W.F. Rannie, 1976.
20. Rose, Phyllis, The Gooderham & Worts Distillery Complex, 12 April 1979. A paper prepared for course 412S in Fine Art History under Prof. Douglas Richardson, University of Toronto.
21. Parkin, John Hamilton, Aeronautical Research in Canada, 1917-1957, Ottawa: National Research Council, 1983. Parkin, a mechanical engineer on the construction staff for British Acetones Toronto Limited, was later head of aeronautical research for NRC.
22. Newell, Diane, and Ralph Greenhill, Survivals: Aspects of Industrial Archaeology in Ontario, Erin, [Ont.]: The Boston Mills Press, 1989, pp. 85-108, 'Gooderham & Worts Distillery, Toronto.'

Books, Studies and Pamphlets

23. Otto, Stephen A., Report on Gooderham & Worts Distillery, [for Gooderham & Worts Ltd.], March 1988
24. Historic Sites and Monuments Board of Canada; Julie Harris, Architectural History Branch, Agenda Paper No. 1988-38, Gooderham & Worts Distillery Complex, 1988
25. Parks Canada, In Commemoration of the Gooderham & Worts Distillery Complex, Sept. 16, 1989. Souvenir program for the unveiling ceremony for a historic plaque commemorating G&W erected by the Historic Sites and Monuments Board of Canada.
26. Diamond, A.J., Donald Schmitt and Company, Mark Fram, Polymath & Thaumaturge Inc. and Laventhol and Horwath, Gooderham & **Worts/Triangle** Lands: Urban Planning Study and Heritage Assessment, Final Report for the City of Toronto Planning and Development Department and the Toronto Historical Board, July 1990
27. Hiram Walker-Allied Vintners-Allied Lyons Pension Funds, with a consultant team, Gooderham & Worts: An Urban Design Proposal, Toronto: April 1991
28. At different times Hiram Walker-Gooderham & Worts has had company magazines--The Club News, The Spirit and The Ambassador--to name three which are good sources of information.

I. Architectural and Equipment Plans

The largest number of surviving plans and drawings are in the G&W On-site Collection, although those in a private collection belonging to descendants of David Roberts, Sr. are generally of an earlier date. Some, but not all of the latter, have been copied by Ontario Archives as collection C-32, accession 11597.

In the Roberts Family Collection drawings for G&W buildings are easily confused with others depicting similar buildings having no proven connection to **G&W**, notably those catalogued by Ontario Archives as #11 through #20 and #24. While the latter may have been early proposals for **G&W**, it is also possible that they were schemes for some other client.

Architectural and Equipment Plans

1. David Roberts [Sr.], Toronto, Plan and section [of mill-distillery], 1845. Scale $\frac{1}{4}$ inch to 1 foot. Ink and wash on paper (Roberts Family Collection)
 2. David Roberts [Sr.], Engineer, Toronto, Detail of cast iron column base and capital, 22 Mar. 1859. Full size. Ink and pencil on paper. (Roberts Family Collection)
 3. [David Roberts, Sr?], Sketch plan for mill and distillery, **n.d.** Scale 8 feet to 1 inch. Verso: plan and elevation. Pencil on paper. **n.d.** (Roberts Family Collection)
 4. [David Roberts, Sr?], Sketch plan of distillery, **n.d.** Pencil on paper. **n.d.** (Roberts Family Collection)
 5. [David Roberts, Sr.], Proposed steam mill and distillery, Toronto [Bldgs. **#2-5**], [**c1858**] Ground, first and second floor plans. Scale 8 feet to one inch. Watermark '**1857.**' Annotated "'This is the Exhibit 24 as referred to in the Examination by Mr. [Thomas] **Gundry**, DBR." (**G&W**, On-site)
 6. **D[avid]** Roberts, [Sr.], Architect and Engineer, Toronto, April 1863. End and side elevations with sections and floor plan [for Malt House, Bldgs. **#35-36**]. [Scale 8 feet to one inch]. Signed by Thomas Storm as contractor. Ink and wash on paper. (OA, C-32, **acc.** 11597, # 21, 21-a; see p. 177)
 7. **D[avid]** Roberts, [Sr.], Architect and Engineer, Toronto, April 1863. End and side elevations with sections [for Malt House, Bldgs. **#35-36**]; scale 4 feet to one inch. Ground plan; scale 8 feet to one inch. Signed by Thomas Storm as contractor. Ink on paper mounted on linen. (OA, C-32, **acc.** 11597, **#22**; see illustration p. 179)
 8. **D[avid]** Roberts, [Sr.], Architect and Engineer, Toronto, April 1863. Drawing no. 6. Plan of details for caps, bases, side-plates and columns [for Malt House, Bldgs. **#35-36**]. Scale 2 inches to 1 foot. Signed by Thomas Storm as contractor. Ink and wash on paper. (OA, C-32, **acc.** 11597, #26 and **#26-a**)
- [David Roberts, Sr.], End elevation and section; side elevation and section [for an unexecuted

Architectural and Equipment Plans

storehouse closely resembling the Malt House],
n.d. Scale 4 feet to the inch. Ink and wash on
linen. (OA, C-32, **acc.** 11597, **#23**)

10. [David Roberts, Sr.?), Office and **coopers'** shed
[Bldgs. #28, 31-33], sections, c. 1863. Scale 8
feet to the inch. (**G&W** On-site)
11. **D[avid]** Roberts, [Sr.], Toronto, Cattle Shed,
April 1864. (**G&W** On-site)
12. Plan of Messrs. Gooderham & Worts Premises on
Trinity Street, Toronto, c.1867. Ground floor
plan. Scale 16 ft. to the inch. (**G&W** On-site)
13. Plan similar to preceding except some additional
equipment is shown and tables are included listing
all equipment and giving dimensions as well as
liquid and cubic volumes. (**G&W** On-site)
14. Plan of Messrs. Gooderham & Worts Premises on
Trinity Street, Toronto, c.1867. Second floor
plan. Scale 16 ft. to the inch. (**G&W** On-site)
15. Plan similar to preceding except some additional
equipment is shown and tables are included listing
all equipment and giving dimensions as well as
liquid and cubic volumes. (**G&W** On-site)
16. Plan of Messrs. Gooderham & Worts Premises on
Trinity Street, Toronto, c.1867. Third floor plan.
Scale 16 ft. to the inch. (**G&W** On-site)
17. Plan of Messrs. Gooderham & Worts Premises on
Trinity Street, Toronto, c.1867. Fourth floor
plan. Scale 16 ft. to the inch. (**G&W** On-site)
18. Plan of Messrs. **Gooderham** & Worts Premises on
Trinity Street, Toronto, c.1867. Fifth floor plan
showing equipment and giving liquid and cubic
volumes. Scale 16 ft. to the inch. (**G&W** On-site)
19. Grinding Mill Cyliners, c. 1867. Full section, 'as
used by T.S.C. for grinding oven.' (**G&W** On-site)
20. **D[avid]** Roberts, [Sr.], Architect and Engineer,
Toronto, Plate and brackett (sic) details, 1869.
Scale one-quarter full-size. Ink and wash on
linen. (Roberts Family Collection)

Architectural and Equipment Plans

21. D[avid Roberts, Jr. architect, Toronto, December 1869. Details of truss. Probably for rebuilding the distillery [Bldgs. #2-5] after the fire. Scale one inch to one foot. Ink and wash on paper. (OA, C-32, acc. 11597, #25-b, 25-c, 25-d. Other versions, unsigned and undated, of a nearly-identical drawing are found as #25 and 25-a)
22. Fred. W. Wolf, architect, Chicago, Ill. East-west section through north end of Malt Kiln [Bldgs. #35-35], [c1877-84]. Scale $\frac{1}{2}$ inch to 1 foot. Wash on linen. Probably related to the raising of the kilns to their present height. (G&W On-site)
23. Foundation plans for grain elevator for Messrs. Gooderham & Worts, Toronto, Probably 1860s-1870s. Scale one inch to 4 feet. Paper on linen backing. (G&W On-site)
24. Stewart & Denison, architects, Toronto, Design for grain elevator for Messrs. Gooderham & Worts, July 1881. Side and end elevations; longitudinal sections. Scale 1 inch to 8 feet. (G&W On-site)
25. Stewart & Denison, architects, Toronto, Design for grain elevator for Messrs. Gooderham & Worts, July 1881. Plans and sections. Scale 1 inch to 4 feet. (G&W On-site)
26. Stewart & Denison, architects, Toronto, Design for grain elevator for Messrs. Gooderham & Worts, July 1881. Longitudinal section. Scale 1 inch to 8 feet. (G&W On-site)
27. Stewart & Denison, architects, Toronto, Design for grain elevator for Messrs. Gooderham & Worts, July 1881. Framing plan. Scale 1 inch to 8 feet. (G&W On-site)
28. Section of Distillery, n.d. Signed and dated 20 Jul. 1882 by W. Reddan as Excise officer-in-charge. (G&W On-site)
29. Cross-section of distillery with new pipes pencilled in, [188-?] Watermarked '1885.' (G&W On-site)
30. Sketch of piled foundations for building to be re-erected for Messrs. Gooderham & Worts, [188-?]

Architectural and Equipment Plans

Shows line of old building, roadway and new location. Scale one-half inch to one foot. (G&W On-site)

31. **D[avid]** Roberts, [Jr.], Rack Storage Building [Bldg. #42], [c1889/90]. Front elevation. Scale 4 ft. to 1 inch. Signed by A. Weller & Co. as contractor. (G&W On-site)
32. **D[avid]** Roberts, [Jr.], Rack Storage Building [Bldg. #42], [c1889/90]. West-end elevation. Scale 4 ft. to 1 inch. Signed by A. Weller & Co. as contractor. (G&W On-site)
33. **D[avid]** Roberts, [Jr.], Rack Storage Building [Bldg. #42], [c1889/90]. Ground-floor plan. Scale 4 ft. to 1 inch. Signed by A. Weller & Co. as contractor. (G&W On-site)
34. **D[avid]** Roberts, [Jr.], Rack Storage Building [Bldg. #42], [c1889/90]. Section through A-B. Scale 4 ft. to 1 inch. Signed by A. Weller & Co. as contractor. (G&W On-site)
35. **D[avid]** Roberts, [Jr.], Rack Storage Building [Bldg. #42], [c1889/90]. Section through C-D. Scale 4 ft. to 1 inch. Signed by A. Weller & Co. as contractor. (G&W On-site)
36. **D[avid]** Roberts, [Jr.], Rack Storage Building [Bldg. #42], [c1889/90]. Rail and track plan. Scale 4 ft. to 1 inch. Signed by A. Weller & Co. as contractor. (G&W On-site)
37. [David Roberts, Jr.] Twenty-nine drawings for buildings and structures for General Distilling Co. Ltd., north and south sides of Mill Street west of Trinity Street, 1902-03. Ink on linen. (G&W On-site)
38. Molasses tank and pump. Three blueprints dated 24 Mar. 1906 and later for pumps supplied by Blake-Knowles division of Worthington Pump & Machinery. Also correspondence from other suppliers of tanks and pumps. (G&W On-site)
39. V.L. Gladman, Toronto, Case warehouse [Bldg. #74], c1927. Copies of plans are filed with application for building permit. (City of Toronto, Central Records, B.P. #95536, 1927)

Architectural and Equipment Plans

40. T. Pringle & Sons, Montreal, Rack House [**Bldg. #75**], 7 Mar 1927. Copies of plans dated 7 Mar. 1927 accompanied the application for a drainage permit (City of Toronto, Central Records, Permit **#128247**). A set of blueprints is filed with the application for a building permit (City of Toronto, Central Records, B.P. **#95894**)
41. Four sectional drawings, for unidentified building at Eureka Distillery, Beauport, Quebec. Undated. Legends in French. With drawing for a painted sign on a fence along a railway, signed A. **LaRoche**. (**G&W** On-site)

J. Specifications

1. [David Roberts, Sr.], Specifications of works to be done and materials to be provided in the erection of a steam mill and Distillery for Messrs. Gooderham & Worts, Toronto, [**1858**]. 10 pages. (MTRL, **Baldwin** Room, **S117**, Wm. H. Pim Papers I)
2. [Stewart & **Denison**, architects, Toronto] Specifications for a grain elevator for Messrs. Gooderham & Worts, Toronto, [July **1881**]. (**G&W** On-site)
3. A.D. Margison Associates Ltd., Specification for Windmill to be erected at Parliament and Fleet Streets, 1953. Superstructure and landscaping. (**G&W** On-site)

K. Municipal Assessment Records

In the City of Toronto Archives are preserved the assessment rolls from 1834 to 1914; those for the period after 1914 are in the City of Toronto Central Records. The assessments are by street and are broken down building by building. Thus, new buildings or demolitions are signalled by additions or deletions on a year-to-year basis. For many buildings not noted in the newspapers as under construction the assessment rolls are the only reliable guide to dating.

L. Drainase Permits

Since 1888 the City of Toronto has required drainage permits as a preliminary step in the building process. They are a useful way to confirm when work on a project was actually begun. Also they often includes site plans and can lead more easily to the finding of the building permit and associated drawings. Drainage records are kept by street address in the **City's** Central Records.

The following list is only a sampling, more complete for some decades than others, since time did not permit a full search for all permits related to Gooderham & Worts.

1. **#19459**, 1 Dec. 1902, to General Distilling Co., for south side Mill Street between Trinity and Parliament
2. **#29863**, 17 Aug. 1906, to General Distilling Co., for northwest corner of Trinity and Mill Streets
3. **#33094**, 15 Jul. 1907, to General Distilling Co. Accompanied by a plan by Sproatt & Rolph, architects, for a tank house on the north side of Mill Street, 130 feet from Trinity Street, July 12, 1907. Scale one eighth inch to one foot.
4. **#38696**, 15 Apr. 1909, to Gooderham & Worts, for 90 Mill Street
5. **#86045**, 30 Jun. 1917, to British Acetones, (Gentle & Travis)
6. **#87541**, 26 Jan. 1918, to British Acetones, (Robt. Jordan)
7. **#87557**, 31 Jan 1918, to British Acetones, (Robt. Jordan)
8. **#87796**, 4 Apr. 1918, to British Acetones, for two sinks on the ground floor, (Gentle & Travis, plumbers)
9. **#89222**, 11 Sept. 1918, to British Acetones, Mill Street, (Gentle & Travis)
10. **#89538**, 18 Oct. 1918, to British Acetones, (J.A. Wickett Ltd.)

Drainage Permits

11. #A-109623, 5 Feb. 1923, Gooderham & Worts, for rear 55 Trinity Street, (Robt. Jordan)
12. #A-114914, 25 Jan. 1924, Gooderham & Worts (Robt. Jordan)
13. **#128247**, 10 May 1927, Gooderham & Worts, (Sheppard & Abbott) Accompanied by a foundation plan and typical floor plan for Bldg. #75, Rack House "M," 7 Mar. 1927, T. **Pringle** & Son, engineers and architects, Montreal & Toronto, Scale eighth inch to one foot.
14. **#137894**, 17 **Dec.** 1929, to Gooderham & Worts, south side of Mill Street
15. # 141963, 2 May 1931, to Gooderham & Worts, for 41 Mill Street (Wright Bros.)
16. **#12042**, 16 Mar. 1942, to Gooderham & Worts, for Bldg. #4, (Purdy, **Mansell**)
17. #B-15440, 6 Oct. 1943, to Gooderham & Worts (Purdy, **Mansell**)
18. #B-15777, 6 **Dec.** 1943, to Gooderham & Worts, for east side Trinity Street between Mill and railway, (Purdy **Mansell**)

M. Building and Demolition Permits

Building permits have been required since 1879 but counterfoils for only a few hundred permits issued before 1920 survive in the City's Archives. In most cases the estimated cost of the project is stated on the permit. Sometimes the architect's name is given also. There is, however, a fairly complete abstract of permits issued back to about 1900. Earlier records can be searched in the City Archives. Post-1930 records are kept in the Building Records Centre, 17th floor, East Tower, City Hall; those more recent than 1970 are in a computerized catalogue. Permits are also required for demolition; they are found in the same series as building permits.

While applicants for a building permit had to submit their plans for approval, the City has retained only a small proportion of the plans submitted before the

Building and Demolition Permits

1920s. They are filed in the City's Central Records under the year and number of the building permit.

1. B.P. #100, 21 Apr. 1888, for a galvanized iron elevator, Esplanade St. at the foot of Parliament. Est. cost \$25,000. Architect not named. (CTA, RG 13, Series C)
2. B. P. #1986, 23 Jul. 1895, for a one-storey brick fire-engine house, on the east side of Trinity Street. "No plans" noted on permit. Est. cost \$1000. Architect not named. (CTA, RG 13, Series C)
3. B.P. #156, 10 Apr. 1901, granted to General Distilling Co. for a five-storey brick distillery building and still, south side of Mill Street at corner of Parliament. Est. cost \$30,000. David Roberts, Jr. architect.
4. B.P. #625, 26 Nov. 1902 for buildings for General Distilling Co., Mill Street. David Roberts, Jr. architect.

B.P. #3509, 19 Apr. 1906, for one-storey brick and stone **coopers'** shop and barrel shed, east side of Trinity street between Front and Mill. Est. cost \$5,800. David Roberts, **Jr.** architect.

B.P. #4239, 13 June 1906 for one-storey brick and stone storehouse, for the General Distilling **Co.**, Trinity Street near Mill. Est. cost \$11,000. **David** Roberts, Jr. architect.

B.P. #9168, 17 May 1907, for garage in cooperage shop yard, Trinity Street near Mill. Sproatt & Rolph, architects.

B.P. #86624, 1926, for installation of [molasses?] tank

Demolition permit #93064, 1926, for elevator **at** foot of Trinity Street

10. B.P. #95536, 1927, for warehouse [Bldg. #74], Est. cost \$72,000. V.L. **Gladman**, archt.
11. B.P. #98385, 1927, for warehouse [Bldg. #75], Est. cost \$120,000. **T.** Pringle & Sons, archts.

Building and Demolition Permits

12. B.P. #99470, 1927, for stack. Est. cost \$1800.
13. B.P. A-8381, 1928, to alter office building. Est. cost \$6000.
14. B.P. #33532, 1932, for addition to factory. Est. cost \$900.
15. Demolition permit #40911, 1934, for storage building
16. B.P. #70773, 1941, for molasses tank. Est. cost \$6000.
17. B.P. #74525, 1942, for interior alterations. Est. cost \$2000.
18. B.P. #74599, 1942, for alterations to building. Est cost \$5000.
19. B.P. #75914, 1942, for alterations to roof of boiler room. Est. cost \$750.
20. B.P. 76280, 1942, for coal hopper. Est. cost \$1000.
21. B.P. #11530, 1951, for alterations to building. Est. cost \$4000.
22. B.P. #12578, 1951, for alterations to office. Est. cost \$36,700. Mathers & Haldenby, architects.
23. B.P. #29388, 1954, for alterations to storage building; installation of fire escape.

N. Incorporation and Board Records

1. Certificate of Dissolution of Partnership between William Gooderham and James G. Worts, Toronto, 4 Feb. 1882. Certifies a partnership was carried on as Gooderham & Worts up to William Gooderham's death on 20 August 1881. (OA, RG 55, York County Partnership #2565)
2. Declaration of Partnership between J.G. Worts and George Gooderham, in business as Gooderham & Worts. Toronto, 4 Feb. 1882. Partnership has

Incorporation and Board Records

existed since 22 August 1881. (OA, RG 55, York County Partnership #2567)

3. Agreement as to Gooderham & Worts Limited, 1 Aug. 1882 between George Gooderham and the Trustees and Cestiusque Trustent under the Will of the late James Gooderham Worts. This twenty-six page agreement created a limited company in place of a partnership. Attached to it were two schedules containing much valuable information; also a site plan by Unwin, Browne & Sankey, 8 Nov. 1882. See Appendix C, pp. 113-130, below for an outline of the schedules and partial transcription. (HW Legal-Secretarial)

The agreement is available only as a photocopy. On the cover is noted in pencil, "This is a copy of historical records loaned to Mr. Hatch by Mrs. Drope through Mr. Carmichael who gave these to Mr. Hatch. Aug. 30/67." Other photocopies are found in the Hiram Walker Archives (Boxes 11, 12) and the Gooderham & Worts On-site Collection. The original has not been located.

4. Letters Patent, Gooderham and Worts (Limited), 24 Nov. 1882 (HW Legal-Secretarial)
5. Supplementary letters patent, for Gooderham & Worts, Limited, 28 Dec. 1923, changing name of the company to "The Old Wind Mill, Limited." (HW Legal-Secretarial)
6. Letters Patent. Incorporating Gooderham & Worts Limited under the Canada Companies Act on petition of Wm. George Gooderham, George Horace Gooderham, Wm. Hargraft Gooderham, Albert Edward Gooderham the younger, Albert Edward Gooderham and Melville Ross Gooderham, all of Toronto, 29 Dec. 1923. (HW Legal-Secretarial; another copy is in G&W On-site)
7. Agreement, Edward D. Gooderham and Gooderham & Worts Ltd., Dec. 1923. Copy. (G&W On-site)
8. Transfer, The Old Windmill Limited and Gooderham & Worts Ltd., Dec. 1923. Copy. (G&W On-site)
9. Conveyance, The Old Windmill Limited to Gooderham & Worts Ltd., Dec. 1923. Two copies. (G&W On-site)

Incorporation and Board Records

10. Warehouse receipt, Gooderham & Worts Limited, Dec. 1923. Copy. (G&W On-site)
11. Copy of Transfer, Gooderham & Worts Limited to Gooderham & Worts Ltd., Dec. 1923 (G&W On-site)
12. Supplemementary letters patent, Gooderham & Worts Limited, 11 Aug. 1926. (HW Legal-Secretarial; another copy is in G&W On-site)
13. Supplementary letters patent, Gooderham & Worts Limited, 8 Feb. 1939 (HW Legal-Secretarial)
14. Supplementary letters patent, Gooderham & Worts Limited, 19 Dec. 1962 (HW Legal-Secretarial)
15. Certificate of continuance, Gooderham & Worts Limited, 24 Jan. 1979 (HW Legal-Secretarial)
16. Certificate, dissolving Gooderham & Worts Limited under the Canada Business Corporations Act, 6 June 1988 (HW Legal-Secretarial)
17. Minute Book, Gooderham & Worts Limited (Dominion of Canada Corporation), Dec. 1923 - Jan. 1934 (HW Legal-Secretarial)
18. Provincial Secretary's File on Gooderham & Worts, Contains names and addresses of officers and directors from 1925 to 1971; dates of last annual general meeting; correspondence re license in mortmain granted by Order-in-Council, 10 July 1925, and license renewals. As a Dominion company G&W needed a license to hold property in Ontario. (OA, RG 55, Series 4, Box 108, file C 25056)
19. Petition to Secretary of State, 9 Aug. 1926, to amend company's capitalization from 20,000 shares P.V. \$1.00 to 200,000 shares N.P.V. (G&W On-site)
20. Agreement, 15 Nov. 1927, between Hiram Walker's Limited and the depositing shareholders of Gooderham & Worts Limited to exchange shares on a one-for-one basis. Hiram Walker's Limited will change its name to Hiram Walker-Gooderham & Worts Ltd. Four printed copies (G&W On-site)
21. Share Certificate Registers, Gooderham & Worts Limited, 1924 to present (HW Legal-Secretarial)

Incorporation and Board Records

22. Annual Reports, Gooderham & Worts Limited, 1924 to present (HW Legal-Secretarial)
23. Applications for stock, 10 Jan. 1924 (G&W On-site)
24. Duplicate list of shareholders, 1925 (G&W On-site)
25. Copy of list of shareholders, 10.2.1925 (G&W On-site)
26. Certificate of Company Secretary, Nov. 1925, as to incorporation of G&W (G&W On-site)
27. List of shareholders, 12.11.25 (G&W On-site)
28. Applications for stock, c. 1925 (G&W On-site)
29. List of shareholders, 31 Dec. 1925 - 3 May 1926 (G&W On-Site)
30. List of shareholders, 28 Aug. 1926 (G&W On-site)
31. List of stockholders, 14 Jul. 1926 (G&W On-site)
32. Certified list of stock, held by Midland Bank, London, England, on 31 Aug. 1928 (G&W On-site)
33. Letter, 25 Apr. 1924, from Duncan MacLeod of Bulloch, Lade & Co., Glasgow, (a Director of G&W Ltd.), waiving his right to notice of Board meetings (G&W On-site)
34. Minutes, first annual meeting of shareholders of Gooderham & Worts Ltd., 2 Mar. 1925 (G&W On-site)
35. Powers of attorney and proxies, second annual G&W shareholders meeting, 2 Nov. 1925 (G&W On-site)
36. Resolution, passed at a meeting of Board of Directors, 6 Nov. 1925, appointing Toronto General Trusts as transfer agent. Certified copy. (G&W On-site)
37. Minute, passed at meeting of Board of Directors, 11 Dec. 1925, appointing Toronto General Trust Corp. as disbursing agent for dividends (G&W On-site)

Incorporation and Board Records

38. Extract from minutes, meeting of Board of Directors, 15 Apr. 1926, re payment of dividend in June 1926 (**G&W** On-site)
39. Memorial, to Harry Clifford Hatch, (born 1884; died May 8, 1946) adopted 27 May 1946, by the Board of Directors of **HW-G&W** Ltd. Printed; with portrait. (**G&W** On-site)

3. Contracts, Leases and **Legal** Documents

NOTE: ALL ITEMS BELOW ARE IN G&W ON-SITE COLLECTION UNLESS CREDITED ELSEWHERE.

1. Agreement, 30 Jun. 1926, with Toronto Terminal Railway Company and Toronto Harbour Commission re sale of land. Plan attached.
2. Agreement, 1 Jan. 1931, between Distillers Pool and Dominion Factors Ltd.
3. Agreement, Sept. 1931, with Lanson **Père** et Fils covering supply of 600,000 quarts of champagne at a cost of \$200,000
4. Lease, 1 Apr. 1931, with Dominion Carbonic covering building and lands on south side of Mill Street
5. Agreement, 4 Aug. 1932, with City of Toronto re molasses pipeline
6. Agreement, 11 Aug. 1932, with Bennett & Wright Ltd. covering the installation of the molasses pipeline from the dock to the tank
7. Agreement, 12 **Dec.** 1932, between Consolidated Distillers Ltd., Gooderham & Worts Ltd. and Hiram Walker & Sons Ltd. ("the Canadian companies") and Bernard E. Mackey and Edward L. Flanigan ("the exporters")
8. Lease, 31 Oct. 1934, for two years with United Coal & Coke
9. Release of liability, 22 Mar. 1935, to **Col.** Malvin I. **Haas** of Cincinnati, Ohio.

Contracts, Leases and Legal Documents

10. Agreement, 11 Jul. 1935, with Celanese Company of America for the manufacturing of collafuse.
11. Agreement, 14 Aug. 1935, with American Can Company covering closing-machine lease
12. Agreement, 3 **Dec.** 1935, with Canadian National Railways and Liquid Carbonic Cdn. Corp. Ltd. re joint use of siding
13. Consent, 16 May 1944, for Bell Canada to install an underground conduit through **G&W's** property to Victory Soya Mills.
14. Licenses, for bonding warehouses, 1942-46
15. Lease, 1 Mar. 1947 for five years, on room 801, Lindsay Building, Winnipeg
16. Agreement, 30 **Dec.** 1948, with Neilson Lang as company salesman
17. Contract, with Dow Chemical of Canada Limited for purchase of ethylene glycol, Jan. 1948 - **Dec.** 1952
18. Acknowledgement, 29 Jun. 1950, of storage for the account of the wine committee of France, without risk to G&W
19. Agreement, 31 Jan. 1951, with Consolidated Warehouse Corp. for in-bond and free storage in Montreal
20. Agreement, 16 Jul. 1951, with Ashley & Crippen covering purchase of print of a film, '**Imperial** Habsburg Art Treasures,' then showing at Toronto Art Gallery
21. Contract, 31 **Dec.** 1952, with Canadian General Transit Co. Ltd. covering tank cars CGTX 9522, 9552, 8252. On 1 Oct. 1953 increased to eight cars and extended to 31 **Dec.** 1955.
22. General Term bond, effective 1 Sept. 1952. Covering importations into the United States
23. General Term Bond, 25 Jun. 1954. Covering importation into the United States of merchandise

Contracts, Leases and Legal Documents

of Hiram Walker & Sons Inc. and its affiliated companies listed on Customs form 7595

24. General Term Bond, 1955. Covering importations into the United States
25. Lease, 1 May 1952, for three years of offices in Canada Cement Building, Montreal
26. Contracts, with Cloke Construction and others for building half-scale windmill replica, 1953-54 (HW Archives, Box 12, 'G&W History')
27. Agreement, 19 Mar. 1954, with Radio Oil Refineries re the canning of G&W antifreeze in Winnipeg, Man. until 1 Dec. 1954
28. Agreement, 19 Mar. 1954, with Radio Oil Refineries re the canning of G&W antifreeze in Edmonton, Alta. until Dec. 1954.
29. Contract, with Dow Chemical of Canada Limited re purchase of ethylene glycol, 1954
30. Contract, 14 Oct. 1954, with Commercial Alcohols Limited, Gatineau, Que., covering requirements to April 1955
31. Warranty, 24 May 1955, covering Addressograph, Series 26, purchased from Addressograph-Multigraph of Canada.
32. Amendment, 19 Dec. 1955, re promotional allowance under contract with Wray & Nephew, 20 Sept. 1954.
33. Bond #4343, Building Products Ltd., Jan. 1956, covering Cased Goods Warehouse (Bldg. #74) for twenty years.
34. Agreement, 1946, with Ontario Liquor Control Board for its temporary occupation of Bldg. #46.
35. Agreement, 19 Aug. 1957, with City of Toronto re construction and maintenance of a 6" underground pipeline on the east side of Parliament Street.
36. Agreement, 25 Jun. 1959, with City of Toronto re extension of existing 10" underground pipeline on east side of Queen's Quay to connect with terminal on Queen Elizabeth Docks

Contracts, Leases and Legal Documents

37. Petition, **n.d.**, to Supreme Court of Ontario asking F.S. Harris be commissioned to take affidavits and sign Customs B13 forms

P. Correspondence

1. With Lanman & Kemp, New York City, 3 Jan. 1864 to 21 Oct. 1879. 470 **pces.** (MTRL, **Baldwin** Room, **S-24**) Lanman & Kemp operated from 1858 to 1880 as manufacturers of patent medicines sold under names like Murray & Lanman's Florida Water, **Bristol's** Sarsaparilla and **Kemp's** Worm Plasters. In 1901 its successors merged with **Barclay** & Co. As recently as 1975 **Barclay** & Co. had a Lanman & Kemp division and one may still exist today. During the 1860s and 1870s Gooderham & Worts supplied Lanman & Kemp with raw alcohol in bulk. Most letters here are routine, advising on shipments and dealing with accounts. Besides providing a good sampling of letterheads, they show who was handling the firm's correspondence, including J.W. Beatty, W. **Doran**, Thomas Drysdale, H.J. Gooderham, William Gooderham, Jr., and James G. Worts, Jr.
2. With Sir John A. Macdonald, 1869-1888 (NAC, MG 26) The finding aid to incoming correspondence lists about a dozen letters from William Gooderham and **G&W**, dealing mostly with customs duties and claims of the company and government against one another. It does not note letters written by third parties mentioning G&W inter alia. An example was found inadvertently: W.H. Beatty to Macdonald, 14 April 1888 (NAC, MG 26, pp **58801-58806**), in which Beatty asks that the CPR be prevented from establishing a shunting yard on the former Worts property at the northeast corner of Trinity and Mill Streets, as it would cut off G&W from the city.
3. With City of Toronto. The Council minutes and papers for the 19th-century found in the City of Toronto Archives are indexed by subject and correspondent. **There** are scattered references to letters from **G&W** on matters like street lighting and the state of the streets. Indexed separately are several references to William Gooderham as an alderman for St. Lawrence Ward in the mid-1850s.

Correspondence

4. With Toronto Harbour Commissioners. G&W had extensive correspondence with the Commissioners and Harbour Master on a variety of subjects, notably:
 - a. Harbourhead wall and Parliament Street dock, 1916-55. (THCA, RG 3/3, box 329, folder 6; file on same subject found in G&W On-site Collection.)
 - b. Expropriation of G&W properties to straighten the Don River, 1917-1920. (THCA, RG 3/3, box 71, folder 10)
 - c. Toronto Viaduct, 1926-27. (THCA, RG 3/3, box 325, folders 5-6; file on same subject found in G&W On-site Collection)
 - d. Pipelines across land owned by THC, 1932-40, (THCA, RG 3/3, box 220, folder 7; file on same subject found in G&W On-site Collection.)
 - e. Importation of molasses, 1938-42. (THCA, RG 2, series 3, box 1, folder 23)
 - f. Relocation of Parliament Street, construction of a 6" pipeline and extension of an existing 10" molasses pipeline, 1959, 1982-84. (G&W On-site)
 - g. Sale of portion of G&W dock and dismantling of Windmill, 1961-81. (G&W On-site)

In addition, other records of the Harbour Trust and its successor, the Toronto Harbour Commission, may contain information on ships carrying goods to and from Gooderham & Worts:

- h. Harbour Dues, 1849-93 (THCA, RG 2, series 4)
 - i. Manifest Books, 1858-1937 (THCA, RG 2, series 5)
5. O.D. Johnston Files. On retiring as president of G&W in 1960, Johnston left several correspondence files to which he attached some significance or wanted kept for other reasons:
 - Alcohol from potatoes
 - Chemical production and marketing studies
 - Chemicals

Correspondence

- National Chemergic Committee, 1940-45
 - Ethylene Glycol
 - Arthur D. Little, reports, bulletins and correspondence on the chemical industry
 - Rubber
 - M.A.** Wingard & Co. Ltd., England, agents for Hot Shot alcohol antifreeze, re its future in competition with glycol.
 - Wages, 1956
 - Group Life and Annuity Insurance
 - Prospective Businesses
 - Report on the Manufacture and Cost of Production, from Refinery Gases of Ethyl Alcohol, Ethelene Glycol and Acetone. Prepared by J.T. Donald & Co., Montreal, 25 Mar. 1941
 - Plant Rearrangement, 1940, (pump from Peoria)
 - Plant rearrangement, 1940, (water still)
 - Plant Rearrangement, 1941, (acid tank)
 - Plant Rearrangement, 1941, (new still)
 - Electrical Plant Rearrangement, 1941
 - Boiler, 1941
 - Dryer, 1942
 - Plant Equipment Expansion, 1943, (grain drier)
 - Alterations to Cannery, Bldgs. #58-59, 1947
 - Flame Arresters for Distillery Vents
 - New Excise Office, Bldg. #28 (A.F.E. 140)
 - New stainless-steel, dried-grains recovering screen, (A.F.E. 154)
 - Coopers'** Shop, **Coopers'** Crest and Millstone Monument, Trinity Street (A.F.E. 161)
6. Re Water pipeline, 1915
 7. Re Howell Warehouses, sale (1940) and repurchase (1951) of Bldgs. #43 and #44, north side of Mill Street. Copy of plan by Speight, Van Nostrand, Ward & Anderson, 14 May 1940, attached. (G&W On-site)
 8. Re repurchase, **s.e.** corner of Mill and Parliament streets from C.P.R., 1945-46. (G&W On-site)
 9. Re litigation, Four Roses brand, July-December 1945
 10. Re lease and renewals, 1948-55, offices in Canada Cement Building, Montreal (G&W On-site)
 11. Re reinsurance, on consignment goods held by Marshall Wells branches, December 1956

Correspondence

12. Re claim from fire at **53-55** Mill Street, March 5, 1982. (**G&W** On-site)
13. Re Toronto Plant, relocation and redevelopment studies, 1974-1981. (**G&W** On-site)

Q. Financial Records

NOTE: ALL ITEMS BELOW ARE IN THE G&W ON-SITE COLLECTION UNLESS CREDITED ELSEWHERE.

1. Invoice, 14 Mar. 1837. William **Gooderham**, Wind Mills, City of Toronto, to Honbl. William **Allan** for purchases in 1836 and 1837. Signed on behalf of William Gooderham by T. Smith. (MTRL, **Baldwin** Room, S-123, William **Allan** Papers, Box 3, **Misc.**)
2. Balance sheet, 31 **Dec.** 1924, prepared by Edwards, Morgan & Co., Chartered Accountants. 7 copies
3. Financial statement, 31 Aug. 1925, prepared by Edwards, Morgan & Co., Chartered Accountants. Twelve copies
4. Financial statements, 1924, 1925 (8. mos), 1933 and 1934
5. Assessment, City of Toronto, 1926 for 1927 taxes
6. Ledgers, 1927-42 and 1945-50, recording value of shipments from suppliers represented by G&W
7. Statement, or return of affairs, at 31 **Dec.** 1929
8. Annual returns, 1925-30, to Secretary of State under the Companies Act
9. Bank Account, Royal Bank of Canada, New York
10. Application, 10 Apr. 1927, for \$250,000 credit at Bank of Toronto; with related correspondence
11. Demand note, late **1920s**, for \$281,877 from Bank of Toronto
12. Dominion of Canada War Loan Bonds, Apr. 21, 1930

Financial Records

13. Documents, 1924-28, re settlement of sales taxes due
14. Appraisal Report of Buildings, Machinery and General Equipment, 1 Jun. 1932, by Sterling Appraisal Co. Ltd., Toronto & Montreal. Vol. 1 (Summary); vol. 2 (Bldgs. 1 through 44); vol. 3 (Bldgs. 44 through 75 and yard).
15. Remittance accounts, 1940. (HW Basement storage)
16. Journal vouchers (eight cartons), 1960s (HW Basement storage)

R. Operating Records

NOTE: ALL ITEMS BELOW ARE IN THE G&W ON-SITE COLLECTION UNLESS CREDITED ELSEWHERE.

1. Notebook, 1886-1907. Appears to have been kept by one of the head carpenters
2. Time Book, No. 11 Bottling Cellar, covering period from April-October, 1910
3. Excise Work notebook, 29 Jun. 1910
4. Ponies and Day Yeasts Record Book, 1910-12
5. Distillers' Notice Books, 1922
6. Fourteen Distillers Notice Books, 1924-1940. Some have 'K 35 Inland Revenue' on cover, others 'T 234 Excise.'
7. Formulae, c. 1925, for concentrated 'Prune Juice' #8 and #10; also 1000 gallons of Export #1 Rye and #2 Bourbon
8. Three distiller's registers of fermentation, late 1920s.
9. Fifteen distiller's notebooks, late 1920s. Some can be identified as belonging to Burris Crump.
10. Stock of whiskey at James & George Stodart Ltd., 2 Apr. 1931

Operating Records

11. Record notebooks, 1935, for production tests
12. Notebooks, 1939, recording time worked by hourly-rated employees
13. Laboratory yeasting record, 1941-42 (HW Archives. Box 12A)
14. Yeast propagating experiments, 1941, with High Test molasses, 1941; Corn reports, 1953-57. (HW Archives, Box 12A)
15. Blending instructions, 27 Apr. 1949, for first bottling operation.
16. Notebook, n.d., for laboratory tests

S. Personnel Records

NOTE: ALL ITEMS BELOW ARE IN THE G&W ON-SITE COLLECTION UNLESS CREDITED ELSEWHERE.

1. Return of employees, to City of Toronto, 10.2.25.
2. Payroll lists, 1929, 1942-43
3. Salary scale, early 1930s. Showing across-the-board cuts in salaries and wages.
4. Retirement Annuity and Group Life Insurance Plans, for employees of Hiram Walker-Gooderham & Worts Ltd., in Canada, effective Jan. 1, 1939. Booklet. With a covering letter from Herb C. Hatch.
5. **Employees'** Sick-benefit society, 1942-48. Record book. (HW Archives, shelved items)
6. Long-service Club dinners, 1948-1986. File. (HW Archives, Box 12A)
7. Oswald D. Johnston, biographical materials. Johnston was president of G&W from 1947-1960. (HW Archives, Box 12)
8. Personnel, 1947-1960, list with file of related correspondence.

Personnel Records

9. Declarations, 30 Sept. 1947, by George France and R. Brimbecorn re **France's** service towards an annuity.
10. Declarations, 12 May 1948, by N. Bailey and R. Brimbecorn re Bailey's service towards an annuity.
11. Release of employees, 1957, due to plant shutdown. File.
12. Salary authorization forms, 1960-1965
13. Salary authorization forms, 1966-1979
14. Salaries, 1962-1974. File.
15. Operating **engineers'** contracts, 1972-1973
16. Information file, on collective agreements with other companies in beverage industry.

T. Marketing, Advertising and Public Relations

NOTE: ALL ITEMS BELOW ARE IN THE G&W ON-SITE COLLECTION UNLESS CREDITED ELSEWHERE.

1. Price lists, 1885-1918. Scrapbook format. (HW Archives, shelved items)
2. Price Lists, 1885-1935. For various markets. A combination of originals and photocopies. Approx. 30 items. (HW Archives Box 12)
3. Press clippings, 1917, re mail-order prices for beer and whiskey
4. Product Sales Record Books, 1927 - **c.1940**, late 1940s
5. Tear sheets, advertising proof sheets, 1915-33. Approx. 30 items. (HW Archives, Box 1)
6. A.B.C. of Mixing Cocktails. Small 52-page book, cover embossed "Compliments of Gooderham & Worts, Toronto." Title page refers to G&W as 'Distillers for nearly a **century**,' dating item to late 1920s. (HW Archives, Box 12; copies of later editions of this item are in **G&W** On-site Collection)

Marketing, Advertising and Public Relations

7. Scrapbook for G&W baseball teams and players, c. 1935. The G&W "Grads" were the Toronto amateur baseball champions of 1934; Harry Sniderman was a star player. This album may have belonged to him.
8. Copyright #7, Rd. #34966 issued to G.G. Kaestner and R.D. Croft covering a published literary work, Sept. 14, 1935. "Something Different Hot Shot Antifreeze Alcohol." Attached is a printed table listing the radiator capacities of more than a hundred vehicles on the Canadian market.
9. Proof sheets, 1941, for print advertisements for G&W and William Penn brands in U.S. markets.
10. Proof sheets, 1942-44, for newspaper, trade paper and outdoor advertising for Five Star and William Penn brands in U.S. markets. Cover embossed: 'G&W National Advertising, Vol. 1.'
11. Proof sheets, early 1950s. For advertising in U.S. markets.
12. Proof sheets, 1969, for newspapers, trade papers and outdoor for William Penn brand in U.S. Cover embossed: 'G&W National Advertising, Vol. 2.'
13. Report concerning labels, Thiel Detective Service Co., 18 Jul. 1925
14. Approved Labels, 1927-37. Scrapbook format. (HW Archives, shelved items)
15. Approved Labels, 1948-56, for G&W and affiliated companies. Scrapbook format.
16. Approved Labels, 1967-76. Scrapbook format. (HW Archives, shelved items)
17. Newspaper clippings, 1967-84. Approx. 50 items. (HW Archives, Box 12)
18. Brand deletions, 1974. Bulletin advising withdrawal of certain brands from the U.S. market, with samples of labels (HW Archives, Box 12)
19. Gooderham & Worts Replica Windmill. Clippings related to construction of windmill in 1953-54 and its demolition in 1960. Correspondence and guest

Marketing, Advertising and Public Relations

lists related to opening ceremonies, 9 Apr. 1954 (HW Archives, Box 12, 'Windmill' and 'Trinity Street' files)

20. Fourth Annual **G&W** - Canadian Legion National Curling Championships, Geo. R. Pearkes, V.C., Branch, Summerside, P.E.I., 1960. Program and menus. (HW Archives, Box 8)
21. Fifth Annual **G&W** - Canadian Legion National Curling Championships, Trail, B.C., 14-17 Mar. 1961. Four copies of advertising poster.
22. **G&W** - Canadian Legion National Curling Championships. Hints on how to organize at the branch level. Small-card format. Several copies.
23. Fifth Annual **G&W** Lawn Bowling Championships, Boulevard Club, Toronto, Aug. 24-26, 1959. Program.
24. Christmas cards, **c1945-50**. Two cards reproducing paintings by **Rowley** Murphy based on research by C.H.J. Snider; two from paintings by H. Oswald Stacey; one lino cut of the Cooper Shop renovated as a lounge. (HW Archives, Box 12)
25. Christmas card, c. 1960. On cover is coloured photograph, 'Winter Morn,' taken near Gooderham, Ontario. Caption tells how the village came to be named.
26. Guest Book, for the Hospitality Room at the distillery, 1948-58. Covers missing.
27. **G&W** 150th Anniversary reception, 26 May 1982. File.

U. Awards, Citations and Addresses

NOTE: ALL ITEMS BELOW ARE IN THE **G&W** ON-SITE COLLECTION UNLESS CREDITED ELSEWHERE.

1. Expression of sympathy, to Messieurs **Gooderham** and Worts, [**1869**]. Ink on paper. Framed. Inscribed following destruction by fire of **G&W's** premises; signed by the Mayor of Toronto and approximately 75 prominent citizens. (HW Archives)

Awards, Citations and Addresses

2. Certificate of Gold Medal, awarded to **G&W** at the **1878** Universal Exhibition, Paris, 21 Oct. 1878. Competing in Group 7, Class 75. Framed.
3. Gold Medal Diploma, awarded to G&W at the **1885** Universal **Antwerp** Exposition, 14 Sept. 1885. Competing in Group 6, Class 69. Framed
4. Certificate, to accompany presentation of a commemorative medal at the Colonial and Indian Exhibition, London, 1886. Framed.
5. Letter, 4 Jul. 1939, from R. Chrystal Irving, to **G&W's** Winnipeg agents, reporting that **Lanson's** Champagne and **Johnston's** Sauterne (for which G&W was Canadian agent) were served to Their Majesties on May 24 at Government House. Ms. Irving was secretary to the Lieutenant Governor of Manitoba. Framed.

V. Records of Affiliated Companies

NOTE: ALL ITEMS BELOW ARE IN G&W ON-SITE COLLECTION UNLESS CREDITED ELSEWHERE.

1. Correspondence and drawings, **1927**, from Canadian General Electric Co. and Dominion Bridge re construction of CKGW transmitter at Bowmanville. Founded in 1927 by **G&W** and known as '**Canada's** Cheerio Station,' CKGW was associated with the NBC and Trans-Canada Broadcasting Co. networks. It operated until 1948.
2. Declaration of partnership, in Trans Canada Broadcasting Company, filed 31 May 1928
3. Declarations of partnership and trust, leases etc. re Trans Canada Broadcasting Co., 1928. Approx. 12 photocopied items. (HW Archives, Box 12)
4. CKGW Expenses, 1929-30; program lists for 1930; testimonials from listeners. Several files.
5. Record of Proceedings, 1944. In the Privy Council on Appeal from the Court of Appeal for Ontario between Gooderham & Worts, Limited, appellant, and the Canadian Broadcasting Corporation, respondent, re CKGW radio station.

Records of Affiliated Companies

6. Disposal of CKGW Assets, **1948**. File
7. Bill of sale, Sept. 4, 1931, to James **Barclay** & Co. from F.C. Clarkson, trustee in bankruptcy, of estate of Peninsular Distilling Company.
8. Incorporation of Consolidated Alcohols, **1957**. A package of related papers. Consolidated Alcohols Ltd. was the result of a merger of **G&W's** industrial-alcohol business with Canadian Industrial Alcohols, owned by Corby's.
9. Consolidated Alcohols, salary-authorization forms, 1957-70.
10. Seppelts. Photograph album of facilities where Chateau Tanunda brandy and Australian wines were made. In 1935 G&W had the agency for Seppelts products for all Canada except British Columbia.

PART TWO

THE GOODERHAM FAMILY

Introduction

William Gooderham, a co-founder of Gooderham & Worts distillery, was father to fourteen children; his brother **Ezekial** who also came to Canada in 1832 had eleven. Between them they set down the roots for a large yet close family. The family tree includes more than 1200 people at present; get-togethers at Gooderham reunions in 1966, 1984 and 1992 attracted attendances of upwards of three hundred.

Regrettably it was not possible in preparing this inventory to do justice to the breadth and diversity of the family. The entries below relate largely to those who were most prominent in founding and directing Gooderham & Worts; some of the endeavours to which other Gooderhams contributed are noted in the Introduction to Part One. Much more material is available, however, largely in the hands or heads of members of the family like Donna and Dan **McNeill**, Lani Moses or Bertram Sturrupe.

A. Family Tree

See Appendix D, p. 133, for a genealogical table of the descendants of James Gooderham (1757-1820) revised to July 1984. A more up-to-date and much expanded tree was prepared for a family reunion in 1992, but has not yet been produced in a format that could be reproduced here. (Courtesy Mrs. Lani Moses)

B. Biographies

Albert Edward Gooderham (1861-1935)

1. Who's Who in Canada, 1923-24. Toronto: Hodder & Stoughton, Ltd., p. 1385-6
2. Middleton, Jesse Edgar, The Municipality of Toronto: A History. Toronto: The Dominion Publishing Company, 1923, vol I, p. 49

Charles Horace Gooderham (1843-1904)

3. Middleton, Jesse Edgar, The Municipality of Toronto: A History. Toronto: The Dominion Publishing Company, 1923, vol I, p. 341

Gooderham Family Biographies

George Gooderham (1830-1905)

4. Dictionary of Canadian Biography, vol. XIII, pp. 387-390. Toronto: University of Toronto Press, 1994
5. Morgan, Henry James, Canadian Men and Women of the Time Toronto, 1898, p. 389

George Horace Gooderham (1868-1942)

6. Who's Who in Canada, 1923-24, Toronto: Hodder & Stoughton, Ltd., p. 1164.

William Gooderham (1790-1881)

7. Dictionary of Canadian Biography, vol. XI, pp. 358-360. Toronto: University of Toronto Press, 1982

William Gooderham (1824-1889)

8. Dictionary of Canadian Biography, vol. XI, pp. 360-361. Toronto: University of Toronto Press, 1982

William George Gooderham (1853-1935)

9. Who's Who in Canada, 1923-24, Toronto: Hodder & Stoughton, Ltd., p. 622.

C. Obituaries

George Gooderham (1830-1905)

1. Evening Telegram [Toronto], 2 May 1905, pp. 7-8
2. The Globe [Toronto], 2 May 1905, p. 1
3. The Mail & Empire [Toronto], 2 May, 1905, pp. 4-6
4. Monetary Times [Toronto], vol. 38, no. 45 (5 May 1905) pp. 1480-81

Gooderham Family Obituaries

5. Saturday Night [Toronto], vol. 18, no. 26, 6 May 1905, p. 2
6. Toronto Daily Star, 1 May 1905, p. 1; 2 May 1905, pl; 3 May 1905, p. 5
7. Toronto News, 2 May 1905, pp. 1, 6
8. Toronto World, 2 May 1905, p. 1; 4 May 1905, p. 4

William Gooderham (1790-1881)

9. The Globe, 22 Aug. 1881
10. Monetary Times, vol. 15, no. 9 (26 Aug. 1881) 237
11. Toronto Daily Mail, 22 Aug. 1881

William Gooderham (1824-1889)

12. Christian Guardian, 18, 25 Sept. 1889
13. The Globe, 17, 20 Sept. 1889
14. Toronto Daily Mail, 13, 17 Sept. 1889
15. Toronto World, 13, 18, 20, 22 Sept. 1889

William G. Gooderham (1853-1935)

16. The Evening Telegram, 28, 29 Oct. 1935
17. The Mail & Empire, 30 Oct. 1935
18. Toronto Daily Star, 28 Oct. 1935

D. Portraits

Albert Edward Gooderham (1861-1935)

1. Photograph, c. 1886 (NAC, C-051762)
2. Photograph, c. 1935 (NAC, Louis Laurier Lyonde Collection, PA-053780)

Gooderham Family Portraits

George Gooderham (1830-1905)

3. **Edmund Wyly Grier**. Oil on canvas, probably painted 1895. Presentation reported in Our Monthly, [the house-journal of the Manufacturers Life Insurance Company], vol. 5 (Feb. 1896) 151. (Manulife Collection)
4. Owen Staples. Watercolour. (MTRL, JRR Collection, #1048)
5. Anon. Oil on canvas. (Toronto-Dominion Bank Archives)
6. Anon. Oil on canvas. Note on back says it was copied in 1905 from a 1902 portrait of George Gooderham by Robert Harris. Water-damaged. (Archives of Little Trinity Church, Toronto)
7. Photograph (Manulife archives)

George Horace Gooderham (1868-1942)

8. Tinted photograph. Framed with portraits of other presidents of the St. George's Society, which he headed in 1898. (MTRL, JRR Collection, #1017)

Harriet Herring Gooderham (1802-1885)

9. George Theodore **Berthon**. Oil on canvas. (Owned in 1977 by Mary Gooderham Mathes, Manchester, N.H. See Families, v. 16, n. 1 (1977), 24-25, 'The Gooderham Family of Toronto')

Mary **Reford** Duncanson Gooderham

10. John Wycliffe Lowes Forster. Oil on canvas, much water-damaged. Presented to her husband, Col. A.E. Gooderham, by the officers of the Grenadiers to accompany a 'soldierly' portrait of him. (Archives of Little Trinity Church, Toronto)
11. Photograph of the preceding portrait. Mary (Mrs. A.E.) Gooderham was National President of the Imperial Order of the Daughters of the Empire, 1911-1919. (NAC, IODE Collection, PA-135290)

Gooderham Family Portraits

William Gooderham (1790-1881)

12. George Theodore **Berthon**. Oil on canvas. (Owned in 1977 by Mary Gooderham Mathes, Manchester, N.H. See Families, v. 16, n. 1 (1977), 24-25, 'The Gooderham Family of Toronto')
13. John Colin Forbes. Oil on canvas, painted in late 1870s. (Toronto-Dominion Bank **Archives**)
14. Owen Staples. Watercolour. (MTRL, JRR Collection, **#1046**)
15. Oil on canvas. (Toronto General Hospital)

William Gooderham (1824-1889)

16. Owen Staples. Watercolour. (MTRL, JRR Collection, **#1047**)

William George Gooderham (1853-1935)

17. John Wycliffe Lowes Forster. Oil on canvas. (Toronto-Dominion Bank Archives)
18. ----- Oil on canvas. Formerly in offices of The Canada Permanent. (Collection of David White, Toronto)
19. John Vincent. Full-length oil on canvas (Upper Canada College)
20. Several black and white photographs. (Toronto Dominion Bank Archives)
21. Two black and white photos, one by T.J. Leatherdale, Toronto, signed April 1915. (Manulife Archives)

E. Photouraphs

1. Family group, possibly Gooderhams, by Eldridge **Stanton**, Toronto, fl. 1881-1900 (**G&W** On-site)
2. George **Gooderham's** yacht, '**Oriole**,' [188-], lying off Tinning's wharf, (MTRL, **Baldwin** Room, T-10359)

Gooderham Family Photographs

3. George Gooderham House, now the York Club, St. George Street at Bloor, Toronto, c. 1900 (OA, **Acc.** 14056-10)
4. Four generations of Gooderhams (William Sr., George, William G. and William H.) taken in the drawing room of one of the family residences in the area of Trinity and Mill streets, Toronto, **c.1880**. Large format. (Ian Macintosh Collection, Toronto)

F. Correspondence and Private Papers

Few letters written by members of the family on private or business matters are found in public collections. Those dealing with business subjects other than the distillery are rarer still.

1. Correspondence with Sir John A. Macdonald, **1869-1891** (NAC, MG 26, A)

Listed in the finding aid to Macdonald's incoming correspondence are about thirty letters from various Gooderhams dealing chiefly with railways, but also with political matters.

G. Books and Essays

1. Bank of Toronto, Annual reports, 1855-1935
2. Trout, E. and J.M., The Railways of Canada, Toronto: Monetary Times office, 1871.
3. Engineering, vol. 28, Oct. 17, 1879, p. 296 [on the Toronto & Nipissing Railway].
4. Adam, G. Mercer, Toronto, Old and New, Toronto: The Mail Printing Company, 1891, pp. 133-34, pp. 189-90. Describes the Toronto College of Music, which George Gooderham patronized in a major way. Also the Toronto Silver Plate Company, established 1882, of which E.G. Gooderham was manager, Alfred Gooderham was vice-president and George Gooderham a director.

Gooderham Family Books and Essays

5. Chadwick, Edward Marion, *Ontarian Families: Genealogies of United Empire Loyalist and other Pioneer Families of Upper Canada*. Originally published 1894; reprinted 1970 by Hunterdon House, **Lambertville**, New Jersey.
6. Forster, John Wycliffe Lowes, *Under the Studio Light: Leaves from a Portrait Painter's Sketch Book*, Toronto: The Macmillan Co. of Canada, 1928, pp. 13-14.
7. Bank of Toronto, **75 Years of Service, [1931]**
8. The Manufacturers Life Insurance Company, *The First Sixty Years*, Toronto, 1947
9. Schull, Joseph, *100 Years of Banking in Canada: a history of the Toronto-Dominion Bank*, Toronto: Copp Clark, **[1958]**
10. ". . . and all the past is future," Toronto: Manufacturers Life, **c.1971**. A brief semi-fictional history of Manulife, which was established in 1887 with Sir John A. Macdonald as president and George Gooderham as vice president. The latter succeeded to the presidency in 1891 on Macdonald's death. The company's first policy was for \$50,000, issued on Gooderham's life.
11. Ruggle, Rev. Richard, *Norval on the Credit River*, Erin, Ont., Printed by Press **Porcépic**, 1973, p. 59
12. Arthur, Eric R., Toronto: *No Mean City*, 2nd edition, Toronto: University of Toronto Press, 1974, pp. 201-203.
13. Mathes, Joan E., 'The Gooderham family of Toronto,' in Families, vol. 16, no. 1 (**1977**), pp. 24-5
14. Thompson, John Beswarick, *A History of Canadian Railways to 1876*, Parks Canada, Manuscript report **No. 188, 1977, pp. 144-47.**
15. Trow, Susan, *Coming Out: Six Generations of Women*. Catalogue to an Exhibition produced by Glenda **Milrod** and organized by Art Gallery of Ontario, Extension Services, 1978

Gooderham Family Books and Essays

16. Skodyn, Basil, *The Permanent Story, 1855-1980*, Toronto: The Canada Permanent Mortgage Corporation, c. 1980
17. Arthur, Eric R., with Thomas Ritchie, *Iron*, Toronto: University of Toronto Press, 1982, pp. 208-209 [on the York Club].
18. Gooderham, Peter B., *Notes on the Gooderhams' Business-ownerships, Philanthropies and other Interests, with anecdotes*, photocopied, 1985.
19. Hayes, Alan L., *Holding Forth the Word of Life: Little Trinity Church, 1842-1992*, Toronto: Corporation of Little Trinity Church, 1992.

d. Newspaper Reports and Magazine Articles

1. 'Building in Toronto,' The Globe, 3 Nov. 1866, pl. "On Trinity street, a red brick dwelling is being erected for Henry Gooderham, Esq. . . ."
2. 'Progress of Toronto . . . St. Lawrence Ward,' The Globe, 22 Nov. 1869, p. 2. "Mr. George Gooderham has been making an **addition** to his large brick dwelling on the corner of Palace and Trinity streets. . . ."
3. 'Mr. George Gooderham lies at **death's** door,' Toronto Star, 1 May 1905
4. 'Solidarity of the Gooderhams: Industry, Thrift and Attention to Business **Exemplified**,' by W.A. Craik, Maclean's Magazine, vol. 27, no. 1 (Feb. 1914), pp. 5-8, 140-41
5. 'New President Manufacturers' Life,' Canadian Courier, v. XV, no. 21, 25 Apr. 1914, p. 17
6. 'Ancient Dwelling Goes to Wreckers' Toronto Star, 4 Jan. 1929. [William Gooderham house, Carlton and Sherbourne streets]
7. 'Name of Gooderham Leader in York for Hundred Years,' Evening Telegram, 23 Jul. 1932

Gooderham Family Newspaper Reports

- 'First of Gooderham Line Brought 54 Here in 1832,' by R.E. Knowles, Toronto Star, 31 Mar. 1933
- '300 Gooderham Descendants to meet in Ancestral Home,' Toronto Star, 15 Jun. 1966
10. 'Wheezing and coughing -- but with style,' by Sid Adelman, The Telegram [Toronto], 7 Feb. 1970, p45
11. 'Manulife Presidents as People: The Gooderham Tradition,' Manulife News, 23 Aug. 1973
12. 'Toronto Landmarks Spruced Up,' Toronto Star, 11 Oct. 1973, p. C7. Gooderham Building, 49 Front Street E.
13. 'Gooderham Building recalls a Canadian philanthropist,' by Donald Jones, Toronto Star, 6 Nov. 1976, p. C24
14. '[George H.] Gooderham's Jarvis St. house will soon be a historic site,' by Donald Jones, Toronto Star, 21 May 1977, p B8
15. 'Covenants for History,' by Colin Vaughan, Globe & Mail, 13 Jul. 1977. [Conservation easement on Flat Iron building].
16. 'Famed King Edward Hotel was built as a barrier,' by Donald Jones, Toronto Star, 19 Nov. 1977, p. G11
17. Review of 'Coming Out: Six Generations of Women,' an exhibition by Susan Trow, Toronto Star, 9 Jun. 1979, p. F3
18. 'William Gooderham poured money into Worthy Causes,' by Donald Jones, Toronto Star, March 20, 1982, p. G14
19. 'Coffin Block to Flat Iron,' by Mike Filey, The Sun [Toronto], 10 Mar. 1985, p. 5-27
20. 'Living with King Eddy,' by Carey Fagan, Metropolitan Toronto Business Journal, Vol. 76, No. 2., 1986, p. 48
21. 'Lift High the Glass to Albert Gooderham,' by Donald Jones, Toronto Star, 27 Sept. 1986, p. M3

Gooderham Family Newspaper Reports

22. 'Gooderham always answered the door when opportunity came knocking,' by John Southerst, Financial Post, 6 Apr. 1987
23. 'Air conditioning [at the York Club] be **darned**,' by John **Bentley** Mays, Globe & Mail, 1 **Jul.** 1992
24. In the History Department, Metropolitan Toronto Reference Library there is an extensive collection of scrapbooks containing biographical clippings from newspapers, which can be viewed on microfilm (film T-686.3). The index lists references to more than two dozen persons surnamed '**Gooderham.**'
25. The City of Toronto Archives has files containing clippings and other materials on the Gooderham Building (49 Front Street E.); the house of William Gooderham (1824-89), at **n.e.** corner of Carlton and Sherbourne streets, now demolished; and George H. **Gooderham's** house (504 Jarvis Street).

I. Architectural Drawings

1. Smith & Gemmell, architects, House proposed to be erected by George Gooderham, **n.d.** but watermarked '1873.' Elevations, ground and first floor plans. Scale 8 ft. to one inch. (**G&W** On-site)
 2. Smith & Gemmell, unidentified house, **n.d.** Plan, elevation and section. (**G&W** On-site)
 3. Plan showing houses of **Gooderhams** and **Worts's** on Front, Trinity and Mill streets, 22 Mar. 1880, with distances between [for laying piping?] (**G&W** On-site)
 4. **D[avid]** Roberts, [Jr.], architect, [Semi-detached] Dwelling houses for W.G. Gooderham, Sept. 1884. Elevations, plans and sections. Scale 8 ft. to 1 inch. (**G&W** On-site)
 5. David Roberts, Jr., Perspective drawing of a house for George Gooderham, St. George Street at Bloor, Toronto, c. 1888. (Private collection, Toronto)
- Sketch plan of lots, Toronto Island, **n.d.** (**G&W** On-site)

Gooderham Family Architectural Drawings

7. Small unidentified house, n.d. Floor plans (G&W On-site)
8. Sketch plans of estate west of Clarkson, Toronto Township, n.d. (G&W On-site)
9. P. Ross, Gooderham House [York Club], St. George and Bloor Streets, measured drawing, 1963 (OA, Picture Colln., D 612-613)
10. [I. Rayman], Gooderham House [York Club], St. George and Bloor Streets, measured drawing, 1963 (OA, Picture Collection, D 614-615 N)

J. Drainage Permits

See introduction to Section L, Part One, p. 41 above.

1. #3082, 5 June 1890, to George Gooderham, 72 Trinity Street
2. #14957, 10 Sept. 1900, to George Gooderham, 90 Mill Street
3. #A-30127, 11 Sept. 1907, to W.G. Gooderham, southeast corner Trinity and Front Streets. Accompanied by a basement plan by David Roberts, architect, dated Aug. 1906 for alterations to a residence. Scale eighth inch to one foot.

K. Building Permits

See Introduction to Section M, Part One, p. 42 above. All permits listed below are found in CTA, RG 13, Series C.

1. B.P. #445, 1 Aug. 1891, to David Roberts, Jr. (for company) for a 5-storey stone and brick office building at the junction of Wellington and Front Streets. Est. cost \$66,000
2. B.P. #998, 23 Sept. 1892, to George Gooderham for a 1½ storey brick stable in rear of residence northeast corner of St. George and Bloor Streets. Est. cost \$6,000.
3. B.P. #1352, 5 Jun. 1893, to Henry Gooderham for a detached two-storey and attic brick and stone dwelling, Homewood Place. Cost \$5,000.

Gooderham Family Building Permits

4. B.P. **#31**, 26 May 1897, to Mr. Gooderham for a large two-storey dwelling and outhouses, Island Front East. Cost \$7,500.
5. B.P. #6, 16 Jul. 1897, to George Gooderham for a small galvanized stable at 842 King Street West. Cost \$150
6. B.P. **#149**, 27 Nov. 1897, to George Gooderham for a two-storey brick addition to nos. 141-143 Spadina Ave. Cost \$2,000.
7. B.P. **#45**, 23 Mar. 1898, to George Gooderham for porches and verandah at nos. 141-143 Spadina Ave. Cost \$150.
8. B.P. **#107**, 25 Apr. 1898, to George Gooderham for a brick addition and alterations to 607 Queen Street West. J. **McKerrachen**, builder. Cost \$500.
9. B.P. **#229**, 26 Apr. 1900, to George Gooderham for factory, Millstone Lane near York street, Toronto. \$6500. David Roberts, Jr., architect.
10. B.P. **#156**, 10 Apr. 1901, to George Gooderham for three pairs of semi-detached dwellings, Worts Ave., Toronto. Cost \$8,000. David Roberts, Jr. architect. Worts Avenue, running east from Cherry Street between Front Street and Eastern Avenue, abutted **G&W's** cooperage on the north side of Front Street. In 1906 the cooperage was re-established on the east side of Trinity Street above Mill Street. About 1916 the houses on Worts Avenue disappeared when the former site of the cooperage and many other nearby properties were incorporated into a yard for the Canadian Northern Ontario Railway.

PART THREE

THE WORTS FAMILY

A. Family Tree

See Appendix D, p. 135, for a genealogical table of the descendants of James Worts (1783-1834), revised to February 1994. (Courtesy Douglas Worts)

B. Biographies

James Gooderham Worts (1818-1882)

1. Dictionary of Canadian Biography, vol. XI, pp. 937-938. Toronto: University of Toronto Press, 1982

James Gooderham Worts (1883-1938)

2. Middleton, Jesse Edgar, The Municipality of Toronto: A History. Toronto: The Dominion Publishing Company, 1923, vol I, p. 210-11

C. Obituaries

James Gooderham Worts (1818-1882)

1. The Globe, 21 Jun. 1882
2. Toronto Daily Mail, 21 Jun. 1882

D. Portraits

1. Miss Alice Worts, winner of First Prize at the Victoria Skating Rink, Toronto, March 7th, 1863, The Canadian Illustrated News [Hamilton], Vol. I, No. 21, 4 Apr. 1863, cover.
2. Anon. James Gooderham Worts (1818-1882), oil on canvas. (Toronto General Hospital)
3. Fraser & Sons, James Gooderham Worts (1853-1884), hand-tinted photograph taken in 1884. (Toronto Harbour Commission; THCA has copy PC 15/3/749)

Worts Family

E. Newspaper Reports and Magazine Articles

1. '**Progress** of Toronto - St. Lawrence Ward,' The Globe [Toronto], 1 Dec. 1868, p. 1. "An addition has been made to the residence of Mr. J.G. Worts, corner of Trinity and Front Streets. The addition consists of a wing, and enlarges the house considerably. Improvements were also made in the stabling and yards."
2. '**City** Improvements; Buildings Now In Progress - St. Lawrence **Ward**,' The Globe, April 21, 1876. "Trinity Street. Two semi-detached residences are shortly to be built for Mr. J.G. Worts at a cost of \$14,000.'
3. 'City Improvements; Building Operations During the Year - St. Lawrence **Ward**,' The Globe, 4 Dec. 1876. "Trinity Street - Mr. J.G. Worts new residence is progressing. It will be of brick, stone facings, three stories. Probable cost, \$13,749. Plan designed by Messrs. Stewart & Strickland."
4. 'Toronto's **Growth**,' The Globe, 12 Jul. 1883, p. 5, "F. Worts, two-storey brick stable, Wellesley place, \$3000.'
5. There is an extensive collection of scrapbooks containing biographical clippings from newspapers in the History Department, Metropolitan Toronto Reference Library. The scrapbooks can be viewed on microfilm (T-686.3). The index includes some references to members of the Worts family.

F. Architectural Records

1. [Stewart & Strickland?], Proposed double house for J.G. Worts, **n.d.** but watermarked '1874.' Elevation and floor plans. (**G&W** On-site)
2. [Stewart & Strickland?], Proposed dwelling house for J.G. Worts, **n.d.** but watermarked '1874.' Basement, ground and first floor plan. Scale 8 ft. to one inch. (**G&W** On-site)

Worts Family

3. [Stewart & Strickland?], Proposed dwelling house for J.G. Worts, **n.d.** but watermarked '1874.' Elevation in wash colour, ground and first floor plan. (**G&W** On-site)
4. Stewart & Strickland, Heating Specification, for a house belonging to Walter G. Lee, Jarvis Street. **n.d.** Stewart & Strickland had a commission from James G. Worts in **1876** and may have provided this document for his information and comparison. (**G&W** On-site)

APPENDIX A
LIST OF PHOTOGRAPHS OF THE
DISTILLERY OF GOODERHAM & WORTS LIMITED
1916-1918
CITY OF TORONTO ARCHIVES, SC 583

City of Toronto Archives, British Acetones Collection, SC 583

PHOTOGRAPHS OF THE DISTILLERY OF
GOODERHAM & WORTS LIMITED

TORONTO, CANADA

OPERATED BY

BRITISH ACETONES TORONTO LIMITED

(IMPERIAL MUNITIONS BOARD)

FOR THE MANUFACTURE OF ACETONE AND CORDITE KETONE

COL. A. E. GOODERHAM
MANAGING **DIRECTOR**

CAPT. A. E. GOODERHAM
ASST. MANAGING DIRECTOR

Construction Staff:

E. METCALFE SHAW, Wh. Sc., **Assoc. M. Inst. C.E.**,
Chief Engineer.

J. H. **PARKIN**, BA Sc., **Mechanical** Engineer.

D. J. THOMSON. BA **Sc.** **Electrical** Engineer.

FRANK W. BARRON, Mechanical Superintendent.

Operating Staff:

H. B. SPEAKMAN, M. Sc., **Bacteriologist.**

D. **ALLISTON** LEGG, F.I.C., **Chemist.**

MARGARET D. **BOWES**, Matron.

W. CHARLES **COLLETT**, BA Sc., Architect.,

THE BRITISH ACETONES TORONTO LIMITED was formed early in 1916 for the purpose of manufacturing acetone from corn by the newly discovered Weizmann Bacteriological process. The shareholders of Gooderham & Worts Limited, and afterwards of the General Distilling Co., patriotically placed their plants at the disposal of the British Government, free of charge, for the duration of the war.

The British Government asked for 250 tons of acetone in fifteen months. The plant actually produced 1,080 tons in the first fifteen months, and a total of 2,850 tons during the whole period of operation from August, 1916, to November, 1918, and was producing at the rate of eight tons per day, or forty-eight tons per week, during the last months.

Canada produced seventy-eight per cent. of the acetone in the British Empire, of which seventy-five per cent. was supplied by the British Acetones Toronto Limited, making nearly sixty per cent. of the total output of acetone of the British Empire.

In 1917 permission was granted for the building of a plant for the conversion of butyl alcohol into methyl ethyl ketone by a process perfected in Toronto. The plant was constructed, and had just begun producing methyl ethyl ketone when the whole plant was closed down following the signing of the armistice.

The following pages give a photographic record of the development of the plant, and a description of the various sections of the plant, and interesting and vital pieces of equipment and apparatus.

BRITISH ACETONES, TORONTO, LIMITED

Page.	Photo No.	Description.
1	10	Original Staff of the British Acetones, from left to right:— Mr. M. Laughlin, Assistant Constructing Engineer. Captain A. E. Gooderham, Assistant General Manager. Mr. J. Leys Gooderham, Assistant Chemist. Mr. E. Metcalfe Shaw, Chief Engineer. Mr. H. B. Speakman, Bacteriologist. Col. A. E. Gooderham, General Manager. Mr. J. W. Hayward, Constructing Engineer. Mr. D. Alliston Legg, Chemist.
2	148	Mr. Speakman, Bacteriologist, and his Staff in the Fermentation Department.
3	152	Mr. Legg and his Laboratory Staff.
4	151	Mr. Legg with his Acetone and M.E.K. Staffs.
5	156	Mr. Shaw with his Engineering, Drafting, and Office Staffs.
6	60	General View of the British Acetone Plant.
7	167	Bird's-Eye View of Plant.
8	62	View of the Plant from the west, showing the Butyl Tank, capacity 1½ million gallons; Boiler House, with Distillery and Mill in the distance.
9	61	View looking south on Trinity Street, showing to the right the M.E.K. Still, and Tank Houses and Storage Coal Shed in the distance; on the left the Butyl Rectifying Stills.
10	153	British Acetone Building, formerly G. & W. Barrel Wash House.
11	154	Interior British Acetone Office.
12	64	G. & W. Elevator.
13	63	View looking south, showing the G. & W. Elevator to the right, Coal Shed to the left with piles of coal between, the Drum Cleaning Room and the Fermenting Cellar.
14	65	Machinery for Moving and Unloading Corn in the Elevator.
15	66	Interior of top of Elevator showing Belt Conveyor.
16	67	Another view showing the Tripper.
17	108	West Boiler House, showing Babcock and Wilcox Boilers.
18	109	Showing Pumps, Auxiliaries, Emergency Electric Light Plant and Fans for Boilers.
19	110	East Boiler House, showing battery of eight Boilers.
20	111	View of top of these Boilers.
21	77	Four Tubular Boilers held in reserve.
22	68	G. & W. Main Building, containing Mill, Mashing and Fermenting Departments; on the right are G. & W. Offices.
23	86	View of same building, from the west.
24	78	Mill Engine in Distillery Building.
25	69	Ground Floor Mill, showing machinery for driving Millstones and Rolls.
26	70	Another view of same.
27	71	2nd Floor of Mill, showing Millstones and Rolls.
28	72	Scalper for removing Bran from Meal.
29	73	Weighing meal into Mash Tubs.
30	75	Ground Floor, showing Air Compressors and Machinery for driving the Mash Tubs.
31	74	Showing control of Mash Tubs.
32	76	Mash Digester. This raises the temperature of the Mash from 206 degrees Fah. to 240 degrees while driving from the Mash Tubs to the Cookers.
33	89	Distillery Department of the General Distillery Company—lower part of the building being the Chemist's Laboratory.
34	112	Switch House, controlling Electric Circuits throughout the Fermentation Room and Distillery.
35	1	Bacteriological Laboratory, showing in the foreground Mr. F. H. Carter, who had charge of the Terre Haute Plant, and Mr. Speakman, at the microscope, who was in charge of this Plant.
36	2	Bacteriological Laboratory. Cooling Room showing Sterilizers and Incubators.
37	146	Bacteriological Laboratory.
38	147	Showing enlargement of Bacteriological Laboratory with Experimental Fermentation Tank.
39	3	Showing the Bacteria in different stages of growth.
40	28	The Inoculator Room, showing Culture Vessels and Inoculators.
41	29	The Culture Vessels with all connections.
42	31	Showing Inoculators with all necessary connections.
43	32	Near View of Seed Tanks with connections.
44	30	General View of Seed Tank Room.
45	79	Showing Fermentation Room with Boiler House on extreme right, Still House in centre, Sulphuric Acid Concentration Building with the hipped roof, M.E.K. Building, and the Mill and Elevator in the distance.
46		Showing Fermenting Tanks with Gas Drums as originally installed. These Gas Drums, being a source of contamination, were discarded, and Gas Traps, as shown on page 49, were installed.
47	20	Showing the Cookers and Seed Tanks with the Inoculator Room in the distance.
48	80	Showing the Cookers.
49	21	Fermenting Room, looking east.
50	53	Fermenting Floors, showing Cookers and Fermenters.
51	18	Another view of Fermenting Room.
52	19	Showing fittings on Fermenters.
53	83	Fermenting Room, formerly part of G. & W. Barrel Wash House.
54	84	Connections for filling and emptying Fermenters.
55	17	Original Cooler.
56	16	Another view of Original Cooler.
57	15	Another view of Original Cooler.
58	12	Improved Cooler designed by Mr. E. M. Shaw.
59	13	Another view of Improved Cooler.
60	14	Another view of Improved Cooler.

BRITISH ACETONES, TORONTO, LIMITED

Page.	Photo No.	Description.
61	81	Pumps, Coolers and Cookers.
62	82	Another view of same.
63	54	Another view of same.
64	85	Engines and Pumps for pumping the Fermented Mash to the Beer Sump.
65	87	G. & W. Fermenting Tanks, into which foaming tanks are pumped.
66	88	Pumps for pumping from Beer Sumps to Beer Stills.
67	149	Mr. Legg and two of his Assistants in the Chemical Laboratory.
68	4	Chemical Laboratory.
69	150	Routine Laboratory.
70	6	Original Beer Still and Tale Box.
71	90	Beer Still and Tale Box, showing two Beer Stills made necessary by the enlargement of the Plant.
72	92	Rectifying Kettles and Badger Rectifying Still for Acetone.
73	93	Foot of columns on Rectifying Kettles and Emergency Pump for Beer Stills on floor above.
74	96	Showing Goose Tanks, Beer Heaters, etc., in Acetone Distillation Department.
75	7	Rectifying Columns, Condensers, Tale Boxes and Gauging Vessels in Acetone Redistillation Department.
76	94	Another view of same.
77	95	Showing Badger Continuous Rectifying Still.
78	91	Connections at bottom of Acetone Tanks.
79	97	Receiving Tanks for Pure Acetone prior to being shipped.
80	99	Drum Cleaning Department.
81	98	Filling Drums ready for shipment.
82	8	Shipping Room, showing consignment ready to be shipped.
83	9	Showing the ends of the Drum.
84	100	The Butyl Salting Plant with Storage Tanks and Drums.
85	101	The Butyl Rectifying Stills, formerly G. & W. Alcohol Rectifying Department.
86	102	Butyl Rectifying Stills.
87	103	Operating Floor, showing Tale Boxes and Controls of the Butyl Rectifying Stills.
88	104	Showing Tank Houses containing Rectified Butyl and Alcohol Tank Rooms.
89	105	Butyl Storage, showing racking off Rectified Butyl into Drums.
90	106	Showing Butyl in Steel Drums ready to be shipped.
91	107	Loading Butyl into cars.
92	37	Construction Staff of Acid Concentrators.
93	22	Acid Concentrators under construction.
94	23	Same.
95	35	Same.
96	36	Same.
97	51	Foundations of Add Concentrators.
98	46	Stairs leading to top of Concentrators.
99	47	Oil Burner on concentrator.
100	129	Improved Oil Burning Installation.
101	49	Motor and Fan for Exhausting Vapors from Acid Concentrators.
102	50	Feed Tank and Measuring Box for Concentrators.
103	48	The Cooling Boxes for Add passing from Concentrator to Storage Tank.
104	52	Acid Storage Tank.
105	130	Same.
106	140	Shaw's Improved Heat Interchanger.
107	138	Shaw's Acid Concentrator.
108	166	Sections of above.
109	124	Transformer House.
110	40	Transformers on car which had been in a collision.
111	39	Same.
112	38	Same.
113	125	Interior of Transformer House.
114	27	Switch House, showing Barrel Rheostats.
115	26	Another view of same.
116	126	View of Enlarged Switchboard.
117	127	Back view of Switchboard.
118	113	M.E.K. Building.
119	33	Experimental M.E.K. Plant.
120	34	Another view of same.
121	136	Furnaces under construction for burning first stage Catalyst.
122	137	Furnaces for burning third stage Catalyst.
123	128	Electrical Workshop where heaters for Catalysers were constructed.
124	25	Catalyser Heaters under construction.
125	58	Catalyser Patterns.
126	163	Catalyser Cores and Moulds.
127	164	Catalyser Cores and Moulds.
128	24	The Catalyser.
129	165	Shipment of Catalysers.
130	114	The Catalyser Room, showing twelve Catalysers set up and in operation.
131	115	Another view of Catalysers.
132	41	Variable Feed Pump for Catalyser.
133	42	Temporary Experimental Catalyser Connections to facilitate obtaining of experimental data.
134	45	Coolers—same principle as shown on pages 58, 59, 60.
135	57	Heat Interchanging Room of first stage M.E.K. Plant.
136	56	Closer view of same.

City of Toronto Archives, British Acetones Collection, SC 583

BRITISH ACETONES, TORONTO, LIMITED

Page.	Photo No.	Description.
137	55	Another view of same .
138	118	M.E.K. Plant, showing in the left foreground Butyl Gasometer; back-center, Salting Plant; right foreground, Scrubbing Column; left foreground, Scrubbed Liquor Receiver.
139	44	Temporary Butylene Compressor in the foreground, with Butylene Storage Tanks on the first floor , and the Sulphating Mixer on the ground floor.
140	43	Showing Temporary Butylene Compressor and Separating Equipment:
141	120	Butylene and Add Storage Tanks.
142	117	Butylene Compressors and Sulphating Mixer for M.E.K. Plant.
143	139	Shaw's Patent Sulphating Mixer.
144	116	Lead Still, Add Tank and bottom of Lead Column for distillation of secondary Butyl from Butyl Hydrogen Sulphate.
145	122	Feed Tank, Dephlegmator and Condenser for the Lead Still.
146	119	Bottom of Scrubbing Column for recovering crude M.E.K. from Hydrogen Gas.
147	123	Tank for Feeding the Lead Still and parts of Still of Scrubber.
148	121	Storage Tanks in connection with M.E.K. Plant.
149	131	Still Houses for Rectifying Stills for M.E.K. Plant.
150	132	M.E.K. Stills supplied by Badger & Son, Boston.
151	133	Rectifying Columns on M.E.K. Stills.
152	134	Dephlegmators and Condensers on M.E.K. Stills.
153	135	Pumps for charging M.E.K. Stills.
154	162	Drum of pure M.E.K.
155	155	Drafting Office and Staff.
156	143	Entrance to M.E.K. Plant, showing Time Office .
157	144	Interior Time Office and Telephone Switchboard.
158	142	Store Room.
159	141	Interior Pipe and Machine Shop.
160	145	Interior Lunch Room.
161	159	Lead Vdves and Fittings in connection with Add Concentrator.
162	158	Gaskets used in M.E.K. Plant.
163	157	Samples of Metals from which our Catalysers were cast.
164	11	Fractured Extension Electric Light which caused a slight explosion in the Plant.
165	160	Staff and Employees, including Contractors' Employees and others temporarily employed.
166	161	Float representing "In Flanders Field"—Victory Loan Parade, November 11th, 1918.
167	169	Shield awarded the Float as being the Best Float in the Parade.
168	168	Tobacco Humidor, presented to Col. Gooderham by the Staff of the British Acetones.

APPENDIX B
NEWSPAPER REPORTS
AND MAGAZINE ARTICLES

Messrs. GOODERHAM & WORTS, *City Steam Mills and Distillery*.—These mills were established in the year 1832, and were originally driven by wind, and built in an improved English fashion, at a cost of upwards of £2,000. As wind-mills they were not found to answer, the power being so uncertain and limited that for the first two years only about 50 barrels of flour per week, or 2500 per year, were manufactured. At that time, however, so little wheat was grown in this district that two, or three agents, in different parts of it, were constantly employed to purchase the quantity required to make that small quantity of flour. After the first two years a steam engine of 16 horse power was added, it being the third steam engine made in Canada West and built by the same person who had a premium of £50 granted by the Legislature of the Province for having built the first steam engine in Canada West. Some twelve months after the engine was applied the wind-mill sails were blown off during a heavy thunder storm, and were never replaced. A distillery was then added, on the ordinary country principle, running 15 bushels per day, being on as large a scale as most of the distilleries in the district, since which the business has been gradually increasing; and about four years since the whole establishment was renewed and remodelled upon the most improved principles, at a cost of upwards of £2,000, and at which time a new still, named after the originator,

Riley's patent still, was put in. This still is now in use, but further improved by Maitland, who increases it as his patent still, but it has been brought to its present perfection by the proprietors themselves. Its great utility consists in enabling the distiller to run his beer in much less time than in the old Dutch still; and spirits can at one operation be brought to 50 per cent. over proof, which, before this invention, could not be done without the assistance of a copper still. The work now done in this distillery averages, throughout the year, 60 bushels per day, or 18,000 bushels of grain per year, producing about 80,000 gallons of whisky. In connection with this part of the establishment, there is a dairy of 108 milk cows, which are kept and fed principally on the offals from the mills and distillery; but in addition, during the winter, their food consists of a ton of beet root and a ton of hay per day, and in the summer they are supplied with fresh mown grass, and are continued to be fed until fatted, and are then sold to the butchers. The average number fatted and sold each year is about 300 head. The milk is mostly sold in the city each night and morning—the quantity not sold is churned into butter by a horse-power churning machine, capable of churning 60 lbs. of butter at a churning, which occupies from 2 to 3 hours. The manure is carted away to two farms in the immediate neighbourhood of the city, on which all the residual food for the cows is

grown. This part of the establishment employs 8 horses, 10 men, and 6 women regularly.

The flour mills have three run of stones, and when regularly at work have turned out 900 bush. of flour per week. There are double coolers in the flour mill, one placed on the floor above the other. The flour, after passing through the various stages necessary for its proper manufacture, is placed in the flour barrels and packed by machinery; and such is the saving of labour from the machinery employed that from the time the wheat is taken in it is never touched by hands until the barrels are removed from the packing machine, filled with flour, to be weighed off for sale or export. There is a wharf in connection with the premises from which the shipments are effected. At the end of this wharf two store-houses are erected, each about 90 by 30 feet, and two stories high, capable of storing 20,000 bushels of wheat and 5,000 barrels of flour. Last fall, the proprietors informed us, they shipped 80,000 bushels of wheat to Great Britain and the United States. The proprietors of these mills are also proprietors of the propeller *Western Miller*, which vessel takes their produce direct to Quebec, without transhipment. She made, season, ten trips from Toronto to Quebec, and one from Toronto to Montreal, and is capable of carrying at one time a cargo equal to 3500 barrels of flour. She was, during the winter, at St. Catharines, being thoroughly overhauled, batt bolted, and diagonally stayed, and we understand from her proprietors that her first trip this year will be to Halifax, with a cargo of flour, bringing back sugar. Several schooners made the voyage last year, but this will be the first steam vessel in the trade between this and that port.

The barrels used in this establishment are all made at a short distance from the mills, where there are employed about ten coopers constantly. The entire number of hands constantly employed in the mills, distillery and cooper's shop, is about 31, besides others casually employed. The workmen occupy, in the immediate vicinity of the mill, 27 houses, and are each in the receipt of from £50 to £120 per year wages.

We had almost forgotten to notice an ice-house which is built entirely above ground, and which the proprietors assured us, kept ice in perfect preservation throughout last summer. It is 30 feet square and 12 feet high, and the ice preserved in it is used in the distillery during the summer months.

This is an exceedingly extensive establishment, the most so we have seen in this country, and much more extensive than anybody unacquainted with it could imagine it to be. The machinery appears to be very substantial and durable, and in complete working order; and everything here appears to be performed with a spirit and system which reflects much credit on the proprietors.

The Globe, 11 July 1859, p2

NEW STEAM MILLS AND DISTILLERY.

A substantial and extensive stone building is in course of erection in the eastern part of the city, between Parliament and Trinity-streets, a little north of the Grand Trunk Railway track, fronting the Bay. The owners are Messrs. Gooderham & Worts, and it is designed for steam mills and a distillery. The premises are 300 feet long, by a width of 80 feet, and the principal building will be five stories from the ground floor, and between 70 and 80 feet in height. The chimney will be 100 feet high, and the walls 3 ft. 6 in. thick. The stone is from the Kingston quarries, and in its carriage four schooners are constantly employed. The first story is to be fire-proof throughout. Like the building, the machinery is to be of the best description and on the most approved principle. It will be entirely of wrought and cut iron, no wood whatever being used. There will be a low pressure steam engine of 100-horse power, built by Messrs. Barclay & Gilbert, of Montreal. The boilers, six in number, will be constructed so as to withstand double the pressure which will be ordinarily brought to bear upon them. There will be eight miles of stoves, capable of producing 150 barrels of flour daily, besides which the operatives in the distillery will be enabled to mash in the same time 1,500 bushels of grain. Elevators will be used for hoisting grain into the building from the railway wagons, which can be run close up to the front. Messrs. Resteven and Godston execute the stone work; Messrs. Smith, Barks & Co., the wood work; Messrs. Fox & Co. the slating; and Mr. James Good the foundry work. The architect and engineer is Mr. D. Roberts, under whose immediate superintendence the building is being erected, and under whose direction it will be fitted up with the machinery, &c. Though it was late in the month of April when the foundations were laid, yet it is anticipated that the work will be finished throughout before the end of the year. The estimated cost £25,000. So: less than from 400 to 500 labourers and mechanics are employed either on or in connection with the building.

The Globe, March 26, 1863, p2

MR. WALT HOUSE, & CO., FOR MESSRS. GOODERHAM & WORTS.

This firm are about erecting another set of buildings in connection with and adjacent to their extensive mills and distillery. The new block will cover an area of over 15,000 square feet, and will comprise a malting house 141 feet by 70 feet, a cooper's shop 70 feet by 26 feet, a storhouse 85 feet by 32 feet, an alcohol tower 32 feet by 16 feet, and an office 20 feet by 25 ft. The malting house will consist of two malting floors and a granary, each 106 feet by 67 feet, and two kilns 88 feet square. The storhouse will be two stories in height, and the alcohol tower will rise to the height of 45 feet. The whole are to be built in the strongest possible manner, with red brick and stone. The floors will rest upon heavy cast-iron columns. The roofs will be covered with slate. The heads and bases of pilasters, and the window sills, will be of Georgetown stone. Messrs. Gundry & Langley are preparing the plans for these buildings.

The Globe, February 7, 1862, p1

ANNUAL REVIEW
OF THE
TRADE OF TORONTO,
FOR 1861.
**DISTILLERY OF MESSRS. GOOD-
ERHAM & WORIS.**

The most important contribution to the manufacturing interests of Toronto during the year, has been made by the above well-known firm. Their distillery, at the eastern end of the city, has been completed and in successful operation for almost twelve months. It is the largest in Canada, and in point of completeness and general arrangement, is equalled by few on the continent.

The building is situated close by the track of the Grand Trunk Railway, from which a private switch is built large enough for fourteen cars, the wharf, upon which are ample storerooms, elevator, &c., of dimensions sufficient to contain 80,000 bushels of grain, is on the other side of the track. The distillery is three hundred feet long, eighty feet wide, and five stories high. The material of this immense structure is the finest quality of Kingston lime-stone. It was commenced on the 1st of April, 1859, and was finished last January, a large number of men having been constantly employed for nearly two years in its erection. The design and execution of the entire edifice are of the most massive character. The walls are of unusual thickness, and the timber, supports, and pillars are equally substantial. As an instance of the care taken in the erection, we may state that the entire number of beams, which form the foundation for each dory, are all double, so that not only is additional strength secured, but in the event of the wood becoming diseased, the faulty stick of timber can be removed and by an easy contrivance replaced by one more reliable. In order, however, to guard against the probability of the timbers becoming rotten, not a single beam is inserted into the walls. Instead of this they rest upon what are termed "cobble stones," or projections from the inside of the wall. The air is thus allowed to circulate around the ends of the timber, the point at which decay is first observed—and thus the beam will be made to last much longer. These beams

are supported in the centre of the building by iron pillars, three on the first four stories king fully a foot in diameter, and those in the fifth story somewhat less. The number of these supports is immense, and the iron work of the building must have formed a considerable item of the entire cost. The building, for strength and durability, is as complete as well directed labour and liberal expenditure can make it. The stone work was contracted for by Messrs. Gordon & Keatvin, the wood work was performed by Messrs. Smith and Burke, who, as usual, made a good job of it. The copper and brass work, including stills, rollers, taps, &c., were from the establishment of Booth & Son, of this city, whose reputation for this class of work is second to none in the Province. The architectural superintendence of the building, as well as the complete machinery contained within its walls, was entrusted to Mr. David Roberts, who during a period of nearly three years, from the first conception of the enterprise to its successful completion, gave the work a most assiduous and intelligent oversight. The establishment reflects the greatest credit upon his engineering abilities, and our city is fortunate in possessing among its professional men, a gentleman competent for such an undertaking.

The visitor to the interior of the distillery cannot fail to be interested, for in scarcely any other establishment in Canada is there so much accomplished without the aid of manual labour. From the time the corn is received at the door until it is "racked" or drawn off in barrels, as whiskey or spirits, it is not handled by human hands. To this fact add the immense capacity of the establishment. Fifteen hundred bushels of grain can be consumed in one day, producing about seven thousand five hundred gallons of whiskey or spirits—a yearly consumption of grain amounting to nearly half a million of bushels, and a production of nearly two and a half million of gallons. In addition to this, there is the supplying almost the entire city with "wash" or swill for cows, and feeding an immense number of cattle in connection with the establishment, a matter to which reference is made elsewhere. The engine, which keeps in motion all the multifarious inventions of human skill to accomplish so much work, is a model of beauty and strength. It is the largest land engine in the Province, being of one hundred horse power. It was furnished complete by Messrs. Baillet & Gilbert of Montreal. The proprietors of the establishment, as also the intelligent engineer, Mr. Charles Hood, speak of the engine in the warmest terms, and strongly recommend its makers to the public. It is most elaborately finished, and Mr. Hood's room, so comfortably carpeted and so cleanly kept, is a most attractive spot. The fly-wheel is of immense size, being some seventy feet in circumference and revolving very rapidly. The engine

room is completely fire proof—the ceiling, walls and foundation consist of dressed stone.

It will give some indication of the extent and completeness of the establishment, to follow the course of the grain, until it becomes whiskey. At the same time it may afford to many who know nothing about the distillation of spirits an idea of the process. The grain, of which the greatest quantity is used is Indian corn, all of which is imported from Chicago or other western markets, the larger portion by the Collingwood route, and the remainder by vessels through the Welland Canal, and discharged at the proprietors' wharf. Barley, oats and rye—the latter mainly imported—are also made use of. The grain is received into the hopper—a car load can be unloaded thus in 20 minutes—where it is weighed. From this it is elevated at the rate of 1,000 bush. per hour to the highest story in the building. Here it is screened and thoroughly cleaned, and descends into the "stock hoppers," of which there are six, with a capacity of 2,500 bushels each. From these hoppers, the grain as it is wanted, passes down to the stones, which grind it into meal. There are eight run-of stones, of the latest and most improved pattern, under the charge of L. Limmer, who efficiently superintends the milling department. These stones are driven by one of the simplest, yet one of the most complete arrangements in the entire building. It would be useless to describe it; to be appreciated it requires to be seen. After being ground into meal, the corn is a second time elevated to the top of the building, and conveyed to another set of hoppers, immediately over the mash tubs. From this it is let down into a moveable hopper, which is placed on a small railway. Here it is again weighed, a process that occupies marvellously little time, for two men can weigh between six and seven hundred bushels in about ten minutes. The hopper is then pushed over the particular mash tub designed for its reception, and the corn descends into it. These tubs are mammoth puncheons, into one of which a small dwelling house could be easily packed. The different grains here meet in the requisite proportions, and are all mixed together into a liquid, by the introduction of hot and cold water, and steam. The distiller everything at his hand—the simple turn of a tap will deluge the tub with steaming boiling water, as well as the turning of another tap bring in an almost inexhaustible supply of cold water. The meal having now by the addition of the water tempered to the right degree, been converted into a thin liquid, is kept in these mash tubs some four hours, during which it is constantly being agitated by the revolving action of a contrivance for the purpose. After having gone through this process this liquor is let down into the fermenting tubs, of which there are at present fourteen, a number that is to be increased

to twenty-eight or thirty. In these tubs the liquor remains for four days, undergoing the process of fermentation. This over, and the reader will remember that it has now reached one of the lower stories, it is elevated, for the third time, by a brass pump of large capacity, not equalled in Canada. By this the fermented liquid reaches the still, where, by the action of great heat, the spirit is separated from the grosser material, the former going off into a worm, in the shape of steam, and the latter running off through a pipe, down into the ground, crossing the street into the receptacle for "wash." After going through the thousand and one feet of pipe of which the worm is composed, the spirit is condensed from steam into a white liquid, known as raw spirits, which runs slowly from the bottom of the worm into a pipe, and is thence pumped up into mammoth receivers or tanks at the very top of the building. From these it is distributed into a series of rectifiers, forty-two in number, containing eight hundred gallons each, when charged. These rectifiers are filled with powdered charcoal (which has to be renewed every six or eight months), through which the liquid is slowly filtered. This process partially separates the essential oils from the spirits. From the rectifiers the liquid is conveyed into receivers, where some further manipulations take place, and from which a portion of it is drawn off as "Common Whiskey." Here it is bottled and rolled into a large store room, where it sleeps, and is ready for the market in from two to twelve months. This is the article that enters most largely into consumption in Canada West, and it is to be regretted that if the people will have whiskey they should not have an improved taste, and drink an article least likely to produce deleterious effects. The higher grades of the article are manufactured in this establishment, and we will proceed to show how. In the meantime, however, we may remark that although common whiskey can now be had at twenty cents per gallon, wholesale, there is no market found for it in Lower Canada, while for the "Toddy" and "Old Rye,"—the higher grades,—there is a large and increasing demand. The quantity of essential oil—the most deleterious element of common whiskey,—which is drawn off during the progress of distillation of the better qualities, is large enough to convince the most casual observer of the superiority of the latter over the former in point of wholesomeness. This process is simply that of putting the liquid through copper stills and worms. For this purpose it is drawn from the rectifiers, and runs down through a pipe underground to the old windmill just adjacent to the distillery. The "old windmill" is among the historical relics of Toronto, having been erected some thirty-one years ago, since which time it has been a landmark of the most useful kind; and the "Wind-

mill line" has been a limit of frequent use during the building of the esplanade and the litigation resulting therefrom. Into this ancient, yet substantial structure, have been introduced some of the most modern and complete descriptions of machinery, forming two immense raper stills, with a capacity of 1,500 gallons each. Here steam is applied, and the liquid is brought up to the highest point of strength, separating as before, but in greater quantity, all deleterious matter in the shape of oils, while the spirit goes off in steam, is again condensed by the worm, and thence emanates "silent spirits" of the purest kind. The highest strength is now reached, being 60 over proof by Sykes' Hydrometer, or what is usually called 59 American proof. This is then reduced to 50 o. p. and in this state it is shipped to Lower Canada where it finds a ready market, and where it is a favourite beverage. Large quantities have also been exported in this state to London and Liverpool markets, where its quality has been highly approved of. For the purpose of still further reducing its strength, distilled water,—i. e. water generated from steam perfectly pure and soft—is applied, and thus with some other harmless adjuncts, the famous "Toddy" and "Old Rye Whiskey" are produced. These articles are unquestionably the best and purest that can be manufactured from grain, and it would be an improvement if they could take the place of all the common whiskey which is consumed throughout Upper Canada.

We have thus followed the grain from its reception from the track of the railroad; until it has been converted into either common whiskey, silent spirits, or "Old Rye" and it is now ready to be again reloaded into the cars, for shipment perhaps to Liverpool, and thence to any part of the world. Throughout this long journey, every possible care is taken to have the article kept in the most healthy state, and every room, pipe and fixture in the entire edifice is as clean and free from impurity as the neatest housewife could desire. Nothing which could save labour and render effective every advantage which nature and art affords, has been spared, and the entire establishment, from the thundering fly wheel, down to the finest tap, is a model of completeness and efficiency.

The "wash," or what outsiders choose to denominate "swill" or "lops,"—is conveyed, as we have seen, from the still by pipes under the ground, across Trinity-st., where force clutches it to a receptacle provided for it. From this city milkmen and private families keep cows, get their supplies. Every description of vehicle can be seen at all times of the day, from the dog-cart to the heavy team loaded with punchcocks. This "wash" after it leaves the distillery is no longer the property of Messrs. Gooderham & Worts; it now belongs to

Mr. William Lumbers, who contracts for the whole quantity. The demand from the city takes only a small proportion of the supply, and Mr. Lumbers in addition carries on an enterprise, the extent and importance of which few of our readers apprehend. Adjacent to the distillery are four long stables, in each of which are one hundred cows,—in all four hundred. These cows, while yielding a large amount of milk which is sold to the city, are at the same time gradually being fed, and in a short time are withdrawn from the stables and sold for beef. In this way over 1,000 head of cattle, producing at least \$10,000 per annum are fattened and sent to market. We confess to have had come into prejudice against the "swill milk" or "swill fed beef," and with visions of Frank Leslie's "stump-tail" revelations, were rather indisposed to accept Mr. Worts' invitation to visit the stables. We are glad, however; that we did go, for we were very agreeably surprised. In the first place, the stables are so constructed and drained that they can be kept perfectly clean with very little labour, and in the next place there is plenty of light and ventilation. The cattle are all sleek and clean, but those that have just come in are easily distinguished by their gaunt, rough and dirty appearance, as compared with those that have been fed for a few months. There is the greatest care taken in providing straw for bedding, and their food, instead of being entirely of wash, as is generally supposed, is quite as varied and excellent as the provender of any cattle in the land. Mr. Lumbers has two farms in the vicinity of the city, upon which he grows immense quantities of root crops. His land is in the highest state of cultivation, and of great richness from the amount of manure brought from the stables, which is applied to it. The roots are cut by machines for the purpose, and fed at regular intervals. Salt in abundance is in every stall, and so far as we could judge, every care is taken of the animals. We noticed some very fine animals among them—many of imported breeds.

We have already occupied a large space in noticing this manufactory, and need not further particularize as to cooper shop, &c. We may state in conclusion that nearly one hundred and fifty men and their families are dependent upon this establishment in one way or another, and that the cost of the building and its contents amounts now to over \$160,000, and when finished will foot up to \$200,000. The taxes paid by the proprietors last year were over \$2,400, and the excise duty to the Government is over \$100 per day. These figures show the extent of the establishment and afford an idea of the amount of means and ability required for the successful prosecution of so immense a business. We need hardly say that Messrs. Gooderham & Worts possess an abundance of both.

282

THE CANADIAN ILLUSTRATED NEWS.

[APRIL 25,

sorely, that it was the arm which clasped the sweetest hopes of my life into my heart, and must fail now forever from its office.

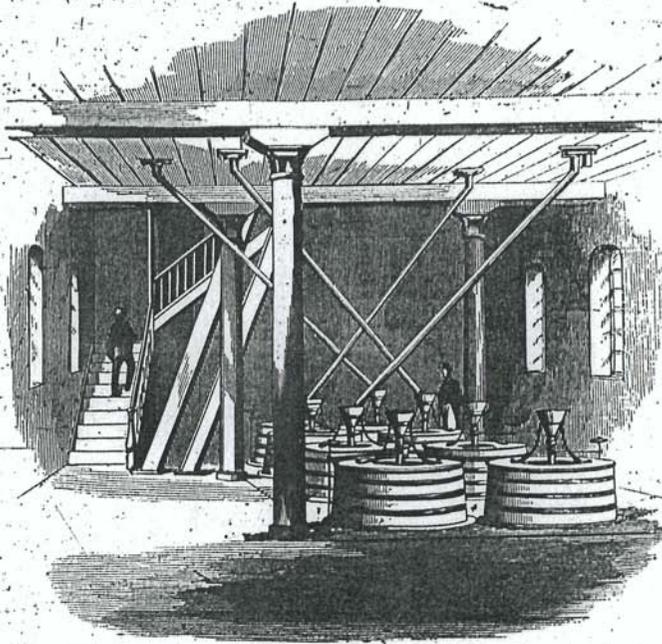
‘Ralph,’ I began at once, ‘I told you I loved you, and as far as flesh and sense is concerned I love you still. But the true Ralph Hasseltine, he who after this visible one has fallen into dust, after the fair earth itself has waxed old like a garment, and been folded away as a vesture, I do not love. And so you will absolve me from my promise as freely as I feel I can ask it of you, since the seeing with which I made it was as if I had not seen.’

He sprang to his feet amazed, remonstrating, protesting, and soon, with hurt pride and disappointment, looking high in him, angry.

He could not understand me, even in this; and loth as I was to let him go forth in anger, I felt it impossible to prevent it by anything short of retraction. And so the graceful figure which had brought such great joys in to me, which I had loved with almost ‘inordinate affection,’ went out over my threshold to return no more forever.

If I had known him less well my heart would have been sorer for him than for myself. But though he loved me as such men may love, I felt he did not need me. His soul was not enough in capacity to feel a lack of which a true woman alone could be the complement. I was to him but one of the many pleasant things of life, and losing me enough remained for his full desert.

What thousands of women have sat before slowly dying fires—fat into nights, as I sat on the one where I, by my own will but not wish, had laid the dear dream of my theory upon the altar of holocaust, and watched its



No. 4.—STONE FLOOR; GRINDING.—[See Supplement.]

fair proportions drop into annihilation. And it was gone with no whit less bitter a sense of loss and failure than if it had been true, and of substantial and logical base. As it was, I had staked my happiness and satisfaction so thoroughly upon my experience of its success, that when, after beginning to be wrought out so nobly, it had failed and fallen, I felt as if all the rest went with it.

At least I felt so in the lonesome hours before the waning fire. But other days dawned, and the great strong march of time went on—neither had beauty and joy faded out of it for such as were willing to take it without too fastidious selection. It is not in my nature, as in many women's to fail or suffer, and by smothering and ignoring the matter get over it. My relief was to argue it out before I could forget it. So I took my old theory of love in hand, and held it up to my tests of religion and logic.

I found that, though applying the former gauge to to all things else, I had hitherto neglected to do it here. I believe I had unconsciously considered love—being ‘in love’—the romantic passion I had sought, as the one thing out of Scripture province. Now looking in the Bible for warrant for my theory of love, I found none whatsoever: this choosing one fallible mortal from among the rest, and investing him—nay, the very trifles his hand touched—with a sort of sacredness above all else.

This willingness to bring all the heart's passion, and kindness, and effort, and lavish them on one man to the exclusion of others. What else can be that ‘inordinate affection’ against which we are warned? And yet in this province of marriage we find there a degree of affection allowed, nay, demanded, second only in its degree to that we give to God. And



DISTILLERY OF MESSRS. GOODERHAM & WORTS, TORONTO; FRONT VIEW.—[See Supplement.]

1863.]

THE CANADIAN ILLUSTRATED NEWS.

285.

yet parallel with this is the requisite and problem of the Christian life on earth, how to impart the largest share of happiness and progress to the greatest number without thought for self, assured that when one puts the question of private happiness out of their hands, God takes it into his and gives a most blessed answer.

In the matter of love and marriage I had considered my own pleasure solely without thought of furthering the cause to which I had pledged all my life's issues and efforts. And now I came to see that the selection and marrying of a husband, while not to be undertaken without great personal preference and pleasure, involves a greater privilege and duty, and is guided by a higher and wiser rule than that of being blindly in love.

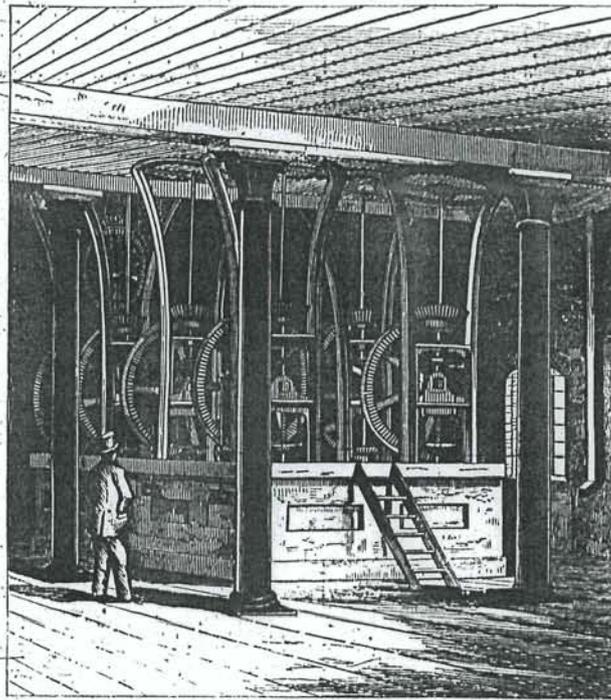
This certainly was a great help to recovery, and together with my thoroughly healthy nature, soon restored me to a very enjoyable atmosphere of being, though the rainbow colors had faded or lay very far back in it now.

Yet I was all woman, and being such had heart and hope. I do not care what women say. I know there never has been one yet, not dwarfed away from the likeness of that wonderful first one, whose nature in her so wrought in her days of pureness, that she, and they after her, have recognized a life shared with a good man not only their own wish but his right and desert. And so, even putting the question of personal happiness in the matter (which I did not do aside), I felt it would be perfectly safe upon the basis of thorough liking to join my life to that one which of all others I could most bless.

And now for the first time, in their true interpretation, I understood Asher Alleyne's parting words. He had spoken from a stand-point and with a knowledge I had not gained. Able now, in the light of my new experience, to see men with a truer vision, I began to bring Asher Alleyne to the test, as I had done Ralph Hueselme.

I analyzed the hours we had spent in the old time. Was not here a man whose purpose in life—more firmly held and truly wrought—was identical with my own? For sharing and furthering every worthy aspiration—for all quiet hours, no less than bitter straits of life—could not a woman put her hand in his and say 'Sufficient?'

Yet could it be possible that in this plain man lay the true world of realization, which, overlooking him whol-



No. 2.—MACHINERY; FIRST HALF.—[See Supplement.]

ly, 'I had located so far beyond him.' Did the best proof I could give to God of my devotion to him, in giving joy to his creatures, come to me through Asher Alleyne?

I sat alone in my room with these thoughts in mind and the Bible in my hand. As I looked down upon its open page I remembered, curiously enough, the good man who all his life refrained from marriage because declaring the book should guide him in the matter through the text he, closing the book and placing his finger upon, should open at, found it tell of him who fell at the threshold of his

bridal chamber dead. I did not believe in that sort of thing at all; yet the impulse came upon me strongly all at once, to decide this question of Christian service in the selection of a husband if possible in the same way, and to take the text I opened upon, if it had any bearing at all upon the subject as conclusive. And it was in no spirit of trifling or irreverence that I placed my finger between the leaves of the New Testament, and holding it firmly opened upon the words:

'Inasmuch as ye do it unto one of the least of these my brethren, ye do it unto me.'

I was not astonished! One of the least of these. As mortal could judge of mortal, Asher Alleyne stood in God's sight as one of his first and best approved, and as such must not recompense for joy bestowed on him be doubly great? But I could not believe it, this emphatic, uncompulsory, sharply to the point text. Such things, of course, must commonly be mere coincidence; and if such, are not like to happen twice: so I will try again, and if I find another passage which tallies with this text I shall deem it sufficient.

I made the trial farther back in the book this time, and opened upon the words of God's holy apostle, Paul, commending to another the brother of his affliction.

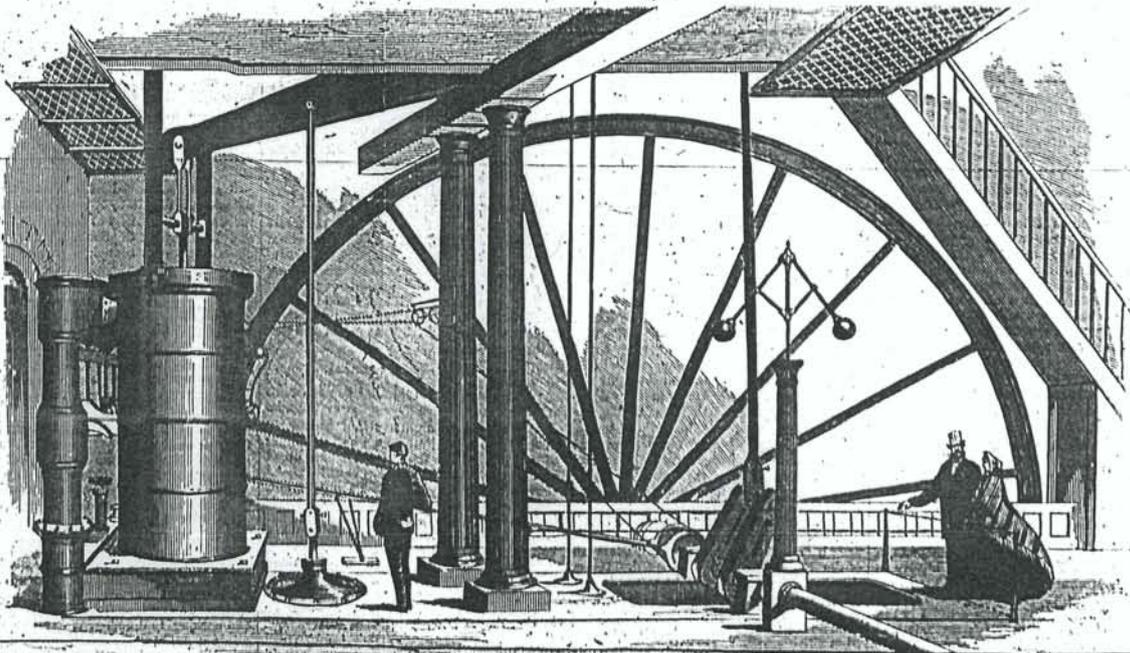
"Which in time past was to thee unprofitable, but now profitable to thee and to me: whom I have sent again: thou therefore receive him. But without thy mind would I do nothing; that thy benefit should not be as it were of necessity, but willingly. For perhaps he therefore departed for a season, that thou shouldst receive him forever. Not now as a servant, but above a servant, a brother beloved, specially tamed, but now much more unto thee, both in the flesh, and in the Lord."

I had my answer. I took it as from the Lord. "Not of necessity, but willingly." Oh, most willingly! I felt at my very soul and strong true spirit that, through no desert of mine, and in spite of my blindness, had been given to me of God. Over my life I felt the soft clasping of a great content. For though this man had gone from me finally, I never doubted for a moment now that he had been my appointed and chosen from the first, withheld from me till I had learned to hold him at his worth, as I could not do under those fantastic lights of fancy; but the silver day had come, and in it I wrote to him simply:

"Colors seen by candlelight do not look the same by day."

And he came back to me and took his old place at my side, and a new one in my heart, not given till reason—religion even—dictated, but once given passing beyond the province of reason and will, into that of love.

By my former theory, and that of many people, I am not in love; yet it will be the sweetest, no less than the proudest day of my life, when I come to stand beside this plain man, and call him my husband.



No. 2.—ENGINE ROOM.—[See Supplement.]

SUPPLEMENT

DESCRIPTION OF THE DISTILLERY. MESSRS. GOODERHAM AND WORTS, TORONTO, CANADA WEST, APRIL, 1863.

SECTION FIRST.

Introduction. Members of the Firm; their Emigration from England to Canada; First efforts; Toronto then and now; the Windmill; the outward appearances; Cattle feeding; the first steam engine.

It is about to describe an establishment which cost the proprietors one hundred and thousand dollars in its construction, in the years 1859, 1860 and 1861, and upon which they pay to the government of Canada a tax of one hundred and fifty thousand dollars a year for permission to work it. It is the distillery of Messrs. Gooderham and Worts, at Toronto, Canada West.

In the county of Norfolk, England, on the London Mail Coach Road, at the second stage from the city of Norwich, where eight stage coaches down, and eight up, changed horses daily; two families resided who in 1831 decided on emigrating to Canada. Mr. Worts was the head of one family, Mr. Gooderham of the other. Mr. Worts came out first; he was father of the gentleman who is now one of the firm of distillers, and grandfather of the accomplished young girl contrast was published in No. 21 of the Canadian Illustrated News, April 4, 1863, as prime sister at Toronto. He left his country in 1831, as pioneer of having left a portion of his family behind. In 1832, Mr. Gooderham, who stands first in the firm, came in, bringing his own family and the remainder of that of Mr. Worts.

His business as millers and distillers was a small way; fifteen bushels of grain being the extent of consumption in the family at distillation. Toronto, so diversified, so noble in its public and street architecture now, contains nearly fifty thousand inhabitants, mechanical appliances executing the labor of the arts of industry, equal in active strength to at least half a million was then a town of boarded frame houses, a very few dwellings or other buildings being standing.

The present distillery buildings and appurtenances therewith connected, including some dwelling house of Mr. Gooderham's garden, and the site of a malt-house to be erected, occupy nine acres. Also an old windmill tower, the hopes and fortunes of the town, but whose machinery, delicate and capricious, the wild, the wind sweeping from Lake Ontario, could not be made by any human contrivance to work peaceably in the face of the tempests of Canada. The tower now has the two-fold purpose of a landmark for vessels entering Toronto Bay, and a still for purifying common whisky into old.

The nine acres likewise in on the opposite side of Trinity Street, at the east side of the distillery, are for four hundred fattening cattle, elevated tank to which most of the corn of Toronto come for the farina and saccharine off-purings from the well relished by bovine cattle whose food is hay, straw, turnips, mangel and other esculent roots.

The efforts of Mr. Gooderham to obtain an engine of "Canadian manufacture" presents a notable contrast with the mode of mechanical science and resources of the province now. The best blacksmith in Toronto made it, but they could induce it to work when made. At the time the Buppens and Mings was in the neighborhood, the engine now called Royal was constructed. Selected men of the Buppens gave assistance for several weeks; and so on it was every person concerned to solve the mystery of steam engine making, they worked with dynamo and wind, and secured; but their engine was not a success. Had it been pirated, the pirate would have been sorry for what he did. That it was made by Diller & Gilbert, Montreal. It ran some where between

eighty and a hundred horse power, and approaches perfection as nearly as advancing improvements have yet reached to in their workshops or elsewhere.

The larger illustrations show on page 282 the south front, looking upon the bay of Toronto. And the rear on page—looking from the north. This latter includes a portion of the new malting house, now in course of erection, three stories high, and a part of the old wind-mill tower, both seen on the spectator's left hand. On the right hand is part of a cooperage house for repairing and cleaning such of the barrels as are returned by customers. The cooperage at which new barrels and puncheons are made is at a place half-a-mile distant. About forty men are employed in that department. The chimney-stalk, seen here, is one hundred and fifty feet high. The door of the boiler house, No. 1, illustration of the interior, is open to receive coals. A water tank is visible, which receives water pumped from the lake and gives it out for the use of the establishment. The elevation of the main building shows four principal floors in front and rear, but when we ascend the interior the fifth-floor, immediately under the roof, will be found to contain portions of machinery important in the mechanical economy of the establishment.

The wharf, shown in the illustration on page—is separated from the south front of the distillery by the Grand Trunk Railway main track, and by a side switch built for discharging grain from railway cars into the distillery building and receiving into other railway cars barrels and puncheons filled with rectified spirits of the different qualities to be carried to the Montreal, Quebec, and other markets of which detailed particulars will be given presently. The wharf contains storage rooms and an elevator for lifting the grain from ships, which together can hold in stock eighty thousand bushels. The south front, including the prolonged structure of one story is three hundred feet from east to west. That low building consists, however, of two floors, one the fermenting room, as will be seen during our perambulation. A perspective view of its interior is shown in cut No. 7. Over the fermenting room and adjoining it are a store-house, and bonded warehouse, the latter under the excise-man's lock and key, but with a sparred partition so thin that a child might enter from the free to the bonded side. With these general remarks I may proceed to notice the preparations for distillation.

SECTION SECOND.

Historical review of distillation, the art not known to the nations of antiquity; Supposed to have been discovered by the barbarians of the North of Europe; Raymond Tully carried the secret to the South; How Starch becomes Sugar; Curious items of Chemical history relating to Sugar and Starch; Flavor of Rum; Flavor of Whisky; We follow the Grain from Grand Trunk cars through the Distillery; The Millstone Floor No. 4; Machinery Floor No. 3; The Grain converted to Meal; Curious travels of the Meal; The Mashing Tubs; Hops and Yeast.

The name whisky is said to be a variation on the Irish Celtic word Uisgebaugh. The term distillation is applied to the manufacture of ardent spirits, through the agency of heat applied to a vessel called a still, which contains the fermented liquor from which the spirit is to be extracted; and the spirit as it is vaporized is condensed in tubes from which it distils, or falls in drops into the vessel placed to receive it. Hence the terms distillation and distillery.

Little is known of the antiquity of this manufacture. To the nations of antiquity it seems to have been unknown, at least there is no distinct account of its preparation. Certainly the old world in its early ages never saw, as the new world in this age has not before seen, any distillery more perfect, and but few if any equal in all respects to that of Gooderham and Worts at Toronto.

Distillation is commonly believed to have been invented by the barbarians of the north of Europe; as a solace to their cold and humid climate, and to have been made known to the more southern nations by Raymond Tully, of the Island of Majorca, in the Mediterranean. At the present day there are few nations above the condition of savages who do not manufacture an ardent spirit by the process of distillation. Whether these are prepared from the expressed juices of fruits, from the natural or expressed juices of trees and plants, or from infusions of grains or of roots, chemistry has made known that they can alone be prepared from sugar, or from principles which during the process of infusion and fermentation, are converted into sugar.

In Britain the larger proportion of the ardent spirit is prepared from barley, which in its natural state contains no sugar; and in Canada from barley, rye, oats, and largely of maize or Indian Corn, which likewise in their natural state contain no sugar; but by the process followed the large quantity of starch which these grains severally contain is converted into sugar. After which, the saccharine infusion being fermented the sugar becomes converted into alcohol, which is obtained from it by distillation.

There are five kinds of sugar known to chemists, two of which by fermentation are suitable for the distiller: cane sugar and grape sugar. It is from the latter that the most of the ardent spirit in Britain, Canada and North America is produced. The grape sugars embrace many varieties, procured from different sources, yet all having the same chemical composition. These embrace the sugar of the grape, honey, the sugar of most of our fruits, and the sugar made from starch. All the juices containing naturally grape sugar are more or less acid, and the chemical reason for this is, that acid possesses the property of converting cane sugar into grape sugar, in like manner as it converts starch into grape sugar. These sugars do not crystallize so readily as cane sugar, but they ferment with extreme facility, and furnish on distillation the ardent spirits known by the names of brandy, whisky, gin and others.

When these sugars are dissolved in water, as in the mash tubs (illustration No. 6) and fermented as in the fermenting tubs (illustration No. 7), they become resolved into carbonic acid gas, which escapes, and alcohol which remains in the fluid. It is this alcohol (spirit, or spirit of wine, 'high wines' in Canada) which is the substance producing the stimulant and intoxicating property in all the forms of ardent spirit; and it is the separation of this from the large quantity of water and impurities with which it is mixed in the fermented liquid which constitutes the art of distillation.

The several flavors peculiar to each kind of ardent spirit, and which serve to distinguish them from each other, are supposed to be owing to the presence of an essential oil derived from the ingredients employed in the manufacture. It is a singular fact that these peculiarities of flavor or of odor, are only imparted to the spirit when distilled from the fermented juice itself; for, when fermented infusions of the sugars prepared from these juices are subjected to distillation, no peculiarity of odor is manifested. Thus the fresh apple juice when fermented and distilled yields the high flavored spirit called rum; but sugar and molasses fermented and distilled after impuration, yield only plain spirits—whisky.

From whatever ingredient the spirit is to be derived the processes through which it must pass before being distilled are virtually the same. The saccharine juices or infusions, whether derived from the grape, sugarcane, date, barley, rye, oats, maize, wheat or other grain or seeds; or from potatoe, beet, or other roots, must first be fermented to change sugar into alcohol. The fermented liquor must then be put into a close covered vessel called a still, to which is attached a conducting tube or worm, the end of which terminates in a vessel or receiver. The worm runs through or is placed in a large vessel called a worm-tub or refrigerator, which receives a constant and plentiful supply of cold water. Fire or steam is then applied (steam in that under description) to the still, when the spirit being more volatile than water, rises as vapour, passes through the worm where it is condensed and runs in a fluid state through the safe into the receiver.

So far that is a very brief explanation of the principle, but the actual operation of the still in the establishment before us is more complicated, and will be presently described more fully. Let us proceed to trace the grain from the Grand Trunk Railway cars, or the wharf projecting into Toronto bay, through the hoppers, elevators, millstones, weighing and distributing conduits to the mashing tubs, thence to the fermenting vats, and from these by the elevating pumps to the top of the building to be let run into the still. After which it will be followed to the rectifying vats, and to the racking off into barrels or puncheons.

The grain pours from a railway car down into bins, the mouths of which are lower than the stone flags of the lowest floor. These bins are in the south-east and north-east corners of the room, marked in the illustrations (No. 3); Machinery first section. An elevator, which is an endless belt with small buckets or lifters attached winds over a cylinder among the grain in the lowest bin, and over a distributing cylinder, on some of the upper floors at a suffi-

cient height to be conducted down the metal spouts which pour it into the hoppers of the whirling, grinding millstones, eight of them in one room, four in a row, as seen in the illustration No. 4. (For a detailed account of grain elevators with pictorial views, see No. 23 of the Canadian Illustrated News, April 18, 1863.)

Four of the bins of stones in that room are intended for the manufacture of flour of a good trade, but the bolting machinery is not yet introduced. The wheels in No. 3 group below the millstones receive their motion from the steam engine which forms illustration No. 2, in the next apartment behind the wall at the spectators left hand. These wheels, spurs and pinions, horizontal and vertical shafts all work as smoothly as a happy family; their swift, soft motion is like music. The massive iron frames in which they work, stand on plat forms of solid masonry five feet in height; a solid iron plate, four inches thick binding the masonry. An apparatus easy of reach and of action can at the will of the skillful attendant (Mr. Kimmer, I believe) throw the wheels and the whirling stones above into or out of motion in a breath of time.

The meal descends in covered spouts through that wheel-room, No. 3, and is delivered to elevators which convey it right away to the highest floor of the house, each elevator delivering its meal into one of several bins arranged in rows, each kind of meal being kept separate.

After being elevated to the required height, each kind of meal is laid hold of by a screw lying within long horizontal troughs. Each of those screws, termed a conveyor, carries its own kind of meal to an opening in a spout leading to a hopper appropriate to receive it. In the room immediately beneath those hoppers—a long apartment lighted by the fourth row of front windows, seen in the south front view of the building, is a runway. A bin travelling on wheels, which is also a weighing machine, is moved to underneath any one of the hoppers from which it is desired to draw the due proportion of the kind of meal it contains for a mash—barley raw, barley malted, rye, oatmeal, or maize meal. When filled it is moved along its runway until its bottom is over the mouth of another hopper. A valve in its angular bottom being drawn allows the meal to fall into the lower hopper; and a valve in the bottom of that being withdrawn by a lever in the mashing room below (illustration No. 6), one or other of the four mash tubs there receives the different allotments of meal into a bath of hot water. The degree of heat requisite is carefully observed by gauges in a room above the mashing tubs where one of Mr. Gooderham's sons presides. The mash tubs are lined with bright copper. In each a central shaft working in a box carries round a plunging rake; an instrument with two outstretched arms which agitate the mash. The diameter of each tub is fifteen, depth seven feet.

The mash is drawn from the tubs, two emptying at a time, and two filling, and conducts itself in troughs made for it along the fermenting cellar (illustration No. 7). The troughs are above the level of the tubs there and have valves to be opened into spouts conducting into each as it requires to be filled. There are fourteen, each fifteen feet in diameter, and seven deep. The mash remains in about four days to ferment. When in a proper condition it is drawn out, and raised by pumping to the fifth or loftiest floor, and there conducted into a vat whose mouth is on that floor, and whose bottom allows the fermented beer to descend into the head of the still the height of which is forty feet above the still room to which we shall presently resort. But before leaving the fermenting cellar it should be related that when aloft on the fourth floor observing the weighing and apportioning of the different kinds of meal to the mash, the aroma of hops induced inquiry as to whence it came. In a closed place the hops were in process of boiling, at that lofty eminence hot water and cold being conveyed in pipes to wherever required, their product of liquor to be associated with malt to become yeast. The hops are obtained, some from Buffalo, state of New York, but mostly from the county of Prince Edward, Central Canada, where cultivation over many years had led to the production of a prime bouquet. The partial culture of the plant near Hamilton has not yet, it is said, succeeded so well.

The yeast is added to the mash when agitated in the mashing room. When the fermenting tubs are emptied, which they are in groups of four, they are scalded with streams of boiling water, then rinsed with cold water, and purified with lime. Scrupulous cleanliness prevails everywhere.

Let us now review and describe the process of distillation.

SUPPLEMENT

SECTION THIRD.

Grain used in the distilling at Toronto; of stills in general; Fermentation; of sugar and alcohol generally; Stills and Refrigerators described; Improvements of the Still by Edouard Adam; The Still in operation; Rectifying rooms, uses of charcoal; Structure of the distillery; the men who built it.

The grains used by the firm of Gooderham & Worts are barley malted, barley raw, rye, oats and Indian corn. The latter and most of the rye are brought from Chicago either by ship through Michigan lake, Huron lake, river St. Clair, river Detroit, Erie lake and Welland canal to Lake Ontario, or by the more direct route through Lake Huron and Georgian Bay, thence to Toronto by Northern Railroad. The barley and oats are obtained in Toronto market, and annually about 15,000 bushels of the rye.

In converting barley to malt it germinates by steeping in water, and is then dried by artificial heat. In its germination, a peculiar substance is generated in the starch of the grain, which acts chemically on the starch of gum called dextrine, and then into a sweet substance identical in composition with grape sugar. It has been found that this dextrase can convert 2,000 parts of starch into grape sugar; and it is of this valuable property that the distiller avails himself when he adds malt to his raw grain. To save the more expensive article malt he uses only so much as experiment has proved will suffice to change the starch of the raw grain into sugar when mixed with it in the mash tub. The distiller, therefore, to prepare the saccharine matter for his operations has to go through all the processes of brewing before he gets it ready for the still.

By the Excise Laws in Britain mashing or fermenting, and distillation of the fermented product are not, or recently were not allowed to be carried on in the same building on the same days. In the largest distilleries in Scotland and Ireland the mashes are made and fermenting processes carried through every Thursday, Friday, and Saturday, while the fermented wash is distilled on every Monday, Tuesday, and Wednesday. At Toronto the processes go on one with the other without intermission.

Fermentation is carried so far (in distilleries generally) as to reduce the wash or 'beer' to the specific gravity of water, that is 1,000. When the wash is made from molasses or sugar it is often reduced below that gravity, but rarely when made from a mixture of raw grains. Even by this great attenuation it is not thereby converted into alcohol, as it increases in the wash, gradually arrests the decomposition of the sugar and at length stops it altogether. It is the presence of this large quantity of undecomposed sugar in the spent wash, from which the spirit has been distilled, which gives it the sweet taste so relishable to cows, so valuable to the dairyman, so generous to the consumers of milk. The whole quantity, however, which escapes decomposition or conversion into alcohol is a loss to the distiller. In the manufacture of Hollands and of Rum, a considerable saving is effected by fermenting the spent wash, or by using it for mashing a fresh quantity of grain.

The still is a chemical apparatus employed for the purpose of separating the more volatile from the less volatile fluids. In that before us it rises forty feet high through two floors. A lower portion of the tall, upright frame work is seen on the right hand corner of the illustration, No. 8.

It is connected with a tub termed a Refrigerator, in which the volatile vapor raised from the fluid in the Still is condensed, and drops or distils into a vessel called the Receiver. The Refrigerator is the large Worm tub seen in the same picture; 12 feet high; 14 feet wide at bottom.

The still has a high head to prevent the fluid from boiling over. To this head a tube is connected ten inches diameter at top, which is carried in a spiral form, winding twice round in the interior of that Worm tub 700 feet if extended in length. It contracts to three inches at the end, discharging into the receiver. From its twisted form the tube is called the 'Worm.' The Worm tub being filled with cold water, the alcoholic vapor within the twisted tube cools, is condensed in cooling to a fluid, and runs into the receiver. The spent wash issues from the spouts, of which three are seen in illustration No. 8, runs through conductors out of the building under Trinity street, still warm and steaming, and is forced up to the tank sufficiently high to admit of barrel carts being filled underneath.

The spirit issues out in a bubbling spring;

within a crystal cover; the metal work of the piping all burnished copper, fashioned by hammer, not cast, made as the other copper work was. Booth and Son, of Toronto, all of workmanship, excellent, beautiful, perfect. That bubbling spring passes from 280 to 300 gallons of spirit per hour, according to the strength. The three elevated circular vessels, seen in perspective beyond the great Refrigerator are receivers filled from the rectifying rooms, on the next two floors overhead. One of the rectifying rooms is shown in illustration No. 9. The man with the barrel at one of the receivers is 'racking off' the spirit for the store or for shipment to market. The barrels are lowered from this to the floor below, where the 'racking off' is principally performed. It is done at different places, because of the varying strength and quality, required for different markets. Indicating weights are suspended outside of these receivers to notify when they are full, or how far from full.— They contain each 4,000 gallons.

The stills, one of which is seen in the picture of this room, (illustration No. 8,) rise up to the top of the building forty feet high, through the next two floors. They are capable of running the wash or 'beer' of seventy barrels per hour. I will here endeavor to convey an explanation of what a still is:

By the old stills such a quantity of watery vapor was carried over along with the alcohol that the distilled spirit had to be subjected to a second process, termed 'doubling,' before it could be made of the proper legal strength. One of the greatest modern improvements therefore, in this art, was the invention of a still which accomplished this object at one operation.

This was effected by a workman in France named Edouard Adam, an illiterate person employed in a distillery, but with the genius of applicability lying largely within him.— Hearing a chemical lecture on the contrivance known to chemists as the apparatus of Woulfe, he applied the principle to the condensation of the vapor of alcohol. By causing the hot vapors to chase the alcohol from chamber to chamber, Adam obtained in the successive chambers alcohol of any strength and purity. Since his time that still has received various improvements.

The principle which has guided the improvements is founded on the fact that the boiling point of alcohol varies with its density or strength. The purer it is it requires the less heat to raise it into the state of vapor, and the more it is diluted with water the greater is the heat required to distil it.— Thus, alcohol of the specific gravity of .793 boils at about 168 degrees, that of strength .851 boils at 179 degrees, and that of .912 specific gravity boils at 197 degrees.

In the still the wash is never exposed to the direct heat of the fire, but is exposed (in a series of shallow chambers placed one over the other) to the vapor of steam, which rises through the perforated bottoms of each chamber and carries off the alcoholic vapors into the condenser. This condenser also consists of a series of chambers separated from each other by perforated plates and is so contrived that the cold wash passing in pipes through these chambers, in its way to feed the other series of chambers, acts as the condenser to the vapor of the alcohol, the wash being gradually heated thereby as it passes through the successive chambers.

The still, therefore, consists essentially of three separate but connected parts, namely: 1st, of a large square receiver at the base, which receives the spent wash, after it has been deprived of its alcohol by passing through the series of evaporating chambers. That we have noticed in figure No. 8. 2d, of a large square upright box termed 'analyzer,' containing the series of evaporating chambers, each communicating with the one below by means of a valved tube, which only allows fluid to escape from the upper to the lower chamber, and having the dividing partition of each chamber perforated with fine apertures, to allow the steam which is admitted from below to pass from chamber to chamber through the shallow layer of wash in bath.

A safety or escape valve is also fitted to each chamber. The already heated wash enters the uppermost of these in a continuous regulated stream. We see the beginning of this when aloft in the highest floor. There a circular tank receives it as pumped from below, and feeds the still. It is gradually deprived of its alcohol by the steam as it passes from chamber to chamber, and at last escapes into the lower large receiver from which it flows off after attaining a certain depth.

The third part of the operators consists also of a square upright box, termed 'Condenser,' divided into compartments by means of finely-perforated plates, and in each chamber is a hole of the tube which carries the

cold wash outwards to supply the evaporating chambers just described. The alcoholic vapors escaping from the uppermost of the evaporating chambers are carried by pipes to the lowermost, and are partly condensed by each successive chamber being colder than the one below it, in consequence of the wash entering the pipes from above, and only getting gradually heated by contact with the alcoholic vapor as it advances from chamber to chamber.

As in the lowest of these chambers the heat is greatest, the alcoholic vapor of the condensed spirit contains a larger amount of water; but as the chambers are successively cooler, the alcoholic vapor and condensed spirit at last arrive at a temperature only sufficient to convert spirit of the strength washed into vapor, and by an adaptation of valves and substituting an impervious partition for the perforated plate; and admitting the alcoholic vapor into the chambers cooled by the passage of the contained wash in its contained pipes, that spirituous vapor is condensed, and the spirit is drawn off at one operation of the very strength which it ought to have, and of the utmost purity.

Having traced the process of distillation, let us descend to the ground floor of the western half of the main building, to another machinery room (illustration No. 5.) Behind the central division wall forming the east end of this spacious area is the steam engine (illustration No. 2) before noticed, and beyond that, behind another wall in the machinery room (illustration No. 3.) In this No. 5, is a vertical shaft receiving motion from the engine behind the wall, and distributing motion upward to the highest floor of the house, and downward by vertical shaft, cog wheel and two pinions to a horizontal shaft crossing the room, and at each angle of that are cog wheels and pinions continuing the motion to horizontal shafts lying longitudinally, and working a series of pumps; two pumps are raising water from the lake to the tank, as seen on north outside of the building, and to filters to supply the rectifiers and other places where required. Another pump is raising the 'beer,' which has come under the ground floor from the fermenting cellars (No. 7) and giving it to the still through the vat on the fifth floor as already told. Here are four vertical shafts driving the rotatory agitators in the mashing tubs on the floor overhead. Here too is a fire engine with steam always up and hose laid through every apartment on the premises. To make sure that the fire engine would not be out of order were it unfortunately needed, it is required to give assistance in some of the industry of this room to keep itself in working order. As to what particular part the fire engine performs my note book leaves me in doubt. For here, it may be remarked, I had not seen the distillery nor any one connected with it, nor had I heard it described before noon on Tuesday 21st instant. I have had to become acquainted with all the matters related in this supplement and assort it to the wood cuts by Thursday evening, in addition to what the reader may find from the same pen on other pages of this paper. This is not named as a matter to 'blow' about, on the contrary, it is a circumstance to be sorry for, as one can hardly give a finished literary sketch when obliged to learn as he goes along the lesson he is rehearsing. Mr. D. D. Robertson, of Hamilton, made the sketches which are both accurate and picturesque. They were engraved by the artists on the staff of this journal. It is now for the people of Canada to extend their patronage, and the engravers will forthwith give to the world a first class Illustrated Newspaper, as one of the native products of this Province.

On my arrival at the distillery on Tuesday at noon, two hours were lost to me while the Superintendent, Mr. Gooderham, junior, attended on a more potent and imperative personage—the Government Excise Officer.— This room (illustration No. 5,) is the theatre of his fiscal operations; 15 cents on the gallon of distilled spirits; \$450,000 per annum to the Government. Two large tubs, holding each between 7000 and 8000 gallons, each ten feet high, and twelve feet diameter at the bottom, stand up side by side. Between them is a gauge indicating the quantity of spirits at any time, held in either. They are connected by a pipe from the still, and from themselves to the rectifiers. Their contents is in that intermediate condition of manufacture termed 'high wines.' A stopcock in the connecting pipe has a lever handle attached which the Officer of Excise fastens with a padlock when he has taken the gauge of the one that may in his absence be emptied, and the other may be filled, but nothing more.

We may now quit distillation, and take note of the process of rectifying. On the third floor, as seen in the front view of the

main building, is the first rectifying (illustration No. 9). There are 42 receivers in this and a room on the fourth floor head; each eight feet high, six feet diameter at top, five feet at bottom, and holding 200 bushels of charcoal. The spirit is filtered through that substance. The charcoal is renewed entirely four times a year but is partially changed at intermediate intervals. It is made from maple, and is chased in Buffalo, none being manufactured in Canada anywhere convenient to Toronto. The 42 vats rectify all that is run from still, about 6000 gallons daily.

When drawn off from the rectifiers spirituous fluid is only 'common whisky' is stored, and is on the market in Toronto to twelve months. The higher quality of spirit, as 'old rye' or 'toddy whisky,' is not much in request in Upper Canada; there the 'common' prevails. But in Lower Canada the 'common' is rejected, and the higher qualities only purchased. 'Common' though paying 15 cents a gallon of duty, sold wholesale for 20 cents.

To produce 'old rye' and 'toddy' whisky the old windmill plays its part. It is fitted up with two copper stills whose capacity is 1,500 gallons each. There steam is set in and the fluid is brought to the highest point of strength, separating as before, but in greater quantity all deleterious matter in the shape of oils, while the spirit going off in steam, is again condensed by the worm and thence emanates in purest quality. It is now 60 over proof by Sykes' hydrometer, or 95 American over proof. Besides Lower Canada, large quantities of this quality have been shipped to Liverpool, London, where it is much approved, reducing its strength with a mixture of distilled water, that is, water absolutely derived from steam—the 'toddy' as 'rye' are produced. These articles an authority better qualified to judge, I, are unquestionably the best and that can be manufactured from grain, would be an improvement if they could take the place of all the 'common' which is consumed throughout Canada.

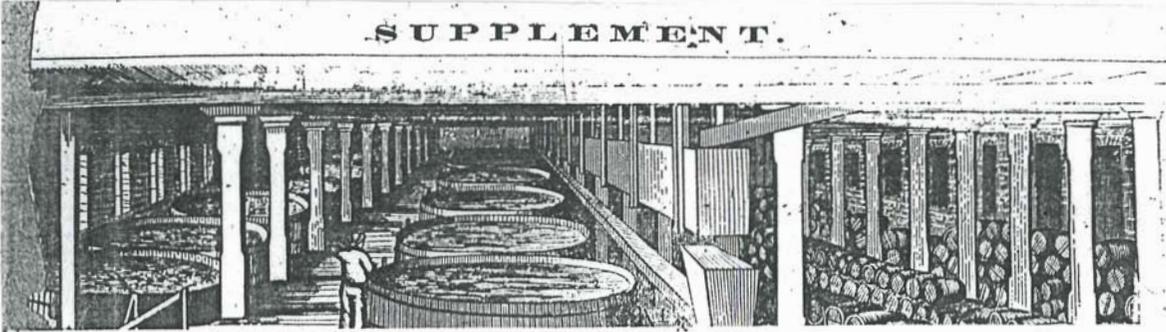
Throughout the great establishment every possible care is taken to have the tile kept in the most healthy state, every room, pipe and fixture in the edifice is as clean and free from impurity as the most scrupulous house-wife could desire. Nothing which could save labor and avoid danger and render effective every advantage which nature and art affords has been spared from the engine to the tiniest part, everything is a model of completeness and efficiency.

The structure of the distillery, its strength and the admirable arrangement of its beams witness to the practical ability as common fame proclaims the high reputation of Mr. Roberts, the architect and engineer. From making plans and specifications, obtaining a solid foundation in 1859, when all was complete, he was ever present, vigilant; and the proprietors endorse his praises. The stone was obtained quarry five miles below Kingston, stratified limestone so abundant in that vicinity. Mr. Gooderham walls the quarries himself. The massive transverse feet thick.—The massive transverse are laid in pairs side by side, the beams supporting the machinery floors rising from basement to top floors in countless shafts of prodigious strength, two inches in diameter. The horizontal beams of timber are doubled, in order that if they decay they may be taken out and replaced another without the solidity of the fabric being put in jeopardy. To render the practicable the ends of the beams rest on 'coble stones,' projections made from wall to form their bed. Their ends were that precaution, be protected from exposure to rot.

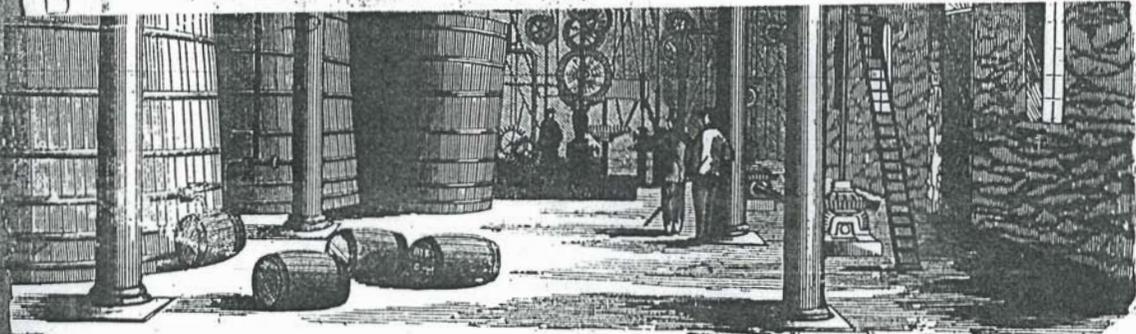
The frame work of the roof is in a monument to the architect, but cannot explained within the limited space which my closing remarks are being crowded. The builders were Godson & Keaton but the masonry was in part done by proprietors. The woodwork was done Messrs. Smith & Burke, of whom the proprietors continue to speak in terms of approval. The millstones and machinery from Mr. James Good, of Yonge street Toronto. The copper work, so beautiful and substantial, came from the hands of Mr. Booth & Son, of Toronto, as already told. Forty-five barrels, holding each 53 tons of whisky; or 21 puncheons of gallons to the puncheon, are on each floor. At present 2,000 puncheons and 5,000 rems are out, which are likely to be returned empty.

Such is the establishment of Messrs. Gooderham & Worts, which cost \$150,000 in construction, and pays a like sum annually in tax to Government. As SOMERVILLE

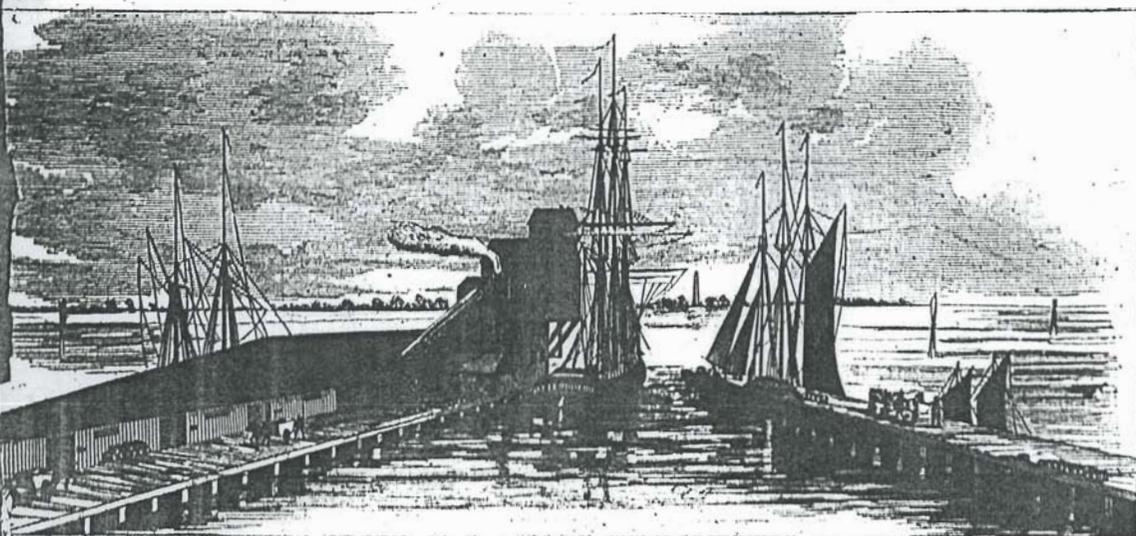
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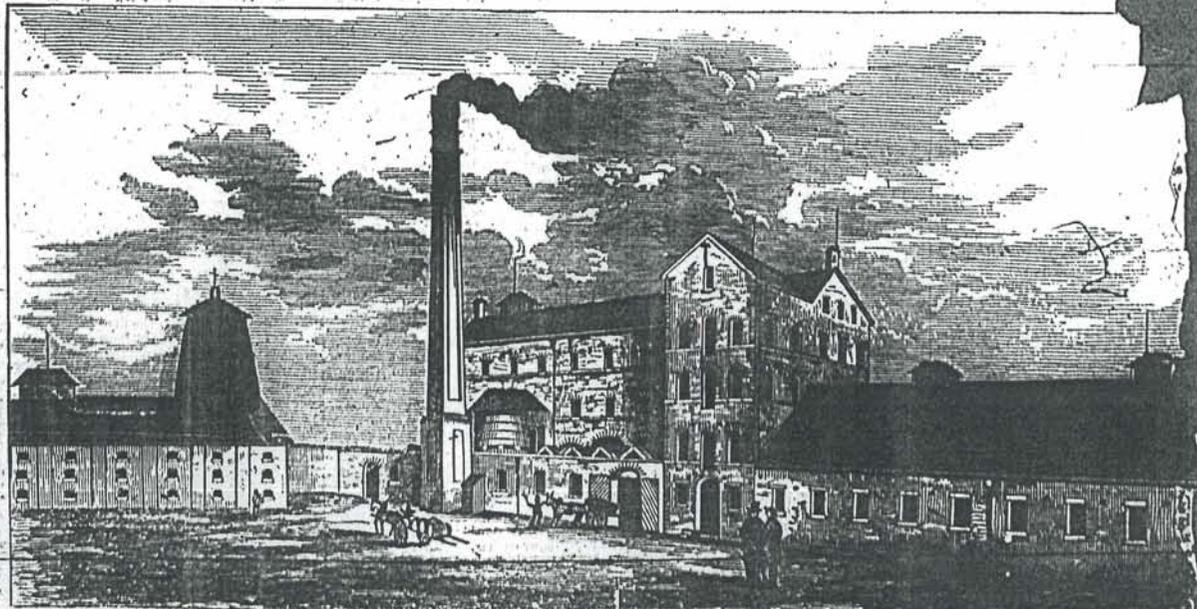
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NO. 6.—MACHINERY; SECOND SECTION.



STOKE HOUSE WHARF AND GRAIN ELEVATOR.



DISTILLERY, MALTING HOUSE, OLD WIND-MILL, VIEW OF NORTH SIDE.

The Globe, October 3, 1867, p2

CATTLE FATTENING IN TORON.

Many people are not aware that there are from twenty-five hundred to three thousand cattle fattened yearly in byres constructed by Messrs Gooderham and Worts, and so fattened, principally from the slop refuse emitted from their extensive distillery situated on the esplanade near the Don.

In addition to the immense cattle byres erected by that firm in 1866-67 they have, this year, constructed others of still larger dimensions, a short sketch of which, together with the *modus operandi*, of producing fat from lean may not be uninteresting to some of our readers. In the year 1866 the firm erected on a plot of land, lying immediately south of the Grand-Trunk-track and east of the bend towards the mouth of the river Don, a byre for the fattening of cattle, about 120 feet square. A conductor or drain made of hollowed logs joined together and reaching from the Distillery of the firm, situated about three or four hundred yards distance up the esplanade, is laid under the railway track over the Grand Trunk bridge, and then on supports to large vats contiguous to the byre. These vats are kept full of the "slop" or refuse of the grain and other material which was previously, to an extent lost by the Distillery, by means of ferreting machinery, and are provided with sluices to effect the supplying of the troughs inside the byre required. A movable port with a large rake-like construction run through it inside the vat, projects over its top, and through this projection is fixed a handle by which two men, going around the top of the vat, can keep the food stirred up and prevent it from settling. Along each side of the inside of the byre run wooden boxes or conductors in connection with these vats. These boxes are laid with a gentle slope sufficient to carry the fattening liquid matter down to the troughs which are run at right angles to them across the building. Fronting these troughs—which are separated by a narrow platform or pathway for the feeding attendants to move about on—and facing each other, are the stalls for the accommodation of two of the *genus bos*, each with a couple of stakes, to which they are

fastened. The boxes which conduct the food from the vats are provided at the junction of each trough with dam-sluices and stops for the more speedy filling of them. And after the cattle have regaled the "L" beast the attendants with hoes pass over the platform and scrape the drogs down to other conductors—where it passes out to troughs—constructed in contiguous pens for the reception of hogs. Standing on top of the narrow platform one can reach the top of the stalls and here is an inch board trap for the purpose of supplying the animals with hay from the loft above. This is an immense place capable of holding about 100 tons of hay, and intersected by a regular waggon way which is reached from the ground by a large sloping gangway or bridge provided with patches for the horses' feet while ascending. Ample room is provided by this bridge and waggon way for the easy ingress and egress of teams with loads at hay.

The cattle are fed several times a day, first with the "slop" food and afterwards with hay; for the latter, however, after a few weeks of regular "slop" meals they display very little desire, preferring the warm semi-liquid substance which does the double duty of meat and drink. Stubborn cases which will not "take" to this kind of food occasionally appear and a system of thorough starving is sometimes necessarily had recourse to, in order to fetch them to a proper idea of the "situation." The majority of the cattle, however, after being a week or two in the byres exhibit quite a surprising change.

Towards spring a general portliness takes the place of meagreness, and many instances, layers of fat to the thickness of an inch upon the forehead and the girth form of the animal. It may be said "en passant" that this kind of cattle food tends to render the beef tender but somewhat spongy, and lacking the juicy solidity of grass fed meat.

Such are the modes by which a large number of cattle were, during the fall and winter of 1866-67, fattened in these byres for the shambles. The enterprise was so successful and satisfactory, and the amount of "slop" food turned out by the distillery so expensive and so largely in excess of the demand, that a byre and supplying vat of similar dimensions were in the summer of last year erected by Messrs Gooderham and Worts, adjoining the previous one, and again this summer another, 120 feet by 140 feet, and capable of

The Globe, October 3, 1867, p2 (cont'd.)

holding nearly 700 cattle, is on the point of completion. In the latter there are twelve tons of 27 stalls, capable of holding two each. adjoining each byre there are six hog-pens, made to hold forty each. The timbers comprising the buildings are necessarily of the most substantial kind, being mainly two and three inch stuff. The flooring of the stalls is four inches thick, and even this thickness has before spring shown holes made by the hoofs of the more weighty cattle. The byres are in possession of different leases from the proprietors who only guarantee to keep the vats full, the owners of the cattle hiring help and looking after punctual feeding and proper attendance of the animals. Miserable looking attenuated and half-starved cattle are driven into these byres during the fall and winter, and never see any or very little daylight until they come out in the spring in a fattened and spirited condition for shipment or the inspection of the local butcher as the requirements of different markets hold out inducements to the owners. The hogs are disposed of in a similar manner. None of the byres have yet received any of their usual winter occupants this fall, but will probably be full by the end of this month as they are all leased. The land upon which they are built has been leased for a period of twenty years by Messrs Gooderham & Worts, who intend putting up another byre next summer. The large plot of land which they have leased is capable of accommodating we should say, a score of such byres as are now constructed thereon, and the probability is that in the course of a few years the business of fattening cattle will assume large dimensions.

Daily Leader, Nov. 29, 1869

% ~ % a GOODERHAM & WORTS' DISTILLERY.—The reconstruction of the distillery of Messrs. Gooderham & Worts, which was recently destroyed by fire in this city, is being proceeded with rapidly. A large number of men are daily employed in putting in the joists and preparing for laying down of the flooring. The joists have already been laid down for the third floor in the eastern end of the main building, and in the western portion the joists are placed for the second floor. The labor of removing the debris from between the walls was of course very tedious, but this was all done before any repairs were commenced. The grindstones and machinery attached are, strange to say, entirely uninjured—their preservation having been effected by being embedded in the large quantity of grain which fell upon them from the upper stories. It is confidently expected that the mill will be in full operation within three months.

The Globe, June 5, 1873, p4

Messrs Gooderham & Worts are making large additions to their distillery. They are putting up a massive Kingston stone and brick building for the reception of "kettles." It will have a frontage of 88 feet on Trinity-street, and will be 208 feet deep. The front portion, to the depth of 32 feet, will be four stories high, and the latter portion one story only. Estimated cost, \$20,000.

CANADIAN MANUFACTURES.

NO. IV.

One of the Largest Distilleries in the World
— Gooderham & Worts, Toronto.

Not many of our readers, we fancy, are prepared for the statement that the distillery of Messrs. Gooderham & Worts, at the east end of the city, is not only the largest in Canada, but one of the largest in the world. The impression generally prevails, we believe, that the largest distillery in the world should be looked for either in Cincinnati or Chicago, but this, it would appear, is a mistake, both the producing capacity and the actual production of the Toronto distillery being, as far as we are informed, beyond those of any similar establishment even in the "Great West," where everything is done on so large a scale generally. There is one pretty large distillery in Edinburgh, Scotland, but this, too, falls short of the capacity and production of the Toronto establishment. The regular consumption of grain here is twenty-four hundred bushels per day, making about eight thousand proof gallons of spirits per day, and this goes on generally for nine months in the year, from about 1st September to the beginning of June; the process being continued night and day without interruption except during Sunday—making a total during the year of between six and seven hundred thousand bushels of grain used, producing altogether about two million gallons of spirits per annum.

Passengers by the Grand Trunk Railway going east from Toronto, or entering the city from that direction, will have noticed the large, solid-looking stone building (Kingston stone, we believe) at the eastern limits of the city, and a little west of the Don bridge. It was built in the year 1860, and the interior of the main building having been destroyed by fire on October 26th, 1869, was immediately afterwards restored, and the works were started again in full operation in four months from the time of the fire. The work of res-

toration was done by Mr. Joseph Geering, (the builder also of the Metropolitan Wesleyan Church,) and shows how great a task capital and energy together can accomplish in a short time. The buildings, as well as the internal arrangements, are from designs by Mr. David Roberts, who along with Mr. George Gooderham spent several months in visiting all the great distilleries on "the other side," from New York to Chicago, taking note of all that was to be seen in them. This tour of examination, and the preparing of the plans for the present buildings, alone occupied the architect for about a year; but at last his work was done, and now the best judges confess themselves unable to suggest an improvement. The main building is 300 feet by 80 feet, 4½ stories high, and behind it is the malt house, built of brick, with massive stone foundation, 140 feet by 70 feet, 3½ storeys, and the rectifying house, 100 feet long, four storeys, besides storehouses. In the distillery are eight "runs" of stones for grinding, or two complete sets, four of them being sufficient to keep the stills going, but the grinding machinery being doubled in case of accident, and to allow every facility for picking the stones and keeping them in order. There are six stills, of gigantic proportions, into which the "mash" is pumped by a small steam engine, four vats in which the mash is agitated, by machinery, and twenty-six vats or tuns for holding the mash, each of them large enough to sail a good sized boat in. Power for grinding, pumping and elevating in the main building is supplied by a low pressure or condensing beam engine, made by Bartley & Gilbert, Montreal, nominally of 40-horse power, but working up to over 100, with a fly-wheel twenty-six feet in diameter, and weighing fifteen tons. This engine, being in a portion of the building that is fireproof or nearly so, suffered no damage by the fire of October 1869. The walls of the original building, from their massive structure and great solidity, were not injured by the fire—a principal reason why the premises were capable of being so quickly restored and put in working order again.

The establishment is supplied with barley from various parts of the Province, with rye chiefly from the Bay of Quinte district, and Indian corn, which forms by far the greater proportion of the grain used, from the Western States, Chicago and Joliette, in Illinois,

The Mail [Toronto], April 23, 1872, p2 (cont'd.)

and St. Louis, in Missouri, are the principal points of supply of corn. At these points the corn is shipped in change-gauge cars, so that it is carried over the American roads and also over the Grand Trunk and the Great Western without transshipment. At the wharf, and in front of the distillery, is a switch of the Grand Trunk that takes on fourteen cars. The train having been run up close to the building, some twenty minutes only are required to transfer a car-load of about 400 bushels to the top storey, the elevator taking up easily 1,000 bushels per hour, time for weighing included. The ease and rapidity with which large quantities of grain are handled and shifted from place to place by the great invention of the elevator, appear almost marvellous to the uninitiated, especially to people not long out from the "old country," where such machinery is, we believe, just beginning to be heard of. Corn sent from Chicago by vessel is brought to Collingwood, thence by the Northern Railway to Toronto. From the moment the grain leaves the car it is taken up and carried forward by machinery until at last, in the form of "wash," it is forced by steam, through a copper pipe, to the feeding stables on the east side of the Don, three-quarters of a mile distant. Steam for driving the machinery, and for other purposes, is supplied by six large boilers, which consume thirty tons of coal per day, or about eight thousand tons during the season. A "fuel economizer"—a Manchester invention, we believe—is now being erected, which it is claimed will save one-eighth of this, or a thousand tons per annum. The ashes, "slag," and cinders from this large quantity of coal are of no little bulk in a year's time, as may be supposed, and are constantly utilized on the streets around the distillery, which are becoming better than even "macadamizing" could make them. The low-lying district between the distillery and the Don would be much the better of being drained, which could apparently be done easily enough; but in the meantime the people living there have good streets made for them nearly altogether with the coal refuse from the furnaces. From the first distillation the spirit passes into immense "receivers," where it is kept for the second distillation, or otherwise drawn off and barrelled as the "high wines" of commerce. The "mashing," or first distillation process is

suspended during the warm months of June, July and August, but the process of second distillation or rectifying is carried on the year round. For this second process there are two large copper stills, made by Booth & Son, of Toronto, one having a capacity of five thousand and the other of nearly four thousand gallons. The firm has succeeded in establishing a large foreign demand for their rectified spirit, the various "brands" of which are as well known in New York, also at Rio, Buenos Ayres, and Monte Video as in Toronto. This export trade is done by American houses, one of which, in New York, is now about to receive puncheon No. 1800 of the quantity supplied them since the fire. It may astonish some people to be told that spirits for the New York market, though sometimes sent *via* Suspension Bridge, are mostly sent *via* the Grand Trunk and Portland, as the cheapest and speediest of all routes—but such is nevertheless the fact. The packages used for the export trade are puncheons of 120 gallons, about twenty-one of which make a car load. The proportion of the whole production exported has been rapidly increasing during some years back, and has now reached very nearly the half. This process of transit by which grain and its products are moved from the far West to New York is a business that is carried on by this firm on a very large scale, leaving much of its profits in Canada, and it speaks well for Canadian enterprise that so large a business is done on this side in American raw produce.

In the malt house, where the large quantity of forty thousand bushels is made annually, are two large kilns, and two floors for spreading the malt upon, laid in cement, apparently as hard as marble, and as easily swept and kept clean. We must here remark that the perfect cleanliness, the neatness and the polish, as we may add in some cases of everything in the distillery, the rectifying house and the malt house, exceed anything that we have ever thought possible where so extensive a manufacture was going on. The engine room is carpeted and looks actually like a lady's parlour, the yeast rooms and the spirit rooms are marvels of cleanliness and polish, while the housewife who can show a kitchen floor and walls as clean as those of the malt house has something to

The Mail [Toronto], April 23, 1872, p2 (cont'd.)

boast of, we should say. To secure this perfect cleanliness no pains are spared. In the first place, directly the mashing and malting season is over, the premises are swept, scrubbed and whitewashed most thoroughly, so that work begins the next season with everything as neat as a new pin. Then, besides, during the working season there is sweeping, and washing, and scrubbing going on daily, so that not a cobweb or the smallest deposit of dirt or dust of any kind is suffered to accumulate. Of course for the various purposes of the establishment, an immense quantity of water is required, it being estimated that the same must be at least one-third as much as the city's whole consumption amounted to. The water supply is taken from the bay, some distance out, and is pumped into the premises by the machinery. The elevator work of the malt house is done by a separate steam engine, made by Hamilton & Son. There are extensive vaults under the malt house and warehouses besides, where hundreds if not thousands of barrels of spirits are stored, in addition to what the receivers contain. Towards the end of the mashing and malting season a large stock of raw spirits, (first distillation,) accumulates, which is worked off in the rectifying stills (second distillation), during the summer months.

Everybody knows that at distilleries cattle are kept to consume the "wash" after the spirit has been extracted from it. Formerly the cattle here were kept close to the distillery, just across Trinity Street, but now they are kept nearly three quarters of a mile distant, away down on the east side of the Don, where new stables, sheds, hay lofts and other conveniences have been erected at a cost of about forty thousand dollars. A copper pipe, about six inches in diameter, runs from the distillery to the cattle stables, and the "wash" is forced along the whole distance by the power of steam. In these sheds are kept some eighteen hundred head of cattle, and they consume each season, in addition to the wash, over a ton of hay apiece, or from \$18,000 to \$25,000 worth altogether, making a valuable market for farmers hereabouts who have hay to sell. In the fall the country is scoured by drovers who buy up young cattle at an average of about \$30 per head, about double that figure being the price that they average when fattened. The cattle being liberally supplied

with hay, between that and the "wash" lay on flesh rapidly, and we are assured that the beef thus produced is of such quality that it brings a higher price in the market than beef made from feeding on standing corn in the field, as is done in Illinois and other Western States. There is water in abundance for "flushing" the stables, and the cattle are regularly groomed and curried every day like horses. The stables are, in fact, kept as clean as cattle stables can be, except, perhaps, in such places as the Queen's dairy, and ventilation is abundantly provided for. Then, whenever a row of stalls is made vacant, the whole space is thoroughly washed out, and disinfectants are liberally applied. That the animals are in perfect health, or as nearly so as stall-feeding will admit of, is shown by their glossy skins and other indications. In order that there may be no waste of the wash, hogs are kept in sufficient number to finish the remainder up clean, by which means the wash is wholly consumed, and none of it goes into the Don, as has been supposed by some people, a fact which it may be useful to remember. What the cattle leave the hogs consume, and thus the last gallon, almost, of wash is utilized, and none of it suffered to go to waste or become a nuisance.

We must here interpose a word or two on a much disputed subject, and say that in no fairness at all can the cattle stables be called a "nuisance," as some people profess to think they are. On the strength of the rural and pastoral experience of ages, corroborated, too, by a weighty concurrence of medical authority, we hesitate not to affirm that the air about cattle in good health,—though to some people perhaps not the most agreeable that might be mentioned—is actually healthy and good for the human system. That is, of course, supposing the cattle to be kept clean, and carefully attended to, which conditions are fulfilled in the present instance most admirably. It has been asked, we believe, why Gooderham & Worts should be allowed to keep their hundreds of cattle near the city, while a poor man with one or a few cows is hauled up for making a nuisance? The answer is ready: the latter does *not* keep his cows and their surroundings as clean as is done at the distillery stables—a fact which makes all the difference in the world between

The Mail [Toronto], April 23, 1872, p2 (cont'd.)

the two cases. Furthermore, many persons keep their one, two, or half-a-dozen cows on premises within the city limits, and even in the midst of thickly-populated streets, whereas the distillery stables are outside altogether, with no dwellings whatever on the farther side, between them and the water; the ground on which they stand being in fact a model farm of about sixty acres—where the barn-yard and everything else about the place is kept in the very best order.

So much for the cattle, but we fear that as much cannot be said for the hogs. "Piggy" is at best a necessary evil, and you cannot make him salubrious and pleasant to the senses, even should you wash him and scrub him and curry him to your heart's content, a mode of treatment which we need scarcely say is not likely soon to be adopted. The best that can be said on his behalf in the present connection is that it is by all odds better to keep a few hundred hogs for a month or two to use up the wash left by the cattle, than to let this surplus wash run into the bay. We say that hog pens positively cannot be kept cleaner than those we refer to are kept, besides which, let it be observed, that they are still farther away from human habitations than the cattle stables. After all this has been said, however, we will add our candid opinion, based on personal examination of the locality, that it is simply preposterous to speak of any disagreeable effluvia from these stables or pens *reaching the city*. If a disagreeable effluvia there is perceived, in any thickly peopled neighbourhood, we would advise that it be traced to its source, which we dare wager a groat or two will be found somewhere else. If anybody feels skeptical on this point, just let him put the truth of our opinion to the test the first convenient opportunity, and report results. The question is one of considerable interest to the public, and, we observe, has been creating no small commotion of late in the neighbouring city of Hamilton; where, however, it is a slaughter-house and not a feeding-place that is complained of.

We should mention also the cooper shops, where some forty men are employed, a few of whom have worked there twenty years and over—and the yards adjoining, where are piled staves to the value of \$30,000, large

quantities of them having been brought all the way from Central Ohio, where it seems "oak ridges" and stave timber do considerably abound. The coopers make good wages, some of them from \$18 to \$24 per week, which they do by working twelve or fourteen hours daily, at their own option, of course, being paid altogether by the piece. We have already said that this portion of the city (east of Trinity street) looks as if a few drains down to the bay would do a great deal of good, and to the ordinary observer it does not appear as if the undertaking need be either difficult or expensive. Perhaps the filling up of the water-holes would be a better plan than draining off the water. Meanwhile the people down there look healthy enough, and healthy-looking children fill the nearest school-house and swarm around the streets like bees. It is not altogether irrelevant that Mr. William Gooderham, Senr., hale and even active at the ripe age of eighty-two, should, with his large family, all born and brought up near by the distillery—be cited as a proof that the air of the east end cannot be so very bad for the human constitution after all. And it may be of interest to note this fact, that whereas in time past ague and fever and intermittent fever prevailed thereabouts every spring and fall regularly, these ailments have, since cattle have been kept in connection with the distillery during some dozen or fifteen years back, almost entirely disappeared from the locality.

The firm consists of Mr. William Gooderham, Senr., Mr. J. G. Worts, and Mr. George Gooderham. It was founded forty years ago by the present senior partner and Mr. James Worts, father of Mr. J. G. Worts, who commenced business as millers in what was then known as the Old Windmill, employing about half a dozen men. Now some two hundred men are employed by the firm, most of them men with families, making quite a little town of themselves, and counting amongst them a few who have been in their present employment for over a quarter of a century. Many of the men are owners of the homes they live in, some have got "ahead" and have houses to rent, and the community down there, we must say, appears to be generally a thriving, prosperous, and healthy one.

MAY - JUNE — 1949

1235 Berri St., Montreal

Gooderham and Worts Limited

Often in these days of "King Science" the expression is heard—"It's a lost art." But not so in the distilling industry which still produces fine Canadian whiskies through the delicate senses of taste and smell. In this article we tried to capture the colourful background and present-day methods of Gooderham & Worts—distillers for over 100 years.

by WILLIAM PRENTICE

TO CAPTURE a world market a commodity must be desired; it must be wanted by a majority of the citizens of distant countries in order that it becomes profitable to ship to foreign markets. To be desired the product **must** have an individual character that stamps it above the ordinary "run-of-the-mill" local produce. This truism of international trade is the essence of why one product secures a world market and another seeks to retain a local acceptance. In this manner, Canadian whisky, filled as it is with character and individualism which distinguish it from all other whiskies, has gained and continues to hold a ready market in every country which has a discerning taste for spirit beverages.

The distillers in Canada in the hard early days managed to develop, with their crude stone and wood stills, a type of whisky which was definitely characteristic of this country. Of those pioneers of the distilling industry in Canada, Gooderham & Worts Limited is the only one remaining, possibly for the reason that they have consistently not followed development but led and guided, to a very large extent, the peculiar character of Canadian whisky; and the enviable reputation which it enjoys throughout the world, is due to the combination of stability and enterprise which has been the foundation stone of this firm since its inception in 1832 in the little frontier town of "Muddy York".

But before going back to those now-romantic times of early Upper Canada, let us admit that, in spite of the thousands of years of the use of wines, beers and spirits, very few people really know much about them.

A very general delusion is that alcohol is made by distillation. This is quite untrue.

Alcohol is made by the natural action of yeast on sugar. There is no indication as to when distillation was first practised, but it was many thousands of years ago, and probably somewhere in the Middle

East, although primitive stills were found in the islands of the south Pacific by the earliest European explorers.

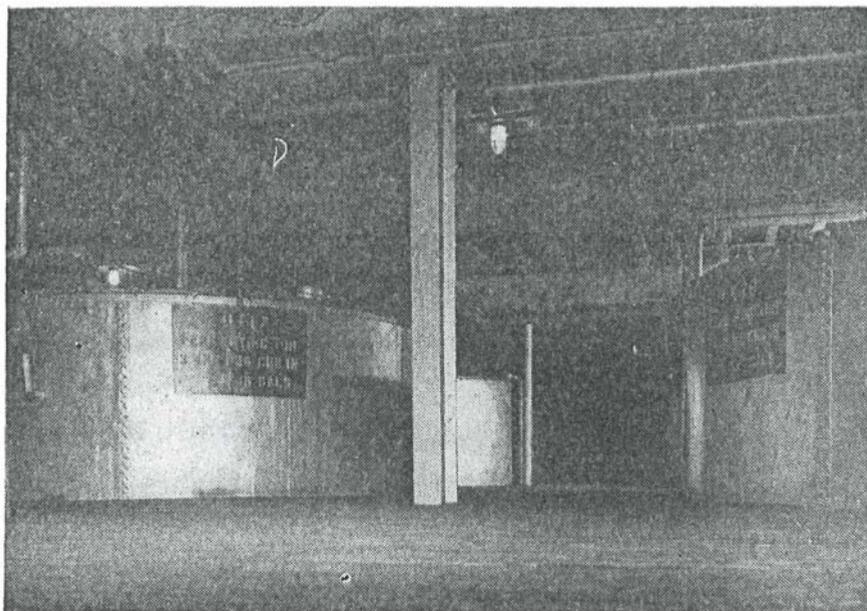
The distillers first and principal problem is to separate the alcohol and other desired products of fermentation from the mash and for this purpose he employs a still, making use of the fact that alcohol vapourizes at a lower temperature than water, and that at any given temperature more alcohol than water will vapourize and can be drawn off from the liquid in the form of vapour after which it can be condensed and returned to liquid form.

The primitive still as developed thousands of years ago was a pot still with a closed top through which a pipe was sunk, and which led off from the pot either through cold water or for a sufficient distance for it to be cooled by the air. The pot was heated, the steam, partly water but mostly alcohol vapour, passed up through the pipe and was cooled, condensed, and drawn off as a liquid with a fairly high alcoholic content. Naturally after each batch of fermented liquid (wine or beer) had gone through the distillation process, the pot had to be emptied, cleaned out and refilled.

This type of still in a primitive form is used even yet by the makers of "moonshine" and "swamp" whisky" and in a very highly developed form by the distillers of brandy and of Scotch and Irish whiskies; also in a modified form for the manufacture of gin.

Hundreds of years ago in the British Colonies in America another type of still was developed by the ingenuity of the Colonials who had to contend with a grievous shortage of metals out of which a still of this type could be made. This type of still consisted basically of a contrivance whereby hot steam came into contact with a trickle of the fermented liquid and carried off with it a high proportion of alcohol in the form of vapour. The still itself, and the pipes, were usually constructed of wood and the steam was formed by pouring water on a pile of stones heated red hot by a fire underneath.

The loyal Americans who came to Canada after the Revolution brought this type of still with them



On the left is fermenting cellar showing some of the 23 fermenters—the largest of which is 50,000 gallons.

and it was a still of this make which was first installed by Gooderham & Worts, Toronto at that time had a population of about 4,000 and there were nine other distilleries in the town operating stills of this general type. Crude as it was, this make of still was the origin of the "continuous still" which was first used about 1840, and which, developed by chemical and engineering skill over the intervening years, has become the almost perfectly efficient still.

Alcohol is a colourless and almost tasteless liquid. However, to be enjoyable, a beverage whether alcoholic or not, must have taste, a characteristic and pleasing smell, and colour, all of which combine to give it what is generally known as character.

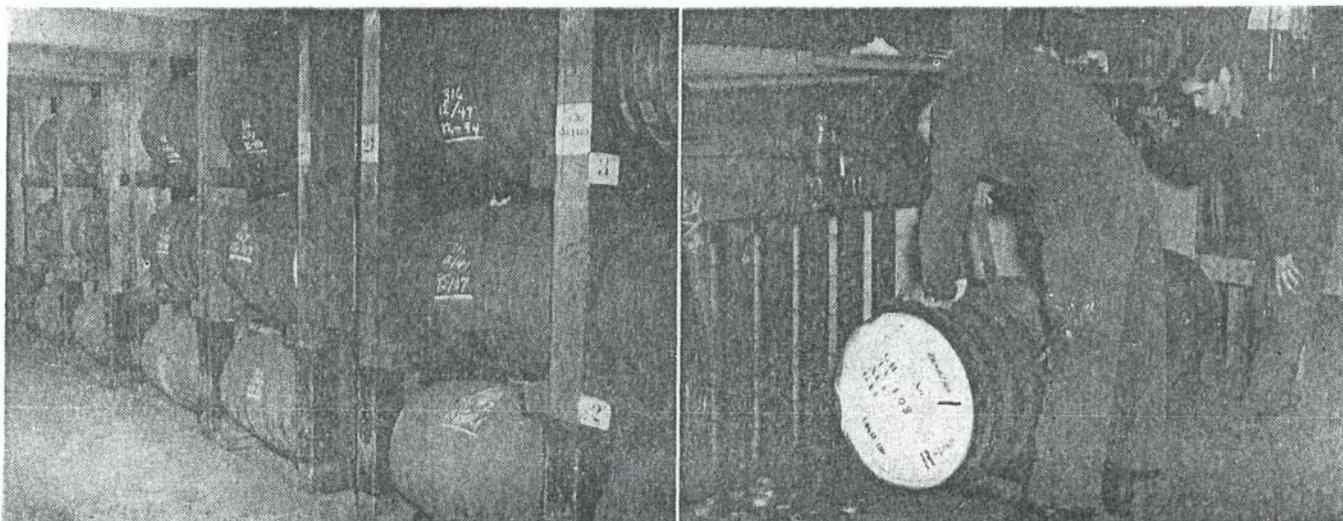
The pot still meets this requirement for a beverage of high alcoholic content, but it gives an imperfect distillation; some solids, some oils and other matters are carried up with the mixed alcohol and water vapours, and combine to give the distilled liquid colour, taste and irragrance. There is no uniformity. It is well known that the apples or peaches or grain of any locality vary in flavour and in appearance from one year to the next. The pot still

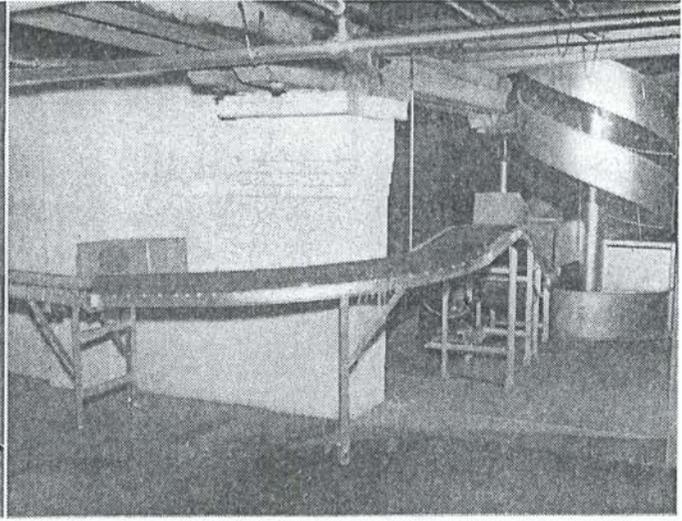
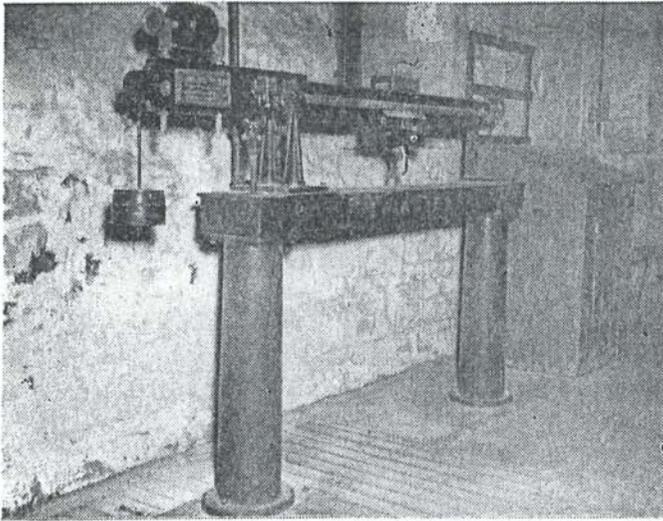
faithfully transfers the variations in the grain or the grape to the finished whisky or brandy. The only way in which uniformity can be achieved is by blending.

The continuous still on the other hand can, by skilful manipulation be adjusted to transmit more or less of the character of the original product to the finished liquid, and by a series of successful processes can be made to eliminate entirely from the finished product any of the undesirable products of the fermentation. A very highly specialized type of continuous still can be made to produce a liquid which is 99.9 per cent alcohol known as "absolute alcohol", whose greatest use is for medical purposes and scientific research. So far as is known, the only still in the British Commonwealth outside of Great Britain, capable of making absolute alcohol is one of the stills of Gooderham & Worts. Quite literally the fact that it was there, operated by people who didn't hesitate to work 20 hours a day, was one of the things which saved the war for the Allies in the dark days of 1940.

However, Canada is a comparatively young coun-

The most interesting sight in the distillery is the barrels which are shown left. Eight floors of barrels are kept in the large warehouse for maturing. On the right are workers filling kegs.





Track scale which weighs incoming grain cars and full and outgoing grain cars when empty. On the right is a view of the conveyor system recently installed in the shipping department.

try just recently risen to, nationhood through the marshalling of its industrial forces during the past two wars. But prior to World War 1, Gooderham & Worts was one of Canada's most widely known firms, having already gained a large portion of the domestic trade and a worthwhile share of the markets in foreign countries. But the history of this firm goes even further back. Back to the days of early Canada when hardy pioneers came to Canada to battle the rugged forests and strange ways of this land. One of these early settlers was an avid young Englishman from Suffolk, James Worts, who arrived in York (Toronto) in 1831 accompanied by his young son, aged 14, James Gooderham Worts. The other immigrant was William Gooderham, who came out when his brother-in-law, Worts, had chosen the site for the new enterprise and began to construct the mill.

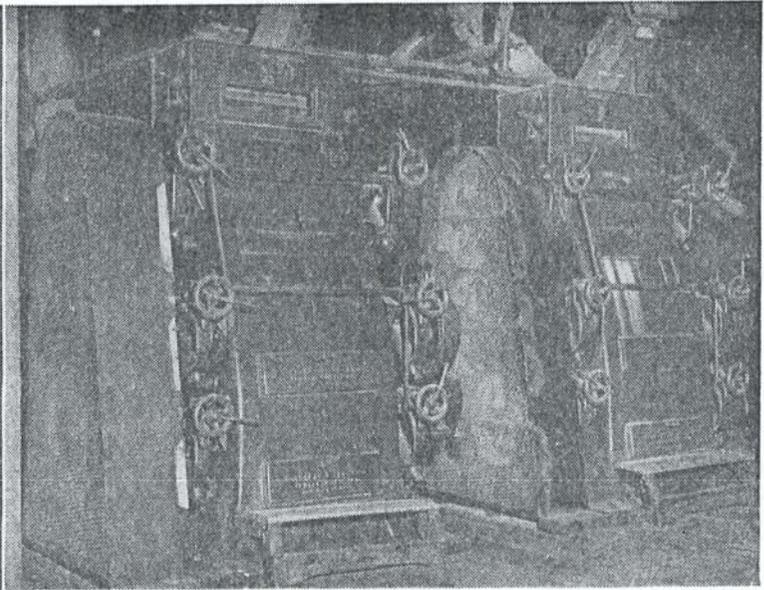
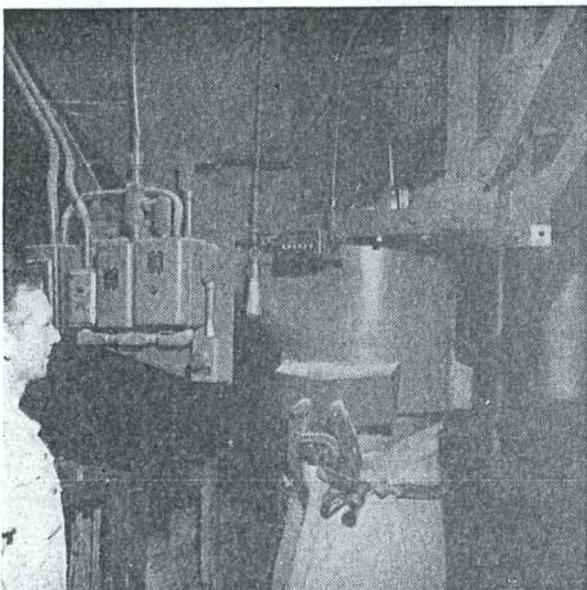
James Worts and his brother-in-law, William Gooderham, entered into the milling business when the latter landed at "Muddy York". G. & W. was formed on July 27, 1832, when an account was

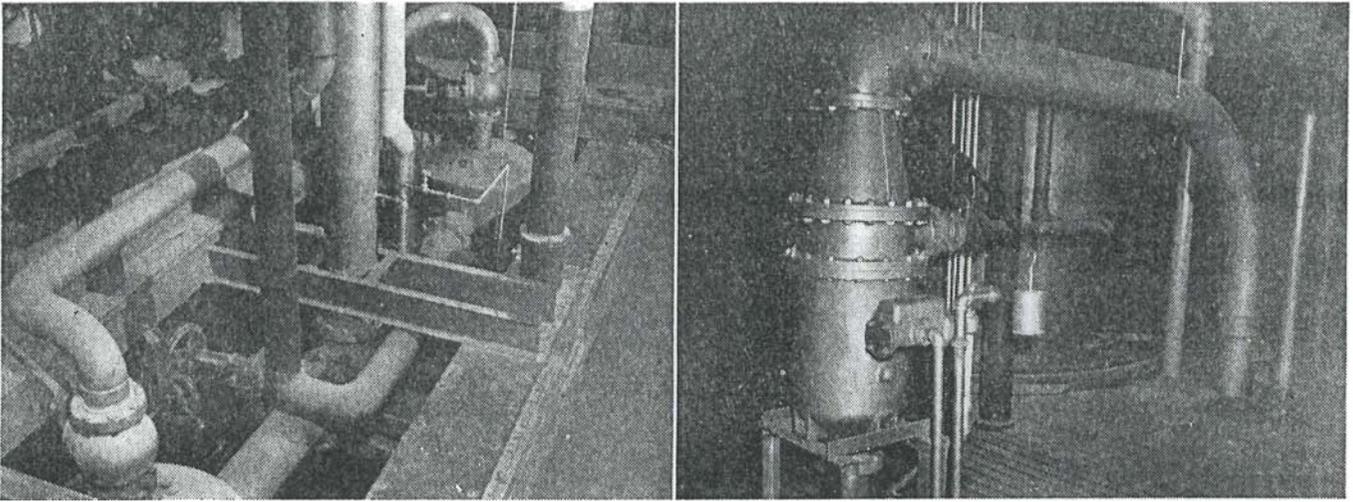
opened in the Bank of Upper Canada (King and Frederick Streets: Est. 1822) in the sum of £1,823/0/6. During this same year, 1832, the famous G. & W. windmill was completed. It was of the Dutch or East Anglia style and six storeys in height. This famous old land-mark of York was run by wind-power until 1835 when steam power was injected. Shortly afterwards the windmill sailed blew away, and the windmill, as a windmill, ceased to function. The location, however, was retained as indicating the base point for subsequent harbour surveys.

In a book by E. B. Shuttleworth entitled, "The Windmill", published in 1924, a description of the mill's progress and production is given. Said Mr. Shuttleworth: "Flour production commenced on October 5, 1832, with the first run terminating on December 13. It showed an output of 239¼ barrels of flour, besides the so-called pollard, which then included middlings, shorts and bran.

"The first recorded sales (of flour) was on October 27, 1832, when five barrels were sold at

On the left is the automatic weigh scales in dry feed recovery department. This machine fills, shakes and weighs the bag. On the right is the roller mills for grinding corn and malt. From here the ground mash goes to the storage bins and then to the cookers.





A view of the top of cookers is shown (left) complete with blowdown and vacuum lines. Barometric condenser which provides vacuum for partly cooling the mash in the cookers on the right.

25/- each to one Robert Ferrier, a baker who operated on King Street. Other earlier purchasers were William Jackes, Thomas Riddell, Alexander Rennie, and William Creighton, who bought at the rate of about five barrels per week.

"Amongst the names of various customers of those early days were Sir John Colborne, Sir W. Campbell, chief justice J. B. Robinson, Judge J. B. Macauley, the Honourable Mr. Powell, the Honourable George Crookshanks, Sherriff Jarvis, Colonel Rowen, Captains Bonnycastle, Philpotts, Hurd, McIntosh and DeGrassi; the Reverends Strachan, Stinson, Dode, Stewart, Barry and Barben; Doctors Widmer, Deiche, Kees and Harris; Messrs. Robert Baldwin, C. C. Small, S. Ridout, G. Gurnett, Jesse Ketchum and John Scadding." Those who recall their early Canadian history (and Toronto's present street names) will note many familiar names in the above group that are famous in Canadian history.

Gooderham & Worts' records show that the Mill commenced distilling on November 3, 1837. The Mill deliveries of October 30 and 31 show 18 bushels of middlings each day "to the distillery". On November 1, 1837, one Alexander Maitland received

one gallon of whisky. No charge appears to have been made against him, and it was probably in return for some service rendered by him to the firm, as it appears he assisted in the early distillation efforts.

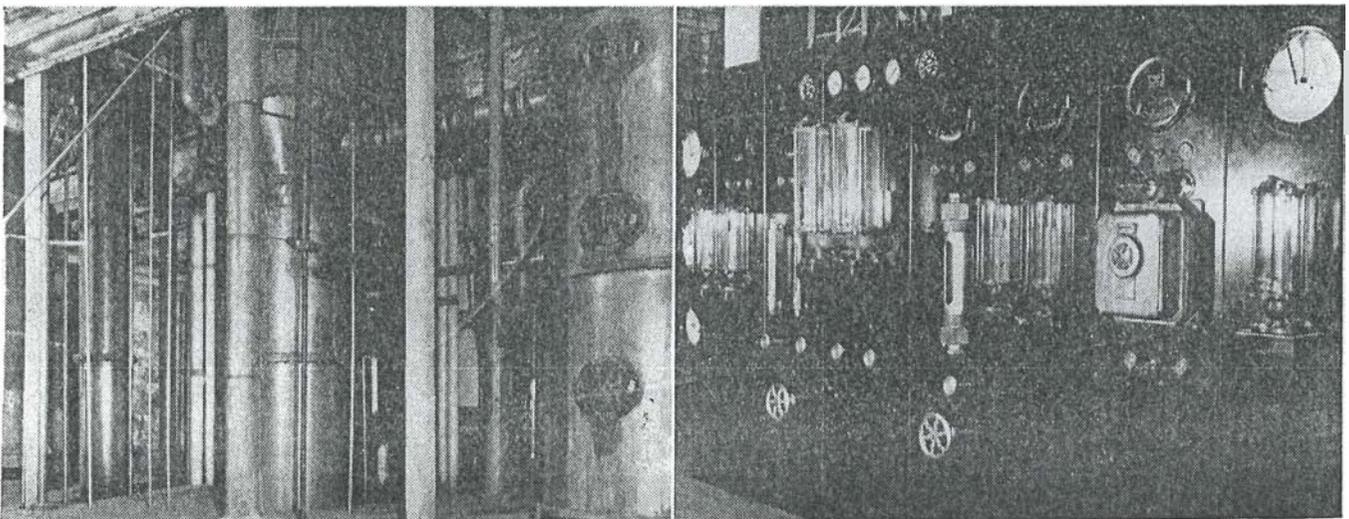
On November 7, 1837, doubtless at the completion of the first run, Joseph Lee, a general store keeper on King Street E., purchased 128 gallons of the firm's spirit, and the next day a further 156½ gallons. In fact that first month he purchased almost the whole output.

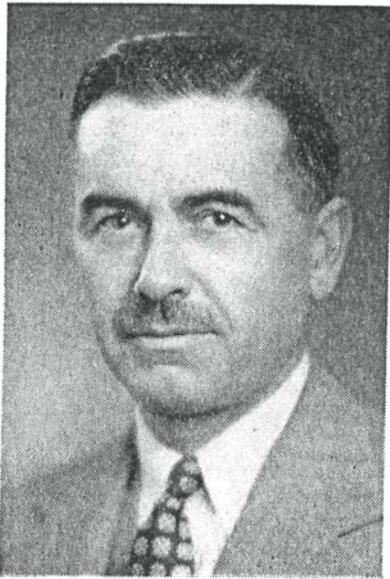
The grain mash regarding the foregoing amounted to some 304 bushels of middlings, with 36 bushels of ground wheat, or wheaten meal, malting 18,690 charged by the firm to the new distillery, at the rate of 5/- per bushel of 60 pounds. No mention, incidentally, is made of the use of any malt, but it must have been employed—say 60 pounds—to 27 bushels, or 3.56 per cent.

It is not known where the first malt was made, but there were facilities for making it at the Windmill by the beginning of 1838.

The grain bill, including the assumed proportion of malt amounted to 18,253 pounds and the spirit

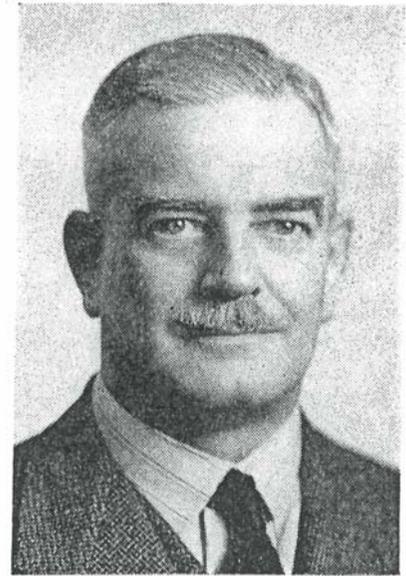
On the left is a view of the stillhouse (above) opening floor showing one of the four-column continuous stills. At extreme right is the beer column, then aldehyde column, next oil column and rectifying column at extreme left. Right is the operating floor of stillhouse showing panelboard.





OSWALD D. JOHNSTON was born in Glengarry, Ontario in 1895. Mr. Johnston is president of G. & W. He joined the company in 1937 as manager of the industrial division. Appointed director in 1939 and vice-president in 1941. Mr. Johnston is a graduate of the University of Toronto (B.A.Sc., Chem. Engineering 1923).

COL. HERBERT RUTTAN ALLEY! vice-president and general manager, was born in Toronto in 1892. Graduate of University of Toronto (B.A., 1912), and Osgoode Hall, Toronto. Joined G & W in 1935 as manager of British and Foreign agencies division. Holder of the O.B.E. Colonel Alley supervises sales. We are indebted to him for his courteous assistance in preparing this article.



produced measured 1,066 wine gallons. The yield per 100 pounds can only be guessed at owing to the absence of any statement of the spirit strength. The definition of proof spirit, and Sikes Hydrometer were not recognized to any extent at that time, in Canada.

In speculating on the yield, and computing the number of wine proof gallons, of that historic first run, equivalent to 1,066 gallons of whisky obtained one would probably take the spirit of the period as averaging 36 under proof. If this is correct this would show 692.9 gallons, including malt.

Fermentation was no doubt started by the use of brewer's yeast. It wasn't until 1840 that the first mention of the use of the Hydrometer was made. On May 1 a note of 22 under proof is mentioned, and on May 8 an entry showing 20 under proof. The range seemed to run all the way from 3.1 to 40 under proof.

On May 1, 1840 the first attempt was made to ascertain the yield, showing that 174 bushels gave at the rate of $3\frac{1}{2}$ gallons of 22 U.P. per bushel. On May 8, 176 bushels produced the same yield at 20 U.P. During 1840 it appears that some 28,324 gallons of whisky were made.

During this period (1832 to 1840) the new distillery made fairly rapid progress until the products were being shipped to Montreal and inter-provincial business opened up. A sharp depression rocked business severely during the early '40's and promissory notes had to be issued. However, under the able guidance of the young immigrants, Gooderham & Worts continued to consolidate itself in Canadian trade. In 1841 commercial pas was introduced into Toronto. An entry in the firm's books, notes the fact. A regular dairy was installed by G. & W. during 1843 to take care of extra slops. The first mention of flour shipments to England was made in 1844. In 1845, 1637 barrels of flour were exported out of the province—to Montreal and sales of whisky ran to 53,000 gallons.

In 1845 J. G. Worts (James Worts' son) was admitted as a partner into the firm and the general assumption of the name of "City of Toronto Steam Mills and Distillery" was made.

The crowning point of those early years was the

erecting, in 1861, of the new distillery . . . the largest in Canada. Its completeness and layout matched the finest on the continent.

There is a fairly complete description of the plant given in E. B. Shuttleworth's book, "The Windmill", on this plant but the extensive nature forbids reprinting in this article. Suffice to say that the plant had a private wharf on Toronto bay and warehouses and elevators of a size to contain 80,000 bushels. It was 300 feet long, 80 feet wide and 5 storeys high. This is still the original part of the present G. & W. plant with numerous additions, of course, being added since that time. One of the remarkable things about the plant was that the grain was not touched by human hands during any part of the process. This in the year 1861. The capacity of the plant equalled the amazing figure of 1590 bushels of grain per day and produced about 7500 gallons of whisky and other spirit.

Down through the years the Gooderhams and the Worts have been closely linked with the company. George William Gooderham succeeded his father, William, the original founder, and headed the firm until the turn of the century. Succeeding G. W. was William George, who held the reins until 1923 when the Gooderham interests were sold to Mr. Harry C. Hatch. The Gooderhams retained an interest in the business and Mr. E. D. Gooderham is a director today.

The outstanding Dominion event, the Canadian National Exhibition, owes much of its success to the zeal and civic pride of the early Gooderhams. They were instrumental in launching this world renowned fair. Many other now historic institutions owe their inception to these early business leaders. The Bank of Toronto, The Canada Permanent Mortgage Corp., and The Manufacturers Life Insurance Company are three of the best known. Leaders in society and civic responsibility, the Gooderhams also interested themselves in the cultural life of Toronto. Trinity Church on King Street (the oldest in Toronto . . . over 100 years) was endowed by the Gooderham family, and St. Peter's Church owed much to their personal and financial support. The Royal Canadian Yacht Club was another of their

diversified interests. The Gooderham Cup is still emblematic of vachting supremacy in Canada. The Gooderham backing of the Toronto Symphony Orchestra is not so well and widely known as it should be.

This colourful era is now past . . . but not forgotten. Present demands for fine Canadian whiskies far exceeds even the most optimistic forecast of the early founders of the company. And to meet this demand today, this firm clings to the traditions of characteristic Canadian whisky.

Here is the detailed description of the modern process written especially for this article by their production superintendent, J. A. Farrell:

The manufacturing procedure of converting a raw material to alcohol is a scientific process which is carefully controlled by chemists. In the production of a fully aged and palatable whisky science is coupled with an art which can be developed only by long experience. It is subject to variables, such as variations in odour and taste far beyond the realm of chemical analysis. Consequently, the actual methods of blending whiskies are a carefully guarded art which varies in different distilleries. In any distillery, the process of converting a raw material to spirits will in general be similar to the following outline depending somewhat on the type of equipment used.

In the production of whisky nothing but selected grains are used. Corn is the principal raw material, but rye and barley are also used. In the fermentation industry yeast cannot be used to produce alcohol directly from the starch contained in the grain. This starch must first be converted into a fermentable sugar. This involves grinding the corn to free the starch, gelatinizing the starch by cooling in water, and transforming the gelatinized starch into a fermentable sugar by means of a suitable conversion with malted barley, which is a barley that has been sprouted, kilned and ground to liberate the conversion enzyme.

Corn is received in boxcars containing about 2,000 bushels. It is unloaded by means of power scoops into the boot of a bucket elevator and is conveyed to the storage bins. The small grains are handled in the same way, each grain having its own bins. These bins are spouted directly to the milling equipment which consists of a hammer mill and stand rolls. The grind is controlled so that the particles are fine enough that the starch may be dissolved in water, but not so fine as to pass through the spent slop screen in the dry feed recovery plant.

The grain meal is weighed into the cookers which contain about 18 Imperial gallons of water for every distiller's bushel (a distiller's bushel of any grain weighs 56 lbs.) and is heated with steam to a temperature of 295 degrees F. or higher. These cookers are horizontal cylindrical pressure vessels equipped with rotating paddles for thorough agitation. After a few minutes at the high temperature, a blowdown valve is opened and steam is blown off to the atmosphere until the temperature drops to about 220 degrees, then a vacuum is applied to bring the temperature to 156 degrees F. By this time, all the starch is dissolved in the water. A cold malt slurry consisting of ground barley malt mixed with water is drawn into the cooker and

this cools the liquid to 148 degrees F. at which temperature the conversion of starch to fermentable sugar is quite rapid. After about 20 minutes at 148 degrees F., the mash is pumped through coolers to the fermenters.

In the fermenters, water or cooled thin stillage from the beer stills, is added to thin out the mash and yeast is added. The dilution at this stage is about 30 Imperial gallons of liquid per distiller's bushel, and the temperature is 76-78 degrees F.

The pH is adjusted, if necessary, to about 4.8. Fermentation is rapid for the first .24 hours, but gradually dies off until at the end of about 72 hours, very little fermentable sugars remain.

When yeast is placed in a suitable medium, the resultant fermentation divides itself into two stages. The first stage is one in which the sugars present are used to reproduce more yeast cells until a certain concentration of cells is reached, that concentration depending somewhat on the total sugar present. This means then, that there is a maximum propagation of yeast and a minimum production of alcohol. In the second stage, the rate of budding of the yeast cells is greatly reduced, and the sugars are used to produce alcohol. For this reason, a starter is prepared which contains a very high concentration of yeast by using a yeast mash with a high sugar content, which, when added to a fermenter, will establish, almost at once, the necessary cells to sugar ratio.

The control laboratory starts the yeast from pure culture slants which are renewed by transfer frequently. A small quantity of yeast, by standard aseptic bacteriological methods, is removed from the slant and placed in a test tube containing about 10 c.c. of sterile malt sugar of Balling about 20 (the term Balling being roughly the % sugar), and is incubated 24 hours. This is then added to about 200 c.c. of sterile malt medium in a larger flask and incubated 24 hours. The quantity of yeast is thus built up through successive stages until after four or five days there is sufficient volume of pure yeast culture. This is used to inoculate the yeast culture machine which is located in the yeast room. This machine is a tank rounded on the bottom and equipped with steam coils for sterilizing, motor driven agitators, and water coils for cooling. From the culture machine, the yeast goes to the final yeast tubs.

A grain yeast mash consists of 40-50 percent barley malt and 50-60 percent other grains such as corn and rye or corn and barley. This mash may be soured by lactic bacteria or merely sterilized and set as sweet yeast. In either case it has a Balling of 20-24. When the Balling drops to around 14, the yeast is added to the fermenters to the extent of 2-3 percent by volume. It usually has, at this point, a cell count of about 150 million per c.c.

The beer or fermented mash containing 6-7% by volume of alcohol, is pumped from the beer well to the stills. Two separate units are used at the Gooderham & Worts plant. Both are four-column continuous stills consisting of a beer column, an aldehyde column, a fusel oil column and a rectifying column.

The beer is heated by means of vapours from the aldehyde column and enters the beer column, the purpose of which is to remove the alcohol and fusel oils from the fermented mash, leaving the grain solids and water to pass out the base of the still. The vapours from the top of this column enter

the aldehyde column which separates the low boiling components and higher boiling fusel oil components from the alcohol. These low boiling components are condensed and disposed of as impure or second grade alcohol, suitable for certain industrial uses. The liquid stream from the base of the aldehyde column, is fed into the rectifying column. Fusel oil collects part way up the column, and is withdrawn as a liquid, and fed into the oil column where alcohol dissolved in the fusel oil is separated from it and returned to the aldehyde column. The heads from the rectifier are returned to the aldehyde column and are separated into ethyl alcohol and heads or aldehyde fractions. Pure high grade alcohol is removed from near the top of the rectifier at a strength of about 96% alcohol by volume.

The by-products of the distillery are dried feed, carbon dioxide and fusel oil. The carbon dioxide is piped to a nearby plant where it is processed into dry ice and liquid carbon dioxide. Fusel oil is sent to a refinery to be refined into amyl alcohol, etc.

The stillage from the base of the beer stills, is run over a screen and is then pressed and dried in a huge rotating drier. The resultant dried grains, having a high protein content, are valuable to farmers and cattle-growers when blended into stock feeds.

The alcohol at this stage in the process is a pure crystal clear liquid containing about 96% alcohol by volume and having a sharp odour and fiery taste. These properties, while associated with good alcohol, are objectionable in a whisky and to remove them the alcohol is diluted with distilled water and placed in charred oak barrels. The barrels are placed in temperature-controlled rack warehouses for periods of up to ten years. The spirits gradually lose the fiery taste, become mellow and take on a golden-amber colour due to material extracted from the wood.

After sufficient time the spirits are blended and further aged, according to very old formulae. This blending produces a light-bodied whisky with a subtle flavour rather than the heavy full body of straight whisky.

At every stage in the manufacture of whisky, the control laboratory facilities are used to ensure high yield of alcohol in the fermentation and high quality in the finished product.

Esprit de Corps

But the bone and sinew of Gooderham & Worts, represented by the latest distilling equipment and mechanical means to produce spirit beverages, is not the soul of either the company or the intangible something which sets G. & W. whisky apart from other Canadian brands. Other companies may have just as modern equipment which can produce, in a purely mechanical fashion, the same chemical products. But it is here that generations of skilled Canadians, working with a "feeling" for their art handed from father to son through as many as four generations set themselves apart and become more than just distillery workers but craftsmen who have inherited something other than a cold purposeful knowledge of stills and fermenting. An art has been their gift. An art that cannot be put down in black and white.

The Housley family—Jack, Albert, John and now Terry—is one that represents four generations of G. & W. employees. The Taylors, represented now by Norman and Donald, were preceded by three generations of Alfred Taylors who each in turn brought their sons to work for Gooderham & Worts. Or men like Bert Hardy looking ahead to his 43rd year along with his brother Norm who has seen 39 years slip behind at the same site, represent the unchanging picture of "make haste slowly" combined with stability of purpose that has anchored G. & W. to a corner stone of human fellowship. This friendly atmosphere permeates the company from the plant through the office to the heads of the firm. It is a united family. One that works together, free from outside guidance, to bring the highest standard of living to each and every one of the company's congenial workers.

This feeling of permanence and cooperation over many years has produced a genuine pride in the products offered to the public and an internal "one for all—all for one" esprit de corps. It is hard to convey to the reader, in this sceptical age, the complete faith the workers have in the fairness of this company's management. Old age pensions, sick benefits, health provisions and many other projects have not been "granted" as concessions to the employees . . . but are rather a combined effort of every member of the firm to insure that, each reaps benefits from hard work and sincere effort.

APPENDIX C
AGREEMENT TO INCORPORATE
GOODERHAM & WORTS LIMITED
1 AUGUST 1882

Agreement as to Gooderham & Worts Limited
Dated 1st August 1882 between George Gooderham Esqr. and The
Trustees and Cestiusue Trustent under the Will of the Late
James Gooderham Worts Ess.

This twenty-six page agreement created a limited company in place of the partnership under which the business had operated until then. Accompanying it were schedules totalling eighty-two pages and containing much valuable information that is outlined below; that part in which the buildings are described is transcribed. Attached to the agreement was a plan of the site by Unwin, Browne & Sankey dated Nov 8, 1882.

Outline of Schedules A and B

Schedule A, Part I

- pp. 1-3 Listing of the Real Estate, Buildings, Plant and Machinery with an agreed value for each asset, the amount of depreciation appropriate and the present value.
- pp. 3-11 A description of the **company's** lands
- pp. 12-31 Description of Distillery

Schedule A, Part II

- pp 32-36 Stock in Trade at 31 July 1882

Schedule A, Part III

- pp 37-46 Book Debts and Cash on Hand

Schedule A, Part IV

- pp 47-69 Reports of Thomas Worswick & **Elisha** Simkins (machinery), George Booth (piping and copperwork), and George Galt & David Roberts (buildings and fittings) showing details of depreciation.

Schedule A, Part V

- pp 70-79 Balance Sheet

Schedule B

- pp 80-82 Weekly expenses at 1 August 1882 for each staff position, grain, fuel, interest and incidentals.

Transcription of Schedule A, Part I, pp. 12-31

Description of Distillery

Item on Real Estate a/c NO 4
Marked on plan annexed hereto 'D'
Value \$121,175

and more particularly described from pages 16 to 24
Size 170' x 50' height 76' with wing running north
30' x 30' built of stone slate roof 5 storeys high
Boiler House 107' x 30' height 20' built of stone
with felt roof and chimney 120 feet high flue 5' x 5'
Fuel Economiser 70' x 12' height 20' built of
brick with felt roof -
Fermenting Cellar size 140' x 80' height 20'
with loft, built of stone with slate roof
West end of Fermenting Cellar size 80' x 80'
height 20' built of brick with felt roof,

Distillery - Mill Part contains Ten (10) run of
stones, Grain bins, Grain and meal elevators,
Conveyors - cleaners - shafting - belting
pulleys &c. &c.

Engine Room contains one (1) 400 H.P. Brown
Automatic-cutoff Engine built by Thomas
Worswick Guelph during summer of 1881
and one (1) Boiler Pump,
two cut gear wheels

Distillery Part contains four (4) Mash tubs
(see fo. 20) lined with copper & rakes driven
by machinery below, Stills (see fo. 13)
Doublers (see fo. 14) Goose (see fo. 23)
Condenser (see fo. 15) and Worm (see fo. 20)

Fermenting Cellar contains forty-six (46)
fermenting tuns 16' Diamr. 8' 6" deep
and one Beer Reservoir of same size

[here begins page 13 of Schedule A to agreement]

Boiler House contains six (6) boilers 23' long
6' Diamr. with 9-10" flues in each
with connections to engines Stills &c.
and all necessary hot and cold water tubs
pipes valves cocks &c. &c. steam and
spirit pipes (iron & copper) valves cocks
&c. &c.

In addition to the above six (6) boilers there are two (2)
in East Boiler House and Two (2) in lane Ten (10) in all

Decription of Stills

The Stills consist of Eighty two (82) Boxes as follows Fifty eight (58) Boxes 62" x 28 1/2" x 12" divided into Three (3) chambers as below each chamber being 18" x 28 1/2" with one (1) copper plate 20" x 26" made of N^o 7 copper, four (4) boxes 62" x 28 1/2" x 24 divided as below into three (3) chambers but have no copper plates - and twenty (20) boxes 62" x 28 1/2" x 12" without any divisions. These twenty (20) contain about 600' of copper scroll - 3" diameter

(here there is a diagram)

[here begins page 14 of Schedule A to agreement]

Description of Doublers

The Doublers consist of thirty nine (39) boxes each box being 7'10" x 3' x 1'6" and of these, thirty (30) have fifty one (51) 1 1/2" Copper tubes in each as below. The remaining nine (9) have no tubes

The Doubles have water connections from the Condenser and overflow into the heater over Boiler House -

(here there is a diagram)

[here begins page 15 of Schedule A to agreement]

Description of Condenser

The Condenser is composed of twenty one (21) boxes 17 1/2" x 42" x 21" inside measurement without divisions as below and encompasses two (2) 10" copper pipes leading from the Goose to the Worm with water Connections from water tank on top floor and to Doublers - With all copper and iron pipes cocks valves &c.

[here begins page 17 of Schedule A to agreement]

One (1) Meal Conveyor **23'** long 10" diamr
with necessary belts pulleys shafts hangers &c. &c.

On Second or Millstone floor are
Eight (8) run of **4'4"** Burr Stones
Two (2) Portable Mills **3'** diamr. with all
necessary feeds spouts kerbs &c. &c.

On Fourth Floor is
One Oat Sceener **5' x 1'11"** with countershafts
belts pulleys &c.

On Fifth or Top Floor are
One (1) NQ 6 Sturtavant Suction Fan from Stones
One (1) NQ 4 Sturtavant Suction fan from Elevator
One (1) Corn Screener of **7' x 2'** made of perforated sheet
iron
Four (4) Meal Conveyors 55 feet long to convey meal
to Distillery meal bins
One (1) Main line shaft **48'** long 3" diamr
with all necessary counter shafts pulleys
wheels belts hangers &c. &c. for driving
the above mentioned machinery -

[here begins page 18 of Schedule A to agreement]

Distiller part size **98' x 50'** height 67' with
wing on North side 30' x 30' height 67'
five (5) storeys high built of stone with
Slate roof

First or Stone Floor is paved with 4" flags
and on it are
Two (2) Pine (Government) Spirit Receivers with
all necessary Copper pipe connections from
the Worms end and from Refrigerator
and to the Spirit pump & water connections
One (1) Wastewater overflow (Pine) tub
One (1) Oak Spirit overflow tub with iron pipe
connections from all the spirit tubs in the
Distillery
One (1) Iron (Refrigerator) Tank 22' x 4'6" x 3'
containing 1300 feet of 2" copper pipe to
cool spirit passing from Worms End
to close Receivers -
One (1) Upright Shaft 6" diamr 11' long on
which are

- Two (2) horizontal shafts 6" diamr. **12'** long with bevel wheels necessary for driving
- Two (2) horizontal shafts each 6" diamr **40'** long with necessary wheels pinions shafts journals **&c. &c.** for driving mashers in Washtubs
- One (1) line shaft 6" diamr **100'** long running from Engine room to Fermenting cellar with pulleys for driving slop pumps and countershafts wheels **&c. &c.** for driving
- Two (2) 3 throw (cold water) pumps 6" diamr 18" stroke

[here begins page 19 of Schedule A to agreement]

- One (1) Brass (spirit) pump 6" diamr 18" stroke with Copper connections from close Receivers used for pumping spirit from close Receivers to Spirit Receivers -
 - One (1) Countershaft 4" diamr 15' long with pulley for belt from small steam engine on this floor and **cutgear** wheels to connect with Main line shaft
 - One (1) 3-throw Brass (beer) pump 5" diamr 18" stroke with Copper connections from Beer Reservoir in Fermenting Cellar to Beer Receiver on Fourth Floor of Distillery
 - One (1) Forty (40) H.P. Steam Engine for pumping water to boilers or to watertanks or in case of accident can be connected with Main line shaft & run the Beer pumps and Slop pumps and so supply slop to the cattle sheds -
 - One (1) Copper and Brass (Slop) pump with copper pipe connections **&c. &c.** to pump slop to cattlesheds
- Also all necessary Copper pipe from the Worms end to the close Receivers Beer Reservoir and Refrigerator and from Refrigerator to close Receivers **&c. &c.** and all steam and water connections to Mash tubs Engine water pumps spirit pump **&c. &c.** all Gas Connections Six (6) Copper Syphons from Stills and copper and iron pipes cocks valves **&c. &c.** of various sizes
- Also about 3700 feet of 5" Copper pipe from Distillery to Cattle sheds made of 6 lbs. copper encased in wooden box

[here begins page 20 of Schedule A to agreement]

Distillery Second Floor

This floor is made of double 1" boards on fifty (50) iron joists **16'** lengths and 4" x 14" pine joists also 7 iron girders **50'** lengths all supported by iron columns and on this floor are

- One (1) Copper (Low Wines) tank Capacity 192 gal. with Copper pipe connections from the Doublers & to the Beer pumps & Beer Reservoir
- One (1) Wood (Worm) tub containing
- One (1) Copper Worm **1000'** long and tapering from 10" to 4"
- One (1) Distributing Safe with Glass cover securing the Worms end with Copper pipe connections to Refrigerator Close Receiver and Beer Reservoir

The Spirit Receiving Room contains

- Four (4) Oak (Spirit) Receivers with 4" Copper pipe connections to rectifying stills and all necessary valves cocks **&c. &c.**

Wash Floor contains

- Four (4) double sided iron (Mash) tubs each **16'6"** in diamr and **5'5"** deep and lined with copper on bottom and **3'5"** up the sides and fitted up with all necessary water and steam connections with valves cocks **&c. &c.**

Also on this floor is the foundation for stills (for description see fo 13)

[here begins page 21 of Schedule A to agreement]

Distillery Third Floor

Stills run through this floor - Foundations for Doublers and Condenser are on this floor for description of Doublers see fo 14 and of Condenser see fo 15

Private Yeast Room contains

- Two (2) double sided Copper kettles Capacity 132 gal. ea.
- One (1) Do. Capacity 265 gal.

with all necessary Machinery shafting utensils
belting Copper and iron pipes steam and
water connections valves cocks &c. &c. for
making stock and jug yeasts -

One (1) Malt crusher driven by belt from
line shaft

Yeast Room for making Day Yeast contains
Twelve (12) Yeast tubs 54" x 44" with copper
pipe connections to mash tubs
Two (2) Iron Yeast Mashers Copper lined
with all necessary spouting steam and
water connections cocks valves &c. &c.
Two (2) Brass (Low Wines) Pumps for
pumping Low Wines from bottom to top
of Doublers -
Two (2) Pine (cold water) tubs Capacity 8000
gals. each
One (1) Pine (cold water) tub Capacity 5000 gals.

This floor is supported by six (6) iron girders each 50'
long and twenty four (24) iron joists each 13' long
all on iron columns -

[here begins page 22 of Schedule A to agreement]

Distillery Fourth floor

The Stills Doublers and Condensers run through
this floor -

Meal Room contains Bins for Yeast Meal & Hoppers
One (1) Fairbanks hopper scale Capacity 3 tons
One (1) Do platform scale Capacity 1 ton
One (1) Wood (Hop boiling) tub with steam and
hot and cold water connections valves
cocks &c. &c.
Two (2) Pine (cold water) tubs Capacity
8000 gallons each
Two (2) Pine (water Rectifiers) Tubs Capacity
1280 Gallons each
One (1) 5 H P steam Engine driving
Six (6) Brass and Copper (Beer) pumps with
copper connections from Beer Receiver to Stills
Eight (8) Oak (Spirit) Rectifiers 3020 Gallons
each with all necessary copper and iron
pipes cocks valves &c. &c.

This floor is supported by eight (8) iron joists each 13' long

[here begins page 23 of Schedule A to agreement]

Distillery Fifth or Top Floor

Stills Condenser and Doublor pipes run through
this floor and on it are

Hoppers for ground meal for mash with
conveyors from mill -

Three (3) Pine (cold water) tubs 4000 gals each
with 4" iron pipe connections to alcohol
stills, malt house office &c. &c. and to
engine on stone floor with fire connections
and length of hose on each floor also
with engine condenser and on (undeciph.)
of Distillery

Two (2) Spirit Receivers Cap. 6000 gals each
to supply alcohol stills

One (1) Spirit Receiver Capacity 6000 gals.
connected with all copper tanks in
Tank Rooms Nos. 1, 2 & 3

One (1) Iron (Goose) Tank 12' x 20'
containing 1000' of 3" copper pipe (undeciph.)
elbows and used as a Condenser and
connected between the Doublers and
Condenser by 10" Copper pipe
with all necessary copper and iron
pipes cocks valves &c. &c.

This floor is supported by eight (8) iron joists each 13'
long

Also two boilers one engine pump &c. in East Boiler
house and two spare boilers in lane

[here begins page 24 of Schedule A to agreement]

Distillery - Outside Weight Scale-
House - Size 18'6" x 17'3" brick with
shingled roof Capacity of scales 10 ton
made by Fairbanks -

Old Coppershop

Size 26' x 25'8" containing forge blower
and other utensils for doing copper work
also store room for coal &c. &c. with
frame addition 20' x 26' height 15'

Shipping Warehouse

Is divided into two (2) parts, one part being 25' x 152' built of brick with felt roof and the other being 60' x 24' frame with tin roof

New Coppershop

Size 43' x 50' height 20' built of brick with felt roof and containing

One (1) Gas Engine

One (1) Forge

One (1) Steamhammer and other utensils for working copper with water and gas connections -

[here begins page 25 of Schedule A to agreement]

Description of Old Rectifying House

Item on Real Estate a/c NQ 5
marked on Plan E
Value \$6620

Size 78' x 33' 4 storeys high - brick - with stone foundation slate roof with wing running south 24' x 34' tin roof used for offices including office furniture safes and coppershop with one iron tank 15' x 15' x 6' for hot water Carpentershop store room &c. &c.

Paint Shop size 28'6" x 101'6" & 14' high built between Malt house and Old Rectifying House with brick front and felt roof. Entrance to vault is from this room

Malthouse and Vaults

Item on Real Estate a/c NQ6
Marked on plan F
Value \$8132

Size 138' x 70' height 36' 3 storeys and grain loft brick with stone foundations slate roof fitted up with Elevators 2 kilns 33' x 33' each 2 iron steep Tubs 2 Hopper scales (Capacity 1 ton each) over steep tubs One (1) 40 H.P. Engine 2 cement floors each 70' x 100' One (1) Grain cleaner and all necessary gas steam and hot and cold water connections &c. &c.

[here begins page 26 of Schedule A to agreement]

Stable	Item on Real Estate a/c NQ 1
	Marked on Plan G
	Value \$5582

Size 114' x 36' 31' high Brick with stone foundations
 Felt roof. Contains
 One (1) carriage house
 One (1) Feed Room
 One (1) Harness Room
 Twelve (12) Single Stalls
 Three (3) Box Stalls
 With loft, shed in rear 22' x 60' height 10' felt roof
 Yard planked 47' x 60' & 24' x 114' (3" plank)

Still House	Item on Real Estate a/c NQ 8
	Marked on Plan H
	Value \$26,320

Size 30'10" x 88' height 50' built of brick with stone
 foundation & felt roof wood and Glass front
 divided into three still rooms one (1) Mixing Room and
 One (1) alcohol room and each still house containing
 One (1) copper still
 One (1) Copper column
 One (1) Copper Goose and Iron Goose Tank
 One (1) Copper Worm and Wooden Worm Tub
 One (1) Distributing Safe
 in all **Three** Copper Stills complete
 also Two (2) Copper tanks size 10' x 10' x 6' each
 Two (2) Iron (**Fusil** Oil) Tanks
 Two (2) Iron tanks 10' x 12' x 8' with all
 apparatus for mixing the different whiskies
 and also spirit steam and water connections

[here begins page 27 of Schedule A to agreement]

NQ 1 Tank House	Item on Real Estate NQ 9
	Marked on Plan I
	Value \$6178

Size 70' x 87' height 30' built of brick with stone
 foundations & felt roof and contains
 Sixteen (16) copper tanks Capacity 8502 gals each
 One (1) Fairbanks platform scale Capacity 1 ton
 One (1) 15 H P Steam Engine with pumps
 and spirit and water and steam
 connections &c.

Ice House

Item on Real Estate a/c **NQ14**
Marked on Plan **N**
Value **\$2580**

Size **100'** x **30'** height **20'** built of brick with
shingle roof

[here begins page **29** of Schedule **A** to agreement]

Wharf property

Item on Real Estate a/c **NQ 15**
Marked on Plan **O**
Value **\$6812**

Wharf property includes

One **(1)** Wharf at foot of Parliament Street
with Fairbanks platform weigh scale
Capacity **6** tons
One **(1)** wharf at foot of Trinity Street
with one **(1)** Fairbanks platform scale
Capacity **6** tons - One **(1)** Do Capacity **2** tons
Grain warehouses Bins Boiler Engine Shafts
Belts Pulleys **&c. &c.**
Exclusive of water lots
Capacity of warehouses **150,000** bushels

Fuel Economiser

Item on Real Estate a/c **NQ 16**
Marked on Plan **P**
Value **\$3000.00**

Size **70'** x **12'** height **20'** built of Brick with
felt roof and contains two **(2)** Greens
Fuel Economisers each composed of **160**
lengths of **12'** iron pipe with connections
to engine boilers **&c. &c.**

Water Supply pipe

Item on real Estate a/c **NQ 17**
Marked on Plan **Q**
Value **\$6700**

Size **2'9"** inside diamr about **800'** long built of brick & oak
and runs from well near distillery to crib in bays

[here begins page 30 of Schedule A to agreement]

Cooperage

Item on Real Estate a/c NQ 18
Marked on Plan R
Value \$17080

Under this heading is included the Machine
shop size 101' x 40' including Machinery viz

- One (1) Steam Engine
- One (1) Boiler
- One (1) line shaft
- One (1) automatic Grinding Machine
- One (1) Parrott Machine or Stave dresser
- Two (2) stave Jointers
- One (1) Heading Jointer
- One (1) Heading Dresser
- One (1) Stave Chipper
- One (1) Stave saw
- One (1) H'd'g Saw
- One (1) Boring Machine

with all necessary belting countershafts pulleys &c.

Coopers Residence size 37' x 28' built of brick with shingle roof
Machine shop above size 101' x 40' Do Do
Cooper Shop Size 155' x 32' Do Do
Flag house size 10' x 14' Do Do
Barrel storehouse Size 100' x 40' frame building Do
Also land as described
as item NQ 18 Cooperage

[here begins page 31 of Schedule A to agreement]

Cattle Sheds

Item on Real Estate a/c NQ 19
See plan annexed hereto
Value \$47000.00

Shed NQ 1 Frame Building with felt roof size
210' x 150' comprising sheds, stalls for
672 head of cattle, feed troughs
tubs, gutters, drains &c. &c.

Shed NQ 2 Frame Building with shingle roof
size 129 x 180' comprising sheds stalls for
512 head of cattle, weigh scale capacity 10 tons feed
troughs tubs gutters grains &c. &c.

Shed **NQ 3** Frame Building with shingle roof size **141' x 120'** comprising sheds stalls for 403 head of cattle, feed troughs tubs gutters drains **&c. &c.**

Shed **NQ 4** Frame Building with felt roof size **158' x 160'** comprising sheds stalls for 516 head of cattle feed troughs tubs gutters drains **&c. &c.**

Shed **NQ 5** Frame Building with felt roof size **158' x 160'** comprising sheds stalls for 516 head of cattle feed troughs tubs gutters drains **&c. &c.**

Shed **NQ 6** Frame Building felt roof size **158' x 160'** comprising sheds stalls for 516 head of cattle feed troughs, tubs gutters drains **&c. &c.**

Shed **NQ 7** Frame Building felt roof size **158' x 160'** comprising sheds stalls for 516 head of cattle feed troughs tubs gutters drains **&c. &c.**

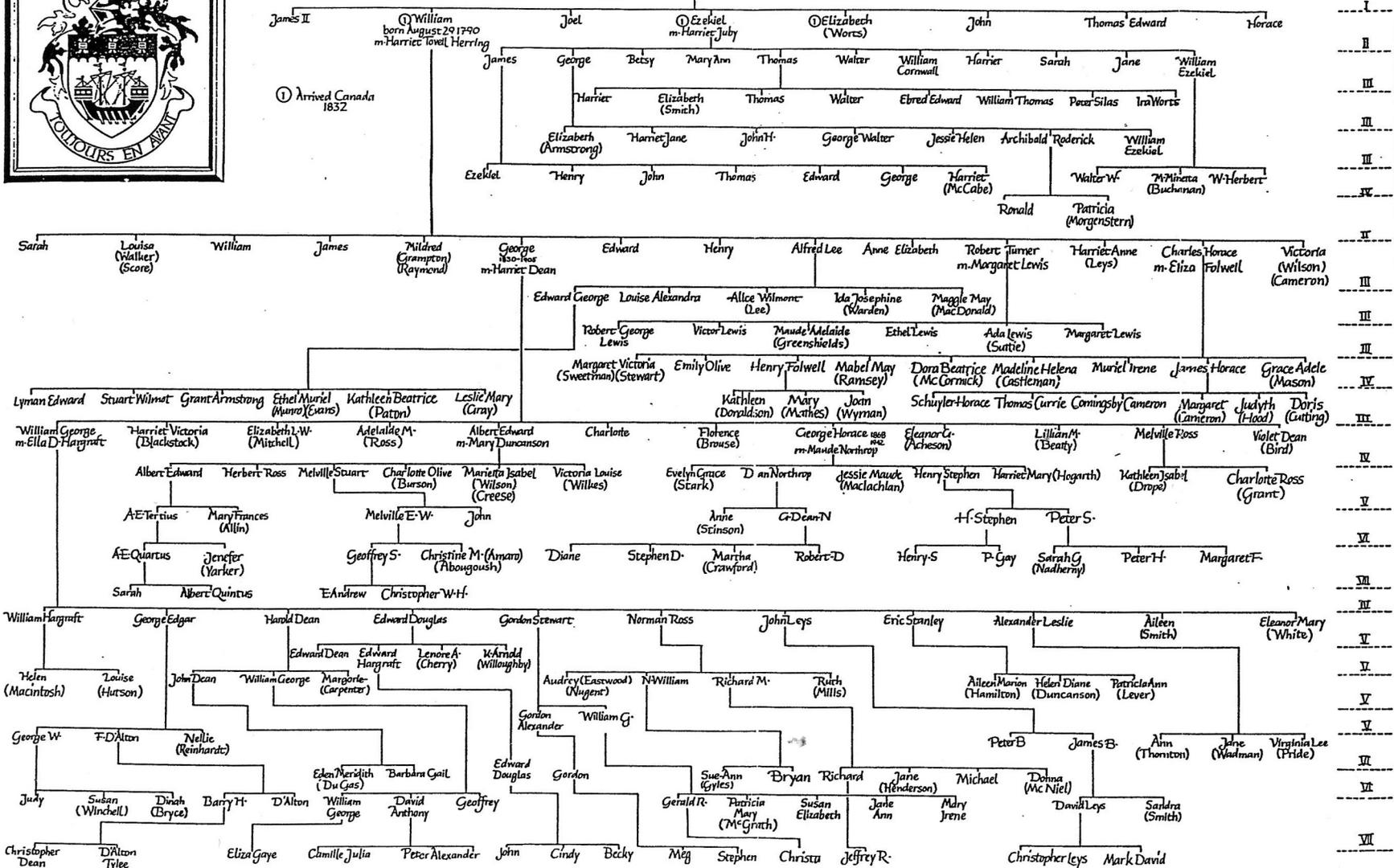
With Manure pits & Bridges for each cattle shed -
And long canal to bay and troughs on tressles to run off water and slop -

APPENDIX D

FAMILY TREES FOR THE
GOODERHAM AND WORTS FAMILIES



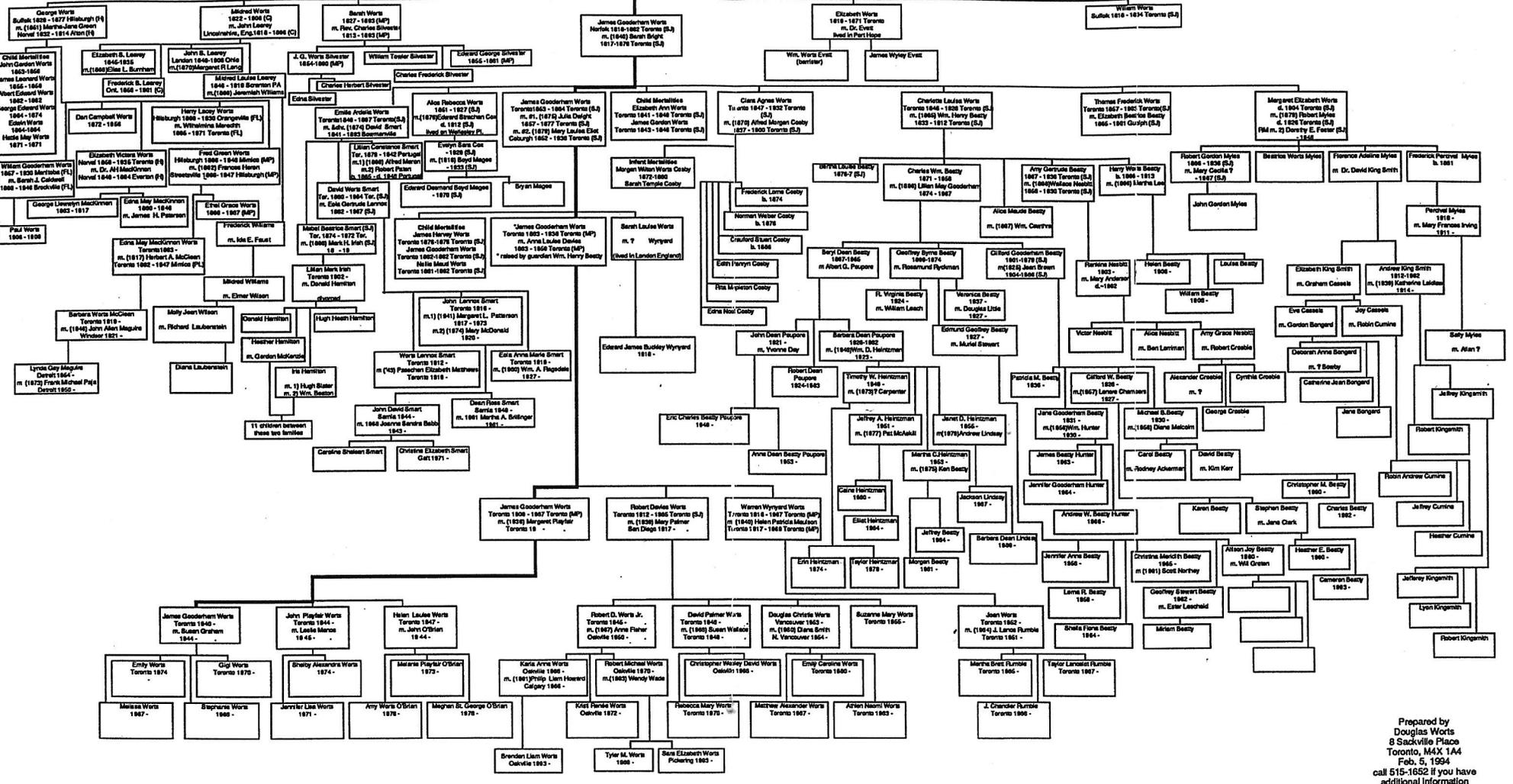
James Gooderham born Scole Norfolk 1757 died 1820



Revised July 1984 LG

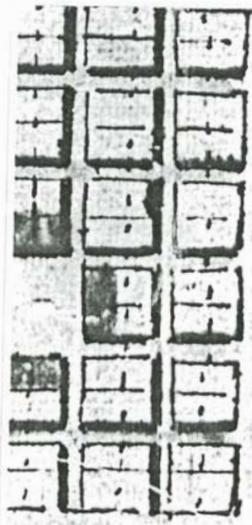
The Worts Family Tree

KEY
S - Saint James Cemetery, Toronto
M - Mount Pleasant Cemetery, Toronto
F - Forest Lawn, Orangeville
H - Huron's Hillbury
C - Cadeville Cemetery, Carleton Place, ON



Prepared by
Douglas Worts
8 Sackville Place
Toronto, M4X 1A4
Feb. 5, 1994
call 616-1852 if you have
additional information

ILLUSTRATIONS

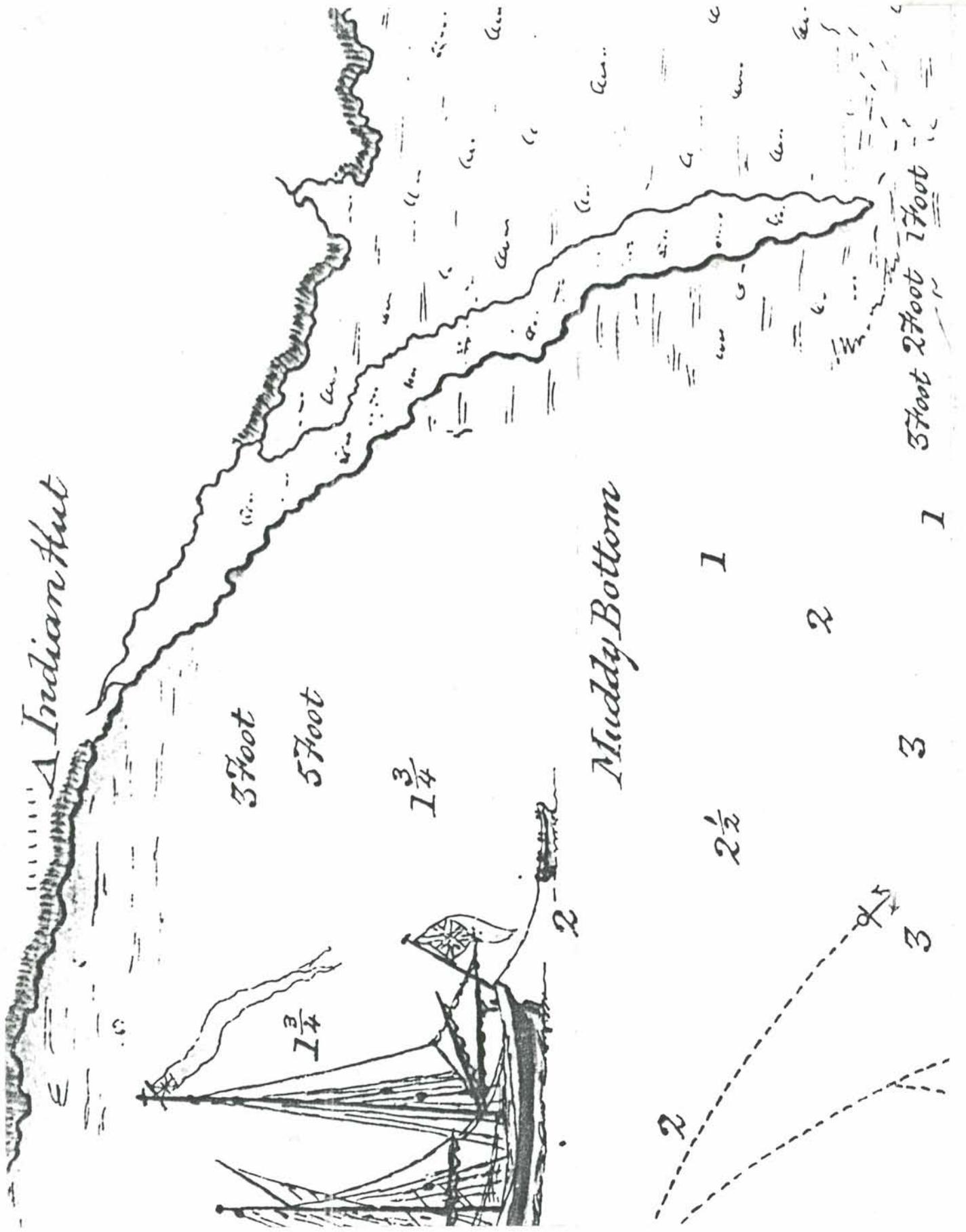


Ground Reserved

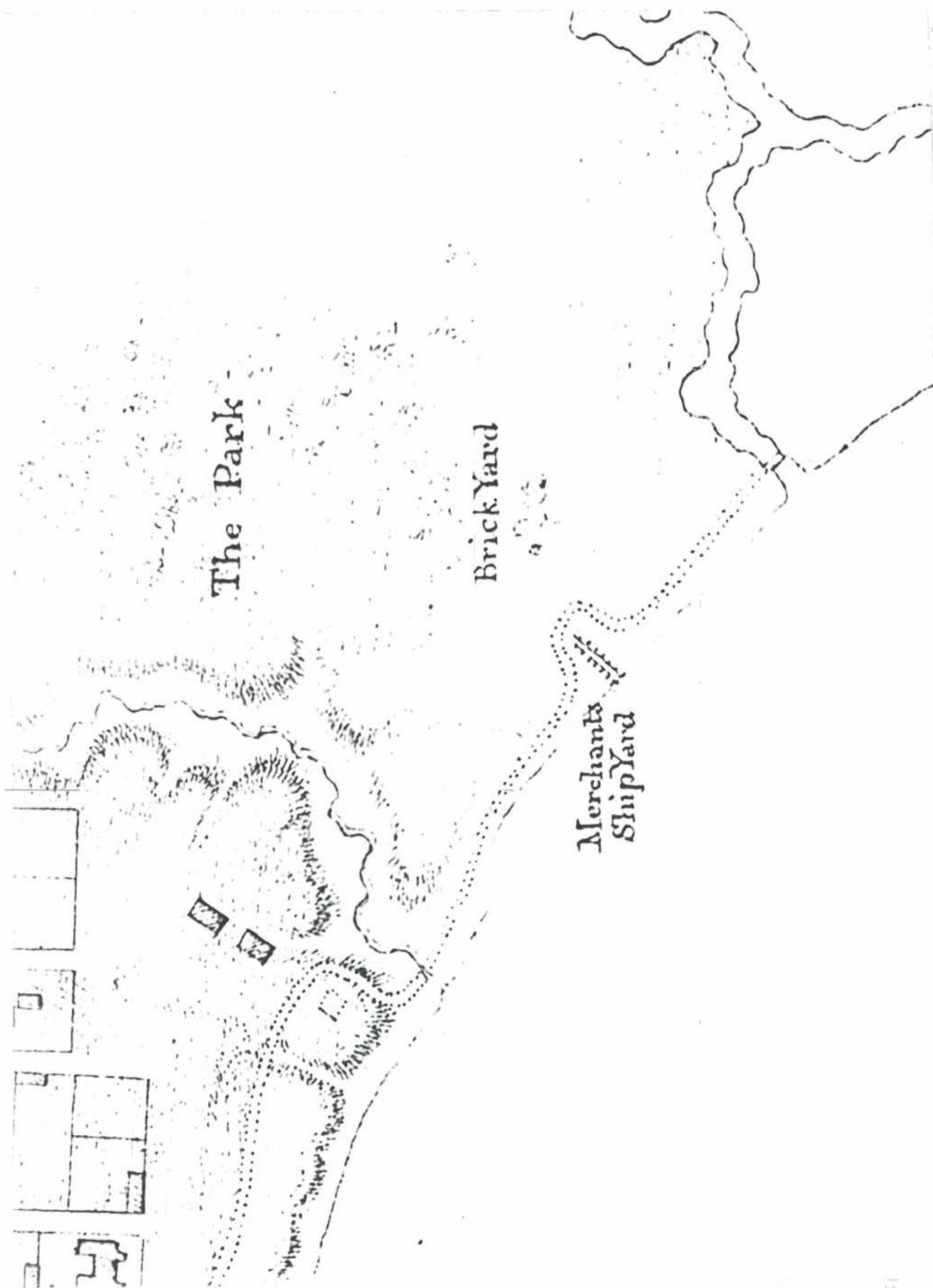


TORONTO HARBOUR

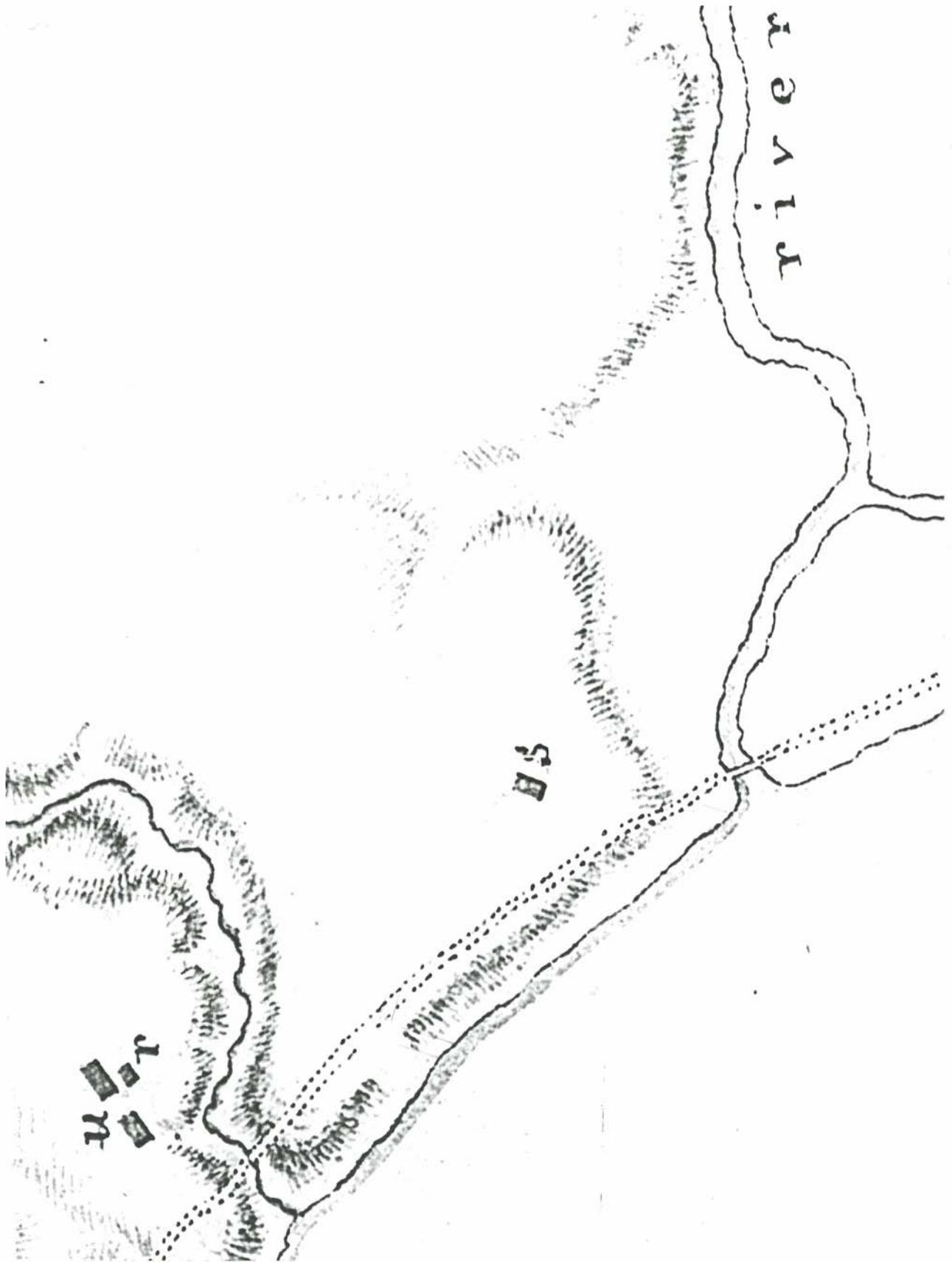
Alexander Aitken, Plan of the Harbour of Toronto with a proposed Town and Settlement, 1788. Detail. (NAC, NMC 0022816)



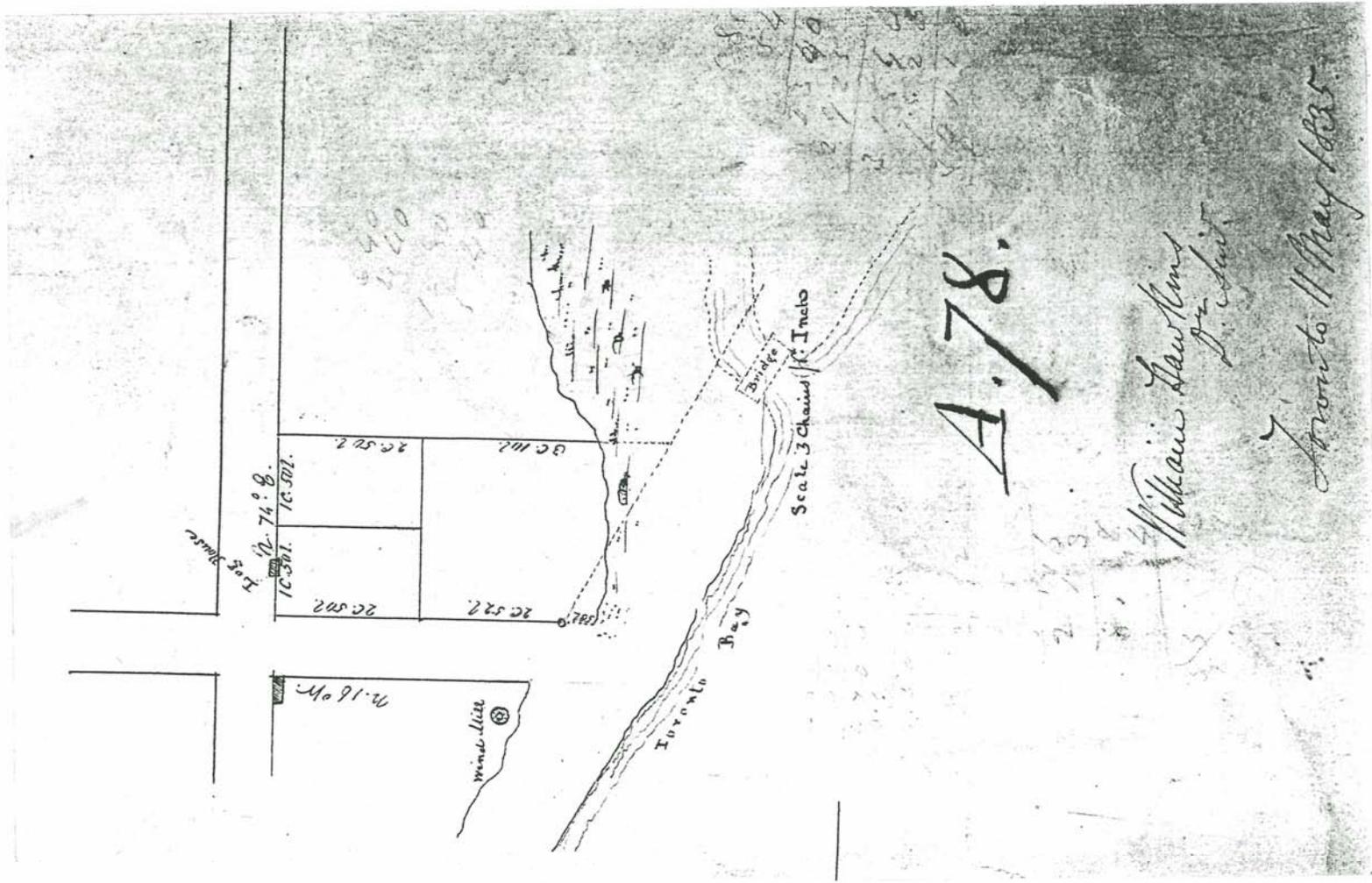
Joseph Bouchette, Plan of Toronto Harbour with the rocks, shoals and soundings . . . 15 Nov. 1792. Detail. (NAC, NMC 0043214)



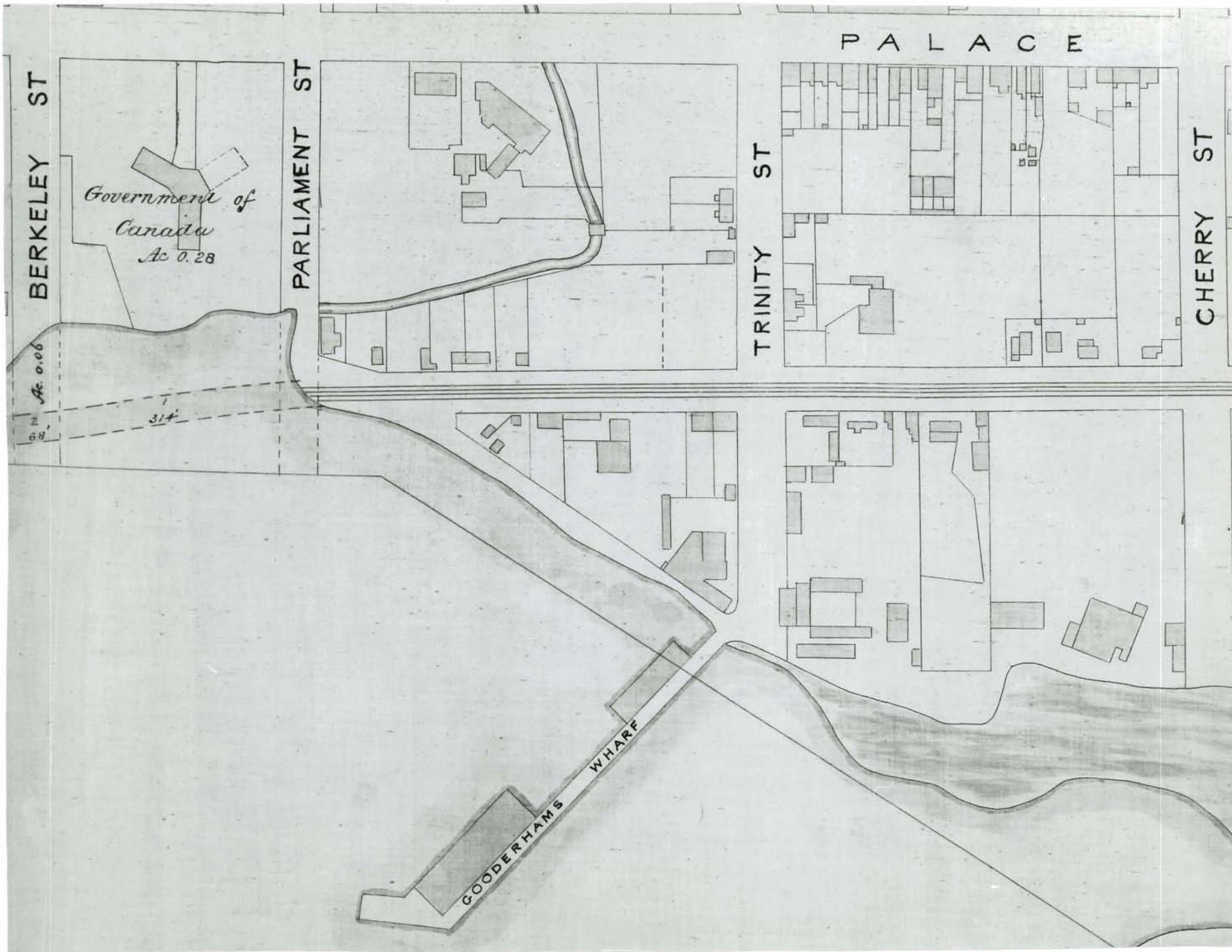
George Williams, R.M.S.D., Sketch of the Ground . . . [at] York,
Upper Canada, [November] 1813. Detail. (NAC, NMC 22819)



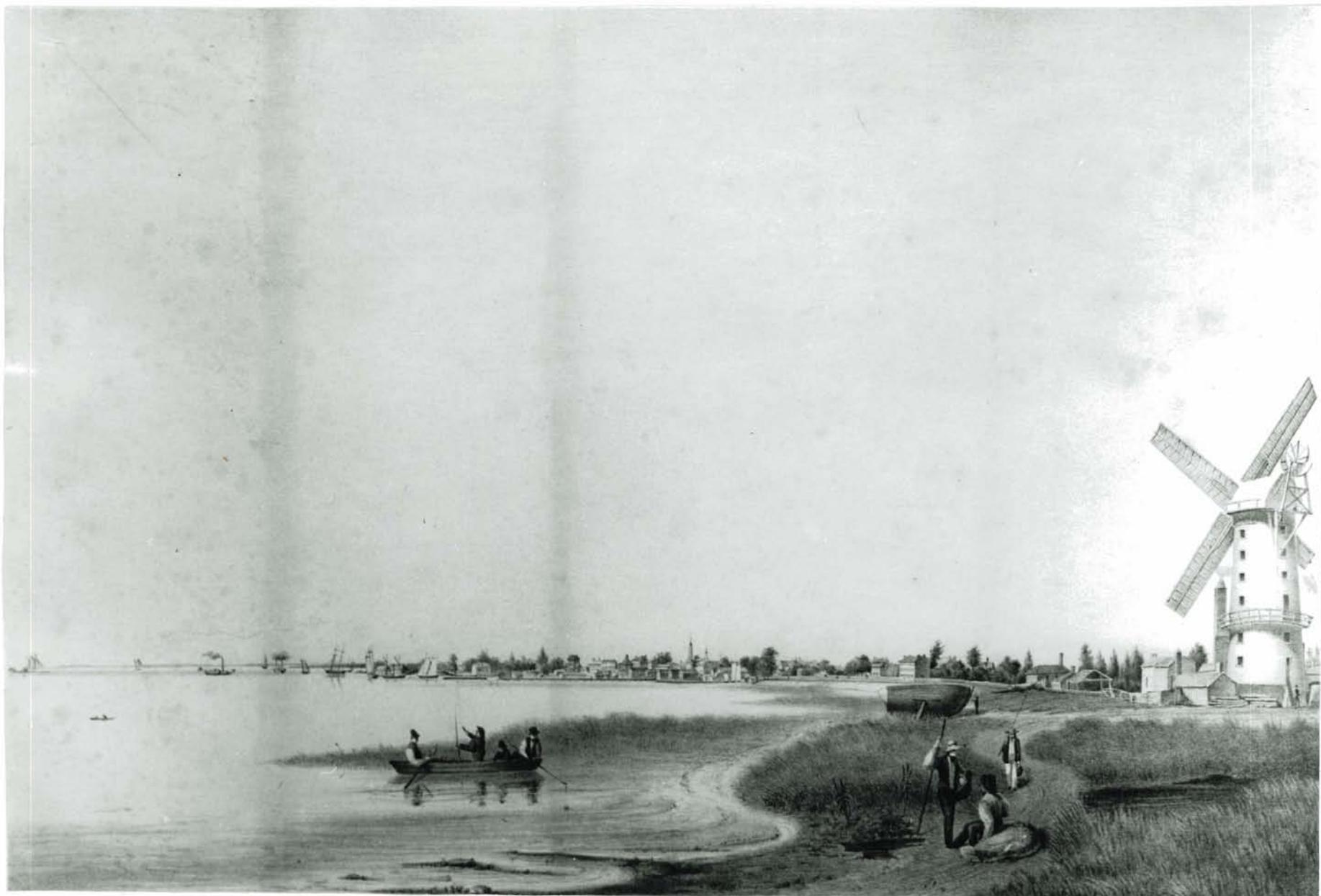
George Williams, R.M.S., Plan of the Town and Harbour of York, 27 July 1814. Detail. (NAC, NMC 0021771)



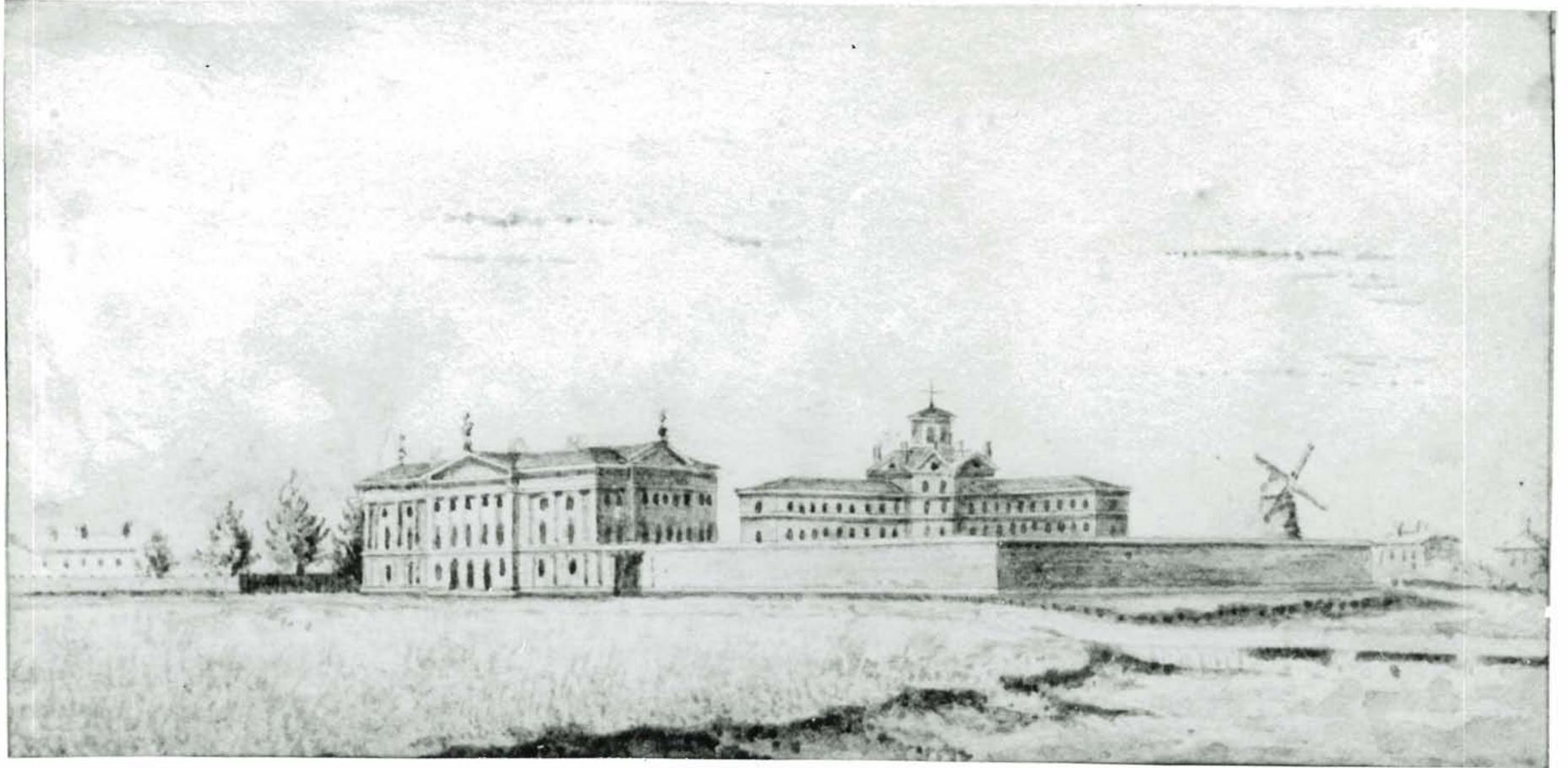
William Hawkins, Plan of building lots situate at the east end of Toronto, Twp. of York, 11 May 1835, Detail showing intersection of Trinity and Mill streets. (OMNR, micro 347, H-24)



William Kingsford, Plan of a right of way for the Grand Trunk
Railway in front of the City of Toronto, 13 Nov. 1855. Detail.
(OA. RG 22. Acc. 14065, GTR Roll 38)



Thomas Young (c.1805-1860), General View of the City of Toronto,
U.C., 1835 (MTRL, Baldwin Room, T-10247)



John George Howard (1803-1890), **New Gaol and proposed Courthouse,**
Front and Berkeley Streets, Toronto, c. 1838 (MTRL, Baldwin Room,
T-11968)



Francis Hincks Granger (1829-1906), Toronto in 1849
(MTRL, Baldwin Room, T-33315)



William Armstrong (1822-1914), View of the **Mill** and Distillery from the east (Hiram Walker Collection)



William Armstrong (1822-1914), View of the **Windmill** (Hiram Walker collection)



Attributed to John Colin Forbes (1846-1925), **Gooderham & Worts**,
1855 (,Hiram Walker Collection)



Anon., Gooderham & Worts Distillery, established 1832. Burnt 26 October 1869 - at work 4 months afterwards (Hiram Walker Coll'n.)



Anon., Gooderham & Worts Distillery, established 1832. Restored building - 1st of May 1870 (Hiram Walker Collection)



Anon. **Gooderham & Worts, 1870** (Hiram Walker Collection)



William D. Platchley (1838-1903), **Gooderham & Worts Distillery, 1884** (Hiram Walker Collection)



H. Oswald Stacey (1909–1968), *Winter Morning, York, 1832*. n.d.
Oil on canvas. (Hiram Walker Collection)



H. Oswald Stacey (1909–1968), *Winter Fete on Toronto Ray*. n.d.
Oil on canvas. (Hiram Walker Collection)



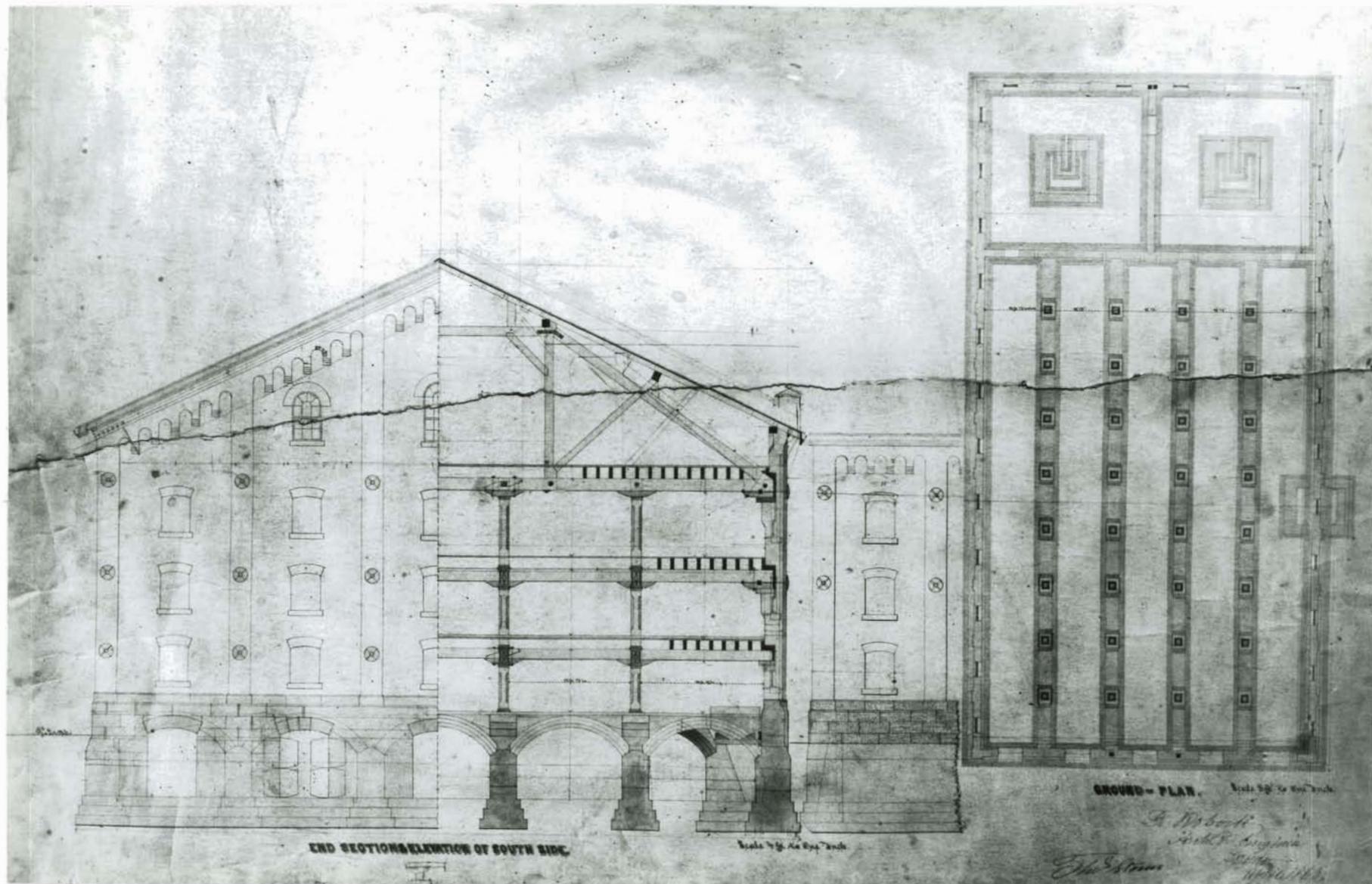
Trinity Street, looking north across CPR tracks above Mill St.,
c.1907. (MTRL, Baldwin Room, T-30223)



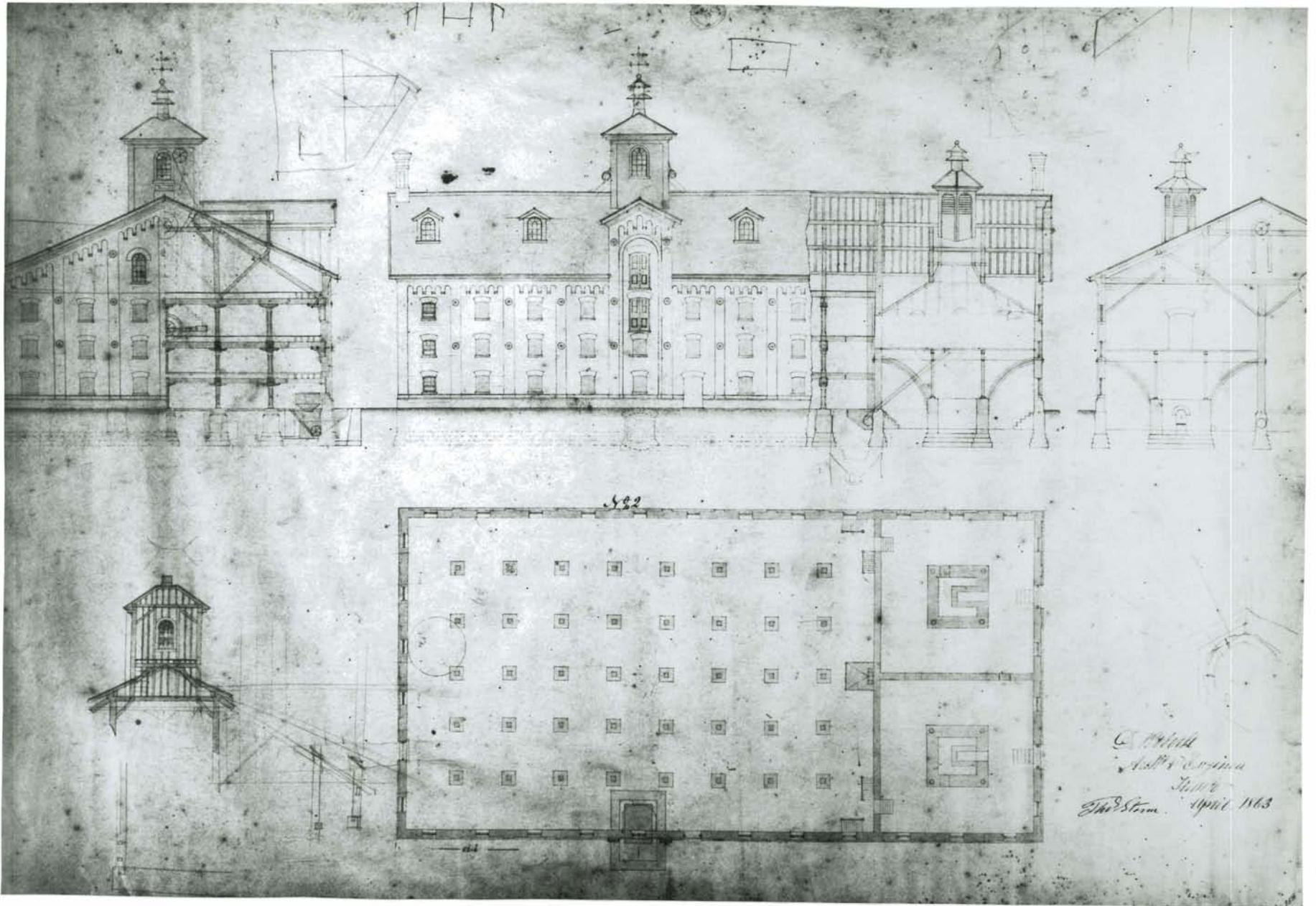
Mill at Meadowvale, [Ont], July 4, 1931. (OA, Arthur Collection, 43-E-1(1))



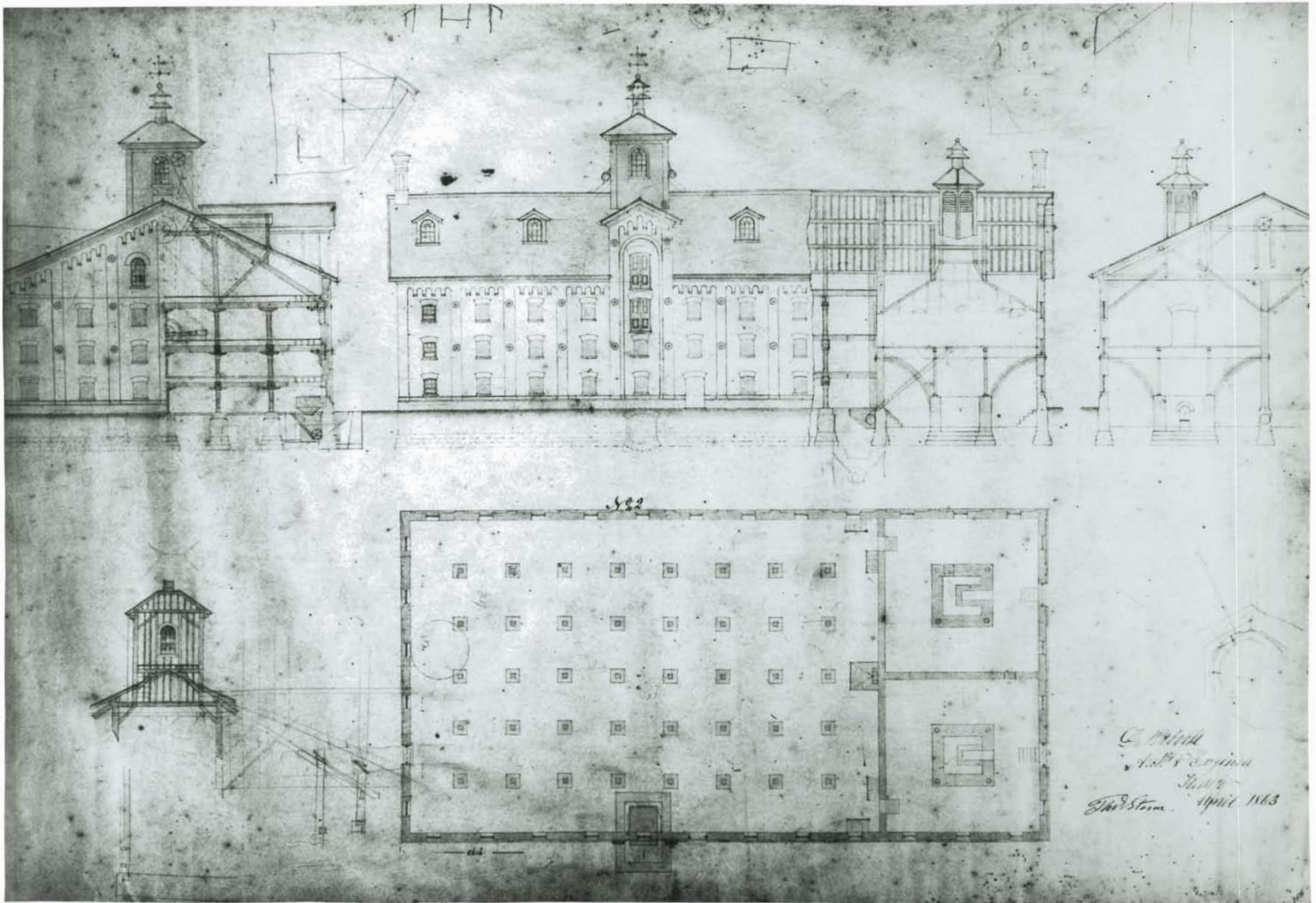
Aerial view of Gooderham & Worts Distillery, c. 1950, (OA, Northway-Gestalt Collection, C-30, ES 4-201)



D[avid] Roberts, [Sr.], Toronto, April 1863. End and side .
elevations with sections and ground plan [for Malt House]. Signed
by Thomas Storm as contractor. (OA, C-32, acc. 11597, # 21, 21-a)



D[avid] Roberts, [Sr.], Toronto, April 1863. End and side elevations with sections and floor plan [for Malt House]. Signed by Thomas Storm as contractor. (OA, C-32, acc. 11597, #22)



D[avid] Roberts, [Sr.], Toronto, April 1863. End and side elevations with sections and floor plan [for Malt House]. Signed by Thomas Storm as contractor. (OA, C-32, acc. 11597, #22)