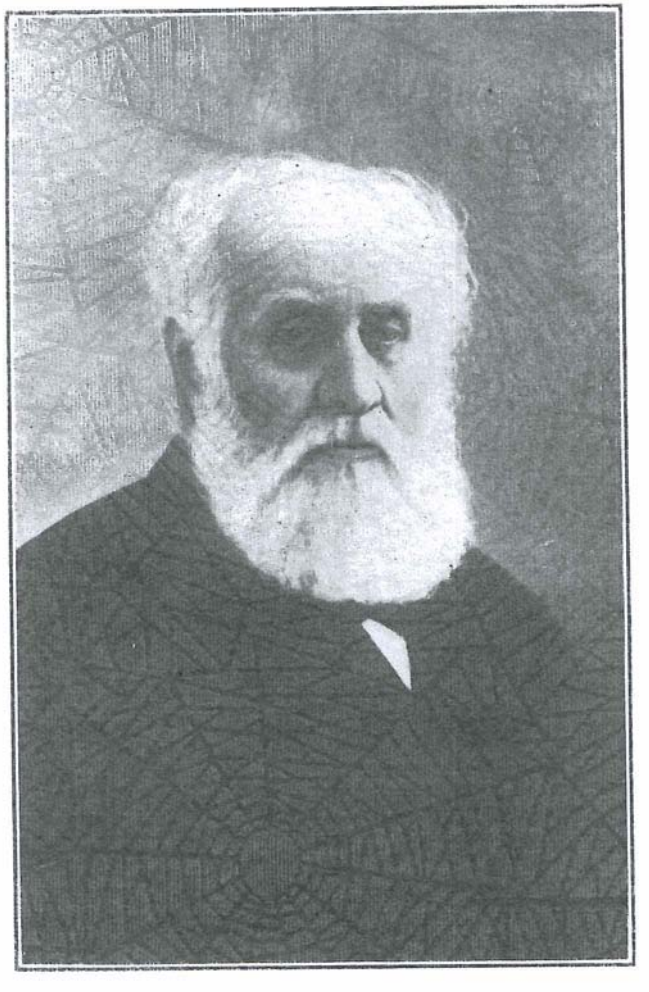

WILLIAM GOODERHAM. 1790 - 1881

THE WINDMILL AND ITS TIMES

A Series of Articles Dealing with the Early Days of the Windmill

by

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FOREWORD

THIS compilation of data respecting the Old Windmill is elsewhere accounted for but may be here stated as resulting from a misapprehension which, if allowed to pass, would have given to that ancient structure a character which it did not possess.

The rectification of this matter was undertaken by Dr. E. B. Shuttleworth, prominently identified with chemical work but easily tempted into the field of local history, especially that of Toronto. In this quest he received much assistance from the old account books of Messrs. Gooderham & Worts, which not only effectually settled the direct object of enquiry, but furnished valuable data respecting the milling and distilling industries; the current prices of the times; and, incidentally, many things connected with the early life of the town. These have been assembled, with other matter of similar import, and for the purposes of presentation are being bound into one volume.

This book will no doubt recall to memory among many now nearing mature life, happy recollections of past times, and to those of younger years prove an interesting and distinctive record of scenes fast passing from the present day life of Toronto.

Acknowledgments are due and hereby tendered to the various authorities quoted in the text, more particularly to LANDMARKS and the representatives of its compiler.

CHAPTER I.

An Old Landmark Restored

The circumstances which gave rise to the notes here presented originated in the fact that in the first volume of Robertson's *Landmarks of Toronto,* page 277, and also in subsequent volumes, there is prominently pictured the Old Windmill, said to have been erected in 1832, and which has since been the starting point of all Harbour surveys. So far well, but unfortunately, in a later and prominent illustration, (Vol. VI., p. 499) there appears another windmill, of an entirely different type. An adaptation of it is also shown in the Historical Collection in the Public Library, and in a 5 by 10 feet painting by Owen Staples in one of the corridors of the City Hall.

This material substitution is accounted for by the discovery by Mr. Robertson of a water color drawing, said to have been executed by a former resident of Toronto who lived on Palace Street within sight of the windmill who might thus be accepted as an authority. There was also found a copy of a very cleverly executed pencil sketch, said to have been made by an English lady who visited Toronto in the summer of 1837. In point of perspective, outline, and minute detail, this drawing is, as far as the Windmill and buildings are concerned, an exact

counterpart, and probably the original of the right hand part of the alleged water color.

The object of this enquiry is to ascertain whether, prior to 1832, there existed, at or near the mouth of the Don, any windmill other than that associated with the name of Messrs. Worts & Gooderham.

At this stage it is impossible to appeal to a living eye-witness who, in 1832, was capable of receiving and retaining until now a correct impression of what he then saw, more especially with respect to any particular date. Proof must therefore be sought from such records as accredited maps or plans, drawings, or descriptions, and such evidence requires careful sifting and confirmation.

It fortunately happens that a windmill is one of the favorite landmarks of the surveyor and map-maker. That this is correct may be learned by consulting the maps or plans of Toronto, or its harbour, since 1832, the date of the completion of the Gooderham structure.

Only two years after this time the Windmill was marked on the plan (Vol. V., p. 562) made by Deputy-Surveyor-General Chewett, and the windmill line showing the limit of wharf extension is also produced. In 1835 the Lieutenant-Governor of the Province gave to the Corporation what may be considered the best map of Toronto harbour which has ever appeared. It was based on Bayfield's chart, from the survey of Capt. Owens, and is complete

to date, differing, however, from the map owned by the city, which has been revised up to 1883. The Windmill is so marked on the map of the Lieutenant-Governor, and the street leading thereto-now Trinity—is styled Windmill Street. The location is even more definitely delineated on the hitherto unexcelled map of 1842, drawn by James Cane, (Vol. V., p. 61). City Surveyor J. G. Howard, in his plan of 1846, (Vol. V., p. 67) even goes a little further by sketching on the location an outline windmill which shows roughly what the structure was like.

Steam was substituted for wind power about this time, and, a little later on, the sails blew away, and the windmill, as such, ceased to be, though the name has since been in constant use as indicating the basal point for harbour measurements.

It will thus be seen that the erection of the tower on the bay shore was at once recognized by the surveyor, and that its location has continuously held its place in city maps from 1834 till the last official issue of 1907.

If such has proved true, since the former date, it may be legitimately assumed that if a windmill existed prior to that time it would have been noted on the earlier maps, but a careful search from that of Gother Mann, in 1788, to Bayfield in 1828—of all the numerous and valuable reproductions with which Mr. Robertson's volumes are enriched, fails to furnish the slightest sign of anything of this kind.

The absence of such evidence is almost conclusive as to the non-existence of any previous landmark of this character.

What has been said in regard to maps holds to a certain extent true in regard to sketches, more especially when they are designed as records rather than for their artistic value. An object so picturesque as a windmill is sure to appeal to the artist, but no such temptation seems to have been presented to any of those who pictured the water front of York.

The earliest reproduction in the *Landmark* is that of Irving's oil painting, done in 1818 or 1820. (Vol. V., p. 367) showing the old lighthouse in the immediate foreground, and, In the distance, the buildings along the front of the town, but, in the original painting, there is no object at all resembling a windmill. The same can be said of the Heward oil painting of 1824 (Vol. III., p. 94) showing the shore as seen from the Island, but without any buildings east of Parliament Street. The value of this picture, in this respect, is enhanced by the key supplied by Mrs. Heward's son, to whom all the buildings were to some extent familiar, and who would certainly have indicated the presence of a windmill had such been in existence at the time. Gray's aquatint of York, from Gilbraltar Point, dated 1828, (Vol. I., p. 308) exhibits much recognizable detail along the front of the town, but nothing like a windmill, though the Roman Catholic Chapel, on what is now Power Street, is clearly defined. The conclusion from such data is that there was not any windmill to delineate.

No sooner, however, is a windmill erected then artists hasten to take advantage of the opportunity. This is shown by the lithograph of Timperlake (Vol. I., p. 2.77) probably composed from the original sketch made in 1834, (Vol. V., p. 584) in which the mill is the chief object. It may be incidentally said that, in the opinion of the writer, the details of construction are more fully and correctly rendered in this than in any other picture. The key to it, referred to in Vol. V., p. 584, shows the windmill in a similar position, as does also that painted by Lieut. Lumley, in 1837. (Vol. V., p. 533). Of a similar character is Grainger's sketch of about 1852. Mr. Howard's water color, and the many Toronto pictures up to the time of the demolition of the brick tower—about 1859—show the conical cap which replaced the roof and sails blown away in the storm which occurred in the forties. This conical top had been depicted by Mr. J. C. Forbes in the oil painting now hanging in the office of the Messrs. Gooderham.

Such positive evidence confirms that of a negative character previously adduced and goes to prove the existence of a windmill as early as 1834, and with an elevation that in no way resembled that in the water color or pencil sketch.

Compilers of Directories could not afford to ignore the existence of a firm wealthy enough to own

a windmill, nor to neglect a reference to its location. None of the available work of this kind, lists, or street keys, make any reference to such ownership until October, 1833, when in the York U.C. Commercial Directory, compiled a year after the mill was completed, is the following reference to a part of the Kingston Road, which then commenced at Berkeley Street.

"Opposite here is Windmill Street leading to Worts & Gooderham's Windmill," showing the prompt recognition not only of the structure in question and its proprietors, but also of the new street leading to it.

Of course there are many persons now in Toronto who conversed with those of a previous generation to whom the Windmill and its surroundings were very familiar. None of these have ever been reported to have spoken of any older structure of this kind.

In 1796, Dr. Scadding's father acquired a large farm, running north along the east side of the Don. Here, the future histriographer of Toronto was born and about 1830 became the head boy in Upper Canada College a year before the tower was commenced. As a youth brought up in the vicinity he was certain to have been familiar with all the objects along the river from his father's house down to the Bay, and probably watched with interest the felling of the trees and the preparations made for the erection of a new and model structure, and, above

all, of its glorious completion. Had any other windmill existed he certainly would have recorded it, nor would he have told the story about Mr. James Beatty, afterwards editor of the Leader and Patriot, meeting Mr. James Worts in 1831, "in the bush," where the latter was "hunting" for a site for the future building. Had there been a previous mill, young Scadding, or Messrs. Beatty or Worts, or some of the older generations of the Gooderham family would undoubtedly have know all about it.

The only scraps of evidence in favor of an earlier mill are the pencil sketch said to have been made in 1837, and the water color ascribed to a Toronto gentleman who, however, by the way, only arrived in Canada in 1843. It will be sufficient to say that it would have been difficult for either of these artists to have seen much of the town of York in 1832. This does not necessarily imply any want of faith in the makers of the sketch or its copy. There is no assertion on their part that this peculiar wooden mill was in Toronto. Very likely these old pictures were put aside and lost sight of for years when their discovery would give rise to speculation as to origin and a decision in favor of what seemed most likely or desirable. This has happened thousands of times, in similar cases, and is noteably one of the most frequent pitfalls of the antiquarian.

It is probable that enough has been said to establish the position that there was not any "windmill" in York prior to that of 1832, and also that

the water color and the English pencil sketch', did not at all resemble that structure as otherwise described and delineated. If, however, there remains any shadow of doubt in regard to the latter it cannot fail to be entirely dispelled by the discovery of new evidence of the most direct character.

In a room over the present office of the Messrs. Gooderham there is a numbered series of boxes containing the account books of the old firm and in the first of these were found several partly used vellum covered volumes, brought from England by Mr. Worts, and pressed into service here. One of these, evidently the first, was missing, and likely contained items relating to the voyage, the arrival in Canada and the selection of York. The second furnished accounts of payments made day by day in the construction of the windmill. Under date of Nov. 26th, 1831, there appears in good old fashioned round hand that would have done credit to any head boy's copy book, "Finished the tower."

This absolutely settles the question of design while the next line is equally conclusive as to material, and to some extend in regard to dimensions:

"It took 105,000 bricks to build the mill, 216 bushels of lime and 100 loads of sand."

Such items are plentiful enough afterward, but sufficient has been reproduced to prove the position and set right, once and for all, the character and appearance of the old landmark.

A copy of the above paper was handed to the author of "Landmarks," who took as much interest in the subject as did the writer. Further enquiry in regard to the authenticity of the pictures, which led him to replace his first well chosen illustration did not reassure him but led to an opposite conclusion, in consequence of which he arranged with the artist who painted the City Hall canvas to alter it in conformity with the description given in the text, and delineated in many other drawings, so that this most prominent landmark and harbour datum is now represented as nearly as possible as it should be.

CHAPTER II.

In the Days of Muddy York

The almost unbroken series of account books in the vaults of Messrs. Gooderham & Worts previously referred to afford an opportunity for tracing out the progress of business, the various steps by which it was accomplished, the parties involved in transactions, the prices of various commodities, and, incidentally, much connected with the history of the firm and the times in which they lived. Regret has been already expressed as to the loss of the first volume, afterwards referred to as a "Waste Book," but which would doubtless have proved the source of many interesting particulars.

The initial entry of the next surviving volume is November 7th, 1831, when Mr. James Worts, Senior, who made the entries, must have been already several months in this country, to which he came, as a sort of Joshua, to view the land, on behalf of his brother-in-law, Mr. William Gooderham, who apparently actuated the undertaking and supplied all or the greater part of the necessary funds. Mr. Worts had previously been engaged for many years in milling in England. In 1813, when he attained his majority he was proprietor of the Kirtley Mill, in Bungay, Suffolk, where a loop of the river Waveney makes an incursion into Norfolk,

only about fourteen miles from Scole, or Osmondiston, as it was formerly called, the parish and village in which this branch of the Gooderham family resided.

The last entry in the Kirtley Mill book is April 25th, 1831, and the first entry in the same old book, in York, Upper Canada, is, as above stated, November 7th, of the same year. Mr. Worts must have arrived here between those dates; and, of course, on a sailing vessel. This was just about a year before the time and season when Mr. J. G. Howard, the future donor of our Western Park, took his departure from the mother land, and who was two months reaching Quebec, and nineteen days in getting to York. Applying this time for estimating the duration of Mr. Worts' voyage, and assuming a start on May 10th, the arrival of that gentleman may be taken at about August 1st. He was accompanied, or, according to another account, immediately followed hither by his son, James Gooderham Worts, then a boy of fourteen.

As has been already said a careful search among old records fails to disclose any authentic evidence of the existence of a windmill, in York, up to this date. There were, however, several water-power mills, all necessarily some miles distant from the town, as neither the Don nor the Humber provide sufficient fall near their outlets. The first attempt at the establishment of an enterprise of this kind was made in 1798 by Captain William Skinner and

Mr. Parshall Terry, who subsequently built a grist mill up the Don. This was in operation in 1831, under the ownership of Mr. John Eastwood, or his brothers-in-law, the Helliwells. The assessment rolls of the township, which had a special column for grist mills, are blank from 1820 to 1825, but record four in 1833, one of which would be the new windmill. The Humber Mill was not built by William Gable until several years later.

Mr. Worts certainly lost no time in making up his mind about the erection of a windmill. He came from a part of England in which the wind was the main source of energy. Sir William Fairbairn —an authority on such matters—says that in the early part of the last century nearly all the grinding, stamping, sawing and pumping for drainage, on the east coast, was done by windmills. At Yarmouth, partly in Suffolk but mostly in Norfolk, not far from the district in which Mr. Worts did business, were the largest windmills in Britain, with sweeps which described a circuit of one hundred feet, and developed a power sufficient to drive six run of stones. No wonder that Mr. Worts determined on a mill of this kind, and at once sought a suitable site as previously related in regard to his meeting with Mr. Beatty "in the bush" near the mouth of the Don.

The location selected was literally as stated. Trinity Street did not then exist, except as a pathway from what was then the Kingston Road to

the Forks of the Don, and thus to the Peninsula, as the Island was then roughly called. There were not any houses south of Palace Street, from Parliament Street to the Bridge (Queen Street east) at Lot Street, except that of Mr. Warren, a music teacher and organist, and the modest cottage of Isaac Pilkington, messenger of the Legislative Assembly. A short distance east of the windmill site was the second block house, erected after the destruction of its predecessor by the Americans.

The exact location of the centre of the windmill tower is now marked by the angle formed by the back porch of the western wall of the present offices, but, at the time referred to, the south wall of the tower was on the edge of the water.

The water front can be best described by an extract from the *U.C. York Commercial Directory*, issued in October, 1833, probably the second printed work of the kind, and a most painstaking and conscientious production. "The Don River, a short distance before it flows into the Bay, forms two streams called the Forks of the Don, and the streams are designated the Great and Little Don. Close by is a bridge across the Don, called Angell's Bridge, being the name of the engineer. Built for the convenience of those going inland, now useless '(1833) by the bridge across the small Don being 'destroyed and which it was necessary to pass to get to the first mentioned Bridge." At the intersection of Parliament Street with the Bay there entered

Goodwin's Creek, as it is called by Dr. Scadding. At first sight the name looks like a corruption or contraction of Gooderham but such liberty would not have been taken by so careful an authority, who, before the advent of the latter family, was familiar with every foot of the ground, and, as a boy, doubtless knew the creek almost as well as the Don.

The immediate neighborhood may be described as being the south part of Township lot No. 16, as laid out on a plan drawn in 1796, three years after the founding of York, and stated to be that of the "Township of Dublin now York Home District." No one has been able to find out when and how this Hibernian designation originated, but, in any case, it would have proved unsuitable for a town bounded by two streams named after Yorkshire rivers and in all respects so essentially English. This plan shows the water front, south of Queen Street, from a point three and three-quarters of a mile east of the Don, at the Scarboro town line, to a mile east of the Humber, which would strike about three or four hundred feet inside the east limit of Howard Park. The lots are numbered from the east, and No. 17 extends 1,320 feet, or a quarter of a mile, from the west limit of Bright Street to the west limit of Parliament Street. This township lot is equally divided, north and south, into two Park lots, Nos. 1 and 2, and the windmill was consequently on the latter.

The block between Parliament and Berkeley Streets and south of the Kingston Road, which then

started at Mr. Small's house, was doubtless a pretty spot, well entitled to the name "Vale Pleasant," by which it was known at that time. The vale was formed by Goodwin's creek, which crossed in a southerly direction from about the comer of the Kingston Road and Parliament Street. The rising land on the south bank is well shown since the demolition of the Hamilton foundry by which it was disfigured until last year (1914). To the south of this block was the site of the Parliament Buildings, destroyed by fire, in 1824, 'but still exhibiting the ruins of the brick structure.

Such was the neighborhood of the location chosen for the Windmill. Beyond it, to the west, stretched the little town, for Berkeley Street was then considered the eastern limit, while the "liberties" extended as far as the Don. The population in 1831 is set down in the assessment rolls in the following curious way, which shows a practical appreciation of kinetic and potential possibilities in regard to labor and matrimony.

Heads of families and males over 16	1,257
Females over 16	807
Males under 16	1,105
Females under 16	800
Total	3,969

The missing "Waste Book," previously alluded to, is indeed a sore loss and it leaves an absolute blank from the arrival in York until November 7th,

1831, the date at which the second book commences. Though ostensibly a rough statement of daily transactions relating to business it is sometimes enriched by incidental notes such as a lonely man might make, informally, at the opening or close of the day, and thus becomes a sort of occasional diary. A copy of the first page very well illustrates the general style and also affords data from which the progress of the work may be estimated:

"York, U. Canada, Monday, Nov. 7th, 1831. Fine frosty morning. Bricklayers at work by eight o'clock.

John Scott
Boy } 8/ ½ day
George Monro 5/ Making window frames
George Calvert 6/3 Making moveable curb.
Sampson 1/3
Irish 2/3½ } Barrowing bricks
Robert, William, Jarvis, Harry, Sam, 6 laborers 1/
Ed. Copping, carting 1,000 feet board
Ed Copping, carting 20 loads sand
Prentice, 32 stave ladder, 1.0.0
Prentice, 1,000 feet board, 2.3.9
34 Ibs. of rope for hoisting brick, 1.8.4."

This will serve to show the staff of men employed—usually about twelve, the wages paid, and the prices of some materials, to which may be added "52 bbls. of lime at 3/1½: Silverthorn for 1,290 feet Fir at 12/6, 14 Ibs. nails 5/10 and letter

to England 2/-" It must be borne in mind that these figures relate to currency, by which one pound equalled four dollars; one shilling 20 cents; and one penny one and one sixteenth cents. Nearly all entries are so priced, but occasionally the decimal system is employed, as in the case of lump sums, as "bought horse harness, cart and sleigh of E. Copping for $1 00."

On November 26th an announcement is made which definitely fixes the stage to which the work had progressed "Finished the Tower and laid on under curb and covered it over with boards" doubtless as a protection from a threatened snow storm, which, by the way, duly arrived. "It took 105,000 brick to build the mill, 216 ~~Brls.~~ Bags lime and 100 ~~bags~~ Loads sand." By a subsequent entry it was found that those bricks were bought from Messrs. Snider & Ward and composed an entire kiln with the exception of 12,800 which were retained by the brickmakers. The price is not stated, but a later lot cost $4.50 per thousand. Paint, putty and such like articles, bought throughout December, indicated the finishing of the outside of the tower, but the moveable roof, and particularly the vanes, took up much time. Many logs of pine, oak and maple were brought to the ground, and there sawn up for interior work, and also for the construction of outbuildings. Lighter lumber, as scantling and boards, was procured in such form. Some bricklayers were retained, probably for the construction of a tall chimney, which was placed to the west of the tower.

This was for furnishing draught for a large stove for heating the mill and doubtless also for a kiln for oats.

The troubles incident to builders were, of course, encountered. One of the mechanics was undoubtedly a good workman and on this account much esteemed, but, like many others, had a not uncommon failing. The degrees of intoxication are amusingly put down by his employer who probably noted them from the standpoint of wages. Thus the man might be "partly drunk," "drunk half a day," "sleepy drunk," "dead drunk," or "drunk as David's sow." It is difficult to say which of the last two degrees should have the preference, but it may be assumed that, in either, the subconscious mind was entirely freed from its fleshly fetters and roamed at large in fields of unbounded bliss—a condition which would likely be afterwards counterbalanced by a commensurate stoppage of pay.

During the balance of the winter a small staff of inside workmen was maintained; and some of the wooden outbuildings completed. The purchase of "bent logs for cap" showed the form that the windmill roof was to assume and "a baulk for stock," 71 feet in length, roughly indicated the height of the tower. As all machinery and mill requisites had to be brought from distant eastern points to the ice bound port of York the want of much progress can be accounted for.

Some entries are noted which indicate incidents which will bear telling. One of these was a trip fourteen miles out of Toronto (township) to the farm of Mr. T. Silverthorn, who had become acquainted with Mr. Worts and had supplied him with considerable timber in the form of logs. This property is described as containing "200 acres, between 50 and 60 of it cleared from trees, 10 acres of which is nearly free from stumps. A good substantial weather-boarded barn and log dwelling house. Asks 550 currency for it" ($2,200). This gives an idea of the price of improved land at this time.

"Dec. 9th, W. L. Mackenzie completed his defence this evening." This recalls a very lively time in York as the disturbance then culminating led ultimately to the more serious trouble of 1837. The supporters of Mackenzie used to meet at McIntosh's Sun Tavern, on the north west corner of Yonge & Queen Streets, and there devise and discuss their plans in language far from respectful to the Government or its head. Mackenzie, who was then a member of Parliament, carried this fiery style of oratory into the House and as a result was charged with a breach of privilege and also accused of libel upon the Lieutenant-Governor, Sir John Colborne. Hence Mackenzie's defence on the 9th, and his consequent expulsion from the House by a vote of twenty-four to fifteen, three days afterwards. His triumphant reinstalment and subsequent downfall need not be further alluded to here.

On the Iast day of January, 1832, "at two o'clock in the morning, the tolling of the bell at the church" announced a fire in the recently erected brewery of Enoch Turner on Palace Street, near Parliament. Mr. Worts and other friends arranged a temporary loan of £300, which tided over the difficulty and enabled the brewer to successfully establish the enterprise. The words "Built by Enoch Turner 1848" on the brick school house still at the rear of Trinity Church, show his regard for the neighborhood in which he once resided and carried on a successful business.

The Mechanics' Institute had only been organized for about a year. Meetings were held in the Masonic Hall on Market, now Colborne Street, not far from Church Street. Mr. Worts used to spend some of his evenings there, and was elected one of the Committee; where he was associated with Drs. Rolph and Mr. Baldwin, Ex-Sheriff Jarvis, Messrs. James Lesslie, Jessie Ketchum, and others interested in technical and scientific subjects.

Mr. Worts, with his son, had been Iodging at the house of Mr. Addy, on Ontario Street, but later on commenced housekeeping on the north side of the Kingston Road, just opposite to what is now Trinity Street, which was then being graded and named Windmill Street as the road to the new structure.

In view of the expected arrival of relatives from

England it became necessary to provide for their accommodation and negotiations were entered into with the Rev. Dr. O'Grady, who had been the incumbent of St. Paul's Chapel since 1829, for the purchase of his house and property on the north side of the Kingston Road, near the Don Bridge. This. was probably about the time that the holy father had a disagreement with the first Roman Catholic bishop of Upper Canada, Macdonnel, who objected to O'Grady's introduction of politics into the instruction given from the pulpit and confessional. Both parties were violent partizans; the Bishop, of the Family Compact, and the priest, of Mackenzie. In fairness it must be said that the charge of perversion of ethics did not seem to be confined to the father, who was, however, ejected from the church and summoned to appear before the Pope to answer for his indiscretion. Whether this was the cause of the sale of the property cannot be positively stated, but is quite likely. The purchase was made on March 29th, 1832, the amount to be paid being $987.1 1.0, currency, for the block of three and a quarter acres, with residence thereon.

A very interesting item was copied into the Waste Book about this time. It gives an insight into the prices and conditions which prevailed in Upper Canada as early as 1822, when, as later, barter was the most frequent way by which commercial transactions were carried on. It is in the form of an advertisement which appeared in the "Western Mercury."

"Ancaster Flour Mills and Distillery."

"The proprietors will give in exchange two gallons of whiskey for 60 lbs. of Rye or Indian Corn. They will also give for five bushels and twenty pounds of good merchantable wheat, one barrel of Superfine flour, fifty pounds bran, and ten pounds of shorts; or, for five bushels of good wheat, one barrel of fine flour, fifty pounds of bran and ten pounds of shorts. The owner of the wheat to find casks and nails."

"Ancaster, Feb'y 17, 1822"

The same issue of the "Mercury" gives the price of wheat as seven York shillings, or 4s. 4½d. currency, per bushel of 60 pounds. The prices of rye and maize are not stated.

The spring of 1832 opened fairly early and was heralded on April 2nd by the arrival of the steamboat Canada from Niagara. This well-known pioneer was under the command of Capt. Hugh Richardson, afterwards Harbour Master of Toronto. She was of 250 tons burden, was built in 1826, at the mouth of the Rouge, and usually traded between York, Niagara, and the head of the Lake, a route she took up this season, regularly, on April 10th.

Good Friday, April 20th, was a lucky day, for about 5 a.m. there came in, from Prescott, the *Great* Britain, a 700 ton steamboat, running between Kingston, Niagara, and the head of the lake, with

the much-looked for main shaft for the windmill, and the Schooner *Kingston* and MacGill brought the millstones and castings. These were landed at Fehan's wharf, which was just west of what was afterwards known as Ewart's wharf, now Conger's, at the foot of Church Street. The millwrights, who appear to have been named Hill and Sedgworth, were ready for work, and Husra, senior and junior, receiving 7s. per day, were employed with them. The bibulous mechanic, who had been several times discharged and restored, had apparently reformed, as his wages were advanced from 6s. 3d. to 7s. per day, but working hours for that period and season commenced at 6 a.m., with half an hour for breakfast, and ended at 6 p.m. since the daylight admitted of working through this time.

Gardening at the "new house" had been carried on very energetically since the opening of spring. Whether the locality stated applied to the O'Grady property or to the house over which Mrs. Robinson presided is hard to determine. In any case an astonishingly large quantity of seed was sown, and as part of this had been brought from England it is evident that Mr. Worts had made thorough preparation for settlement in Canada. George Leslie, the new nurseryman, who had previously lived at the Smith house, on the north east corner of King and Carlaw Streets, was now on his own property, east of the Don, and supplied any plants which were required. Thus on April 25th, one hundred and fifty asparagus roots were bought for 7s. 6d.—not

far from their price in 1915, and cauliflower and early York cabbage plants were also obtained, despite the fact that English seeds of these vegetables were already in the hot bed, and, by the end of the month, were showing their seed leaves. During May there was little doing at the windmill, probably on account of the non-arrival of parts of machinery, or perhaps of expected funds, but spare energy was assiduously applied to gardening.

On May 30th, Mr. Worts writes that "Emigrants from Suffolk called on me informing me that Mr. E. Cooderham was on his way up to York." From this it may be inferred that these men learned the news since their arrival in Canada, which would be at least about the middle of May.

This was a very busy time at Quebec, as emigration was unprecedented. During the year 1832, and for the most part in the spring, over. 30,000 persons arrived in the country and the difficulty of transportation westward was much intensified. This was brought to a climax on June 3rd, when the brig *Carricks* arrived at Grosse Isle, from Dublin, with 103 passengers out of 145, the rest having perished from cholera. This was the first recorded appearance on the American continent of this dread scourge which was moving its course westward. Originating, as usual, in India, it commenced its march in 1826, devastated Russia in 1829, and arrived at the port of Sunderland, in England, in 1831, from which it spread over that country, and,

in 1832, over Great Britain, taking its heaviest toll in the sister isle.

Some of the passengers on the *Carricks* put up at a lodging house kept by a man named Roache, from which 56 victims were carried to their last resting place, and, in a fortnight, over 1,000 persons in Quebec suffered the same fate. Cholera usually follows the lines of travel and thus was it carried up the St. Lawrence, reaching Kingston on June 20th, and York four days later. The transmission to the latter was through an eastern tailor, named Filgiano, who thought to escape by flight westward, but the destroyer already had him in his clutches and the victim fell in the little town of York, over which the infection spread with lightning-like and fatal rapidity. The progress of the epidemic westward was such that Chicago was reached by July 10th and Arkansas by September, but its violence diminshed and about this time and place ceased altogether. The second visit, which occurred in 1834, originated independently and was not, as sometimes thought, a continuation of the first.

This choleraic digression may be in part excused because it perhaps accounts for the length of time which appears to have elapsed between the arrival of Mr. E. Gooderham at Quebec, probably about the middle of May, and in York on July 5th. It moreover explains a recipe for cholera which Mr. Worts thought valuable enough to be handily transcribed under date of June 30th—six days after the

disease had appeared in York. The medicine consisted of a mixture of charcoal, lard and maple sugar which was to be followed,—if the patient survived—by spruce beer. The external application of the lye of wood ashes was recommended for spasms, but this alkaline embrocation might happily be substituted by hot brandy. After recovery, bean soup, with, very fat pork, might be indulged in while water in which live maple coals had been quenched was mentioned as a proper drink. This prescription has quite a national flavour, and is not without a redeeming feature—the hot brandy, for instance—but, prevention is better than cure, and the good people of Montreal, acting on this, tried to scare away the disease fiend by burning tar barrels and firing cannon on one of the corners of Notre Dame Street. This did not however drive away the demons of disease until over 2,000 cases had occurred.

To resume the story. The arival of Mr. Ezekiel Gooderham, at York, on July 5th by steamer ***Great Britain*** from Prescott, was doubtless most welcome to Mr. Worts, not only that he received some funds, but more particularly, news, anxiously awaited, of the families and relations who were soon expected to arrive from England. It is commonly believed that these relations accompanied Mr. E. Gooderham, but this is clearly disproved by the fact that this gentleman would surely have announced it, and Mr. Worts, writing on July 21st, would not have made the entry: "No account of

the Anne, Capt. Potts" (presumably the ocean ship on which the Gooderham & Worts families sailed) nor two days later would he have written "Received the joyful news of our families' arrival at Quebec." This single statement is quite sufficient to establish the position.

On July 25th, 1832, the anxiously awaited party, under the direction of Mr. William Gooderham, arrived at York and was the occasion of a happy reunion.

Two days sufficed for mutual congratulations and a survey of the position, when business was definitely commenced by the formation of the partnership between Messrs. Worts & Gooderham and the opening of an account, under such style, in the Bank of Upper Canada, with an initial deposit of £1,823.06. From an entry in the account book it appears that up to April there had been about one thousand pounds expended on the mill. As remarked in Robertson's Landmarks of Toronto the total amount represented in those days a very considerable sum. The Bank which was then at the south-east corner of King and Frederick Streets, had been established for ten years, and had fully entered upon a period of prosperity which continued until the depression of the fifties, and terminated in the disastrous failure of 1866.

The accession of additional energy and capital proved a stimulus to progress at the mill, though this was necessarily curbed by the difficulty of ob-

taining the machinery. The new harvest was, however, at hand, and a little wheat, possibly old stock, was already making its appearance on the streets of York. The first purchase was made on July 30th from a Mr. Fenton and some weeks later other small lots, at 5s., from William Smith, of the Don, and Caleb Groat, with oats from John Scarboro at 1s. 10½d. The names of many of the pioneers of York and Scarboro are embraced in the entries of September 1832. Quantities varied from a few bushels to a wagon load, and prices ranged between 3s. 9d. to 5s.—mostly over 4s. The entire purchases, up to Oct. lst, were 887 bushels of wheat and. 154 bushels of oats, the latter costing from 1s. 8d. to 2s. 6d.

The end of the summer brought the windmill to fair completion, and it may be well to describe what the structure was like, as far as ascertainable from the old records.

The so-called German windmill was of the earlier kind though it was antedated by a stationary structure with vanes facing the prevailing wind. It was not until the twelfth century that this primitive idea was carried out, to be in time succeeded by a design in which the entire wooden mill, or its upper half, was made to revolve on a central post. This led to a further improvement in which a stone or brick tower was erected and surmounted by a moveable cap or roof, mounted on a suitable curb, furnished with runners, and carrying the horizontal

axle and vanes, so that the latter would face the wind. This was the Dutch, or smock mill, very common in Suffolk and Norfolk, and other countries on the east coast.

The builder of the windmill at York was born and brought up among these Dutch models and had himself been a mill owner, which sufficiently accounts for his building such a structure here. The circular tower was consequently made of brick and the number used—1 05,000—was sufficient to raise it to a height of six stories, the upper three and the second being lighted with four windows each, and the first and third by two, with doors. All such towers are tapered so that the diameter of the base is greater than that of the top, and the difference may have been about eight feet. The mill stock, when purchased, measured 71 feet, which probably gives an exaggerated idea of the height, which was likely about 10 feet less. A revolving cap is indicated by the purchase of bent Iogs for a framework, so as to produce a sort of hipped effect. The main axle passed in the direction of the gables of this structure, and the vanes were automatically worked up to the wind by a revolving fan. Around the tower, above the second tier of windows, was a railed platform, which afforded an entrance to a door at this elevation. All this is delineated in detail in Timperlake's lithograph of Toronto in 1834, which, must have been made up from a sketch or sketches made when the mill was in operation, long before Timperlake's time. In any case the result-

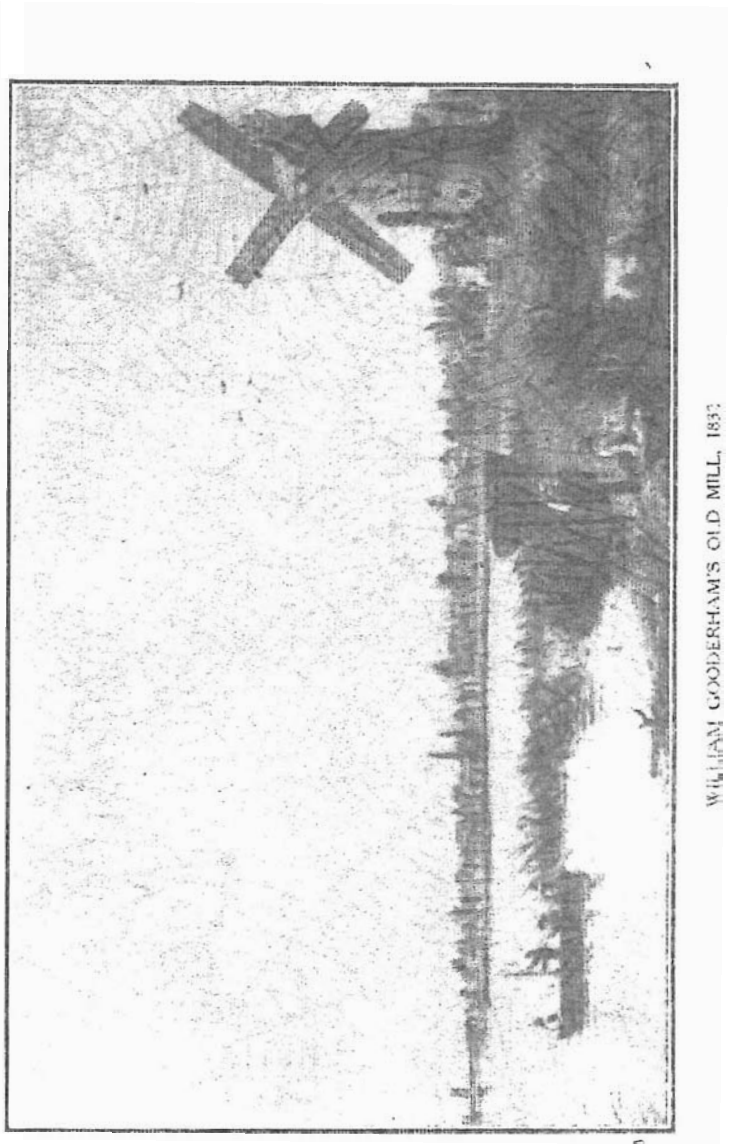
ing picture is in conformity with other evidence and may be accepted as coming as near to the truth as is possible. The assumption that the York windmill was of a revolving type is entirely untenable.

It was not until the autumn of 1832, or about a year after the foundation was laid, that the mill was so far completed as to admit of flour production. The first run commenced on October 5th and terminated on December 13th, a period of ten weeks, with an output of 239¾ barrels of flour, besides the so-called pollard, which then included middlings, shorts and bran.

The first recorded sale was on October 27th, when five barrels were sold at 25s. each, to Robert Ferrier, a King Street baker. William Jackes, Thomas Riddell, and Alexander Rennie, in the same line of business, and on the same street, were also good customers, purchasing about five barrels per week, as did William Creighton, whose shop was on Market Lane, now Colborne Street.

Most of the output of the mill was sold in barrel lots, directly to customers, of whom a list would embrace most of the prominent citizens of the little town.

Among the many names in the old account books of this time are those of Sir John Colborne, Sir W. Campbell, Chief Justice J. B. Robinson, Judge J. B. Macaulay, Hon. Mr. Powell, Hon. George Crookshanks, Sheriff Jarvis, Col. Rowen, Captains Bonnycastle, Phillpotts, Hurd, McIntosh and De-



WILLIAM GOODERHAM'S OLD MILL, 183?

Grassi; Revds. Strachan, Stinson, Dade, Stewart, Barry and Barben; Drs. Widmer, Diehl, Kees and Harris; Messrs. Robert Baldwin, C. C. Small, S. Ridout, G. Ridout, G. Gurnett, Jesse Ketchurn, John Scadding and a host of others. Deliveries to the "Soup Kitchen" suggest rather bad times, and to the credit of the Windmill it may be said that a good many barrels of flour found their way to this institution at a much reduced price. Charges against the "Greenland Fishery" apply to the inn or hotel which was so styled and was carried on at the north-west corner of Front and John Streets, deriving its name from its sign, on which a Greenland scene had been depicted by a hard-up sailor artist, who had worked out his lodging bill in this way.

The total amount of wheat ground up to the end of 1832 was 2,991 bushels, of which the average price was 93 cents. There were sold 354½ barrels of flour, usually worth about five dollars each, besides 67 stones of wheat which was then called meal, and, latterly, wheaten meal. The pollard or "offal" must have realized, for feed, quite a respectable sum, the price being about 10d. per stone.

An idea of the charge for gristing may be obtained from an entry on October 27th reciting a form of blank contract: "Mr. ..... agrees to deliver 20 bushels of wheat, 64 pounds to the bushel, for which he is to receive 4 barrels of flour." Comparatively little business of this kind

was done, as most of the grain was purchased outright by the firm.

An exception must, however, be made in the case of William Arthur, whose dealings in this line came in for almost daily mention under such titles as "Arthur's Corn, "Wheat, middlings, rye or malt." The latter indicated brewing or distilling interests, and this is more closely defined by an entry on Sept. 17th of delivery to "Arthur's distilling house." By reference to Walton's U.C. Commercial Directory, published in October 1833—a copy of which was then purchased for three shillings, by the firm—it is shown that William Arthur had a warehouse at 83 King Street, which would locate him near the market, as the numbering then commenced at Mrs. Eliza Small's house at the corner of Berkeley Street. He appears to have been a grocer, in which line he was succeeded by his son, George, though in another location which was in the vicinity of the Coffin Block. Col. William Arthur, as the name was afterwards spelled, was another son. The location of the distillery has proved quite difficult, but, by the testimony of Mr. Pearson, formerly of the Gas Works, who came to Toronto in 1839, it was across the Don, in a line with Gerrard Street. If this is correct it is most likely that the building was on the flats, as a plentiful supply of water would be required, and also easy drainage, more especially as hogs were kept. This is made evident by an advertisement in the Patriot of December 6th. 1832, when William Arthur asked for "2,000

'bushels of distilling grain and 200 hogs." Arthur was also the owner of the Wood-Duck, a small schooner purchased in 1828.

Another name which crops up quite frequently in the old day book, in connection with transactions in flour, and also in relation to financing, is that of Joseph Lee, who, according to the Patriot of December 1832, and later issues, conducted the "East York Store," at 39 King Street. The stock, as advertised, comprised almost everything that could be asked for. Number 39 would place the shop between Caroline and Frederick Streets. To the west was the Gamble homestead and next to that, at the comer of the last named street, the office of the Canada Company, which was located in the first brick building in York, erected by Quetton St. George in 1807, and long occupied by him but ultimately leased to the Company. Directly opposite, on the south corner, was the store of William Allan, the westerly half of which was formerly occupied as the office of the Bank of Upper Canada, now located at the corner of Duke and George Streets. Joseph Cawthra's store was no longer at the corner of Caroline Street where in 1806 the foundation of his fortune was laid, but was now on Palace Street, at the west comer of Frederick Street. The new place of business had been previously occupied by Mackenzie as a printing office, and it was here that his presses and type were destroyed in reprisal of the attacks of the Advocate on the members of the Family Compact. The

house existed as early as 1804 and was the birthplace of the Hon. Robert Baldwin.

At this time, according to the Directory, both partners in the Windmill were living on the Kingston Road, "half a mile east of the town" which means that distance east of Berkeley Street, for it must be remembered that the road to Kingston commenced at Mrs. Small's house where King Street still shows a divergence from a straight line. The residence alluded to was probably the O'Grady house, purchased some two years before by Mr. Worts, and was located somewhere in the vicinity of what is now Sumach Street. Landmarks were then few and fewer still have survived. Trinity Church was not built until ten years after, but just opposite to its site a road named Chapel Street led north to St. Paul's, which had been built about nine years, and by contemporary writers was said to be one of the handsomest brick edifices in the town. It is thought in the very early days the Roman Catholic services were held in the houses of prominent residents, but the original grant of land was obtained, in 1805, by Father Macdonell, and it is almost certain that a wooden chapel was erected not long afterward, which then became the ecclesiastical centre of one of the oldest parishes in Upper Canada.

In 1833 there were very few residents on the Kingston Road between Chapel Street and the Don Bridge. The Directory enumerates a small grocery store, opposite Windmill Street; an empty house,

followed by the house of William Hamilton, clerk in the Bank, after this, three small houses, until the "Brickfields" and the residence of the Brickmaker were reached. Still further east was the Bull's Head Inn, kept by John Palmer, on whose signboard was the following doggerel:

"Traveller's friend and Extortioner's foe,
Call to-day, and to-morrow you'll know."

Then came another residence, followed by that of the '.'Proprietors of the Windmill," between which, and the Don Bridge, lived Edward Goldsmith, "Clerk in the Bank," eleven houses in all, starting from Power Street. Queen or Lot Street was even more sparcely settled, there being only eight houses or places of business between Yonge and Bond Streets. "Here," says the Directory, "the street is interrupted by the grounds of Capt. McGill, S. P. Jarvis and the Hon. W. Allan. Past there it is open to the Roman Catholic Church and it is intended to be carried through to the Don Bridge. Samuel Ridout, Esq., Edward McMahon, John Dempsey, gardner, Roman Catholic Church.

This digression has led the writer far afield, so to resume, it may be said that there is no evidence that much was done to the exterior of the mill, but the owners had evidently arrived at the same conclusion as others who have had to depend on the wind and thus realized its fickle and uncertain nature. It is not therefore difficult to account for the growing interest shown in steam as a motive power as evidenced by the payment of sums total-

ling two or three hundred pounds "due on engine," etc., to Charles Perry, of the York Steam Engine Works, which were situate at the corner of Duchess and George Streets. The instalment of the engine must have been early in the spring of 1833 as a second payment was made thereon in May. It seems likely that its purpose was that of supplementing the windmill when in a balky or too frisky mood; or assisting it when overburdened by work, but not in supplanting it as the governing power. A run of buhr stones was obtained from or through Mrs. Crickmore, of Hamilton. They arrived on June 6th and were at once put in position, probably in connection with the new engine, thus bringing the working power up to three run of stones. **Sam.** Clarke, who had for some time been with the firm, appears to have been the engineer, and also the general factotum of the establishment, for which services he received one pound ten ($6.00) per week—then considered good wages for a steady job.

The business of the mill appears to have prospered in 1833, as evidenced by the sales of flour, which totalled 2,244 barrels, against 354 for the three months during which grinding had been carried on in the previous year. The increase over the calculated amount, per annum, would be 826 barrels, showing very fair progress for an enterprise conducted at such a time, and in such a place, for it must be remembered that Muddy York was not much to boast of in those days.

CHAPTER III.

A Ramble in the City in 1834

SPECULATIONS AS TO THERE HAVING BEEN SETTLERS PRIOR TO THE DAYS OF GOVERNOR SIMCOE

Forty years had passed since with blare of trumpets and boom of guns the recently appointed Lieut-Governor of the newly-born Province of Upper Canada proclaimed the selection of York as the seat of Government. There is no evidence of previous settlement, though, in the palmy French days, forty years earlier, considerable trading was doubtless done in the vicinity of Fort Rouille, but was brought to an abrupt close in 1759, when the Fort was burned by its defenders in order to save it from the victorious English General then hastening from Niagara.

Captain Gother Mann, of the Royal Engineers, who drew a plan of the locality in 1788, saw enough of the remains of the outlines of the buildings to indicate them by five rectangular dots, which he designated "Ruins of Trading Fort," on the *Plan of Toronto Harbour* bearing the above date, but there is no indication of any other buildings. The locality was shortly after reported on by J. Collins,

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surveyor-general to Lord Dorchester, who wrote of the capabilities of the harbour, and the suitability of the situation as a military post, but made no mention of any existing settlement.

Joseph Bouchette, later a lieutenant of the 14 gun schooner "Onandaga" carried out the survey of 1792, but his plan dated 1793, bears no record of any permanent landmark of human making, nor is there in his subsequent work on ***The British Dominions in North America*** any reference to a settlement. On the contrary, he speaks of the "untamed aspect of the district", and the "dense and trackless forests which lined the margin of the lake." "The wandering savages" said he, had constructed their ephemeral habitations beneath this luxuriant foliage, the group then consisting of two families of "Messassagas," and the bay and the neighboring marshes were the hitherto uninvaded haunts of immense coveys of wild fowl." This is quite in accord with Surveyor-General Russell's exclamation—perhaps intended for a pun—about there being no town in sight but the town site—or words to that effect.

The most direct bit of evidence, in this line, has been generally overlooked by reviewers, but is to be found in a notice of the Smith family, which appears in Blackett Robinson's *History of the County of York*. William Smith, the ancestor of the family whose log shanty used to be on the east bank of the Don, on what is now Queen St., just below the bridge, and which has been since removed to the Exhibition

grounds, where it is used as a sort of head-quarters of the York Pioneers—accompanied General Simcoe on his first visit in 1793, and found three Indian wigwams, east of the Don, on the river banks (lot 15) one of which was occupied by the Chief, Kashago; the only white settlers then being William Peak and his family who had been settled there for some time, and knew the locality well, often accompanying General Simcoe on hunting and fishing expeditions—that being Peak's principal occupation. For services rendered to the new government he is said to have received a grant of land in the neighborhood of Duffin's Creek. From this it seems likely that he was related to the Captain Peeke referred to by Dr. Scadding, in ***Toronto of Old*** who, before the close of the eighteenth century, was the owner of a schooner in the lime business, trading between Duffin's Creek and York, and other places. He is said to have had occasional difficulties with over bibulous members of his crew when in port here. Such offenders were promptly brought under the operation of the so-called "Stump Act" which, as a penalty, demanded the removal from the public roads of as many stumps, or as much labor, as was commensurate with the offence. There is no ,reason to doubt the reliability of the statement that Peak was the first white settler but it is strange that Dr. Scadding makes no mention of it as the Smith and Scadding farms were almost, if not actually adjoining.

The publication of Miss K.M. Lizar's ***Valley of the Humber*** brings prominently forward another

possible addition to the list of original white settlers. It is true that his residence was a considerable distance from the town plot, as laid out in 1793, though at present it might be squeezed within the city limits. The owner, Jean Baptiste Rousseau, or Mr. St. John as he was better known in Upper Canada, had more than twenty years before, when in Montreal, held a trader's license, and did business with Toronto, which, about the close of the period mentioned, comprised the land between the site of Fort Rouille and the Humber—which was then called the Toronto River. During the interval St. John had officiated as trader, interpreter, guide, and general authority on matters of travel. Towards the end of the period he erected a log house near the mouth of the river, on the east side, which served as a storehouse, place of entertainment, and general rendezvous for parties entering the old Indian trail to the north, which, starting at the river, followed the long portage—the Carrying Place—to the Holland river, and thus into Lake Toronto, (Simcoe) emerging at Lake Huron. It is probably that sprinkled here and there were other dwellings, of a still more unpretentious character, which escaped notice, or were deemed unworthy of the attention of those who recorded their melancholy impressions of the site of the present city prior to the arrival of Governor Simcoe. It is more than likely that the district between the Don and the Humber with the trading place between, backed by a wealth of fine farming country, would have attracted and retained some to whom

these conditions were congenial and promising. Enough has been said to show a foundation for the claim made on behalf of Messrs. Peak and St. John and this reference may have some influence in strengthening the position.

The retinue of the Governor comprised those who accompanied him on the schooner Mississaga—a very considerable following, who ultimately became the officials and prominent men of the settlement. In these western days one sometimes hears of a town springing up in a night but a greater wonder in creative magic was witnessed when, at the same moment, the town became the Capital of the Province, the seat of Government, and the centre of education, refinement and fashion in a country which included a very considerable part of the northern continent. York never passed through the stages of infancy and boyhood, but arrived as a man, with all the responsibilities of the situation, but with no experience, and less equipment, to meet them. The struggle soon commenced, and was continued through years of privation, war, fire, pestilence, and more serious than all, a period of political oppression and strife which paralized ambition, and for years to come retarded the progress of the town.

As the early statistics of the population of York were for several years included with those of some of the adjacent townships it is impossible to say what the town settlement amounted to, but it may be concluded that an excellent start was made, though, as has been stated, it was not long main-

tained. In 1801, for which separate figures are available, there were 338 men, women and children in the town, and 456 in 1804. This would give an average yearly increase of 40 through the first decennial period.

During the next ten years, ending in 1813, and including the period of the first part of the war of 1812, the increase was only at the rate of 28 per annum. The population at the close of the war may be taken at 673, of whom only 116 were taxpayers. In 1823 the total is given as 1330, showing a yearly gain of 66. This increased to 476 during the next decennial, but the real growing time was from 1830, when the annual augmentation became 349, to be followed by 1109 in 1831, and 1539 in 1832. In 1833 there was a recession to 589, doubtless by dread of the cholera which carried off so many of the immigrants of the previous year and thus frightened intending settlers. The population in 1833 was officially stated as follows:—

Males over 16	2,056
Females over 16	1,772
Total over 16	3,828
Males under 16	1,189
Females under 16	1,077
Total under 16	2,266
Total population	6,094

This brings the writer to the time at which he should really have started as his subject relates to the birth of Toronto rather than of York. However, the digression had for its main object the stimulation of further enquiry as to the first settlers, and, as such, may be pardoned, as also details of the growth of the town up to its fortieth year, which may be useful for future reference.

The population stated above indicates a place of similar size to that of Lindsay, or Orillia, at present (1915) but it may be that Oshawa offers the best topographical comparison, though its population now is some 500 greater than that of York when it became Toronto. Statements of population must, however, be taken with a very large grain of salt. Witness, for instance, the very varying current figures for Toronto as furnished by the Dominion census; the assessment rolls; the police census, and, finally, Might's Directory, which always caps the climax. Even so was it in 1833, for in Walton's Directory, to which attention has already been directed, the figures are stated as under:—

Males above 16	2,597
Males under 16	1,404
Total Males	4,001
Females above 16	2,155
Females under 16	1,317
Total Females	3,472
Total Population	7,473

This evidently referred to the town, proper, to which must be added:

In Macaulay Town	558
From Osgoode Hall to Farr's Brewery	400
From King Street to Don Bridge	300
	1,258
Grand Total	8,371

The value of the property for assessment purposes, at the beginning of 1834, was estimated at $526,026; but, only a few months afterwards, this was raised to $747,528—about 50 per cent—by the assessors, (who are all alike; then, as now). It may be incidentally mentioned that in the roll for this year there is an entry for the rating of "Wm. Gooderham, ½ ac. with one windmill, 7 stories, with 3 run of stones, 1 storehouse, £208," which clearly shows that the civic officials were disposed to look with favor on the new enterprise.

The limits of the city at this time were fairly extensive and its configuration such as would be predicted from its long sunny water front. Its natural advantages were great, but it suffered somewhat from an over supply of creeks, of which there were at least six in the distance between the Old Windmill and the Garrison. These were admirable for drainage but objectionable from the gullies formed by thousands of year's erosion. Some of these old water courses were large and deep enough to be called ravines, which greatly interfered with the construction of roads—a condition which still exists,

to some extent, in the vicinity of Bell Woods Park, and the lands occupied by Trinity University. There was similar trouble at Tannery Hollow, the Rosedale Ravines and scores of other localities.

Lot Street east, almost from Yonge to Allan's lane, (Sherborne) has always suffered in this way, and for many years was practically closed. In the early years and long afterwards, as may be still remembered by some of the readers of this story, there was a series of very deep gullies sometimes at one side of the street and sometimes at the other, which started about the limits of Captain McGill's lot, now the Metropolitan Square, and continued to the east confines of Moss Park where a very considerable stream poured through a stone bridge, or culvert, which led it across Queen .and Sherbourne Streets in the direction of its outlet. There was formerly in Moss Park a fork in the channel of this creek by which the volume of the water in the southern branch was much increased. The writer was told by the late Hon. G. W. Allen that when a boy, he had excellent fishing at this point and sometimes hooked perch of half a pound. This point now serves for the tap water skating rink of the Boys Club on Shuter Street.

One might spin endless yarns about the old creeks of the city, most of which are now doing ignominous duty in dark and noisome sewers instead of dancing in the merry sunlight, bringing more joy to the joyous and flashing rays of hope and encouragement

to the weary passers by. A word or two must, however, be said as to the fate of this particular stream which took a south-easterly course, passing through Vale Pleasant—a sort of little park in the block bounded by King and Palace Streets, between Berkeley and Parliament. This plot, opposite the old Jail, last occupied by Fenian prisoners of '66; afterwards became the site of Hamilton's Foundry; ultimately reverting to its original condition, as a public square. After this the stream meandered about in the low land where the gasometers now stand and taking a turn westward, near the Old Windmill, discharged its waters into the Bay, at the foot of Parliament Street.

It must not be that this notable river shall go without a name, though none of the plans or sketches give any sign that it ever possessed one. Some additional light has however, been thrown on the subject and may be taken advantage of at this stage. Robertson, Vol. I., page 316, in referring to the house of one Pilkington said that it was near "Goodman's Creek" but Scadding, page 261, speaking of the same residence, says it was in a grove of pines and acacias on the knoll, to the right, after passing Goodwin's Creek." On page 531 in referring to the marriage in 1804 of Jessie Goodwin, mariner, he makes the remark that "This is the Goodwin from whom the small stream which ran into York Bay, at its eastern extremity, used to be called—Goodwin's Creek." As Dr. Scadding was born and for many years lived near this locality his evi-

dence carries preponderating weight and it is not unlikely that the resemblance in sound accounts for the substitution. By the way there have been Goodwins residing in this section up to the present day, and mostly mariners. All Islanders remember Captain Joe and his sons, who like enough were the descendants of the original mariner whose name was given to the creek.

All land travel to the Island—then generally called the Peninsula, and sometimes Presqu'ile, was necessarily around the bend of the Bay, thence across the bridges over the Forks of the Don, and along the east shore of the Bay to what is now the Eastern Channel—then a wide part of the Island, doubtless covered with trees. Even a score or more years later the writer remembers elms and pines there, a wharf, ferry, and several buildings for refreshment or amusement.

That such were in existence as early as 1833—the year the Directory was being prepared—is not generally credited but any doubt on the subject can be at once put an end to by the following extracts of which the first occurs in some introductory remarks which conclude as follows: "On the Island or Peninsula Mr. Knott has lately erected a manufactory for making starch, soap, etc., attached to which is an hotel for the accommodation of parties of pleasure visiting the Island, and for whose convenience in getting there, a boat has been established propelled by four horses. Again on page 147, the compiler says "A boat propelled by four horses,

called the Sir *John of the Peninsula* (named after Sir John Colborne) runs every day from the Steam Boat Wharf, to the Starch Factory on the Peninsula or Island across the Bay; her trips regulated to suit public convenience. Fare to and from the Island 1s. 3d. *An* Hotel has been opened on the Island to accommodate sportsmen, parties of pleasure, etc." To strengthen this is an item in the enumeration of tavern licenses which names M. O'Connor under the heading "Retreat Hotel on the. Island." This evidence, which is definite enough, published at the time, and in no wise dependent on the vagaries of memory, settles a vexed question, once and for all. It may be mentioned, however, as more or less confirmatory, that Mr. Knott conducted a similar odoriferous business, a little south of Palace Street--opposite the foot of Frederick—which, would in due time be removed to the Island, doubtless to the relief of city neighbors.

It will be remembered that it was hereabouts that some of the wealthiest merchants did business in the earliest days and here was located the first business centre of the town of York. Its original "four corners" were those at the intersections of King and Frederick Streets where the north-east corner was the site of the first brick edifice. This was put up by Quetton St. George, in **1807** as previously related and was ultimately used as the offices of the Canada Company.

The city limits in 1834 comprised the district between Parliament and Peter Streets, extending

north to Lot Street. The part east of Yonge was still cut up by ravines as far as Caroline Street, from which it was open to the Catholic Church and "was intended to be continued to the Don Bridge." Lot Street, west of Yonge, was practically an almost closed, or rather unopened thoroughfare, except for the block next to Yonge Street, where there were eight buildings—one of them the old Court House—for that then in use was near the north-east corner of King and Toronto Streets, near the west end of the present Court Street, the Gaol being at the other extremity, where the front wall is still to be seen at the back of the offices of the Street Railway. The eight buildings on the south side of Lot Street would probably lead east to the corner of Victoria Street, as now named, but then called Upper George Street. With the exception of the residences of Messrs. McGill, Jarvis, Allan, Ridout, McMahon and Dempsey there were no other buildings on Lot Street, even as far as the river.

Yonge Street, now so central, was in **1834** a comparatively insignificant thoroughfare, except as a road leading to Newrnarket and Lake Simcoe. It started on the west side with Sir James (Judge) Macaulay's house, near where the Bank of Montreal now stands, but most of the buildings as far as Market Street (Wellington) were occupied by the laboring classes, including those in a court called Hunter's Place, with a decided improvement in the block ending at King, though the occupancy was

decidedly mixed, comprising some stores, the studio of Linen, a portrait painter; McGuire, whose occupation is indicated by "brickfield"—which may possibly mean that he had a brickfield in this locality. Nearer King was the wholesale dry goods warehouse of Francis Hincks—(afterwards Sir Francis) followed by the surgery of Dr. Warren, and the legal offices of Baldwin and Sullivan, in the house occupied from 1825 to 1832 by the Baldwin family. At the actual corner of Yonge and King, where the Dominion Bank is now built, was the wholesale dry goods house of A. Laurie & Co. which was afterwards succeeded by that of W.H. Dow & Co. The north-west corner was occupied by William Ware who kept a general store with a leaning towards crockery. On the east side of Yonge, at the corner of Front, was located the residence of Judge L.P. Sherwood whose house, like that of Judge Macaulay, was built a considerable distance back from either front. The land between this and King Street was taken up by some eight houses, apparently occupied by mechanics, and at the comer, now the C.P.R. Building, was a general store kept by William Crawford. On the opposite side of King was the warehouse of Ridout Brothers where it remained until the relinquishment of the site in favor of the Royal Bank.

Yonge St. from King to Lot St. showed an improvement over the lower part but the stores only numbered about fifty and seem to have been small. Jesse Ketchum—whom everybody remembers—

operated a tannery at the corner of Newgate St. (Adelaide) and owned at one time or another, all the frontage from that point to Lot St. and west to Bay, besides the block on the east side of Yonge as bounded by Lot & Hospital St. (Richmond), Bell's Soap & Candle Works, the York Foundry and a number of tradesmen's shops also took up considerable space on Yonge St. which must have presented a decidedly mixed appearance.

The west side of Yonge Street, above Lot, is treated by the Directory as a separate district called Macaulay Town which included the north side of Lot Street, as far as Osgoode Hall, and north to a continuation of Macaulay's Lane corresponding with the present Albert Street. This formed part of the original grant by Governor Simcoe of 100 acres to Dr. Macaulay who, according to Scadding, was surgeon in the Queen's Rangers and formerly of the 33rd. regiment.. One of his sons, Sir James, has already been mentioned as a resident; the other—Colonel J. Simcoe Macaulay, of the Engineers, at a later period occupied Elmsley Villa, further north. The original cottage of the Doctor was near the site of Trinity Church.

Macaulay Town was fairly populous at the time under review but the residents were mostly small storekeepers, mechanics, laborers, and the like. Perhaps the most notable place was the Sun Tavern kept by T. Elliot, of Mackenzie fame, to which reference has been made in a previous chapter.

The present Yonge Street front of the Eaton-Woolworth block was in 1834 occupied by two tavern keepers; three carpenters, one general storekeeper, one butcher, two blacksmiths, a turner, a person without occupation, a house in similar condition.

Across Yonge Street from here were a few places north of Lot Street, ten houses in all, which, according to the Directory, terminated Yonge Street proper and commenced Yonge Street Road. The enumeration of names, as far as what is now Bloor Street, may be reproduced: Jas. Newbigging, Esq., Dr. Robinson, Prop. Steam Saw Mills, near Windmill; The Hon. John Elmsley, Henderson & Sons, (tailors) W. Adams and W. Franks, nursery, seedsmen and market gardeners. Bloor's Brewery, J. Price, Red Lion Inn; and York General Burying Ground.

Having arrived at a stage which seems appropriate for the termination of this instalment of random and very disconnected notes, the writer lays down his pen and begs the indulgence of the unwary reader who may have been beguiled into the multifarious confused and confusing details with which he has had to struggle.

CHAPTER IV.

In the Days of the Distillery

It is impossible to say when and how the idea originated of combining a distillery with the mill. Similar arrangements were, however, at that time common enough in Upper Canada. Every miller had occasionally on his hands quantities of offal, consisting of waste grain, sweepings, etc., which he could not readily dispose of for feed, and there was seldom much market for the middlings separated m the making of flour. The conversion of the starch of this unsaleable waste material into alcohol, for which there was always a demand, was resorted to by many millers who thus turned a loss into a profit, and helped out the latter by utilizing, for swine and cattle feed, the residue of distillation.

The proprietors of the Windmill had only to look around them for precedent for such an undertaking. William Arthur, who had a distillery across the Don, seven or eight hundred feet north of Gerrard Street, just about where the old Smallpox Hospital sheds used to stand, had a good deal of his grinding done at the Windmill, and bought largely of middlings. John Maitland, who conducted the City Distillery, located on the wharf,

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at the foot of Church Street, had transactions with the Windmill, as also had Charles and Alexander Maitland, possibly his brothers. Edward Lefroy Cull, at the foat of Frederick Street, possessed facilities for malting, and also had a copper still, though there is no evidence of its use at this time; and this is also true of Joseph Bloor, who afterwards sold his still, at the Brewery, to interests connected with Mr. Gooderham. Jones & Son, of the Ontario Brewery, are said to have operated a still, as also did Richard L. Denison, whose house or distillery was on Dundas Street, north of the first toll gate. John Ward, who afterwards kept the Don Vale House, at the intersection of Winchester Street and the river, had a distillery in the Rosedale Ravine, not far distant from this point, and some of his grinding was done at the Windmill.

There is plenty of evidence that, even in the days of Muddy York, distilleries were quite common. Several of them were located in the outskirts of the town, or within a few miles. Scadding, in describing a boating trip, commencing at the Don Bridge, speaks of passing certain potasheries and distilleries before reaching the meadows above, and there is a tradition of a distillery being in operation near the intersection of the Rosedale ravine with the Don, immediately north of the Necropolis. This is asserted by Mr. D. Lamb who says that he remembers the gradual carrying away of the ruins for firewood.

In MacKenzie's "Sketches of Canada," published in 1827, it is stated that "About three miles out of town, in the bottom of a deep ravine, watered by the river Don, and bounded also by beautiful and verdant flats, are situated the York Paper Mills and Distillery of Messrs. Eastwood & Co. * * * * and Messrs. Helliwell's large and extensive Brewery." The locality described is that of the present Taylor's Mills. Both concerns mentioned were erected about 1820, and to that of the Helliwells was afterwards attached a distillery said to have been capable of operating on fifteen to twenty bushels of grain per day. This was burnt down in 1837.

Another old distillery, referred to in an advertisement in the U.C. Gazette of August 18, 1831, was situated on the Don, "having easy access to the town from which it is a mile distant." This consisted of a distillery and potashery, with about nine acres of land, and was offered for sale or exchange by Messrs. Wood and Anderson. There is a possibility that this was the Castle Frank Distillery previously referred to. The distillery at York Mills may be included in this enumeration. It was owned by Andrew Mercer, whose name lives in connection with the Reformatory. He was one of the earliest settlers, arriving in 1802. He shortly afterwards acquired 200 acres of land, but was really occupied as a merchant on King Street, and was connected with various interests, including the distillery on Yonge Street.

A more extended and careful search would doubtless result in an enlargement of the above list, but enough has been given to show that the manufacturer of alcohol was not an untried field of enterprise, but one which had been well trodden, from the earliest settlement of the country, and had proved the most ready way for the disposal of grain—which was then unexportable—and also for the production of spirit, at that time considered by almost everyone as an absolute necessity of life.

Another cause of the popularity of this branch of industry was the light requirements of the law as compared with those of after years. During the early part of those good old days when George the Third was King anyone could set up a still, without tax on the vessel, or the spirit produced. This was the case in Canada, and also in Great Britain, where in 1788, the still tax was first imposed. In Governor Simcoe's third session of Parliament a similar measure was introduced and passed on the second of June, 1794 (34 Geo. III, Cap IX. This required every person using a still or stills, for making spirituous liquors for sale, to pay, annually, to the Provincial Secretary, for the uses of the Province, the sum of one shilling and three pence, of lawful money, for every gallon which the body of such still was capable of containing. It might be as large as desired, but vessels of less than ten gallons were forbidden and a penalty fixed for their possession or use. Infringements were subject to a fine of ten pounds—half to the informer—and the

offender might have his license suspended for three years. The gauger did not, thank goodness, then exist, but a magistrate might issue a search warrant, though happily its operation was confined to the time between sunrise and sunset, so that during the absence of the orb of day the rest or labor of the distiller might be undisturbed by the official eye.

A little trouble arose as to whether the one and three pence per gallon applied to sterling or currency (Halifax) but this was settled by an old Act of Lower Canada, which declared that shillings and pence referred to the sterling money of Great Britain. The gallon specified was that of wine measure, which was then recognized in Canada, and continued to be so until shortly after Confederation. If these restrictions are observed and applied to the License Fee demanded it will be seen that a still of 500 gallons would cost about $150.00 per annum. It is difficult to say just what the import duty on spirit was at this particular time, but, by the old Lower Canada Statutes of 1774, it was fixed at three pence per gallon for British Spirit, and one shilling for that from "American plantations." The protection thus afforded was, therefore, of a very generous kind, amounting practically to about 25 per cent, ad valorem.

After the continuance of this comfortable state of things, for about nine years, the authorities claimed that the working of the law proved "dilatory and circuitous," and provision was made for the

appointment of inspectors to look after the measurement and regulation of stills, or to prosecute if necessary. This was really the beginning of the Excise, though, so far, the remuneration of the Inspectors was arranged by specified fees for individual services. Several unimportant additions to the law were made in the following year or two, but a very pronounced change came in 1819 by which wooden stills were made subject to an additional tax of one and three pence per gallon.

The inclusion of wooden stills marks the change from the pot still, which was emptied after every charge, to the more or less continuous process, which ultimately culminated in the column. It appears, however, that after the experience of five years the doubling of the tax on the body of the still was not considered commensurate with the output, so that, in 1823, the capacity of the still itself, and also of the cap or head, whether in divisions or not, were fully measured and charged for tax at half the volume, the remainder being deducted as steam allowance, but, in addition, every heater for beer, or other appliance before charging, was taxed to its full capacity at the rate of two and six pence per gallon.

This was the state of things when the project of adding a distillery to the Windmill was carried out, and though the tax on wooden stills had been increased there remained a large margin in favor of the distiller over the importer of spirits.

Another favoring consideration was that arising from the relatively low cost of a plant constructed largely or entirely of wood, put together in the country, over that made of copper, with metallic connections, which had to be imported, almost in ik entirety, from abroad. The increase in the duty on spirits to one shilling, sterling, per gallon, as prescribed by the British Act of 6 Geo. IV., while Canadian Whiskey was sold for the same amount, confined competition wholly to home manufacturers, though it must be acknowledged that rivalry in the trade was remarkably keen.

The writer of these reminiscences will perhaps be forgiven this long and somewhat discursive digression as to the causes which led to the addition of a distillery to the Windmill. This has not been introduced merely for this purpose but, incidentally, for placing on record certain facts which are now difficult of access, and which throw some light on the early history of distillation in Canada, and the laws relating to it.

There is no definite or detailed account of how the distillery addition was built. It was, however, a frame structure, to the south and west of the tower of the Windmill, and was probably put up by George Robinson, a carpenter, frequently employed by the firm. It will be remembered that a large chimney had been erected in 1832, on the west side of the mill, and about a year afterwards a boiler and engine had been installed, followed by

other improvements in this line, so that the introduction of steam for distillation was already provided for.

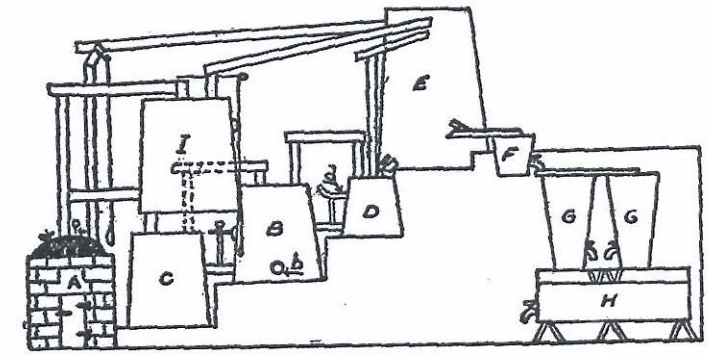
No one living seems to have any definite recollection of the style of the still. As seventy-nine years have elapsed this is not to be wondered at. Had this investigation been made a generation earlier the task would have been easy, but, as it is, one has to be content with the few words spoken, and such evidence as may be inferred from records of business transactions; or from records applying to stills in use in Canada at that time.

All that could be definitely learned with regard to the still was that it was constructed mostly of wood, and the wood still was packed with round stones. This gives a clew, particularly when taken with the legislation of 1819 and 1823, when the Acts respecting the gauging of wooden stills were introduced. Moreover there fortunately comes in some evidence from the now antiquated "Muspratt's Chemistry," a copy of which is in the possession of the writer, and from which the following quotation is taken:

"Numbers of distilleries are now at work in Canada; like those of their neighbors, they are mostly of wood, and worked by steam. In Pittsburg, and other parts of the United States, the whiskey is purified by filtering it through charcoal, coarsely ground. Seven miles from the City of Toronto is

a large distillery the annexed drawing, and description of which are taken from Morewood. All the vessels and pipes, as well as the stills, are made of pine; the pipes are nine inches square, with a boring two and a half inches diameter."

The illustration is reproduced with the addition of the names and dimensions of the various vessels.



A. Horizontal Boiler withcentral flue for burning wood.
B. No. 1 Still or preheater 4 ft. 7 in. x 6 ft. (b) pipe for charging from fermenters.
C. No. 2 Still 4 ft. 7 in. x 6 ft.
D. Doubler 2 ft. 7 in. x 3 ft. 8 in. (d) Low wines and Faints pipe.
E. Worm Tub 5 ft. 6 in. x 9 ft.
F. Spirit Receiver 2 ft. 2 in. x 2 ft.
G. G. Percolators filled withcharcoal 2 ft. 6 in. x 5 ft.
H. Receiver for purified Spirit.
I. Warm Water Tank. for mashing—water, etc., connected by wooden pipes with steam boiler and top of worm tub.
Diameters stated at half depth.
All Pipes of wood.

The distance of this distillery from Toronto—seven miles—at once negatives the idea that reference was to that at the Windmill, or any other located in the city, or its immediate suburbs, and this also holds good with regard to Eastwood's and Helliwell's establishments up the Don, which were not more than three miles away. It might have applied to the Mercer distillery at York Mills, or possibly to that carried on near the old Mills, on the Humber, though it is quite unlikely that a small plant, such as this, would have been selected as representative of Canada.

In any case the illustration serves to show that wooden apparatus was used; and what it looked like. As the Windmill still was packed with stones it is likely that this was a primative device to accomplish continuous distillation, as carried out in the Coffey apparatus, which had only been patented in England about five years previous to this time. One can easily conceive that an uprushing current of steam, meeting with "beer" in its descending passage over and between the cobble stones, would quickly be deprived of its alcoholic contents, though certainly in a rather crude manner.

The only way in which the capacity of the still can be estimated, and then only approximately, is by the license fee. This amounted to £42.3.0 currency, which was handed to the Hon. John H. Dunn, then Receiver-General of the Province. It will be remembered that this tax was at the rate

of two shillings and six pence, sterling, per wine gallon, on the full capacity of the still and head, as well as on beer heaters, or like contrivances having entry to the still, but the tax on the main vessel itself might be reduced to the extent of 50 per cent. as an allowance for steam space. Assuming the still to have been without head or heater, and thus subject to this deduction, its total capacity would have been 555 wine gallons; but it is likely that some sort of head and heater was employed, with contents possibly amounting to, at least, one-fifth of the whole volume, which would be chargeable with the full tax, thus indicating the still capacity to be only 444 gallons. For the purposes of this paper it will be near enough to say that the still held about 500 wine gallons which could be represented by a tub of four feet diameter and say five feet three inches deep.

"Distillery Commencing 3rd Nov. 1837." There is no uncertain ring about these words which form the heading of a day book devoted to a record of the daily output of the still house. Mill deliveries for Oct. 30th and 31st, of 18 bushels of middlings on each day to "the Distillery" afford the first surviving mention that such a place was in existence at all, but it is very sure that, on Hallowe'en night —a very appropriate occasion for the liberation of spirit—several tubs of mash must have been bubbling merrily in the fermenting room. The still was actually in operation, and some spirit was. produced, as slop, or "wash," as it is called, was said

to be ready for disposal. Next day, Alexander Maitland received a gallon of whiskey, for which no charge appears to have been made. Alexander. has been mentioned before as being a distiller, probably connected with his relative John's establishment, but not adverse to helping out a competitor when making a start. He is credited with remuneration for occasional services rendered during the succeeding year or two. According to one entry he received a lump sum covering ninety-six days, computed at the rate of six shillings and three pence per day. It seems therefore very likely that Alexander Maitland assisted early efforts in distillation, if he was not the chief advisor or director.

On Nov. 7th, probably at the completion of the first run, Joseph Lee, still a general storekeeper on King Street East, near Frederick, purchased 128 gallons of the new spirit and, next day, 156½ gallons more. Indeed for the whole of the month he took the greater part of the entire output.

The grain mashed consisted of 304 bushels of middlings, with 36 bushels of ground wheat, or wheaten meal, making 18,690 pounds, charged to the distillery, at the rate of 5 shillings per bushel of 60 pounds. No mention whatever is made of any malt being used in this operation, but as such must have been employed, the quantity may he taken at that subsequently stated—say 60 pounds—to 27 bushels, or 3.56 per cent. This addition would bring the total grain to 18,253 pounds.

Were this malt was made can only be assumed, but there were facilities for malting at the Windmill, as proved by the sale of a quantity at the beginning of the year. However, many purchases were afterwards made from others, particularly from Edward Cull, as well as Jones & Co., and several brewers in the vicinity. The supply of malt was evidently governed by convenience, as has often since been the case. Of diastasic value, or indeed of even the existence of a ferment of this kind, neither the distillers of the Windmill, or elsewhere, knew anything at all, as the new enzyme had only just received its name. However, in the light of future knowledge it is certain that the malt must have been of most remarkable potency, or else it was used in very insufficient proportion. The latter is the more likely when reference is made to the yield of spirit.

The grain bill, including the conjectural proportion of malt, amounted to 18,253 pounds, and the spirit produced measured 1,066 wine gallons. The yield per 100 pounds would be a very simple problem, but, unfortunately, in the absence of a statement of the strength of the spirit it can only be guessed at. Although the definition of proof spirit had been legalized in Great Britain since 1816 and the hydrometer of Sikes was well-known, neither the law nor its standard was recognized to any great extent in Canada in 1837. People bought their whiskey very much as they now purchase their wine. If it pleased the palate and possessed that

titillating quality in the mouth, which is the precursor of a genial glow which shall presently pervade the whole system, they cared little for its degree Sikes, but were content with the less scientific but vastly more interesting organoleptic test. Nor was it otherwise in the Windmill distillery, for there is not the slightest reference to strength, or any instrument to estimate it, until long afterwards, while it was not until 1846 that Canadian law made any demands in this respect.

If one were allowed to speculate on the yield and compute the number of wine proof gallons equivalent to the 1,066 gallons of whiskey obtained, he would most likely take the spirit of the period as averaging about 35 under proof. This would show 692.9 proof gallons and indicate a yield of 3.68 wine gallons for each hundred pounds of grain, including malt—not so very bad for a beginning, more especially when the reduced starch value of middlings is taken into consideration.

Fermentation was doubtless started by the use of brewer's yeast, as was the practice in those days, and as is sometimes the case even now. That such was so is proved by an entry of a purchase of yeast for which a small sum was paid. The distiller sometimes propagated his own stock, but often obtained his daily supply from the brewer, and always resorted to him for new leaven when that in use had deteriorated.

Of the nature of fermentation almost the whole

world was entirely ignorant. The first public announcement on this subject was that which followed the experiments of Schwann and Latour, and was brought up in the French Academy--only four months before the time of the distillery, when the following startling point was raised:

"Beer yeast instead of being an inanimate chemical substance, as previously supposed, actually consists of small globules which possess reproductive power, and are therefore living organisms."

Then followed, or rather recommenced, the long and hard fought battle on spontaneous generation which was finally decided about 1870, under Liebig on the chemical side, and Pasteur for those who held to the biological theory. It is no wonder that this question was until very late years regarded as strictly academic, with little practical bearing on the art of the distiller, who may certainly be forgiven for taking advantage of the assistance of the brewer.

Now as to the disposal of the whiskey of the first month's run it has already been stated that the greater part was taken at is. 9d. by Joseph Lee. The 49 gallons remaining went into the hands of five other customers who paid a slightly higher price —1s. 10½d. per gallon.

The slop was sold to those who came for it, and in quantities as varied as the receptacles which they brought, realizing, in all, £5.9.8, from which it may be inferred that a good deal went to waste, thus

bringing the lesson home that provision must be made for the immediate utilization of this by-product. In less than a week afterwards 25 pigs were bought from G. Silverthorn, for 20 shillings, cy., each, which served for the beginning of this branch of the industry, though, shortly afterwards, the ownership of the animals was to some extent placed in outside. hands.

In December the grain used was mostly middlings, with a little bran, making altogether, without malt, 15,780 pounds—a slight reduction on the mashing of the initial month. This may have been due to the holiday season, or more likely to the deficient or irregular supply from the mill. It is significant that of the twenty transfers of grain from Mill to Distillery, sixteen were in quantities of 12½ bushels. From this it may be inferred that such was the usual mashing, independent of the malt, which would be, say, 30 pounds, making altogether 780 pounds. If this supposition is correct it affords a means of getting an idea of the working capacity of the fermenting tubs, which, at 1¼ pounds of grain in a gallon of mash would require a space of at least 624 wine gallons, and this would he approximately the daily output of slop at this time.

In January, 1838, the Distillery worked for 24 days, exclusively on middlings, hut with an increase to 15½ instead of 12½ bushels per day. This rate was fairly maintained throughout the season which was unmarked by any summer holiday, or

stoppage for repairs. Even in August the grain used was but slightly diminished in amount, and with the warm water of the Don for mashing, and condensing, the distillers lot was, doubtless, not a happy one.

A noticeable change was made in the grain bill on October 13th when, for the first time, the words "rye" and "chop" were mentioned. That the former was no mere accident, or arose from some of that grain having to be disposed of, is proved by its frequent and afterwards regular use, while the introduction of chop—meaning roughly ground grain of any kind--shows that the supply of middlings was insufficient. In a month or so a regular column was ruled off for chop, in the grain book, and though rye was not so honored, it came in often for special mention.

An attempt to ascertain the amount of grain used, during the year 1838, is not justified by the long search which is implied, but it may be estimated. approximately, by doubling the totals of alternate months which gives 4,356 bushels, equalling 261,-360 pounds independent of malt, or an average of 363 bushels a month, against 282 for the two months of 1837.

No record was made of the spirit produced, nor of its strength, so the output can only be judged by collecting and totalling the sales made throughout the year, less a small reduction for spirit received from Cull and Maitland. This gives 15,638 wine gallons, which at the former assumption of a

strength of 35 U.P equals 10,165 proof wine gallons. This figure works out a yield of 3.88 P. Gals. for 100 pounds of grain, exclusive of malt, which is remarkably close to 3.83, the result of the first run.

Joseph Lee still continued to be the principal buyer, taking 4,682 gallons out of 15,638—nearly 30 per cent. Joseph Cawthra, who had his store at the comer of Frederick and Palace Streets, was also a large purchaser, and John Tilt, at the comer of Lot & Sayer Streets bought very considerable quantities. F. Mullin, who took at one time a purchase of 850 gallons, paying therefor S82.5.0, can not be traced out in Toronto, and probably refers to a merchant in some other city or town. Other large customers were Alexander Badenach, storekeeper, of 117 King Street, at the south-east comer of Church; James Leslie & Sons, stationers and druggists, 112 King Street, on the north side, near Toronto Street; Thomas Clarkson & Co., general storekeeper, 55 Yonge Street, on ground now occupied by the R. Simpson Co., W. C. Cook, storekeeper and probably innkeeper, on the Kingston Road near the Don Bridge, William Heather, who in Walton's Directory for 1833 is described as a "bricklayer and surveyor," afterwards commenced an inn, named after the Windmill, and situate on that street, near Park Street, (now Eastern Ave.) purchased a good deal of whiskey direct from the distillery, as did many others in the same Iine of business.

In the accounts of 1838 a few words appear which have a particular value, especially in the absence of definite records of occurences or changes such as could not be expected in the work of a mere book-keeper, but might Le looked for in a diary. The books of the firm, except the old Waste Book of 1831, are singularly free from any marginal notes or references to any matters except those that relate' to financial transactions or obligations of others. A good example is afforded by the distillery itself which appeared as if made in a night. A diligent search might reveal the fact that the carpenter's bill was large, or that a good deal of money had been paid to so and so, who sold lumber, but it is not until one meets with such an item as a considerable payment to the Receiver General, for a license, that the idea of a distillery is revealed. So is it with many matters for which inference is the only elucidation.

It thus becomes an interesting question whether after fourteen month's experience there had been any effort made to improve the quality of the first vintage. It is folly to look for any direct answer to this, but some light is thrown on the subject by the record of the purchase of charcoal. It is not too much to infer that this was employed for the removal of fusel oil, and it is possible that it was used from the outset, and that its purchase had not been entered, or, if entered, had been done without reference to what the money had been paid for; or possibly the first charcoal had been home

made. Anyway, on Nov. 20th, is an item in which Clarke, of New Street (Jarvis) is charged with 42 gallons of best whiskey at 2s. 6d. per gallon. and Hill bought a keg of 5 gallons, at the same price, and, two days later, a barrel was acquired by Dewdney—doubtless he of the Royal Oak, at the comer of King and Berkeley Streets—at the same price. Ordinary whiskey was selling at this time at 2s. so it is evident that a new kind had been made which, judging from the price, was twenty-five per cent. better in flavor, or strength, than the former. It is to be regretted that connoisseurs did not appreciate this change, or perhaps the high price operated as a deterrent, but, in any case, there were not any further sales, at this figure, for the balance of the year.

The prices of ordinary whiskey during 1838 may be here noted. It started at 2s. for large purchases, with an advance of 2d. for keg quantities, for it must be remembered that the law then permitted sales by distillers to be as low as three gallons. In February, Joseph Lee and Joseph Cawthra only paid 1s. 9d. but for the balance of the year they paid 1s. 10d. except on one special occasion when there was a drop to 1s. 8d. To purchasers of barrel lots the price almost throughout, was as at the opening.

It is not the intention to follow out in detail, year by year, the operations of the distillery, as has been done for the initiatory period, but only to

note any occurrences of interest; the introduction of new features; or the general progress of the business. The year 1839 was, however, unmarked by anything very remarkable, but gave evidence of considerable prosperity as far as output was concerned.

In January 1840, an effort was made, for the first time, to record the quantities of malt used, and a column was ruled off and continued for this purpose. The proportion of chop, which likely included some rye, was also increased, and the middlings correspondingly diminished. A favorite mixture consisted of 9 bushels of middlings, 18 of chop, and 42 pounds of malt. A good deal of experimenting followed, and, by the end of March, very little middlings was mashed—perhaps because there was none in stock—and 28 3/4 bushels of chop, with 60 pounds of malt, were substituted. The chop was subsequently increased to 31 bushels, and, by the middle of the year, the grain bill was regularly composed of 30 bushels of chop, l of middlings, and 60 pounds of malt—the latter therefore amounting to 3.01 per cent. of the entire mixture. The value of this was usually set down at S7.8.3. Wheat at this time, say November, was worth 3s. 9d. to 6s. 3d.; barley 2s. 8d. to 2s. 10d.; and rye 4s. 6d. a bushel. Some malt was bought from Edward Cull, at 4s., when at a parallel date, barley cost from 3s. to 4s. Malt entered from mill to distillery was priced at 2d. per pound.

The license paid for this year amounted to

S45.9.3 against £43.3.0 for the preceding period, and might imply a remeasurement, but in any case would not mean a material increase in the capacity of the mill.

The whiskey produced was for the first time regularly entered up, weekly, for up to this date the only record was that of individual sales, from day to day. The quantities on hand at the beginning and close of the year were not recorded, and that these would balance one another had to be assumed. This was apparently the case in 1839, the difference being only 23 gallons, showing a production of 28,863 gallons. January and December, were the heavy months, while in August, September, and October the run was only about one-third the average of 2,405 gallons.

The leading purchaser was "Browne," whose only distinction from this great family consisted in the final letter, while the christian name was altogether omitted. There was likely therefore only one Browne, and this is borne out by the Directory, which supplies the name James and describes him as a wharfinger. He owned the most westerly wharf of the three at the foot of Church Street, the others, at this time, being known as Ewart's and Maitland's. Confirmatory evidence is afforded by Browne's first purchase being on March 15th, and the last on April 3rd, comprising 95 barrels, holding nearly 4,000 gallons. What more likely than the accumulation of a shipment in time for the

breaking up of the ice? "Fra" Mullins followed with a purchase of 2,180 gallons which seems as if it were intended for a similar purpose as that of Browne. Thomas Clarkson & Co., previously mentioned, bought 1,960 gallons, while Joseph Lee's purchases were only 1,309 gallons—not a third of the quantity of the previous year.

The price realized did not differ much from those of 1838. The general figure for barrel lots wntinued at 2s., which, on larger purchases, was sometimes shaded to 1s. 10½d. Kegs were priced at 2s. 2d. to 2s. 4d. "Best" whiskey brought 2s. 6d. by the barrel, and was in better demand--the sales amounting to nearly 1,300 gallons, of which Thomas Clarkson & Co. took nearly 850. It will be remembered that this shop was at the Yonge Street comer of Macaulay Town and the demand for a better quality here possibly indicated an improvement in the residential character of the western and northern districts.

The revenue from slop was insignificant, though some of the old customers were accommodated; among them Dan Riordan, who, like a great many other citizens, grew his own pork. Dan had been a regular employee of the firm since the opening of the distillery, and held a position for many years afterwards. At the time of writing he was receiving £48 per annum and appears to have been considered a valued servant. He is of especial interest on account of a subsequent connection with a rival

distillery to which reference will be made in the proper place.

As has been said the direct revenue from slop was inconsiderable which is accounted for by its diversion into another channel now manifesting itself through the medium of pork. On September 1st, 1839, the number of animals fed is set down at 224, with a value of £307.10.0. Pork was then sold at $6.50 to $7.00 per 100. but by the end of the year it had declined to $5.00.

The prices paid for grain during the year varied, as usual, with the season. Wheat in the earlier part, cost 5s. to 7s., with 4s. 6d. to 6s. for the new crop. Barley ranged between 3s. 10 d. and 3s. 2d. and rye from 6s. 3d. to 5s. Oats were scarcely purchased at all, until the autumn, when 1s. Id. was paid for small quantities. Some malt, costing 4s. a bushel, was obtained from Edward Cull. Corn, which could only mean maize, was for the first time mentioned, and a few bushels were taken in, possibly only to be used as horse feed; the price was 4s. 6d.

The mill and distillery seasons, as recorded with reference to grain, terminated on August 31st and for the year preceding this date, in 1839, there had been purchased 16,138 bushels of wheat—an increase of 2,322 bushels on 1838. The sales of flour were not proportionate to this as more grain was used in the distillery. As a matter of fact, the

number of barrels of flour sold in 1839 showed a decrease of 262 on the previous year when 2,649 were disposed of.

In turning over the pages of one of the old account books, leaf by leaf, there was recently found an enclosed slip on which was recorded the average monthly prices paid for wheat from the commencement of the Windmill to 1837. This is too valuable and interesting to be neglected, and, though a little out of chronological order, is herewith reproduced. The values are, of course, expressed in Halifax currency.

Month	1832	1833	1834	1835	1836	1837
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January		4 0	4 0	2 9	4 1	6 11
February		4 2	4 0	3 0	4 1	8 0
March		4 2	3 10	3 0	4 4	7 8
April		4 1	3 8½	3 0	4 1½	7 6
May		3 8	3 8	3 8	4 3	5 7
June		3 7	3 8	4 0	4 3½	8 3
July		4 4	3 6¾	4 1½	4 0	8 0
August		4 6	3 7¼1	4 1	4 3	5 0
September		4 4½	3 7	4 7	5 9	5 3
October	4 9	4 4%	3 5½	4 8	6 5	5 4%
November	4 2	4 0¾	2 11½	3 11%	6 1½	6 0
December	4 4	4 0	2 8	3 11	6 4	6 9
Ave'ge in pence	53 0	49 4	42 6	44 7	58 0	80 2

The heading of a page in the ledger of 1839 is followed up by a series of entries, in this and succeeding volumes, introducing an incident which led to what may be considered an episode to this story, if, indeed, it is not part of the main narrative. It is connected with the name of John Dew, who appears to have been employed as the successor of Charles Perry who installed a boiler and engine in

the windmill, as early as 1833. In June, of the next year, John Dew was paid £28.10.7 for "altering" this engine, and, in 1835, received various sums, totalling about £200, for "exchange of boiler;" and "putting down new stones and engine to drive them," etc., so that at this time he was evidently acting as machinist to the firm.

He appears to have had several relatives—probably brothers—Martin and William, both of whom figure on the books as purchasers of flour, etc. The Directory of 1833 does not include the name of Dew, but, in that of 1837 the information is afforded that John was an engineer on Lot Street west, but as few of the places of business were then numbered it is impossible to say where. The next Directory, nine years later, contains no reference to the name.

In the index of Ledger No. 3 there appears the name "John Dew, 94, "through which a line had been ruled, but, by turning up the page, the name is reproduced with the addition "per Kirtley Mill." The entries comprise some articles for household use, as flour, pork, and similar things, which would not have been supplied in the course of trade with ordinary customers, thus showing Dew to belong to a more favored class. Thus, on October 19th. 1839, a cart, costing £7.10., was charged to Dew and at the same time he received a loan of £20, which was the precursor of many other sums, which he did not at once acknowledge,

but only after long intervals when he recovered such amounts, with other indebtedness, in notes siined by "Kirtley Mill." Flour bags were also lent by Mr. Gooderham, and purchases of wheat were paid for from the same source, but there is no direct evidence of flour production at this time, though such need not have necessarily been recorded.

In the early part of 1840 a little rye, with middlings, and some malt, were charged against Kirtly Mill, and it looked as if the example of the Windmill in 1837 were being followed. This conjecture is confirmed by the payment on March 31st. of £32.8.9 for a still license, on which there was later a rebate of £3.9.0. The sum paid for the original windmill license was £42.3.0, and this was taken as equivalent to say 500 gallons. If the same estimate is applied to the Kirtley still its capacity may be assumed at about 380 gallons. Some time after this a small copper still was bought for £25, from Joseph Bloor, who at one time had it in use in his brewery on the south side of the Rosedale Creek, a little east of the line of the present Huntley Street. There is no evidence that this pot-still was ever put in operation at the Kirtley distillery.

It was otherwise with the wooden still which for a short time was apparently kept busy. By May 14th, 35 barrels of whiskey—1472 gallons—had accumulated, and were handed over to Mr. Gooderham, who consigned them to a firm in Montreal. This spurt of energy on the part of the

Kirtley owner was not maintained for long. There are credit references to a few hundred gallons of whiskey, but things appear to have gone along in a half-hearted way in this department, as well as in that of milling. The record of the year gives no indication of prosperity, and the same may be said of 1841, though transactions were on a somewhat larger scale—not excepting those in commercial paper.

The end came towards the close of 1842, and was precipitated by a fire, which appears to have occured in Tamlyn's Brewery, which adjoined, or was in the vicinity of Kirtley Mill, if indeed it did not form a part of the same range of buildings. A share of the insurance was paid to Mr. Gooderham and this helped to reduce his loss, though the account of the mill transaction is wound up by a pencil note of a deficiency of nearly £800.

It seems most likely that the concern was at first in connection with John Dew's machine shop, where the necessary power for a mill was probably available, but where this shop was located, or where Tamlyn's Brewery was at this period, cannot be decided by means of present sources of information. The change of names from Dew's to Kirtley Mill, or Distillery, which took place at the opening of the new year, is possibly significant as indicating the introduction of interests in some way concerning Mr. Worts, Junior, whose father owned Kirtley Mill, near Lowestoft, Suffolk, and conducted business there from 1813 to 1819, prior to his removal to Bungay. Mr. Worts, Junior, attained his majority on June 4th, 1837, only a few months before the change of name, and it is possible that these facts may be in this way connected rather than resulting from mere coincidence. It is otherwise difficult to account for the assistance and support given by Mr. W. Gooderham to a rival business and his assumption of the final loss. If, however, he wished to provide a branch under the direction of his nephew, just arrived at manhood, the matter would be intelligible, and the revival of the old name reasonably accounted for.

After this long digression, which, somehow, the writer could not avoid, though fully conscious of the charge of irrelevance, which might be brought against him by those of a more matter of fact turn of mind, the story goes back to doings at the Windmill and Distillery during 1840.

The price of grain, as largely affecting milling and distilling interests, demands prior attention. Wheat suffered a very considerable decline, starting in January from 5s., for best quality, to 3s. 7d. in December. Rye was steadier at 4s. to 4s. 3d. and barley about 2s. In January, some 28 bushels of corn were purchased at 5s. 4d. from J. D. Sadd, an old personal friend of the Norfolk families. This may be regarded as the first maize used for distilling at the Windmill. Malt was often procured from one or other of the brothers Cull, and sometimes

barley was sent for malting, as in the case of John Cull, who charged 9d. per bushel for performing this service.

As the book of mill receipts and deliveries ends on March 7th, 1840, and its successors cannot be found, it is impossible to find out the precise Purchases of grain for the official year ending August 31st. The recorded period practically covers six months, so by doubling this figure the following approximate annual totals are obtained. Wheat bought, 22,018 bushels; barley, 9,650; rye, 1,632. Flour sold, 2,030 barrels. This shows a decrease of 357 barrels on the previous year, and accounts for the effortsmade to extend trade in the direction of Lower Canada.

The prices of flour are estimated on bakers' lots of say 5 to 10 barrels, starting in January at 27s. 6d., with a gradual decline to 22s. in September, and a further drop to 18s. 9d. at the close.

Some changes worthy of note took place in the working of the distillery. The strength of whiskey had been previously estimated by rough tests, but up till now there had been no reference whatever to the use of the hydrometer. The first mention of such an instrument was on May 1st, when a certain bill of grain yielded so many gallons of spirit of "22 under proof," and a week after, of "20 under proof." A hydrometer, costing £3.10.0, was also bought for Kirtley Distillery, and particular customers were sometimes furnished with the strength of their purchases according to Sikes' scale. The

value of the term "strong," as heretofore used, is now for the first time defined, though not between very narrow limits. A consignment of such whisky, amounting to 655 gallons, was separately estimated, package by package, and ranged from 3.1 to 10.2 under proof. A number of puncheons containing ordinary whisky showed strengths of 18.5 to 33.1 u.p., but, another lot of barrels—which by the way was from the Kirtley Distillery—was averaged up at 32. u.p., which degree may, consequently, be taken as the recognized strength of ordinary spirits, though lots of 35 and 40 were frequently sold to smaller buyers who demanded a weaker article at a proportionately lower price.

Another change, from the technical side, was made in the bill of grain which, up to the present, had not included corn, and only occasionally rye. On January 13th, the mash contained 3 bushels of corn, 3 of rye and 28 of chop and 60 pounds of malt. A week later the rye was diminished to 1 bushel, (56 pounds) and middlings took the place of chop, as occasion required. In June the corn was discontinued and the mixture to the end of the year consisted of 20 to 28 bushels of chop, 1 of rye flour and 60 pounds of malt. Although corn was ultimately destined to play the most important part in the grain-bill its use was doubtless at this time restricted by the fact that its production in Canada was limited to mere experiments, and the facilities for importation were such as to make the price prohibitory.

The results of attempts to ascertain the yield were sometimes set down; happily in one or two cases when the hydrometer strength of the spirit was recorded. Thus on May 1st, 174 bushels gave at the rate of 3¼ gals. of 22 u.p. per bushel, and on May 8th, 176 bushels produced the same yield, though the spirit was of 20 u.p. Neither of these could have been considered good, and were recognized as being "short." In later years, but still in more or less primative times, it was considered by still-men that under the most favorable conditions a bushel of grain, taken at 60 pounds, should produce 3½ proof gallons.

The records of whiskey made and sold in 1840 are quite complete up to the first half of the year but after this the figures relating to spirit produced are often omitted, though the sales are set down regularly. The only ready way of getting an idea of the spirit made is that of doubling the record of the first half of the year. This gives 28,324 gallons, of which 22,616 are shown to have been sold. This would leave 5,708 on hand.

Attempts were again made to extend trade outside the province and a very respectable shipment was sent on May 13th, by schooner Fly, James Gooden, master, to Montreal, consigned for sale to Murray and Sanderson. This comprised 53 barrels or puncheons, 2,803 gallons, of ordinary whiskey and 15 barrels, 655 gallons of "strong." To this was added 46 barrels of pork, and 25 barrels of flour.

The prices realized cannot be readily traced out. Ordinary customers, as Clarkson & Co., Tilt, and Lee, who bought in lots of several barrels, paid 1s. 9ds. to 2s. at the beginning of the year, with a drop to 1s. 3d. in July. and so on till the close. Lee, who bought in all 550 gallons throughout the year, paid 2s. 9d. in March, for a strength of 10 u.p., and Is. 3d. in September for 40 u.p. and even one penny lower, in November, for the same strength. Pork, which in 1839 sometimes brought $7.00 per 100, and generally about $6.50, had declined to as low as $4.00 by May, when the piggery account ends. The entire year may be characterized as being one of low prices and must have been discouraging to farmer and manufacturer alike.

As the book is missing in which were recorded the purchases and disposal of grain it is now impossible to say, except in very general terms, how things went on at the Mill, during 1841. The city bakers, comprising Rennie, Ferrier, Cleal, Baker, Burk. Carnell, Reeves, and the Maitlands still continued steady customers for from four to six barrels of flour, weekly, and the general storekeepers regularly supplied their wants from the same source, but there is no evidence of larger transactions, or attempts to urge business beyond local requirements.

The prices paid for wheat varied considerably. starting from 3s. 4d. to 4s., and increasing steadily. until September, when 5s. 4d. to 5s. 6d. were

reached, with slightly lower values as the year drew to a close. There was little change in barley, though some was bought for 1s. 10½d. Rye ranged from 3s. 6d. to 3s. 7½d. with only one large transaction. A good deal of grain was at this time bought through William Hacking, who lived in the vicinity of Newmarket. He bought considerable whiskey, and possibly kept a general store, though his dealings need not necessarily have extended beyond the articles mentioned.

Flour followed the general advance in wheat, commencing at 20s., per barrel, and rising in July to 30 and even 35s., but dropping to 27s. 6d. at the close. Wheaten meal was still produced, but the making of oatmeal remained unattempted.

The quietness of the times had its effect on the distillery, but the practice was apparently discontinued of giving a summary of results as to grain used and spirit produced, and it is difficult to make any comparison with former years, though some idea may be formed by reference to the value of the whiskey made, which only reached to about 60 per cent of the previous annual period, ending August 31st, 1840, but this did not include the revenue from pork, which would doubtless have increased it considerably.

Prices of whiskey were very low, some lots changing hands at a shilling a wine gallon, for say 40 u.p., the equivalent of two shillings-40 cents—per imperial proof gallon. Joseph Lee, who this

year purchased 1,473 gallons, and always succeeded in getting the lowest figures, bought from 1s. to 1s. 4½d.—the former probably applying to 40 u.p. and the latter to 35. J.F. Davis, of Bradford, who was a valued customer, bought 1,818 gallons, mostly 25 u.p., for which he paid 1s. 7d., up to October, with an advance to 1s. 10½d. for this strength, while 25 u.p. brought 1s. 4½d.

Peter Perry, of Whitby, does not often figure in the books of the firm, but there is one very respectable transaction, noted in September, by which 1,427 gallons of whiskey at 1s. 3d. were practically exchanged for 463 bushels of rye at 3s. 7½d. which only left a balance of a few pounds in favor of the firm. Mr. Perry, formerly a member of the Legislature, had been one of those most prominent in the rebellion, and as far back as 1827, had been named as Chancellor of the Exchequer and Receiver General, in the burlesque nominations of a Mackenzie cabinet, in which the appointments were for life, with unlimited emoluments and privileges entirely eclipsing those enjoyed by the most favored of the Family Compact.

Hydrometrical references were not commonly appended to small commercial transactions as the ordinary purchaser was usually satisfied with the designation "whiskey," even irrespective of the appellation "strong." It is, however, gratifying to notice that the use of the hydrometer was much more frequent than in the preceding year, and it is

also to be remarked that the range of a strength was approximating to that of commercial grades as now in demand.

Changes in the working of the distillery principally related to modifications of the grain-bill, which, as before explained, were often governed by the materials at hand rather than a desire for experimentation. During the first month the old mixture of 25 to 30 bushels of chop, or middlings, 56 pounds of rye flour, and 60 pounds of malt were used. This was followed by a succcessful attempt to work a larger mash, in which the proportions were similar, but the quantities were increased to 30 to 35, 80, and 70, and this was fairly well kept up afterwards, though the rye failed to materialize after the autumn months. About the middle of the year the value of chop was stated as being 3s.; middlings 5s., and malt 3s. Malt was then taken as weighing 30 pounds to the bushel, rye 56, and flour 60.

The license paid in 1841 was B4.17.9, against £33.10.0 in the preceding year—a negligible difference—but otherwise when applied to the initial fee of £42.3.0. This would indicate a reduction of about 20 per cent in still capacity, which is not likely to have taken place. It is, however, possible that the inspector had by this time become more familiar with his work and was thus enabled to discover the faultiness of his first mode of measurement, or calculation, though, as a matter of fact

such officials are not over anxious to acknowledge or correct their errors.

The absence of the usual connected records of the purchase and disposal of grain, either for flour or spirit production, is even more marked in 1842 than in the preceding year, and it is quite difficult to make a definite statement as to progress, or institute comparisons between the figures of various annual periods. Sales of flour might be totalled from the ledger, which fortunately survives, but the search would scarcely be justified, and in any case production would still remain unknown. A general impression, formed by a hasty survey of the individual accounts in the ledger, leads to the conclusion that times were hard and money difficult to collect. Flour had to be purchased, but the payment was mostly by notes, which too often remained promissory, and accounts had to be closed in a very unsatisfactory way.

Grain prices can be learned from the sums paid to purchasing agents, such as Hacking of Newmarket, or large concerns in the city. Wheat was relatively high, at about 5s. 6d., from January, until the new crop ccame in by September, when it dropped to 3s. 9d., and by the end of the year had reached 3s. Barley at first brought as much as 2s. 9d., with a decline to 1s. 10½ d. for new crop. Rye ranged from 3s. to 3s. 9d., with a purchase of a lot—probably inferior--at 2s. 4d. at the close. A little corn--44 bushels—was bought at New-

market for 3s. 3d. This must certainly have been of home growth and thus demonstrates the possibilities of culture at this time.

Flour, as estimated from bakers accounts, was at first sold as high as 28s. 9d. with one sale of "superfine" to Cleal for 30s., but for the greater part of the year the ordinary run of the mill brought 27s. 6d., with a sharp drop to 18s. 9d. when the new crop came in.

Amongst the best customers for whiskey this year —1842—were Clarkson & Brunskill of Thornhill, who only opened an account in August, but in three months had purchased 2,082 gals., and all at the same price—1s. 3d. The first two out of fifteen lots were noted as having been of strength of 35 u.p. There is no statement as to the balance but it may be assumed that it was of the same degree. Lee still managed to secure 310 gallons, but seems to have at last fallen from his former position as a favored customer. John C. Bettridge, who kept a stock of drugs and groceries, at 110 Yonge Street, which was at the south-east corner of Richmond Street, had always dealt with the Distillery, and this year bought over 1,000 gallons, at prices varying from 1s. 3d. to 1s. 6d. according to strength.

The number of gallons of whiskey sold, during the official year, ending August 31st, 1842, may be taken as about 31.1 75. The weekly record is sometimes incomplete but the omissions have been filled up by fairly estimated averages and the result

may be accepted as being as near the truth as possible. The production would exceed this figure but cannot be ascertained. The whiskey in stock would be about 5,000 gallons.

The only data available in regard to the composition of the grain bill are furnished by the distillery records for the first three weeks of January which fail to show a revival of the use of rye, which had been discontinued at the close of 1841. The mixture now used consisted of about 33 bushels of chop, middlings, or shorts, with 2 1/3 bushels (70 pounds) of malt. The word "shorts" come into use in the account books at this time and may indicate some change in the process of flour production. Once, durimg the three weeks referred to, a few bushels of corn were added to the mash but as there was no repetition of the act it may have been purely incidental.

On July 18, 1842, there appears an entry which evidently opens up a new subject: "To Rectifying House 199 gals." Five days later there is a similar entry, which, by interpolation, would read--48 gals. 25 u.p.; 35 21 u.p.; 35 21 u.p.; 50 19 u.p. During August six similar lots of spirits were sent to the rectifying house, thus establishing the fact of the existence of a plant for rectification, and that the process had been for the first time carried into effect. The second lot taken in hand shows the limit of strength—16 u.p.—usually reached by the, beer still, but afterwards it was thought unnecessary

to use such strong spirit, and the last lot redistilled was only 40 u.p.

The question arises whether rectification had been adopted for the production of a purer or merely a stronger spirit. Both purposes were probably kept in view. There is direct evidence that the firm intended to manufacture spirits other than whiskey, and really carried this into effect. Gin, and other spirits were made and sold during the next year, as will appear in due course. That the main object was the production of a purer and stronger spirit is proved by the sale, on October 8th, to John C. Bettridge, the Yonge Street Druggist, of 30 gallons of "pure spirits" at 3s. 6d. a gallon. Whisky, at this time, was bringing 1s. 3d. for 35 u.p. If sixpence is deducted from the larger sum as the equivalent for the expense of more purification, and the other figures are applied for calculating strength from value, as in the equation—1 5: 36: : 65: 156; the strength of 56 o.p. is indicated, which—not perhaps from mere coincidence--is the exact degree of Spiritus Vini Rectificatus, as required by the Pharmacopoeia Londonensis, by which affairs pharmaceutical were then governed in Canada. Mr. Bettridge got precisely what he required, and, more than likely, what he himself suggested. Incidentally, it may be related that immediately following this entry is one relating to the sale of a gallon of "Coloring—for 7s. 6d," which shows that caramel was then made at the Windmill, and, by

the way, realized a very good price, but at this time, it must be remembered that sugar was a much more expensive commodity than it is—even in these war times.

The introduction of a rectificatory plant capable of furnishing spirit of 56 o.p. or 89 per cent of alcohol, by volume, not only afforded means of supplying the needs of pharmacy and medicine but opened up the way to other industries, as the manufacture of varnishes, hat making, and such like. Of much greater importance was its promised effect on the purity of spirits used for drinking, whereby the injurious end-products could be almost entirely removed and a product secured of a much more wholesome character.

That the spirit sent to the rectifying house was so disposed of is pretty well substantiated by the fact that the only recorded sale of so-called "pure spirit," in 1842, is that to Mr. Bettridge, though very considerable quantities of high wines, amounting to between 400 and 500 gallons per month, had passed through the still. This supposition is to some extent confirmed by the fact that, toward the end of the year, there were two kinds of whiskey one at 1s. 3d. and the other at 1s. 6d., and the evidence that this differencewas due to strength is often lacking. That it was on account of quality is reasonable and probable, besides being consistent with what was becoming a recognized practice in preparing spirituous beverages.

Thus ended the tenth year of the Windmill arid the fifth of the Distillery. The birth of the latter was in the most troublous time through which the new Province had passed. It was on the eve of the rebellion, which, a month later, burst into open flame. Business of all kids was completely paralized; distrust and discontent reigned supreme; and even the domestic hearth was often divided by the bitterness of political strife. The darkest hour is said to precede the dawn, which was this time long delayed, and the little city suffered a tedious waiting for a resumption of even the hope of the prosperous and ambitious days when it became the capital of Upper Canada.

Now fell a serious blow in the passing of the Union Act, and the decision to remove the seat of Government to Kingston. This took place in 1841, and as can be readily imagined had a very depressing influence on the minds and hopes of the citizens, as well as on business generally.

Despite these drawbacks the population of the city had increased by nearly 10,000 since the commencement of this story, and the sturdy enterprise of its people gave promise of progress which politics might check but could not hold.

During these years the business of the Windmill had been firmly established and become one of the leading concerns in the city while the distillery had surmounted the difficulties of its inception and was gradually freeing itself from the rule-of-thumb

methods which up to this time characterized the manufacture of spirits in all parts of the world, and which to a certain extent still survive.

The extent of flour production, in 1843, cannot be learned, but the accounts of certain classes of old customers—such as the bakers--cover more ground than formerly, and a much larger business was done, though there is no record of shipments beyond the limits of the Province.

Prices of flour advanced from 18s. 9d. to 23s. 9d., in September, closing at 23s. Wheat was steady throughout the year at about 3s. 9d., for the best, with 2s. 6d., for that for distilling purposes. Barley was worth 2s. at the beginning and end of the year, falling to 1s. 4d. between times. Corn cost 2s. 3d. The quantities of these grains, bought for distilling purposes, between September, 1842 and 1843, were—Corn 2,129 bushels, barley 378: wheat and rye--of which the cost was practically alike—are enumerated together, the sum amounting to 5,665 bushels.

Business at the distillery was good throughout the official year, amounting to sales of 33,914 gallons of all strengths. Prices were very uniform for ordinary whiskey, which seemed to have settled down to a recognized strength of 35 u.p., though the degree did not cut a prominent figure in everyday trade. Such spirit commanded 15d. until the last three months, when it sold 1d. higher. A better

grad —probably that which had been redistilled— brought 18d.

"Alcohol," as such, appears for the first time on the books. Its strength is several times definitely stated at 50 o.p., and the prices realized ranged from 4s. 3d. to 5s. The year's sales amounted to 324 gallons, of which 197 were purchased by Lyman, Farr & Co., who, in 1842, commenced business as wholesale and retail druggists on King Street, east, a few doors west of the market. The senior member was W. Lyman, the oldtime druggist of Montreal, while the junior member of the Toronto branch was successively represented by Messrs. Farr, Kneeshaw, and Elliot.

Langlois & Bates, Grocers, 103 King Street east, which would have been on the north side, took 77 gallons, and Francis Richardson, who kept a drug store on the south side of King Street, east, the fourth house from Yonge, bought 32 gallons. Charles H. Sabine, druggist, of 106 Yonge Street, east side, next door but one north of John C. Bettridge, took a few gallons, and the balance was disposed of among half a dozen purchasers. This matter has been treated in more detail as probably representing the first transactions in Canadian alcohol. A later shipment to Montreal supports the assumption that it was not then manufactured in that city.

The most prominent purchasers of whiskey, in 1843, were Clarkson & Brunskill, of Thornhill,

who acquired about 2,000 gallons. Other outside good customers were J. Wright, also of Thornhill, and H. D. Wilson of Sharon, a grandson of the celebrated David, prophet of the Children of Peace, who as early as 1801 came from the state of New York and settled where Sharon now is; T. Edmansou, druggist and general storekeeper, Bradford, and Mr. Chadwick of Richmond Hill. Most of these also sold grain to the firm, for nearly all trade partook of the nature of barter.

A great deal of spirit was consumed in the city by the soldiers. There had been parts of three regiments stationed here about this time. The 32nd, the 34th Foot and 93rd. Highlanders. Two out of these three were in the city in 1843, but which two is hard to discover now. In any case they were good sturdy drinkers and steady patrons of McDonald's, Brown's Old Garrison, or Reeve's Canteens, and showed their preference of the vintage of the Windmill by consuming between four and five thousand gallons throughout the year.

The oft repeated name of Joseph Lee no longer appears as a purchaser of spirit and it looks as if the business relations of the parties were not as cordial as in the old days.

During 1842 there appeared a few references to spirits other than whiskey having been made at the distillery, and in 1843 there was quite a little trade in such compounds. Brandy, which in one instance is stated to have been obtained from the Rectifying

House, was sold at 4s. per gallon; gin 3s.; peppermint brought from 1s. 10½d. to 2s. 6d., while noyeau, the most expensive, was worth 6s. per gallon. This beverage has been so long out of date that it is necessary to explain that it was a cordial consisting of sweetened spirit, flavored with bitter almonds, peach kernels or the oils of that class of substances.

A rather curious item appears in the ledger in which there is a charge of four pounds "for distilling 80 gallons of whiskey" for an eminent legal functionary who lived not far from the distillery. It was made from rye, possibly grown on one of his own farms, and distilled according to directions, so that like the wine of Jotham it was capable of making glad the hearts of god and man.

So universal was the use of whiskey in Canada, and so regarded as an article of daily consumption, of which no one need be ashamed, that the writer would scarcely deem it a breach of confidence if the name of this legal connoisseur were revealed. A list of the citizens who purchased whiskey would be like that of a census, and, at the time, its publication would have invoked no more remark than if they had been buying tea. However, there were some who thought differently, as evidenced by the Upper Canada Temperance Society, of Provincial scope, which was founded in 1833, with the Hon. John H. Dunn as president, supported by Jesse Ketchum, Rev. James Harris, Thomas Vaux, and

P. Patrick. These good and worthy pioneers, whose memory is held in veneration by all, were not of the stiff-necked and fanatical kind who try to dominate everybody, now-a-days, but of kinder and more reasonable natures, as well shown by the pledge to which they subscribed, and which read as follows: "I hereby pledge myself to abstain from using Ardent Spirits and from giving them to others except they be required for some bodily injury, or severe indisposition, and I do also pledge myself to avoid excess in the use of every other liquor." Some objection might be taken at the drawing of the line at Ardent Spirits, and a rather hostile feeling is aroused by the capitalization of the words, but the qualifying clause as to severe indisposition introduces possibilities which render the situation somewhat hopeful, and, in any sense, if denied the Ardent, a man could fall back on his beer, which, by the way was bountifully provided by such really good men as John Doel, Joseph Bloor, Enoch Turner, George Rowell and others, whose reputation for piety, charity, and general good citizenship endures even to the present day.

Another ledger entry—this time for gas pipes—calls up memories of the old days. Citizens of 1839 were tired of candles and lamps—oil at that—for there was no kerosene for many subsequent years, and after much agitation, one of the brothers Cull went to Montreal to interview Mr. Albert Fumiss who was then engaged in introducing gas in that city. He became interested in the Toronto

project, which took the shape of a joint stock organization called the City of Toronto Gas, Light and Water Co., the shareholders holding privileges as to price of gas.

This resulted in the introduction of this mode of lighting in 1841, which included the city contract for twelve lamps, the usual cost being $5.00 per thousand. The works were at the foot of Princes Street, late Dalton's Soap factory, and now a lumber yard. Furniss afterwards acquired the stock, which he disposed of in 1847 for $88,000, to the Consumers Gas Co., which had been formed in anticipation of this event. The new company promised a reduction of $2.00 per thousand, but this did not materialize until a long time afterwards, and even in 1853 it had only been reduced to $4.00. The new gas works, on the site of the old Parliament Buildings, burnt down in 1824, were not erected until 1855.

The disposal of unsold slop was still carried on through the medium of a piggery, and a few cows had all along been kept for the production of milk for the families at the Windmill, and some of their friends. During the official year, ending August 31st, 1843, it had evidently been decided to extend this side-line by establishing a regular dairy. In the annual period mentioned there were purchased 22 cows, costing about two to four pounds a piece; 4 heifers at from 19s. to 22s. 6d.; and some calves which had accompanied their mothers. Provision

for butchers' meat was shown by the buying of several steers, and a yoke of oxen was added to the stable. The price of these cattle. £16.17.6, seems relatively very high when the fact is brought to mind that a good cow could be had for two or three pounds. The value of the cows and pigs, at the end of the official year, is set down at £277.1.3.

The necessity for an oulet for the output of flour was exemplified, in 1844, by shipments in September, and October, to Geo. Borthwick & Co., Commission Merchants, Montreal, of 1,043 barrels, of which the values ranged from 20s. 0¼d. to 21s. 6¾d., the whole venture totalling nearly £500. Three shipments were made in successive trips of the Traveller,—a 350 ton steamboat, built in 1835, at Niagara,—and 100 barrels were also sent by the *Adventure*—a vessel whose antecedents are unknown. Accompanying the above was a lot of 5 barrels of flour which Mr. Borthwick was requested to ship to London, England, in care of Mr. Thorne, who was to deliver them to Thomas Muns (this is as near the surname as the chirography admits of) of Scole, Norfolk, the birthplace of the owner of the Windmill. This may have been a gift designed for the poor of the village; or to show the Norfolk people what Canada could do in the way of flour. The absence of any stated value bears out the former supposition.

The price of flour, as shown by bakers' purchases, was about 25s.. at the beginning of the year,

rising a shilling about the middle, and bringing even as low as 21s. 6d. at the close. Wheat was at first worth about 4s. 4d., stiffening to 5s., and falling to 3s. 6d. when the new crop was ground. Rye was pretty steady throughout the year, at 3s. 9d., and barley at 2s. 9d. Oats brought about 1s., and a little corn was purchased at 3s.

Survival of part of the old distillery records for this time fortunately affords material which throws a little light on the composition of the grain bill for the first few months of the official year. Rye was not used in September, possibly because there was none in stock, but, next month, it formed a constituent in proportions varying from 65 to 89 pounds to 35 bushels of chop or middlings. The proportion of malt was increased from 80 to sometimes 88 pounds, which could not have failed to have been an improvement. On Nov. 23rd, 1843, there is a significant record of a mash consisting of 20 bushels of chop, 17½ of corn, 82 pounds of rye, and 80 pounds of malt. This was followed on December 2nd, with 18 chop, 18 corn, 86 pounds of rye and 99 pounds of malt. Unfortunately the book ends here, and it has no immediate successor. However, one must be thankful that even so much is left as serves to announce the use of corn in anything like an important proportion. It is true that in January, 1840, a few bushels were used, but this was only for a short time and is likely to be accounted for by the fact that some of this grain happened to be on hand and was thus utilized.

Whether this will prove to be the case in the present instance depends on a closer search for missing records, which it is hoped will not prove unfruitful.

Something interfered with the making of malt at the distillery at this time, as its preparation appears to have been largely in the hands of two brewers, James Jones & Son, whose establishment was east of Trinity Street and south of King, and Robert Jewell who did business on Caroline Street, in the original brewery of York, built in 1815 by a man named Henderson. The stone malt house still survives, and as the writer passed it this morning, the blacksmith by whom it is occupied was busily hammering away at his horse shoes. This building shares with another at the north-west corner of Church and Lombard Streets, the distinction of being the first stone erections in York. On Henderson's death the property passed to William Allan, from whom it was acquired by an American, Dr. Stoyell, about 1822, and was successively occupied by Joseph Shaw, John Scott and John Lynch, the latter being there in 1836. Robert Jewell's name occurs in connection with this brewery in the directory of 1846. Walz's was occupant in the early sixties, and Kormann now does business where the frame part extends along Duchess Street. The stone malt house has of late years been used as a blacksmith's shop.

In the calendar year 1844, Jewell supplied the distillery with 31,569 pounds of malt of all kinds,

either purchased directly, as such, or made from grain furnished for malting, the charge being 9d. per bushel. Part of this was barley malt, but the major portion, amounting to 21,789 pounds, was made from oats. This is the first mention in the records of this grain being so used, and a reason can be found for its introduction by the relatively low price of this grain—usually about 1s. a bushel. The weight of oat malt, per bushel, varied between 23 to 25 pounds, while barley malt ran from 33 to 35. Jones & Son supplied 28,575 pounds of barley malt, and 17,856 of that made from oats, and both malsters more or less balanced their accounts by purchases of whiskey.

The annual output of whiskey is unrecorded but a good busiiess was done though no spirit was exported. The finn of Goesmann & Henderson, Queen Street, head the list with 3,620 gallons, for which they paid 18d. to 16d. presumably for 35 u.p. The senior partner was of Hanoverian descent and he, or his father, had for a long time been prominent in provincial politics. The junior member was not William Henderson, father of John B., so well known by those who enjoyed the privilege of sailing on the Gooderham yachts, though at the time the old gentleman was in business at the corner of King Street and Market Square, and was on the books of the fim. Tilt's Town Line Store, which appears to have been managed by a Mr. Hunter, bought 1550 gals. Tilt's city store was at the corner of Queen and Sayer Streets, but where the

other was cannot be easily determined. H. D. Wilson, of Sharon, was still a steady customer, taking 1353 gallons at the prices above stated—18d. for the first part of the year, with a decline to 16d.

During 1844 there were sold 1186 gallons of alcohol, often stated as being 50 o.p. Prices ranged from 4s. to 5s. for barrel quantities, and as high as 6s. 3d. for small lots. Sines & Brown, probably a Montreal firm, bought 576 gallons, K. M. Sutherland & Co., wholesale grocers, doing business at the corner of King & Yonge Streets, are charged with 395 gallons, and Hamilton, Hales & Chettle, of Wellington Buildings, on the north side of King Street, near Church, are set down for 215 gallons. The druggists, Lyman, Farr & Co., and F. Richardson, of King Street, East, took respectively 111 and 84 gallons, while two hatters, who must have done some manufacturing, bought 30 and 22 gallons, doubtless for dissolving shellac for stiffening silk hats. One of these hatters was E. H. McSherry, whose shop was on the south side of King Street, east, next to Betley & Browns, at the comer; the other was Thomas Glassco, nearly opposite, but a little further east.

The successor to John Dew, as foundryman and machinist, appears to have been the firm of Christopher Elliott & Co., who kept the Phoenix foundry, in rear of 58 Yonge Street, near the site of the present Strand Theatre. The ledger account con-

tains some references to promissory notes of Dew, and it is not unlikely that this was the identical place in which he carried on operations. Credits to the Elliott firm amount to fairly large sums, and it is evident that the Mill machinery was being repaired or extended. T. H. Metcalf, of Metcalf and Cheney, stove founders, etc., on the north side of King Street east also did some work of this kind in this and the next year.

Samuel Faulkner was the regular engineer of the Mill, and received 5 shillings a day for his services, but, about the middle of 1844, was succeeded by Edward Broughton, at the same wages. Alex. Maitland, who had been chief distiller from the first, was still so engaged at the old remuneration of 6s. 3d. a day. It is said by Mr. E. Copping whose father came from Norfolk and helped to build the Windmill, that Sam Clarke, who had been employed at the Windmill, almost from the first, left his situation with a view of conducting a small distillery at the Howland Mills, on the Humber, but in this was unsuccessful. Geo. Robinson, who for now nearly twelve years had done carpenter's work, as occasion required, still continued to give apparent satisfaction.

The making of barrels for flour was mainly carried out at the cooperage of Robert Hogg, at Hogg's Hollow, on Yonge Street Road, as the thoroughfare was then styled. The cost of such barrels, at this time was 1s. 8d. each. The cooper

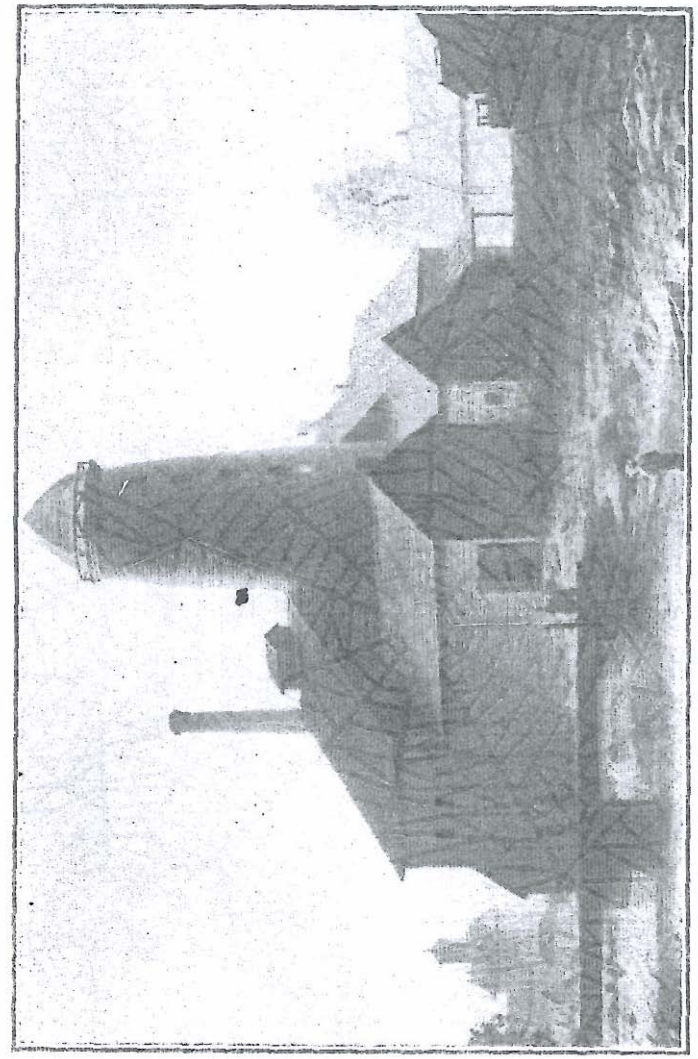
was a descendant—probably son—of James Hogg who lives in local history as having challenged Mr. G. Gurnett, editor of the Courier, for a somewhat pointed but uncomplimentary reference which appeared in that paper in 1832. It was claimed that a large number of farmers from surrounding townships came down to crowd a local meeting at York —"hulking fellows" as they were styled, and "Hogg the miller headed a herd of swine from Yonge Street who made just as good votes at the Meeting as the best shop-keepers of York." The editor preferred the pen to the sword and the duel did not come off.

John W. Bevan also made flour barrels for Gooderham's mill. His cooperage was at the south west comer of King and Princes' streets, where his father conducted business many years before. Whiskey barrels were also largely made by Bevan, and in 1844, when iron-bound, were worth about 6s. 3d. each, while "half bound" barrels were valued at 2s. 8d.

Between the leaves of one of the old books was a loose copy of an account, addressed to John C. Bettridge, bearing date January 1845, and headed "Tordnto City Steam Mills & Distillery." The Windmill, as such, was no more, nor had it been much of a feature for a considerable time. There is a tradition that, not many years after starting, the vanes were seriously injured by a heavy gale, and by the evidence brought forward in the narrative it

is undoubtedly shown that attempts were made to provide assistance by the employment of steam. References to "replacing boilers" indicate the existence of, at least, two, and mention of "new engine" involves a similar interpretation. It may be safely inferred that, long ere the time under review, the replacement of wind by steam had been complete, and the new name was not misapplied.

The removal of the vanes put an end to the career of the Windmill, but the dismantlement was to be made even more complete by an accident that occurred about this time, or perhaps shortly afterwards, by which the entire cap, or roof of the tower was blown off. This is still talked about, but no one can say when it took place. Mr. Henry Gooderham, at that time, who might have been about ten or twelve years of age, well remembers the carrying away of the vanes, and the blowing off of the cap, but has no recollection of the time when either took place. Such must have been during storms, such as occured on August 1837, or September 1839, which would have suited the first event, while the memorable blow in the early autumn of 1846 would have accounted for the more difficult removal of heavier and more solid structures. This storm was the worst in many years and was felt severally at Baltimore, Philadelphia, Washington, and north as far as St. John's, Nfld. Several cargoes were lost at Montreal, and the steamship Great Britain, from Liverpool, never arrived at port. On our own lake the schooner Joe



GOODERHAM & WORTS, 1855

Mills was driven ashore at Niagara, and an immense deal of damage was done to buildings in Toronto, amongst others, probably the Windmill. A new conical roof was substituted, and is represented in Forbes' oil painting in the present office of the firm.

The shipment of flour to Montreal, last year, appears to have proved satisfactory as a similar venture was made in May 1845, and also in July, to the same consignee, G. Borthwick & Co. The first lot, consisting of 137 barrels of "superfine," at 20s. 7½d. was sent by the schooner Olive *Branch*, Captain McCarb, as he is styled. The second, which numbered 500 barrels, went by the propeller Beagle' The prices ranged from 24s. 3½d. to 20s. 10¾d. This lot was sent through Robert Maitland, to McPherson & Couen, of Kingston, but was ultimately intended for the Messrs. Borthwick. In addition to these there were two other consignments--one of 484 barrels shipped by *Princess* Royal and 516 sent in the Sovereign. These total up to the very respectable figure of 1637 barrels exported from the province for the year 1845.

Some idea of the prices of flour will have been gained from the preceding, but for ordinary baker's lots the range was from 20s. to 22s. 6d., with a rise in September which was not maintained. Wheat, for the official annual period, averaged from 3s. 9d. to 5s. at the close; rye 3s. to 3s. 10d.; barley

about 2s. 7d.; oats 1s. to 1s. 10d.; corn was not purchased.

The output of whiskey for 1845 cannot be stated, but sales amounting to 14,517 gallons are recorded from September 23rd. to the end of the year. An estimate on this basis would show annual sales of about 53,000 gallons, which might be considered an advance on previous figures. H. D. Wilson, of Sharon, still remained a good customer, buying 1488 gallons, Coessmann & Henderson took 1331; Ridout & Phillips, 1007; and Romain & Brothers, 844 gallons. McDonald's Canteen consumed no less than 2482 gallons, and Delamore, of the Kingston Road, 726; Heather's account disappears altogether about this time, being probably terminated by death, which thus also puts an end to the Windmill Inn. The prices realized for ordinary whiskey varied from 15d. to 18d.

There was an increasing demand for alcohol 50 o.p, as over 900 gallons were disposed of during twelve months. Sines and Brown previously mentioned, were the largest buyers, and the dmggists and hatters continued to obtain their supplies from the same source. The last named tradesmen were joined by Joseph Rogers, the pioneer hatter and furrier of York, who since 1817 had done business on King Street, east. The price of alcohol, for barrel quantities was 4s. but in several cases higher figures were obtained—two of these from hatters to whom a high strength was indispensable.

Nothing can be said of the composition of the grain bill except that corn had not yet become a permanent constituent, as had been anticipated at an earlier date, and wheat malt was being to some extent substituted for that of barley or oats. Jones and Son supplied 2094 pounds of this product, in addition to 2481 pounds of barley malt, but the latter was more largely obtained from Jewell, who furnished 23,625 pounds.

The dairy proposition, carried out to a certain extent, in 1843, by the purchase of 22 cows, afforded a means of utilizing a by-product, but doubtless involved work of a character which did not harmonize with that of the mill, and would have been better conducted under separate management. A realization of these matters brought about negotiations with Archibald Cameron, dairyman, who. towards the end of 1844, assumed the management of the dairy and the ownership of the cows—29 in all, which were valued at 80 shillings each. He was also charged with the cost of wagons, sleigh, and dairy utensils, and also of a boat for ready communication with the Island where much grass was available. On the whole sum of £142, he agreed to pay interest regularly, together with the rent of a house,. which he presumably occupied, while the slop was accounted for by the payment of 18 pence per week for each cow fed therewith. The vesting of the ownership in Cameron was practically a loan, secured by an assignment back to the firm. The plan appears to have worked suc-

cessfully, as evidenced by its continuance. Records of purchases of milk sometimes appear on the books of the firm in connection with other business, as was the case with the Lunatic Asylum, which was supplied by Cameron. This institution was then located in the old Jail building of 1824, a little back from King Street, near the corner of Toronto Street, while the Court House, a similar building, stood in the same relative position near the comer of King and Church Streets, on part of the site of the Imperial Oil Company's building now in course of construction. The erection of the Asylum on Queen Street West, was at this time in contemplation. The Jail was then at the foot of Berkeley Street, in the old building vacated in 1860 in favor of the new structure across the Don.

The most important event of the year 1845 was the admission of Mr. J. G. Worts as a partner in the firm of Gooderham & Worts. The terms of this union need not be here recorded but may be consulted in detail, in an old day book commencing shortly before the above mentioned date and ending in January 1846. The statement is in the best style of the elegant handwriting of Benjamin Jackson, whose addition to the counting house staff appears to have been made about this time.

Coincident with the above was the general assumption of the title "City of Toronto Steam Mills and Distillery" by which the concern was afterwards known. The name "Steam Mills" had been

J. G. WORTS. 1818 - 1882

occasionally used prior to this date and at almost any time would have been applicable. It has been shown that an engine of some capacity was installed a year after the Windmill was built, and a replacement of this by something better occurred shortly afterwards, while alterations and additions in this line were often made. These were to become even more radical and extensive, but how and when this took place must form another chapter of this story to be told by another historian.

The following article. reproduced from the Toronto Globe of February 7th, 1862, will serve to trace the progress of the Distillery from the point at which it was left in previous chapter up to the date given below:—

ANNUAL REVIEW OF THE TRADE OF TORONTO FOR 1861

DISTILLERY OF MESSRS. GOODERHAM AND WORTS.

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 storehouses, 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 story, 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 "corbel 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, those on the

first four stories being 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 edifice 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. Godson & Kestevin, the woodwork was executed by Messrs. Smith and Burke, who, as usual, made a good job of it.

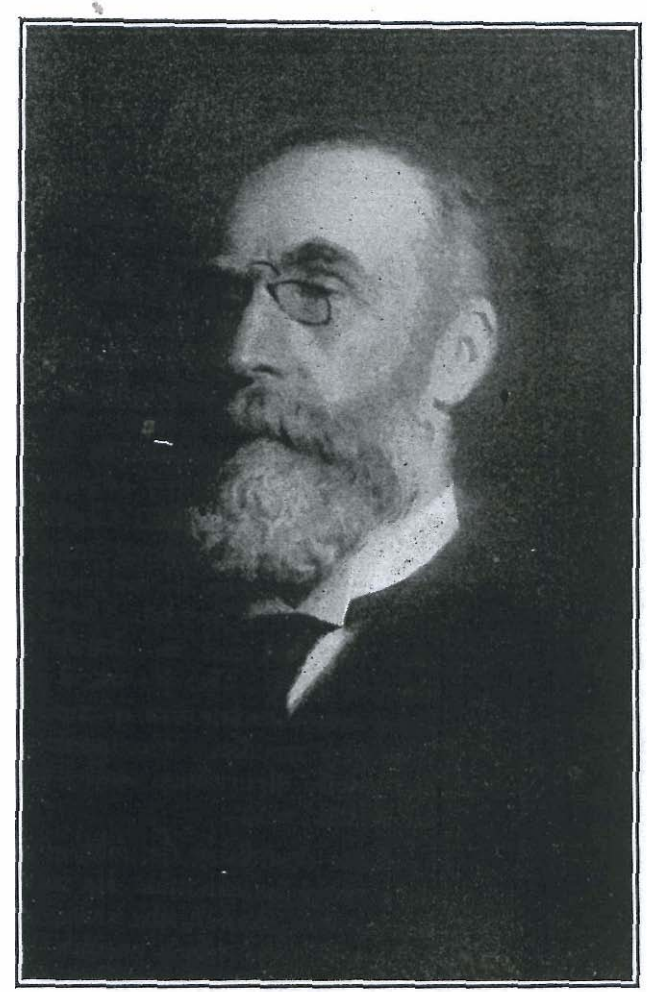
The copper and brass work, including stills, coolers, taps, etc., were from the establishment of Booth & Son, of this city, whose reputation for this class of work is second to none in the Province. The architectural superintendence of the building, as well as the complete machinery contained within 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 there is 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.

The engine which keeps in motion all the multiform 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.

After describing the milling of the grain and its subsequent fermentation, by which its starch is converted into alcohol, the writer explains the process of purification which consists in passing the spirit through a series of rectifiers, forty-two in number, each being of a capacity of eight hundred gallons. These say the writer, are filled with powdered char-



GEORGE GOODERHAM, 1830 - 1905

coal (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 which a portion of it is drawn off as "Common Whiskey." Here it is barrelled and rolled into a large store room, where it ripens, 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 people will have whiskey they should have that of 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 theprogress 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. The 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 land mark of the most useful kind; and the "Windmill 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, including two immense copper 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 vapour, is again condensed by the worm, and thence emanates as "silent spirits" of the purest kind.

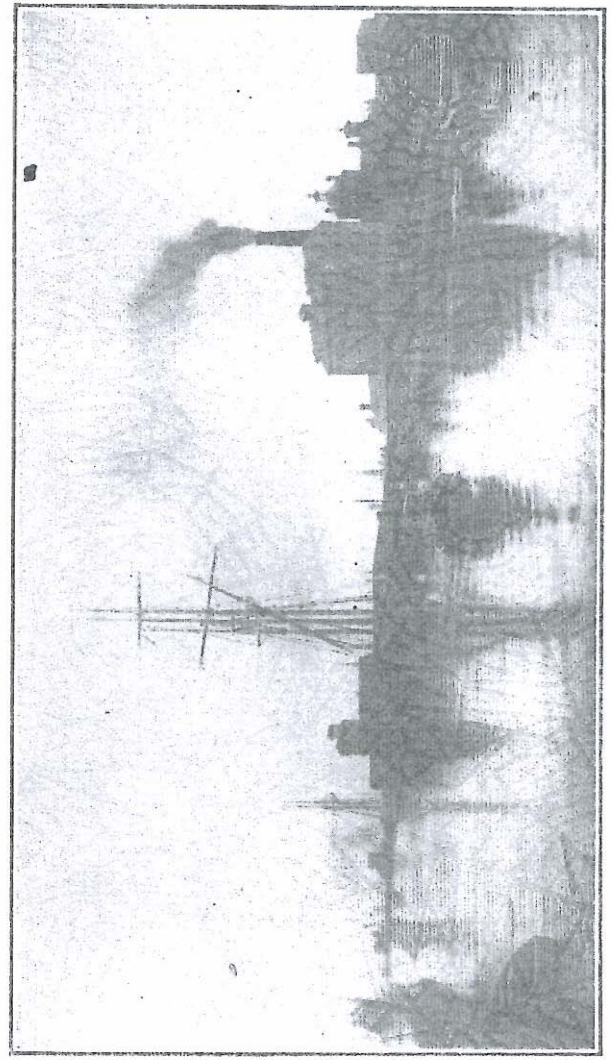
The highest strength is now reached, being 65 over proof by Sikes' hydrometer, or what is usually called 95 per cent. This is then reduced to 50 o.p.,and in this state it is shipped to Lower Canada where it finds a ready market, and where it is a favourite beverage. Large quantities have also been exported 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.

The "wash" or what outsiders choose to denominate "swill" or "slops,"—is conveyed, as we have seen, from the still by pipes under the ground, across Trinity st., where force elevates it to a receptacle provided for it. 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 demands from the city takes only a small portion 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 short time are withdrawn from the stables and sold for beef. In this way over 1,000 head of cattle, producing at least $40,000 per annnm are fattened and sent to the market.

We have already occupied a large space in noticing this manufactory, and need not further particularize as to cooper shop, etc. 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.



GOODERHAM & WORTS, 1870