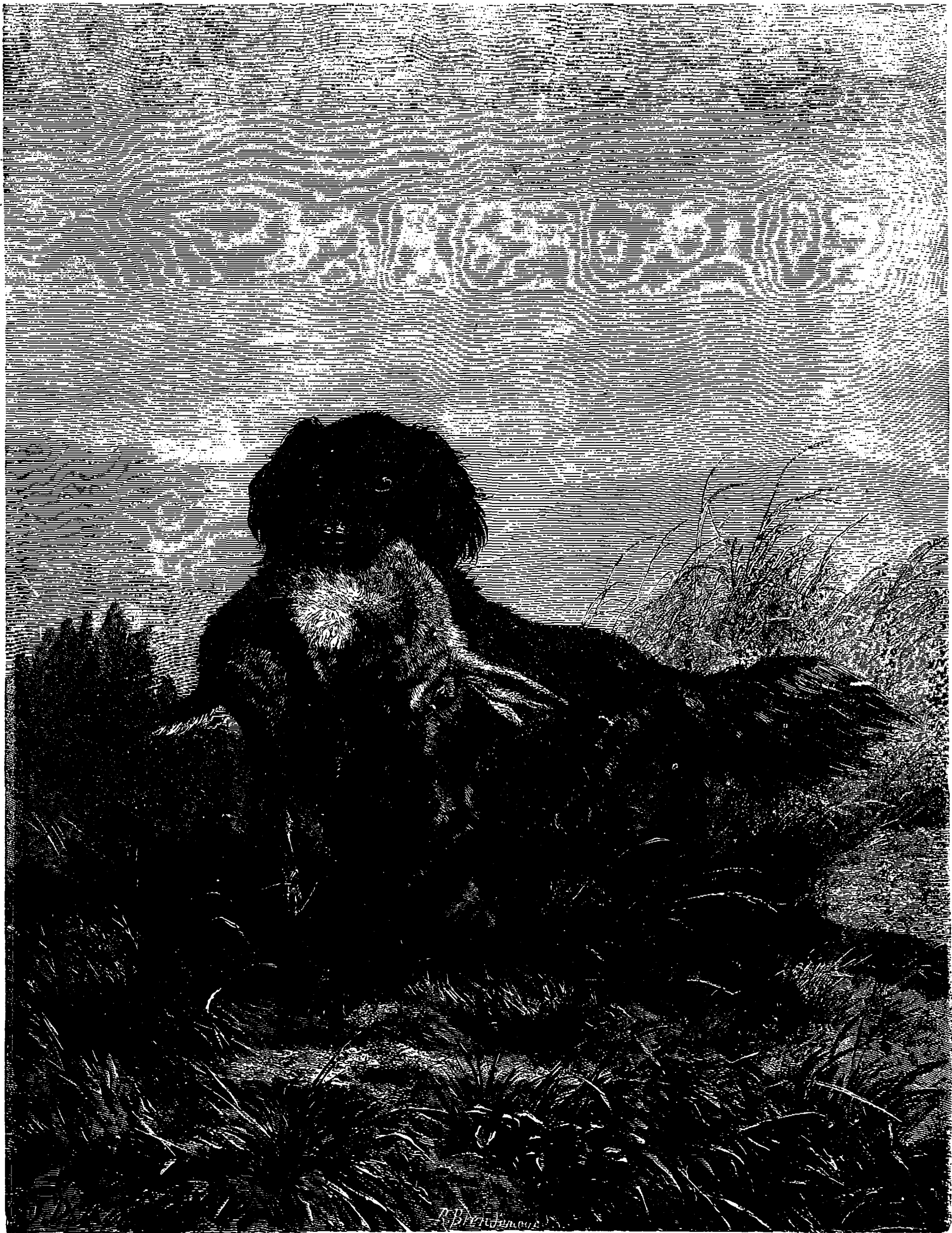


MASSEY'S
ILLUSTRATED
A JOURNAL OF HARVESTING MACHINERY

The Massey Manufacturing Co. }

TORONTO, APRIL, 1884.

{ No 8



THE RETRIEVER.

HERE IT IS!

The New Sheaf Carrier,

USED ONLY ON

The Toronto Binders.

Purchasers of the Toronto Binders will save the expense of an additional hand in the harvest field.

Prominent Points on the Toronto Binders.

THE CUTTING APPARATUS

Is conceded to be the most complete ever produced. The advantages of the angle finger bar made of cold-rolled iron with wrought iron case hardened guards, riveted firmly to the bar, the pitman working on a direct line from the fly-wheel to the heel of the knife, all substantially the same, and making the same complete cutting apparatus as is used on all the other Toronto Machines, will be observed and appreciated by those who have experienced serious difficulties in the use of other machines on account of the indirect manner of communicating motion to the knife, by the use of the old style double back action walking beam, wooden pitman shaft; also wooden or combination finger bars, &c.

The large substantial reel which is firmly attached, entirely under the control of the operator, and by the use of a lever, conveniently arranged for that purpose, can be raised and lowered instantly to any desired height, and is driven by a substantial sprocket chain with sufficient power to reel up and into the cutters and back to the conveying belt any kind of grain, entirely obviates the objections urged against the old style, light, flimsy reels used on other machines. By the use of a large wide-faced grain wheel, firmly secured to the grain divider by the slotted plate to which the grain-wheel is substantially

attached by means of a case-hardened spindle and heavy bolt passed through the plate, spindle and washer, securing it firmly in position, with a lever connection conveniently arranged for instantly raising and lowering the cutters to any desired height, the objections to the small grain-wheel (used on other machines) causing the machine to run hard and irregular on rough ground, and to mire down and swamp in the mud, have been entirely overcome.

The difficulty so often experienced by the farmer in the use of the canvas belts for conveying and elevating the grain, on account of the shrinking and stretching of the belts, and the almost impossibility of keeping them tight enough to perform their work, and yet not tight enough to cause any unnecessary friction and destroy the belts, has been entirely obviated in the Toronto by the use of a peculiarly constructed and much more substantial belt in connection with the large driving rollers, and

THE HEAVY TENSION SPRINGS,

Used for keeping the belts constantly stretched to a certain desired tension, the springs expanding or contracting to conform to the shrinking and stretching of the belt. In this connection the belts are wider and stronger than those used on the ordinary Harvester, giving much more and sufficient room for conveying and elevating the heaviest grain into the Binder receptacle.

The arrangement of the conveying or platform canvas belt, in connection with the angle finger bar, which permits the front edge of the belt to be run within three-eighths of an inch of the back of the knife, thus taking the grain almost out of the guards (in connection with

the vibrating arm or relief rake) which pushes the grain back at the heel of the bar entirely on to the conveying belt; also the use of a steel shield or guide, which prevents short grain from dropping at the end of the conveying belt and guides it into the elevating belts, which never fail to elevate and deposit the grain into the binder receptacle, entirely obviate the serious difficulty experienced by some in the use of other machines on account of very short grain lodging on the finger bar in front of the conveying belt and clogging up at the heel of the bar.

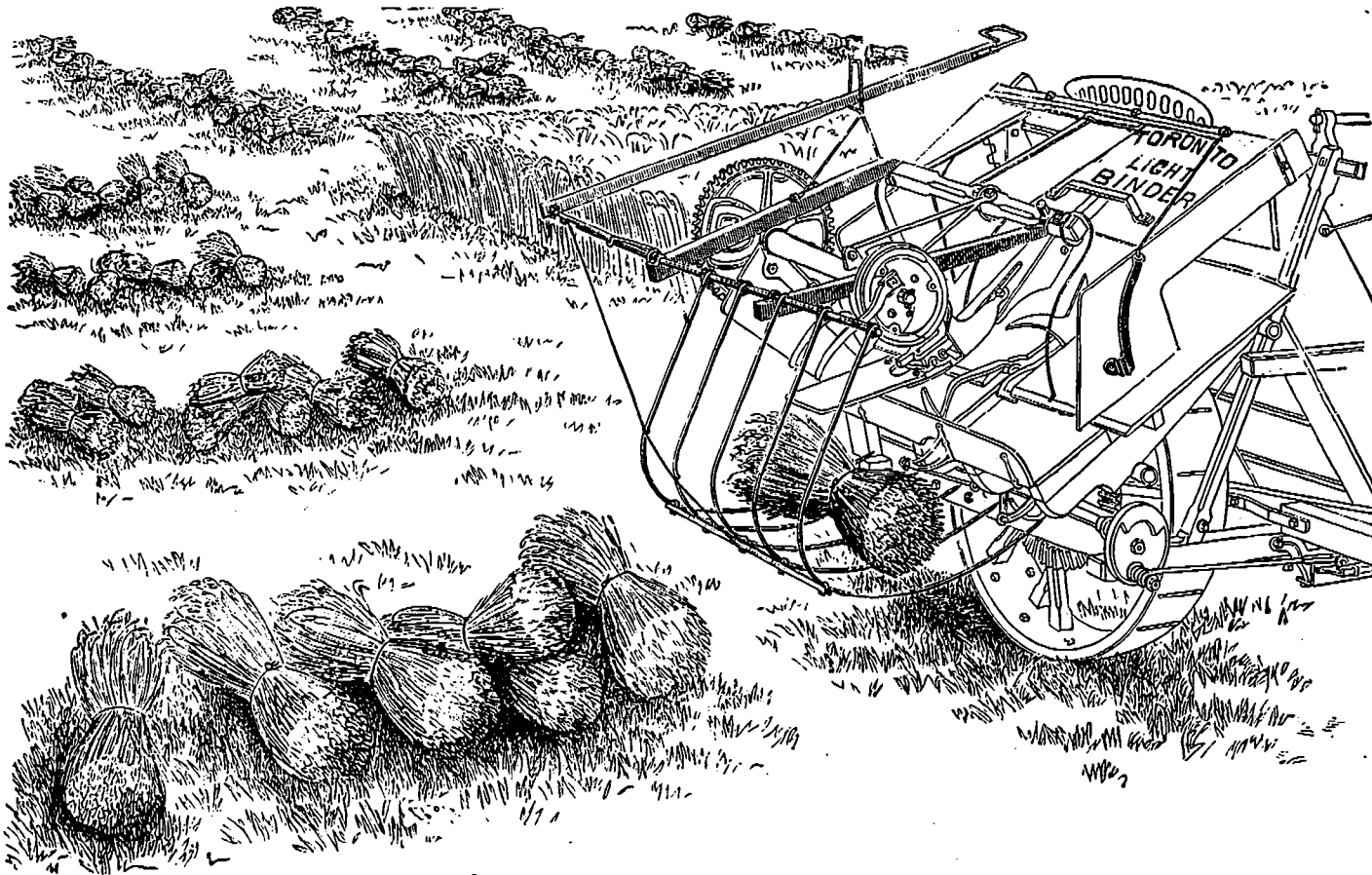
THE MASTER WHEEL

Is 40 inches in diameter, with extra wide face, peculiarly constructed of iron and wood. The centre is of iron, with straight wooden spokes set bracing from the sockets in the iron centre to the rim, and forced together under a hydraulic pressure of ten tons, and secured by means of four bolts which clamp the centres in position, making the strongest and most durable wheel ever produced, and remedying entirely the objection to the light, flimsy driving wheels generally used on other machines.

THE DRIVER'S SEAT

Is located low down on the rear of the machine, enabling the operator to command all of the working parts of the machine, and make all necessary adjustments without leaving his seat. The conveying and elevating belts and reel are all driven by one substantial sprocket chain, which is conceded to be the most simple and complete arrangement for driving the belts, reel, etc., ever devised. The harvester is

PERFECTLY BALANCED



A FIELD SCENE.

On the driving wheel and grain wheel, which are on the same line, and enables the machine to be backed and turned as easily as a cart, while the levers are tilting, raising and lowering the height of cut, adjusting the reel, etc., are conveniently arranged for the operator, enabling him to raise and lower the cutters, reel, etc. instantly from the highest to the lowest, while the machine is in motion.

THE AUTOMATIC BINDER

Used in connection with the Toronto Harvester is what is known as the Appleby type or bill hook tyer, but with many different features and valuable improvements used only by us, among which are the peculiar style of automatic packer for taking the grain from the elevator and packing it into compact form for binding; also the adjustable hinge wings for guiding the grain at the butts and heads, and forming the bundle, **the Independent Trip or Set-off**, by which the operator is enabled to absolutely control the size of the bundles. The trip lever is perfectly independent of the compress, and is operated by the pressure of the grain direct without reference to any of the other working parts, and is admitted by all to be the most perfect trip in use.

J. H. Walton, of Peterboro' writes us under date January 14, 1884, "The Toronto Cord Binder I bought of you in 1882 has done good work and has not cost 20c. for breakage."

TESTIMONIALS.

PORTAGE LA PRAIRIE, Man., 27th Nov., 1883.
MESSRS. IRWIN & MCKAY,
Agents Massey Mfg. Co.:

GENTLEMEN,—In answer to your inquiry as to how I am satisfied with the Toronto Cord Binder, I beg leave to say that I am more than satisfied with it. I candidly believe it is the best Binder in the market at the present time, and would not hesitate to guarantee it would satisfy any reasonable man.

Yours respectfully, JOHN ORR.

ADMASTON, Co. Renfrew, October 20th, 1883.
The Massey Manufacturing Co., Toronto:

GENTLEMEN,—The Toronto Cord Binder purchased by me from your agent, T. Stafford, has given good satisfaction, and I have cut 175 acres with it this season. I consider that for a self-binding harvester it is the best I have seen and would recommend it to all farmers.

Yours truly, WM. SHARP.

BEATRICE LODGE, Fort Qu Appelle, Man.
Massey Manufacturing Co.:

GENTLEMEN,—The Toronto Binder I purchased from you has given entire satisfaction. Besides cutting 75 acres of my own crop and 50 acres for my neighbors, I have not lost five minutes from the machine getting out of order, and always did its work well. Every one I cut for was highly pleased, in fact lauded it for its work.

Yours truly, J. E. A. LEECH.

CHINGUACOUSY,
Oct. 25th, 1883.

Massey Mfg. Co.:

GENTS.—We, the undersigned threshers, having this season threshed a large quantity of grain, bound by self-binding machines, we can positively say the grain we threshed for Mr. Christopher Anderson was the best bound and neatest sheaves we have threshed this season, which was bound by one of your Binders.

ALEX. DENNISON.
FRANCIS DENNISON.

OTENAW P.O., Man.,
Oct. 6th, 1883.

Massey Mfg. Co.:

The Toronto Cord Binder that I purchased through your agent, Mr. J. Bryan, two years ago, has given me good satisfaction. I have used it for two seasons and

have cut four hundred acres with it and it has not cost me one cent for repairs yet, and am well pleased with it.

Yours very truly,
GEORGE W. CRAMER.

ALEXANDER, MAN., September 21st, 1883.
Agent of Massey Man. Co., Brandon:

DEAR SIR,—The Toronto Cord Binder which I purchased from you this season has given me entire satisfaction and I have seen no other Binder that I would prefer to it. I will give you an order at an early date for another Binder for next season.

Yours respectfully,
GEO. G. HILLIARD.

RAPID CITY, MAN., Sept. 13, 1883.
Massey Manufacturing Co.:

GENTLEMEN,—I bought a Toronto Binder of your agent, Mr. Carey, last season, and I find that it does its work in a good and satisfactory manner, and I find she does not require any section arrangement to elevate her on the main wheel, as on other Binders, and I can recommend her to any one getting a Binder.

WILLIAM HEDLEY.

PILOT MOUND, October 3rd, 1883.
To T. J. MCBRIDE,
Manager Winnipeg Branch:

SIR,—It affords me much pleasure to be able to send you a written testimonial with regard to the Toronto Cord Binder I purchased from P. Shaver, at Pilot Mound. I have cut one hundred and twenty-five acres without any delay. It is light of draft and made of good material. I can safely recommend it to my neighbors and farmers at large. I think you will sell a number in this locality next season.

JAMES ROOK.

Harvest Labor versus Self-Binding Harvesters.

— VIEWS OF A PRACTICAL FARMER.

There is a point beyond which it will not pay to hire manual labor, and when the cost is closely connected with the element of uncertainty and inconvenience, it quickly places the question of manual labor or machinery beyond argument. The man who, with the aid of a half-grown boy, can do all his farm work by machinery, is independent. A man and a boy, or two men, can, with a full complement of machinery, do all the work necessary here on a farm of two hundred or three hundred acres. The work is easily so arranged that no task will crowd too closely upon any other. The daily milking of a large dairy is a heavy task when there are few to perform it. This work can be lightened, and perhaps the profits can be increased, by keeping, in place of part of the cows, a flock of sheep and one or two brood mares. Work can be better managed by growing crops that ripen in succession. Wheat can be sown in fall and harvested immediately after haying. It is very easily handled by machinery, and is profitable. There are few crops that cannot be followed to good advantage from the seed bag to the thresher by machinery.

The great objection to machinery is its first cost. A self-binder is the most important machine on the farm. It saves labor at a time when labor is scarce and high-priced, but as a mere labor-saving machine it is absolutely necessary, and perhaps may become a necessity even upon farms of small size. Farmers cannot afford the time to secure grain crops by manual labor. The expense, risk and press of other work forbid it. The whole question is reduced to one of expediency. Crops must be secured—can we afford the means of securing them? The farmer with only fifteen or twenty acres of grain is in a hard position. He delays from year to year the purchase of a costly self-binder, for the reason that the importance of his harvest will not warrant the outlay, and he goes on from year to year, and in the life-time of a self-binder he has lost much more than the price of a machine. Judicious investment in farm machinery is never a mistake. One objection to buying costly machinery, is that such machinery is being constantly improved from year to year. A machine that is perfect this year, will, in half a dozen years, become, or appear to become, old in style and inferior in operation. This cannot be avoided. No one wishes his machinery to wear out, nor does any one wish to retard the improvement of labor-saving machinery.

It seems to me that this will become necessary in view of the great uncertainty of procuring good and reliable men, and I think it will be cheaper than to do without needed machinery.

F. K. MORELAND.

BUYING TOOLS.—The winter is the time to buy tools. Every farmer should, at this time of the year, determine what implements he will need for the next year, and make arrangements for procuring them. If a mowing machine is to be bought, let him take time by the forelock, and look into the merits of each kind of these machines, and buy intelligently; do not wait until the grass is ready to cut, and buy the one nearest at hand. By sending to the Massey Manufacturing Company, Toronto, circulars with full directions, and illustrations, can be obtained, together with prices, etc. If a plow is needed, do all the work of selecting it, before the busy season is at hand, that it may not be "on the way," just when the best week for plowing is passing. In the peace of winter, prepare for the war of summer.

THE MASSEY MOWER

The Lightest and most efficient Grass Cutter ever produced.

— ITS POPULARITY IMMENSE. —

For Strength, Durability and Powerful Cutting it has no equal.

— 1,000 BEING MADE FOR 1884. —

This Machine has been before the public since 1879, during which time it has grown rapidly into favor and has been justly called a "little gem." So great has been the demand each year that we have never been able to supply all those who have desired to purchase this machine.

As a grass cutter it has no equal. It is extremely simple in its construction and well made, weighs about 600 pounds, and cuts a swath of 4 ft. 3 in.

Its gear is very strong, neat and compact. Enclosed in a strong iron box, which thoroughly protects it from all dirt. The quality of the material is of the very finest. Its shafts are made of steel with highly polished surface which run in brass bearings.

The tilting apparatus of the Mower is very complete, the lever being conveniently situated that the driver can instantly lower the guards to cut the very worst down clover and grass, or raised to cut a higher stubble or pass over stones or obstructions.

The lifting lever is also a very great convenience by the use of which the bar can be quickly raised to pass large stones or stumps without stopping the knives or team. It runs very still and the draft very light, it is less liable to get out of order than any other Mower.

The guards are of malleable iron in which are hardened steel plates securely riveted. These plates may be easily removed and replaced at a small cost at any time when worn out.

If you raise heavy hay crops and would harvest them successfully the Massey Mower is the machine you want. There is nothing in the shape of fodder it will not cut, and do it in a superior manner and without the vexatious delays incident to so many low price shoddy machines.

Remember the Massey is guaranteed "all wool," and its operation in the field fully warranted.

Boys Should Learn to Use Tools.

Encourage the boys in the use of carpenters' tools. I never was more impressed with the necessity for this than when, a short time ago, a young farmer purchased a neglected piece of property where the house was sadly out of repair. He was obliged to take his family into it just as it was, and two or three weeks passed before he could set anyone to make a few repairs, during which time they all became ill from exposure. This could have been prevented had the purchaser been skillful in the use of two or three of the commonest carpenters' tools.

Of course boys will dull and sometimes break them, but if carefully taught their use, and if acts of carelessness are followed by a season of deprivation, they soon learn that it pays to be thoughtful. Encourage them in making their own kites, in putting new boxes on their express waggons, and in building their coops for their own biddies and her broods. These will be crude and rough, but praise the work, and the next time they attempt it, offer a few suggestions, that every effort may exceed all previous ones.

One who has some knowledge of carpenters' tools is more fitted to direct workmen, and give plans when he wishes a building put up or repairs made. Then how often a mere novice whose hands are accustomed to use saw and chisel can, with a few directions, put up a shop or henry, at a time when farm work is slack! Then the convenience of being able to fashion a door or ladder, to mend a broken gate, or replace a few shingles blown from the roof, and do it all in a workmanlike manner that brings no shame at the result.

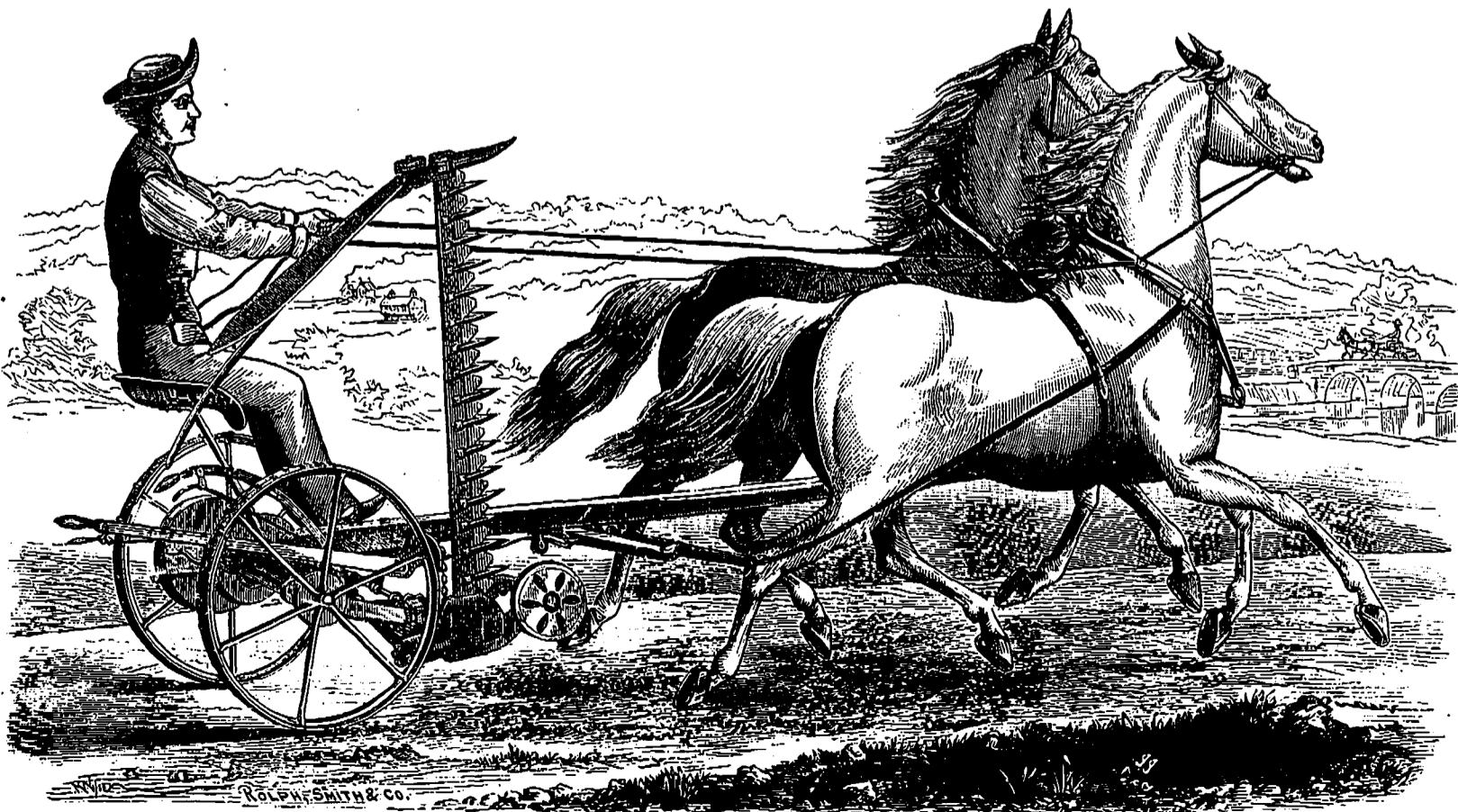
Then there are a thousand and one little things about the house which would save much weariness and many steps—little things for which one hardly likes to call the carpenter, and that the father or one of the boys might do if he could saw off a board straight, or drive a nail without pounding his thumb and losing his temper. Then there is real pleasure in accepting a token of love fashioned by the hands that give it. I have in mind now a pretty centre-table and a book case, made by a young farmer during the stormy days of a cold winter. It was not the money value alone that gave them worth, for "my husband made these" was often said by the recipient of these favors.

Provide a warm workshop, as nice as can be afforded, but at least with a stove, a chimney, and a whole roof, and give the boys permission to saw and plane as they like. It is not necessary to allow them free use of the choicest tools, neither is it wise to restrict them entirely to old and broken ones. People do not condemn their children to the use of trenchers, because they occasionally break a plate, nor would it be kind to forbid their touching the tools, because they sometimes break an awl or lose the pinchers.

O. A. O.

JUST twenty years ago, the twenty-ninth day of last month, the Agricultural Implement establishment of Mr. H. A. Massey, at Newcastle, was entirely destroyed by fire. Out of the remains has grown the largest concern of the kind in Canada—the works of the Massey Manufacturing Company, Toronto.

Study the comfort and welfare of your household and not turn your house into a boarding-house during harvest, but buy a Toronto Elevator or Massey Low Down Binder, and your wives and daughters will cry, Eureka!



THE MASSEY MOWER ON THE ROAD.

THE MASSEY HARVESTER,

The head and front of them all.

2,000 MAKING FOR 1884.

Has gained an enviable reputation, the sale of which is twice that of any other Reaper in the Dominion. The demand we have never been able to supply, although we have each year added greatly to our facilities with a view of being able to keep up to the enormous demand.

For heavy, lodged grain, or any other difficult work, this machine is in every way adapted. It is very strong and substantial and of very light draft. It is much stronger than any other Reaper of a like weight, the very finest grades of material enters into its construction, combined with excellent workmanship makes it a most desirable machine.

The main frame consists of a stout wrought-iron bar surrounding the main drive wheel (not cast, as is found on so many of the cheap, flimsy, low-priced Reapers).

The Dude.

A creature that seems to embrace all of the worst characteristics of the human being, the stork and the donkey. Dude is supposed to come from "Dodo," a peculiar kind of waddling bird of the crane family, on account of the creature bearing the name having the erratic manner of locomotion.

Noticeable in the bird:—The dude either parts its hair in the middle, or does not part it at all, but bangs it and allows it to grow down to the eye brows. It also wears very odd, tight-fitting clothes, a high hat, a gold headed cane, which it sucks whilst meditating in front of a hotel, and a standing collar which extends up to its ears. It also smokes a package of cigarettes every day and pretends to be intelligent and critical, going to the opera, and thereafter giving its opinions in as convincing a manner as a professional newspaper critic does. It usually wears a long frock overcoat, like unto those worn by an imported coachman, and strides along the public thoroughfares as though skating against the wind. Its food is caramels and ice cream, and it is usually to be found in aristocratic localities. Grayhounds have frequently been known to greet it as a long-lost cousin, and hunting dogs have been detected in the act of pointing it, under the impression, not wholly and entirely inexcusable, that it was a game bird.

BOISTEROUS, stormy, rugged March is past. Its winds and clouds are many, and it seems not a friend to human health and comfort. Still March has its place as well as May.

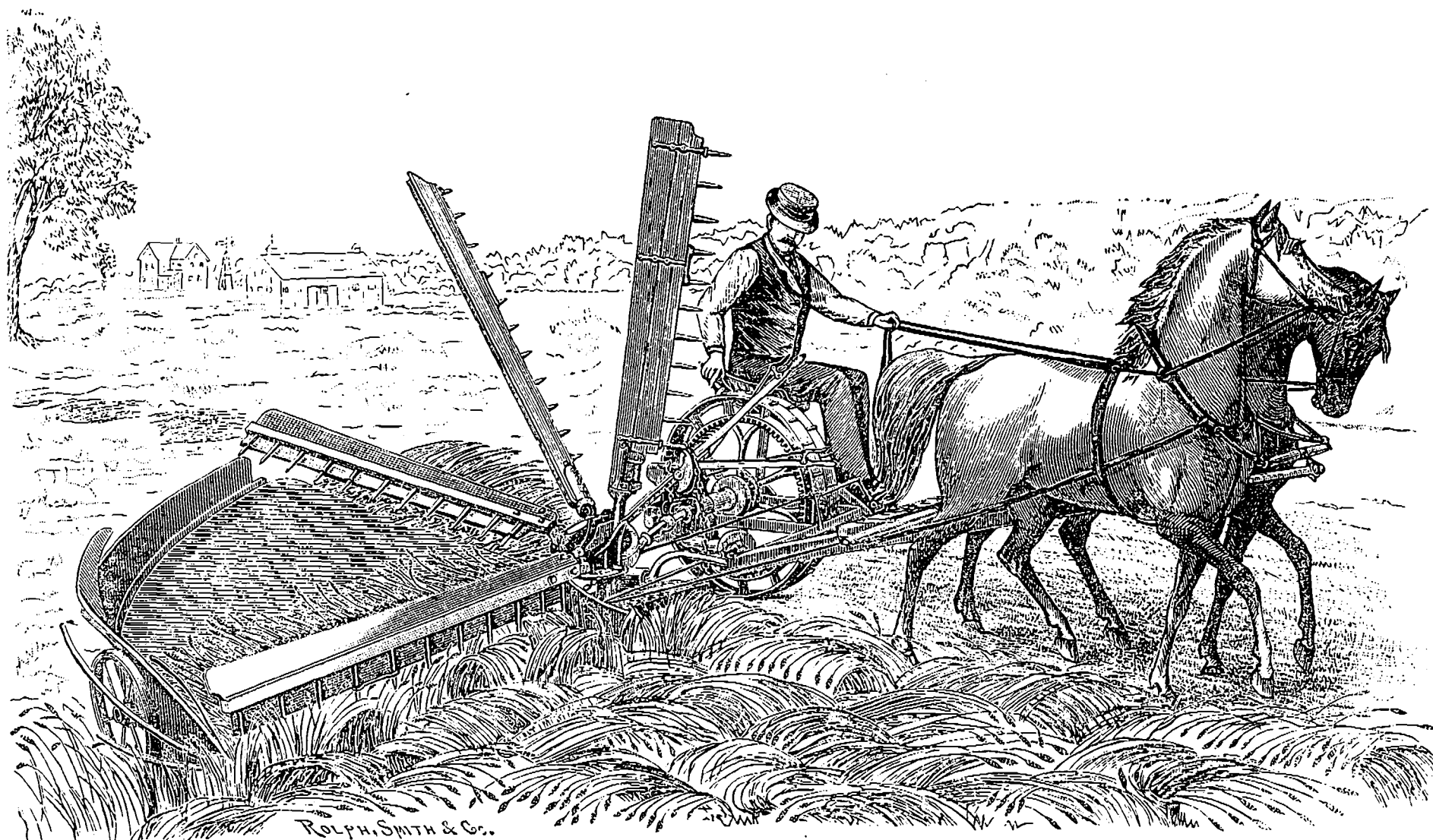
THE Massey Manufacturing Co.

Business Established 1847.

Incorporation of the Company,
1870.

Removal to Toronto, 1879.

Purchase of Toronto Reaper
and Mower Company's
Business, 1881.



THE MASSEY HARVESTER.

The pitman works on a straight line with the knife, making it easy upon the knife heel and giving it a powerful stroke.

The shafts are all steel, and highly polished, running in brass bushings, causing smooth, quiet action, without jerk or jar.

The platform is suspended or attached to the main frame, by a very strong wrought-iron "Bale," a cut of which can be seen on page 5. This adds very materially to the strength of the machine, never allowing the platform to sag.

There is no weight on the horse's neck and no side draft. The driver has a very safe and comfortable position, that gives him full view of the work to be done and entire control of the machine. The balance of the machine is perfect whether the driver is in his seat or not.

The rake is driven directly from the main axle by a jointed connection, which imparts a steady uniform action to the rake, which is very easy upon the working parts.

The lever for changing the height of cut, tilting the guards and platform and the grain wheel lever, are all conveniently situated to give the driver absolute control.

Indeed, so simple and strong is this machine that it can be readily handled by the most inexperienced operator, or any girl or boy capable of driving a team.

Sample machines can be seen at any of our agencies throughout the world.

FACT.

It is a fact that the machines made by the Massey Manufacturing Company are immensely popular.

It is a fact that our aim is and always has been, to produce the very best Farm Machinery of the times.

It is a fact that we have the best facilities for the manufacture of Reapers, Mowers, Binders and Horse Rakes of any makers in Canada.

TO MEASURE CORN IN THE CRIB.—This rule will apply to a crib of any size or kind. Two cubic feet of good, sound, dry corn in the ear will make a bushel of shelled corn. To get, then, the quantity of shelled corn in a crib of corn in the ear, measure the length, breadth and height of the crib, inside of the rail; multiply the length by the breadth, and the product by the height; then divide the product by two, and you have the number of bushels of shelled corn in the crib.

To find the number of bushels of apples, potatoes, etc., in a bin, multiply the length, breadth and thickness together, and this product by 8, and point off one figure in the product for decimals.

If you would harvest your grain successfully, and with least possible trouble and no cuss words, place your order at once with us for a Toronto Binder.

THE Massey Manufacturing Co.

First to manufacture a Self-
Rake Reaper.

First to manufacture a Sulky
Horse Rake.

First in the quality and quantity
of its manufacture.

A Word on Malleable Castings

AND THEIR RELATION TO THE MODERN REAPER AND MOWER.

For many years after the introduction of the Reaper and Mower, great difficulty was experienced in making the several iron working parts of the machinery sufficiently strong to perform their respective functions, without rendering the completed machine too heavy for economical and effective work.

Ordinary grey cast iron was the most suitable material then known for making such portions of the movement as were too intricate to admit of being readily forged, and as a consequence the Reaper and Mower at this stage of its history was comparatively a crude and cumbersome piece of mechanism, heavy of draught, and subject to frequent breakage during its operations in the harvest field. Owing to this disadvantage many inconveniences occurred, and inventors set to work earnestly to remedy this radical defect which was partially accomplished by the substitution of refined malleable iron castings for many of the small grey iron castings, where the strain was severe.

This improvement having given universal satisfaction so far as it went, a determined effort was made by some of the leading firms engaged in this industry, to radically reduce the weight, and at the same time strengthen the machines which they were employed in building. This seeming anomaly was finally attained by the adoption of malleable castings in substitution of cast iron, to an extent that was rendered practicable by the great advancement which had been made in the malleable iron business during the term covered by the development of the agricultural implement trade. Until this comparatively recent period the manufacturers of malleable iron confined themselves to the production of light work, principally consisting of such goods as could be cast from an ordinary cupola, but owing to the introduction of the reverberating melting furnace, and improved annealing ovens, the largest castings required for the construction of Reapers were successfully turned out.

With a view of placing their machines in the front rank, the MASSEY MANUFACTURING COMPANY were amongst the earliest to avail themselves of the improvements connected with these changes, and now nearly the whole of the metal work contributing to the movement in their machines, is of the best quality of malleable iron procurable, thus ensuring to the farmer the greatest possible maximum of strength, combined with the minimum of lightness, both in weight and strength.

A machine thus constructed of the best materials which can be used in its various parts, whether it be wood, malleable, or wrought iron, and embodying in its design all the improvements which long practical experience and skill can suggest, or capital procure, and control, must eventually find its way into the hands of every enterprising agriculturist in the Dominion of Canada.

As the manufacture of malleable iron castings is a special and interesting branch of the iron trade, it may not be out of place to give a short description of the various processes which the raw or pig metal undergoes before it arrives at its last stage as a finished casting, ready to be fitted by the hand of the machinist.

To obtain the best results the pig iron to be treated must be the best cold blast charcoal, and requires to be melted in a horizontal furnace, admitting of the fuel being kept apart from the iron which is being acted upon solely by the flame.

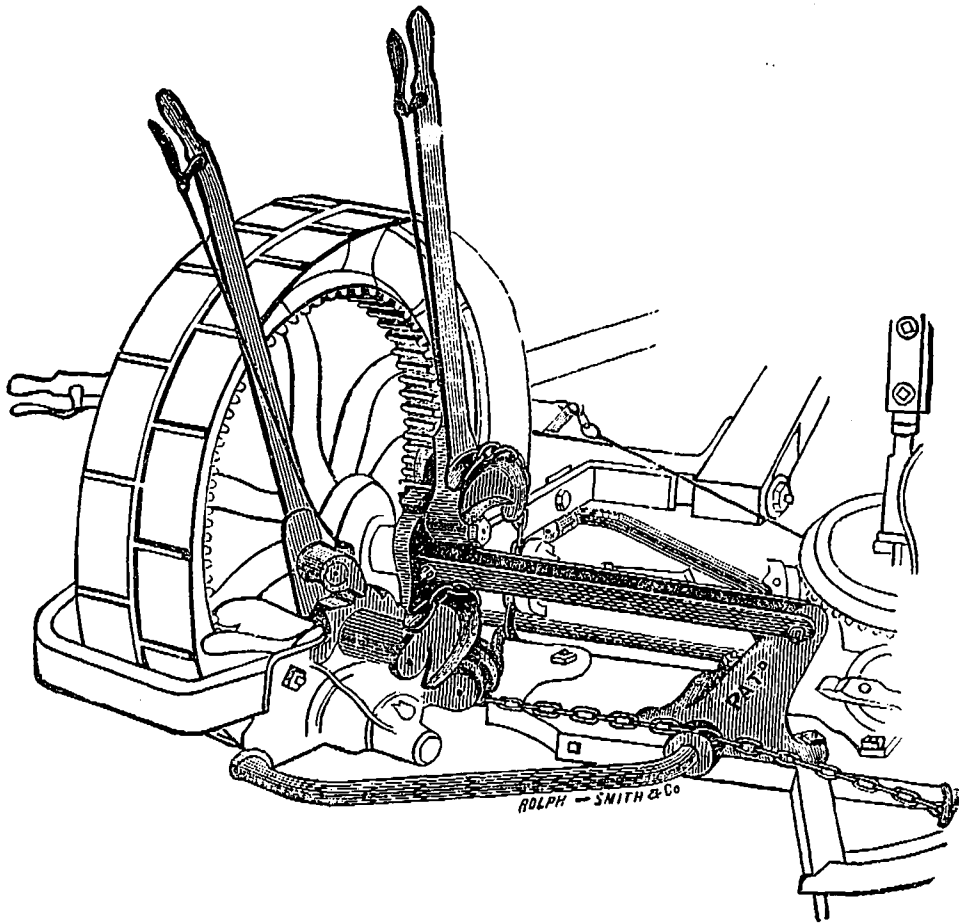
This description of melting furnace enables the operator to thoroughly mix the several brands of iron best suited to the purpose, and to remove by skimming from the surface all the impurities as they arise. When the refined molten metal is ready it is drawn off rapidly, and poured into the moulds awaiting it in the usual manner, where it is allowed to cool. The castings at this stage are called "hard," and if one be broken the fractured surface will be found to present a silvery-white appearance. This arises from its being carbonized highly, and consequently it is granular in its structure and very brittle. After troubling to remove the adhering sand, these castings are carried to the annealing department, in which a long row of large annealing ovens stand conspicuously awaiting their reception when packed.

The packing process consists in the several pieces being neatly arranged in large oblong cast-iron boxes, all the crevices or vacant spaces in the boxes being filled with oxidized iron filings or turnings. These boxes to

the number of sixty or more are wheeled into one of the ovens, the front of which is built up, and by means of four exterior fires the whole contents of the oven are raised to a bright red heat, at which temperature they are kept for a period of six or eight days, when the door is removed and the oven allowed to cool for a day preparatory to drawing.

When the castings after thus annealing are emptied out of the boxes the carbon has been eliminated and the iron has changed from a hard granulated, to a soft fibrous condition, capable of being filed, bored or punched with great facility. It can be straightened also when bent, and possesses a resistance equivalent to five times that of ordinary cast iron. The silvery whiteness which characterized the "hard" casting has now given place to a different appearance. If an annealed casting be broken the iron (if good) should exhibit a dark grey centre, with a narrow exterior ring of a light steel color to the depth of an eighth of an inch more or less according to the circumference of the article.

MEASURING GRAIN.—Please tell me, through your columns, how to find the number of bushels a wagon-box will contain, or bushels of grain in a bin. I think I have seen it in some paper, but cannot find it.—SUBSCRIBER. [Multiply the inches of length by inches of breadth, and this by the inches in depth. Divide the last product by 2150.4 for "struck" bushels and 2748 for heaped bush.]



The new Bail Support and Lever Attachments on the Massey Harvester.

The Old Oaken Bucket.

How dear to the heart are the scenes of my childhood,
When fond recollection presents them to view!
The orchard, the meadow, the deep tangled wildwood,
And every loved spot which my infancy knew;
The wide spreading pond, and the mill which stood by it,
The bridge, and the rock where the cataract fell;
The cot of my father, the dairy house nigh it,
And e'en the rude bucket that hung in the well.
The old oaken bucket, the iron-bound bucket,
The moss covered bucket which hung in the well.

That moss covered vessel I hailed as a treasure;
For often at noon, when returned from the field,
I found it the source of an exquisite pleasure,
The purest and sweetest that nature can yield.
How ardent I seized it, with hands that were glowing!
And quick to the white-pebbled bottom it fell;
Then soon, with the emblem of truth overflowing,
And dripping with coolness, it rose from the well;
The old oaken bucket, the iron-bound bucket,
The moss covered bucket arose from the well.

How sweet from the green mossy brim to receive it,
As poised on the curb it inclined to my lips!
Not a full blushing goblet could tempt me to leave it,
Though filled with the nectar that Jupiter sips,
And now, far removed from the loved situation,
The tear of regret will intrusively swell,
As fancy reverts to my father's plantation,
And sighs for the bucket which hangs in the well;
The old oaken bucket, the iron-bound bucket,
The moss-covered bucket which hangs in the well.

On the street: "I understand that you own a great many houses and small farms in the suburbs." "Yes." "Do you live on any of them?" "No." "Then, you don't raise anything?" "Oh, yes, every spring I raise rents."

Preventable Losses on the Farm.

BY WALDO F. BROWN.

It is a "penny wise and pound foolish" system to breed from scrub stock. There is not a farmer in this section who has not access to a pedigreed Shorthorn bull, by a payment of a small fee of two to five dollars, and yet we find only one animal in ten with Shorthorn blood. It is a common practice to breed to a yearling, and as he is almost sure to get breechy, to sell him for what he will bring the second summer. Many farmers neglect castrating their calves until they are a year old. I think ten per cent. are thus permanently injured, must be classed as stags, and sold at a reduced price. Fully half the calves so stunted never recover.

With many the starving process continues throughout the entire year. They are at first fed an insufficient quantity of skim milk; then in July or August, just at the season when flies are at their worst, and pastures driest, they are weaned, and turned out to shift for themselves, long after the fields yield them a good support. They are wintered without grain, spring finds them poor and hide-bound, and the best grazing season is over before they are fairly thrifty.

The keeping of old cows long past their prime is another thing which largely reduces the profits of the farmer. We have found quite a large per cent. of cows, whose wrinkled horns and general run-down condition, showed that they have long since passed the point of profit. A few years ago these cows would have sold at full prices for beef, now they will sell only for Bologna at 2 cents per pound. Thus cows have, in a majority of cases, been kept, not because they were favorites, or even because they were profitable, but from sheer carelessness and want of forethought. Another fruitful cause of loss to the farmer is attempting to winter more stock than he has feed for. Instead of estimating his resources in the fall, and knowing that he has enough feed even for a hard winter, he gives the matter no thought, and March finds him with the choice of two evils, either to sell stock or buy feed. If he chooses the former, he will for much less than the animals would have brought four months earlier, and if the latter, will usually pay a much higher price for feed than if it had been bought in the autumn. Too often he skimps the feed, hoping for an early spring, and as soon as he can see the grass growing a shade green around the fence rows, or in some sheltered ravine, turns his stock out to make their own living. This brings one of the most potent causes of unprofitable cattle-raising; namely, short pastures. The farmer who is over-stocked in winter, is almost sure to turn his cattle on his pastures too early in the spring, and this generally results in short pasture all summer, and consequently the stock do not thrive as they ought, and in addition, the land which should be greatly benefited and enriched, is injured, for the development of the roots in the soil must correspond to that of the tops, and if the latter are constantly cropped short, the roots must be small. The benefit of shade is lost, and the land is trampled by the cattle in their wanderings to fill themselves, so that it is in a far worse condition than if a crop of grain had been grown on it. From all these causes combined, there is a large aggregate of loss, and it is the exception to find a farm on which one or more of them does not exist, and yet without exception, they may be classed as "preventable," if thought and practical common sense are brought to bear in the management.

Immense.

The materials purchased for the construction of our Machines and Horse Rakes this season, are:—

White Ash, Hickory, Oak and other hard-wood lumber	1,000,000 ft.
Pig Iron	1,200 tons.
Bar Iron	600 "
Steel	250 "
Malleable Iron	400 "
Brass, Copper, Tin	20 "
Coal and Coke	1,500 "
Moulding Sand	250 "
Paints and Oils	40 "
Varnish (costing over \$2 per gal.)	2,500 gals.

To deliver this quantity of raw materials at our factory in Toronto, and afterwards deliver the finished product—in Machines and Horse Rakes—to our customers throughout Canada, from Prince Edward's Island to British Columbia, would require 60 trains of cars, drawn by 60 locomotives, or in all, 1,200 car loads.

How to get along.

Never fool in business matters.
Do not kick every one in your path.
Learn to think and act for yourself.
Keep ahead of, rather than behind, the times.
Always use your own brains rather than those of others.
No man can get rich by sitting around stores and saloons.
A man of honor respects his word as he does his bond.
More miles can be made in one day by going steadily than by stopping.

Massey's Illustrated

A Journal of Harvesting Machinery.



Massey's Illustrated will be mailed free to any one sending his address.

PUBLISHED BY
THE MASSEY MANUFACTURING CO'Y,
TORONTO, ONTARIO.

APRIL, 1884.

Circulation - - 25,000 Copies

Office of the Massey Manufacturing Co.,

TORONTO, April 1st, 1884

To our Patrons and Friends:

Owing to the lamented death of our late Vice-President and Manager, Mr. C. A. Massey, some changes have been made necessary in the officering of our Company, of which we take this opportunity of informing you.

For some time past, owing to the rapid growth of our business, Mr. Massey found it necessary to lessen his immediate responsibilities and consequently a good deal of the work at one time done entirely by him has been for a year or two performed by others. The labor and responsibility to which he has latterly given his particular attention, while being divided among other attachés of the Company, will fall mainly into the hands of our President, Mr. H. A. Massey, who will give his entire time to the interests of the business and allow no department to escape his careful and efficient oversight.

This gentleman having been connected with our establishment for over 30 years, it is needless for us to speak of his ability and experience. Latterly he has been devoting his energies more especially to the erection of our new buildings and other improvements; these being so nearly completed, he can now give all the time required to the duties recently discharged by his son Charles. Daniel Massey, the grandfather, laid the foundations of our great enterprise, and his son made those foundations sure and strong; Charles Albert, the grandson, tireless, unwavering and ever hopeful, came to the front and reared the structure; and now the beloved father and younger sons are left to carry on the business in memory of the departed.

Our establishment has reached an enviable position—first in the Dominion. It is large enough, and there seems scarcely room for further extension and improvement. All that remains now is to do the business for which we have capacity, and this we are determined to carry out.

The stockholders of our Company held their annual meeting on Feb. 27th, when the following officers were chosen for the ensuing year:—H. A. Massey, President and Manager; C. D. Massey, Vice-President; Geo. Metcalfe, Secretary and Treasurer; M. Garvin, Superintendent; W. F. Johnston, Assistant Superintendent. The three gentlemen first named constitute the Board of Directors.

A report of the business for 1883 was read showing a gratifying result.

Thanking you for every favor bestowed.

We remain, yours respectfully,

THE MASSEY MANUFACTURING CO.

CHARLES A. MASSEY.

When the writer of these lines prepared the article on "The Future," for the January number of the ILLUSTRATED, little did he dream that it would so soon be his sad duty to record the death of him whose name stands at the head of this sketch. The name C. A. MASSEY has been so long associated with our business and so closely identified with every movement of the Company that it is difficult to think of him as not among the living. But so it is, and right in the heat of activity he has fallen.

Until some five months ago Mr. Massey's health has always been remarkably good, he never having been confined to the house on account of illness for a single week since his connection with the business. But for a while past his friends have felt that he was

DOING TOO MUCH,

and should take rest, but nothing whatever serious developed in his case until his death illness was upon him. During the fall months Mr. Massey on three different occasions had an attack of

ACUTE INDIGESTION,

the first of these visiting him while on a tour in Manitoba. The effect of these, however, appeared to be overcome and fair health was again enjoyed until the middle of January, when a

SLIGHT ATTACK OF PLEURISY

detained him from the office for three or four days. But restoration was not long to be enjoyed—the weary brain and burdened form of this tireless leader were nearing their rest, the "candle which had been for so long burning at both ends was soon to go out."

ON JANUARY 28TH,

although he had been suffering from a severe cold for a day or two, instead of calling in a physician, he spent the entire day at the office working with more than usual vigor. It was his last day's work, he returned home that evening never again to look upon the vast business pile which had so long felt the impulse of his touch.

On the day following (January 29th) the family physician was called in, and in a few days discovered that he had a typical case of

TYPHOID FEVER.

What appeared at first as a severe cold and then a remittent or slow fever gradually but quickly developed into this terrible disease. Mr. Massey's sufferings were intense, though his symptoms were not unusually alarming, with the exception of a stubborn irritation of the stomach which greatly aggravated the disease and tried the skill of the physicians. This difficulty, however, was apparently overcome, and the patient was making a brave battle for life with good prospects for recovery, when all at once he took a sudden turn for the worse and the shock came like a thunderbolt out of a clear sky.

Just two weeks from the day the physician was called to see him the racking fever finished its awful work, and on

FEBRUARY 12th, 1884,

Charles A. Massey ended his earthly career. Everything that human skill could do to save life was done—skilful medical attendance, careful nursing and every appliance that could be brought to bear, but death was inevitable. The vacancy, the shock to the community, the loss to business circles, the widespread bereavement, resulting from this early demise, are two well imagined by our readers for us to dwell upon it at this time. It would seem that Mr. Massey's work was only thoroughly begun, but who would call his an unfinished life work? He lived to see the industry with which he has been so long associated reach the enviable position of *first in its line* in the Dominion—a work in which he has been the leading spirit. He accomplished more in his short life than most men who pass the three-score.

Charles Albert Massey was born near the Town of Cobourg, in Haldimand Township, County of Northumberland,

SEPTEMBER 20TH, 1848

He was the eldest child of Mr. H. A. Massey, the President of our Company, who was an extensive farmer at the time. About three years later his parents removed to Newcastle, Ont., where Mr. H. A. Massey purchased an interest in the business established by his father, Daniel Massey, Esq., and began the manufacture of agricultural implements, afterwards becoming sole proprietor.

Here young Charles received a good school education and all the advantages that devoted parents and good influences could afford. All who were brought into contact with him could see elements of promise. He was a man of business from the beginning, maturity was so early that he bounded from childhood to manhood. He was not long in his "teens" when his Father placed him in the Factory, where by actual experience with the other workmen he might become

ACQUAINTED WITH A TRADE.

The advantage of this course no one can estimate. In 1864 Charles entered Victoria University, Cobourg, where he was a student for two years. Here as elsewhere he made life-long friends, and none more deeply mourn his loss than acquaintances formed at College.

In the fall of 1866 he pursued the course and graduated at the British American Commercial College, Toronto, showing fine business habits and rapid work. Following this he took the course at the Toronto Military School, which

COMPLETED HIS STUDENT LIFE.

In the summer of 1867 while his Father was absent in Europe grave responsibilities were placed upon the shoulders of young Charles, the whole business being placed mainly in his charge, while he was not yet 19 years of age.

THESE GRAVE RESPONSIBILITIES

were bravely borne, and from this time forward the subject of this article was a leading active spirit in the management of the business. In 1870 the health of Mr. H. A. Massey becoming impaired and his removing to Cleveland, Ohio, the business was formed into a Joint Stock Company, Charles being made

VICE-PRESIDENT AND MANAGER,

a position he filled ably and acceptably to the day of his death. The rapid development of the business at Newcastle, with the introduction of every appliance and the best machines, and the unparalleled extension of the Works since their removal to Toronto in 1879 attest the

ENERGY AND SKILL

of our departed friend.

While Mr. Massey, Sr., as President made frequent visits (while resident in Cleveland) to the Factory giving the benefit of his counsel and experience, still how many fathers could leave as extensive a business in the care of a son only

22 YEARS OF AGE.

But we would not speak only of the business side of our brother. The record would be far from complete without reference to him as a friend, a genuine-hearted employer, an enterprising citizen, a noble type of manhood. Well as his business merits were known by business associates he will be remembered best and longest

AS A FRIEND.

His evenness of disposition, unselfish manner and manly integrity won the admiration and affection of all who knew him. Stout-hearted business men and sturdy-handed workmen alike wept at his obsequies. It was a scene seldom witnessed.

Our deceased friend dwelt in the affection and confidence of his employees. They recognized in him one to whom they could go in trouble and find relief, one who would kindly advise, a brother who was always ready to listen to their troubles and do what he could to help them out of their difficulties. Whatever our young employer did in the way of charity he felt his first duty was to those who laboured in his Factory. For them he had an interest and a sympathy like that of a father. It was always a sore trial to him when circumstances demanded a reduc-

tion in wages, and when the time came for advance he was not slow to make it. Such a thing as a general strike among the workmen in the Massey establishment was never known.

An evidence of the regard Mr. Massey held for those who labored for him is the enterprising interest he held in the erection of a

LIBRARY, READING-ROOM AND PUBLIC HALL, exclusively for their use, a building now nearly completed. In quiet moments during his illness he gathered thoughts which he hoped to put in the form of an address to the workmen when assembled in their new quarters. That speech was never made, but the noble spirit actuating it ever remains. Strange that a speech should come to him for he couldn't make one—the thought of it would make him nervous—but there is sometimes a mighty eloquence in the sick room.

While Mr. Massey was deeply interested in and kept himself clearly informed on all public enterprises he refrained from participating in public affairs. But he had no time nor strength for it, his cares and responsibilities were already too heavy. What he might have done had he been spared to reach the fifties and sixties no one can tell. We are certain that a young life so unselfish and so full of work would have blossomed into an old age replete with labors for the public good.

For a short time Mr. Massey was a Director of one of the Banks of the city, and at one time was offered a candidacy for election to the Dominion Parliament from West Toronto, but declined.

Much as we have said of the subject of this sketch, those who were best acquainted with him will say he was better than we knew. He had no self-esteem, and never asserted his superiority in any way; it was a common tendency with him to depreciate himself in the presence of others. Notwithstanding his active association with affairs in general he never thrust himself forward—he had no occasion to do so, he was led on by his

INHERENT WORTH.

What more! What profound feelings his loss has awakened—heart-aches not only in the family, but in the work-shop, in the counting-room and in the study. We think of the poor old man with his basket, the hardy salesman, and the college mate each with trembling and sadness lingering at his bier. We shall not soon forget the busy travellers and associates whose lips quivered and voices choked with emotion as they realized that "Charley" was gone. Says the proprietor of a prominent business firm in Montreal, "We have lost our best friend in Ontario."

One wonders why such a heavy stroke should fall. A life so full of hope, so replete with business energy and with prospects so fine, suddenly cut short. A citizen of Toronto, in speaking of the deceased remarked, that there was not a man in the city for whom there seemed so much promise. But his time came to go, we could not keep him, we must consider his work done. We would mingle our tears with the workmen who, as a "body guard of affection," escorted all that was mortal of our departed friend to its last resting place, echoing the sentiment expressed in choice floral emblem from these manly sons of toil,

"EMPLOYER, FRIEND, WE MOURN FOR THEE!"

The subject is endearing, but we must not linger. The spirit of our friend seems to be actuating us still, but he is not here. The final word comes hard, but we must give a fond "Farewell," for he has

"PASSED ON!"

THE sorrow and sympathy awakened by the death of Mr. Massey is wide-spread and deep, it has come alike from stranger and acquaintance. Letters and telegrams by the score have poured in from every quarter, bearing messages of most tender condolence.

It would be impracticable to attempt to reply in detail to all these communications, and the bereaved families would take this opportunity of expressing their deepest appreciation and hearty thanks to all who have in any way remembered them in their affliction.

ADDRESS

Of the Employees of the Massey Manufacturing Company to the Widow and Children of the deceased Employer on the occasion of their sad bereavement.

To the Widow and Children of the late Charles A. Massey, Vice-President and Manager of the Massey Manufacturing Company, who died on Tuesday, Feb. 12th, 1884.

Dear Madam and dear Children:

The employees of the Massey Manufacturing Co. desire to convey to you, through the medium of this Memorial, an expression of their profound sorrow at the removal by death of your husband and father, and their deep sympathy with you in your hour of bitterness and trial.

When we recall his worth and goodness, and feel, as we do more and more each day, how much even we shall miss him, we realize to some extent our utter inability to use any form of words which can bring comfort to the hearts of those to whom he bore the sacred relation of husband and father.

But we trust that when time and Christian fortitude shall have in some degree alleviated your pain, shall have bound up the broken tendrils now torn and bleeding from the pangs of separation; when you shall have learned to think of him with resignation as one who has attained to a higher state of being; to an immortality of bliss from which even you would scarcely call him; then the assurances of our love and respect for him, which we herewith endeavor to convey, may have some influence in mitigating your grief. Among so large a number of men there were naturally degrees in our intimacy with our employer. Some of us remember the day he was born, some were his playmates and school-fellows, some have known him all his life, and some were comparatively strangers. But among us all there is only one feeling, that of universal sorrow at his untimely removal from the work he took such pride in, from the position he filled so well. Of his qualities of heart and mind we cannot speak too highly. Tender and true, though not given to outward demonstration his sympathy was always sure and always eminently practical. Not content with mere words, his hand was always open to afford timely succor to the distressed, and many of us have cause to remember his generosity in the day of our need. Calm and self-possessed in the face of the many trials and perplexities inseparable from so large a business his brow was always unruffled, and his eye serene. No loud word, no angry exclamation was ever heard from him. And yet his quiet presence was always felt, his guiding hand always apparent. His was no narrow soul which sits on some low eminence and sees impossibilities on every hand. His place was on the mountain top amid those noble spirits who are ever in the van of progress—whose armor is always bright—the men who lead the world. Had his physical strength been commensurate with that of his mind, to what position might he not have aspired in the future? With a firm and comprehensive grasp of affairs unattainable by ordinary men—clear in judgment and prompt in action, he was eminently fitted to lead in any enterprise he might engage in. And when we add that he was pure and spotless in his life, honest and fair in all his dealings, we feel that we have described one who was entitled to bear without reproach the grand old name of "gentleman," in the full and true significance of the word.

As he lived so he died. When he realized that his work was done; when he "saw the hand we could not see which beckoned him away," he submitted without a murmur. The calm steadfastness which never forsook him did not forsake him now, and the gentle nature which was at all times moved by the sufferings of others, refused to permit another to suffer for him, even while there was yet a little hope of saving his own life.

As one by one we passed and said farewell to the peaceful and beautiful face upturned in its more than earthly serenity, our thoughts were carried far beyond this world. We saw him crowned and clothed in white raiment, amid the glorious company of the Redeemed, who passing through sufferings great, have washed their robes and made them white in the blood of the Lamb.

To you, his widow and children, even these remembrances will for a time be vain. You will dwell only on the thought that he is gone, that you shall see him no more. For many days you will start at the opening of a door, at the sound of a footfall on the stair, will stretch out arms amid the darkness; and your wounds will bleed anew under the cruel hard of disappointment, as you realize again and again that earthly doors shall open for him no more, that his step is silent forever, and that your arms clasp only the empty air. Poor mother! poor children! our hearts are sore for you. Would that we might comfort you. But we know that there is only one source of comfort in such a trial, the ever-present love and faithfulness of Him who has promised to be a husband to the widow and a father to the fatherless. To that Love and Faithfulness we commend you.—

"May all love—

His love, unseen but felt, o'ershadow you;
The love of all your people comfort you,
Till God's love set you at his side again."

Signed on behalf of the Employees,

JNO. B. HARRIS,
W. F. JOHNSTON,
W. N. ALLIN.

TORONTO, Feb., 1884.

The above address handsomely executed and framed was presented to Mrs. Massey on behalf of the Employees (numbering over 400) of the Massey Manufacturing Company, Friday evening, March 14th.

RESOLUTIONS OF RESPECT

TO

THE LATE MR. C. A. MASSEY.

The following resolution was passed at a meeting of Manufacturers, held at London, Ont., Feb. 15th:

Moved by Mr. J. K. Osborne, of A. Harris, Son & Co. (Limited), Brantford, seconded by Mr. J. H. Tilden, of Gurney Manufacturing Co., Dundas:

"That the Binder Manufacturers of Canada, desire to express their profound regret for the death of Mr. C. A. Massey, and wish to extend their sympathy to Mrs. Massey and family. Among his brother manufacturers Mr. Massey was greatly admired and respected, not only for his personal qualities, but also for his energetic business abilities, and for the stimulus he has always given to the advancement of mechanical enterprise, and his early demise has filled our minds with feelings of sorrow and regret that so promising a career is thus cut short."

(Signed) A. COCHRANE,

Chairman.

RESOLUTION passed by the stockholders of The Massey Manufacturing Company at their annual meeting held at the offices of the Company, February 27th, 1884:—

Moved by Geo. Metcalfe, seconded by J. H. Stanton, and

Resolved, That the shareholders of the Massey Manufacturing Company desire to express their most profound sorrow and regret for the severe loss sustained in the sudden removal by death of their late honored and respected Vice-President and Manager, Mr. C. A. Massey, and also to convey to the bereaved families our most sincere and heart-felt assurances of sympathy in this their most trying hour.

GEO. METCALFE,
Sec. and Treas.

THE
TORONTO LIGHT BINDER
 Light and Simple,
 Strong and Efficient.

These Machines are made of two sizes, to cut 5 and 6 feet and fitted complete with Sheaf Carrier Attachment; will pass through 10 and 12 feet gateways.

By the introduction of this Machine, the worry, care and anxiety, delays, breakages, loss and labor of the harvest field vanish forever.

Before placing your orders examine the Toronto thoroughly.

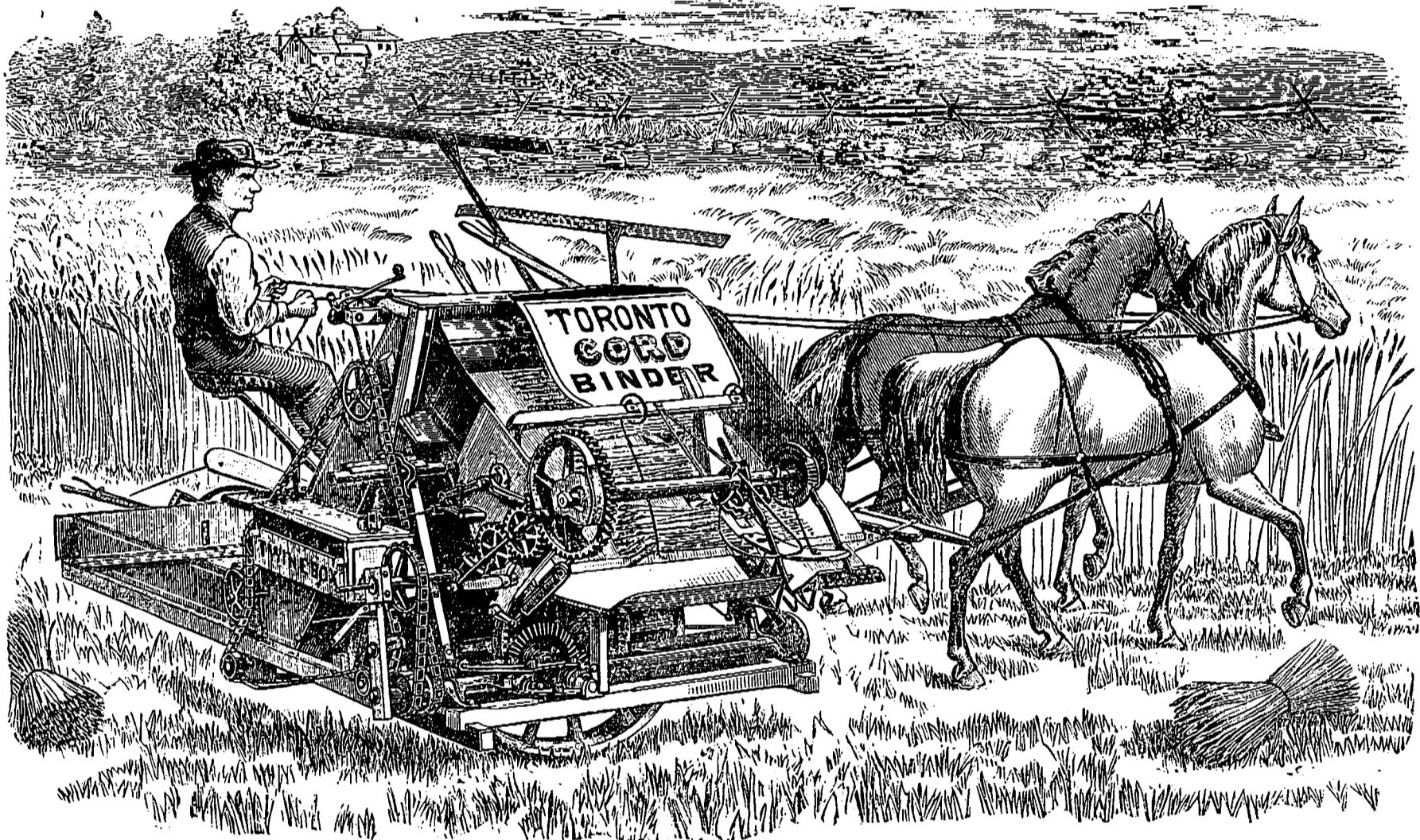
A Splendid Machine.

Recently a number of gentlemen were invited by Mr. J. Bernie, to witness the working of a Toronto Elevator Cord Binder, made by the Massey Manufacturing Company, which was cutting wheat in a large field belonging to Mr. John Stagg at the north end of the farm. The machine is known as the Toronto Elevated Cord Binder, and was driven by Mr. William Rogers. The machine has been in his possession for a long time and has done splendid work, giving the best of satisfaction.

He has cut this season some 96 acres of grain and in every case the machine gives perfect satisfaction, not only to Mr. Rogers, but to his patrons. When the word go was given the three horses attached to the Binder walked off at a lively pace, and the sheaves started to drop out at the side at the rate of twenty-five a minute. The grain was badly lodged in some places, but the levers by which the driver controls the movements of the machine enabled him to raise and lower the knife when desired and thus overcome this difficulty with ease. The great quantity of rain during the past season has caused the undergrowth of grass to be very luxuriant, and to give a great deal of trouble to some reapers by choking, etc. None of this was observable in the Toronto. This very desirable effect is caused by a new and simple trip that throws the binding mechanism into gear just at the right time. By the use of this device the size of the sheaf is graduated according to its weight, a much more desirable way than by bulk. The field in which the Binder was working was not very level, but the roughness did not make any appreciable difference in the work of the ma-

DID you ever watch a dog gape? For thoroughness and entire absence of affectation and mock shame-facedness, there is nothing like it. When a dog gapes, he doesn't screw his face into all sorts of unnatural shapes in an endeavor to keep his mouth shut with his jaws wide open. Neither does he put his paw up to his face in an apologetic way, while gaping in ambush as it were. No, sir; when he gapes he is perfectly willing that the whole world shall come to the show. He braces himself firmly on his fore feet, stretches out his neck, depresses his head, and his jaws open with graceful moderation. At first it is but an exaggerated grin, but when the gape is apparently accomplished, the turns out his elbows, opens his jaws another forty-five degrees, swallows an imaginary bone by a sudden and convulsive movement, curls up his tongue like the petal of a tiger-lily, and shuts his jaws together with a snap. Then he assumes a grave and contented visage, as is eminently becoming to one who has performed a duty successfully and conscientiously.—*Boston Transcript.*

FREEZING PUMPS.—When a pump tube freezes solid, do not pour in hot water in the common way with the hope of thawing. The hot water will stay at the top, and that will be the end of it. But procure a lead tube, or any other kind of pipe, place the lower end directly on the ice in the pump, and with a funnel pour hot water in at the top. The weight of the water in the pipe will drive it hot against the ice, the pipe settling as fast as the ice melts, and the whole will be cleansed out in an incredibly short time.



The Toronto Cord Binder is fitted with an Angular Steel Cutter Bar.

A Good Machine.

Mr. Editor and Brother Farmers:

GENTLEMEN.—I have been patiently waiting for some years to see if the long heads of the Dominion would bring the self-binder reaping machines to perfection so that I could procure the best machine that could be made. As nothing new appeared in this locality during this untoward harvest I was determined to see a Self-Binder work in tangled grain, and at the eleventh hour of my harvest I applied to Mr. O. C. Wilson, of Seaforth, agent for the Toronto Cord Binder to procure for me one of those machines as quickly as possible, and I must say he did not neglect his instructions, but filled the order in the shortest possible notice. After thoroughly testing the machine, I must say that I never had anything in the shape of machinery that I liked so well or that gave me such good satisfaction, and I do not think that a machine was ever better tested on the continent of America. To say that the grain I cut with it was badly lodged would be but a faint description of its condition and it not only cut and gathered it clean but made excellent sheaves of it. I have, therefore, very great pleasure in recommending the Toronto Cord Binder to any who may be inclined to purchase. In fact I can not find language in which to express the unbounded satisfaction the machine gave me in every particular. It did its work powerfully and expeditiously and without any breakage or mishaps.—*GEO. SPROAT, Tuckersmith. — Huron Expositor, Sept. 21st, 1883.*

AN interesting article on the manufacture of malleable iron will be found on page 5.

chine, which cut a swath fully six feet in width, shaving the stubble as close as desired. The Binder is easily adjusted to any length of grain, having a range or sliding rod fifteen inches in length, and the sheaves are very neatly and evenly bound. The adjuster is directly under the control of the driver. From fifteen to twenty acres a day is the average capacity of the Binder. Other advantages possessed by the Toronto Self-Binder are a relief rake at the heel of the knife which feeds all the grain that gathers there into the elevator, and keeps that place free from everything. The elevator belts are good and wide with the wooden slats securely riveted on, and having the belt bearings kept taut at all times and in all seasons by means of coiled springs. This, we think, is a very desirable feature. The knife has a six inch stroke and is driven from the heel entirely. In fact all the improvements that a long experience and first-class talent can suggest are embodied in the Massey machine, which is built of the best material, and well deserves the attention of the farmers. Besides being the strongest and most desirable, it is the lightest elevator Binder built.—*Brockville Weekly Times, August 31, 1883.*

Now, don't make the mistake so many fall into, by waiting until the last moment before ordering their machines. You will gain nothing by waiting, and run the risk of being unable to get what you want. Order at once and save annoyance and confusion both to manufacturer and purchaser, and become well acquainted with your machine before you require to use it.

1884 is the fourth year for the Toronto Cord Binder.

The following gentlemen in the vicinity of Uxbridge are purchasers of the Toronto Cord Binder and used them during the harvest of 1883.

UXBRIDGE P.O., Reach Tp., Jan. 14th, 1884.

The Massey Mfg. Co., Toronto:

GENTLEMEN,—We cannot allow this winter to pass without notifying you of our success with the Toronto Cord Binder we purchased through your agent, John Galloway, of Uxbridge (who, by the way, we must say, is in every way reliable and trustworthy). We have cut and bound over one hundred acres of grain, some very short and some very long, and lodged and tangled very badly, and we must say that it worked to our entire satisfaction, cutting a level swath, doing a perfect job, and causing no more trouble than an ordinary Reaper; had no stops and no breaks. We also cut a field of twelve acres on a side hill which we believe has at least 400 stumps, and besides doing a first-class job, and drew as easily with three horses as any ordinary Harvester with two. Consequently we feel it our duty to give it our unqualified recommendation, believing it to be the best in the market, to which the neighbors will testify.

We are, yours, etc.,

N. DURE, SR., N. DURE, JR., J. DURE, F. DURE.

The following gentlemen, purchasers of the Toronto Cord Binder in 1883, also add their testimony in favor of this Machine:

F. ELLIOT, J. BELL, JAS. GREGG,
 J. ELLIOT, JR., T. ALLAN, H. C. BRENT,
 W. & J. PAGE, A. KINSEY, D. ROSS,
 JOS. BARTON.

SHARP'S RAKE!

4000 Sold annually in Canada.

4200 TO BE MADE FOR 1884.

22,800 Now in Use.

We claim that this Rake has no superior, and we sell it upon our old warranty of "No equal or no sale."

The cause of its immense popularity is said in three brief sentences, viz.:

The style of construction.

The manner of construction.

The material used in its construction.

We have the longest experience in the manufacture of Hay Rakes of any manufacturer in the Dominion. Our facilities are exceptional, our Rake department being fitted with special tools for the making of this Rake.

Every part is made in our shops and under our own supervision. The material entering into its construction is of the finest quality money can purchase.

The spokes are made from well seasoned hickory. It has 24 steel teeth, all of which are oil tempered and tested 22 to 24 inches, a much greater strain than is ever brought to bear on them in the field.

It is easily held down to form any sized winnow desired by the operator. It is both a self and hand dump, and is easily operated by a child capable of driving a horse.

Comments on the Rake almost appears superfluous when one looks at the great number sold each year. There is scarcely a concession in Canada where the Sharp's Rake is not well and favorably known, and now that the season for purchasing is at hand, no time should be lost in examining thoroughly into the merits of each kind.

Samples may be seen at any of our agencies, or better, to make direct inquiries from your neighbors who have used them for many years.

IN MEMORIAM.

BY JOHN B. HARRIS.

[Lines suggested at the burial of Mr. C. A. MASSEY.]

Beside the spot which holds thy clay
We stood amid the wintry cold,
And saw the tomb's dark doors unfold
To hide thee from our sight away.

In long, unbroken, silent lines,
We watched the mournful cortege come,
Which bore thee to thy lonely home
Beneath the waving, murmuring pines.

While each dark bough and tender stem,
Clad in its glistening robe of snow,
With cadence soft, and accent low,
Sang plaintively thy requiem.

And all their burden seemed to be
The echo of our hearts alone;
In sad and muffled monotone—
"Employer, Friend, We Mourn for Thee!"

We left thee to thy long, long rest,
In that lone mansion of the dead,
With sweet flowers strewn about thy head
And garlands blooming on thy breast.

And long within our hearts shall bloom—
Sad memory ever fondly tend,
The sweet forget-me-nots, O Friend!
Which cluster round thy honored tomb.

We miss thee 'mid the ceaseless roar
And din of quick revolving wheels,
And o'er our hearts dark sadness steals,
Remem'ring thou shalt come no more.

Soft be thy rest: sleep tranquilly,
Though still our hearts in voiceless pain,
Keep beating on the sad refrain—
"Employer, Friend, We Mourn for Thee!"

Accompanying this number we furnish an engraving of our late Vice-President and Manager, Mr. C. A. Massey. No recent photograph of the deceased having been taken the work was consequently performed under great difficulty, and we trust that due allowance will be made for any seeming defect.

WE are pleased to furnish our readers with new woodcuts of the Massey Mower and the Massey Harvester, also one of our Factory. These cuts are unsurpassed in this country. The two former are from the firm of Messrs. Rolph, Smith & Co., and the latter from Messrs Grant, Barfoot & Co., both of this city.

OUR RAKE PYRAMID

1874	350	1874
1875	1,000	1875
1876	1,200	1876
1877	1,500	1877
1878	2,000	1878
1879	2,150	1879
1880	3,000	1880
1881	3,200	1881
1882	4,000	1882
1883	4,200	1883
1884	4,200	1884

26,800

26,800 Sharp's Horse Rakes made by the Massey Manufacturing Co. since 1874. See the increase each year and consider the cause.

NOTE.—For several years prior to the year 1876 we also manufactured another style of Horse Rake which we subsequently discarded, finding Sharp's Rake so much superior.



THE SHARP'S RAKE.

Which is the most popular Mower in Canada?

The echo comes from 10,800 prominent farmers—

THE "TORONTO!"

WHY?

Because it never fails to cut the stoutest and worst lodged grass that grows, and that with perfect ease on man and beast.

- Because it is the most simple Mower yet produced.
- Because it has only one revolving cog wheel on the entire machine.
- Because its operation is silent.
- Because it has no rapid machinery to wear out the working parts.
- Because there are always eleven cogs in gear at one time.
- Because you can elevate the cutter bar to pass a stump, fence or tree without stopping the knives or team.
- Because by a conveniently arranged foot lever the knives can be instantly raised without using the hand lever.
- Because by use of the tilt lever the guards and knives can be lowered to cut the worst tangled clover or bottom meadow, or elevated to trim a hedge.
- Because all the materials used in this machine are of the very finest quality.
- Because each and every part is carefully made and fully guaranteed.
- Your neighbor has one; enquire of him how he likes it, how long he has had it, and how much it appears to be worn, its liability to get out of order, etc., etc.
- When you are satisfied of its superiority, don't delay, but place your order with us or our agents at once, as we shall only build three thousand (3,000) of these Mowers for next harvest. We were a thousand short last year.

A Sample of Sorghum.

The thumpty thump of an overgrown fist,
Was heard at the editor's door,
And the overworked, petulant journalist hissed,
"I will wager my head that's a bore!"
And a farmer approached, in a gingerly style,
The man who instructed the masses,
And placed in his hand, with a satisfied smile,
A vial of sorghum molasses.

"I reckon you newspaper fellers," he said,
"I've never been foundered on sich,
And you think yourselves lucky to even get bread,
And deny yourselves things that is rich.
Well, it hurt me to think of you suffering here
For a change in your regular diet,
And I thought, if you'd send me your paper a year,
I'd give ye that sorghum to try it.

"And of course," he continued, "you'll give me a puff
In that paper that comes out to-day—
A column, I reckon, will be 'bout enough,
And I reckon you know what to say.
I made them molasses myself, you must know,
And my name is Ezekiel Squeers."
Here he leaned from his window and twice shouted "Whoa!"
To a thin yoke of heart-broken steers.

Then the editor, setting the sorghum aside,
Arose from his chair with a sigh,
And he said, "It is true, and it can't be denied,
That we journalists cannot live high;
And your great generosity, equalled by nought
Save your modesty, melts me to tears."
(Here the man took a bite from some cheese he had brought,
And he shouted again to his steers.)

And the writer continued, "The *Times* for a year
And a puff of a column or two
Would be but a feeble exchange, sir, I fear,
For this sorghum, deliciously blue;
So, accept the office, my friend, if you please;
'Tis the work of a number of years"—
(Here the husbandman nibbled again at his cheese
And shouted once more to his steers.)

"The office is yours," said the scribe, "and the press,
They are all I can offer you now;
Your favor looms over them both, I confess,
Like a mountain range over a cow;
And I give up my chair, you shall take it instead,
And instruct and enlighten the masses,
While I vary my regular diet of bread
With this vial of sorghum molasses!"

Two able Confidence Operators.

A rustic-looking man sat in the smoking car of the Omaha train last Tuesday night, when another rustic-looking person came in.

"Is this seat taken?" asked the new comer.
"No, sir; sit right down, sit right down," said the other, making room next him.

Soon the two old farmers were in conversation.
"Where are you from?"
"I live near Buda. Where do you hail from?"
"I'm a pretty near neighbour of yours: I live near Kewanee."

"Farming?"
"Yes. Are you?"
"Yes; farming and stock."
"Been to town with stock?"
"Yes; brought up a hundred head of steers.
"I brought hogs."

And so the conversation ran on until just before the train reached Mendota, and the two old farmers were right well acquainted. Presently another man who looked like a merchant came in, and was surprised to see one of the old farmers.

"Well, well, well," said the new man, I'm glad to see you; may be you can help me out of a little embarrassing trouble. I want to pay a man a little bill on the train before I get off at Mendota, and I haven't money enough. If you will let me have \$100 on my cheque I'll be very much obliged."

"Certainly, I'm glad to do it," and out came the farmers' pocket book. But alas! he had only \$40 in small bills and a beautiful, crisp \$500 bill.

"You're perfectly welcome to the \$40, if that'll help you out, or to the \$500 if you can get it broke."

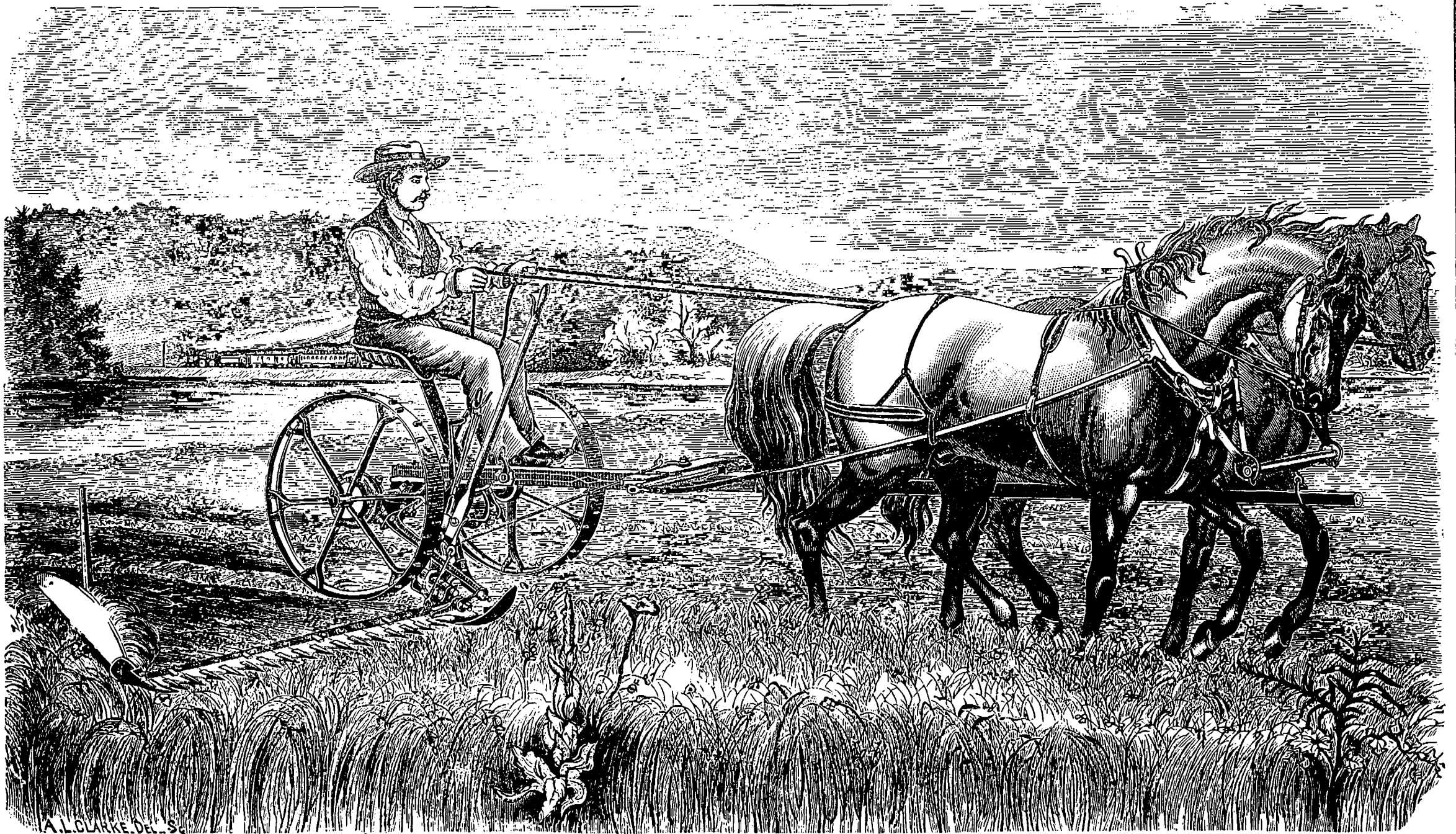
"Perhaps your friend can help us out; the \$40 will hardly answer," said the merchant, and then he apologized for making so much trouble.

"Well," softly said the other farmer, who until now had been silently looking on, "I can't change a \$500 bill but I can give you another one for it, and I think it came out of the same batch, and was printed on the same press."

And turning to the other old farmer he added:—"If your partner hadn't come just as he did mine would have been here in a minute. I've been getting ready to work you on that game ever since we left Chicago."

At Mendota four very much disgusted confidence men stepped off the train, and stood around in the cold waiting for a train returning to Chicago.

The Toronto Binder is the only self-binding harvester fitted with the new sheaf carrier.



THE TORONTO MOWER.

Eleven thousand Reapers, Mowers, Binders and Rakes will be made by the Massey Manufacturing Company for the harvest of 1884.

The Massey Manufacturing Company now have a staff of 400 first-class mechanics and running on full time.

The popularity of the Toronto Mower is national. Over ten thousand made and sold in Canada since 1877. The favorite of the Farmer.

**THE MASSEY
LOW DOWN BINDER**

*Has met the combined opposition of
all the agents of our competitors
and has come out victorious.*

The success of the Massey Low Down is shown by expressions from those who have used them rather than comments from interested parties.

The operation of the Massey Low Down Binder during the harvest of 1883 was watched with intense interest alike by farmers, dealers and manufacturers. So novel a device certainly wanted fair and honorable treatment at the hands of the representatives of competing machines, especially as its manufacturers had made no loud

proclamation of its merits. Notwithstanding this it would be hard to imagine more ungenerous or more contemptible opposition than the Low Down Binder has had to meet in all parts of the country. The circulation of false reports of its failure, unwearied efforts to make purchasers lose confidence in the machine before they had seen it tested, and in numberless cases offering their own machines at a great discount for the purpose of displacing the Low Down Binder, all these and worse schemes were shamelessly used by the opposition. In spite of all this the Massey Low Down Binder has made a good record, which warrants us in building a large number for the coming harvest.

Its lightness, compactness, ease of handling, both for driver and team, the certainty of operation of its automatic binding apparatus, the perfection of its work in all kinds of grain, and the fact that it will pass through an ordinary farm gate, all go to make it a most attractive machine for the farmer. Several important changes have been made in the construction of the Low Down Binder for the coming harvest which will give it abundant strength and make it the most desirable machine in the market.

SMITH FALLS, October 22nd, 1883.

Massey Manufacturing Co.:

GENTLEMEN,—We, the undersigned, have each purchased one of your Low Down Binders from your agent, W. H. Willis, of Smith Falls, and after doing a big harvest are well pleased with the little machine. It does its work well, works easily with two horses, can be driven through any of our farm gates, and the driver has perfect control of the machine from his seat in all kinds of grain. We wish you good success with your Low Down Binder.

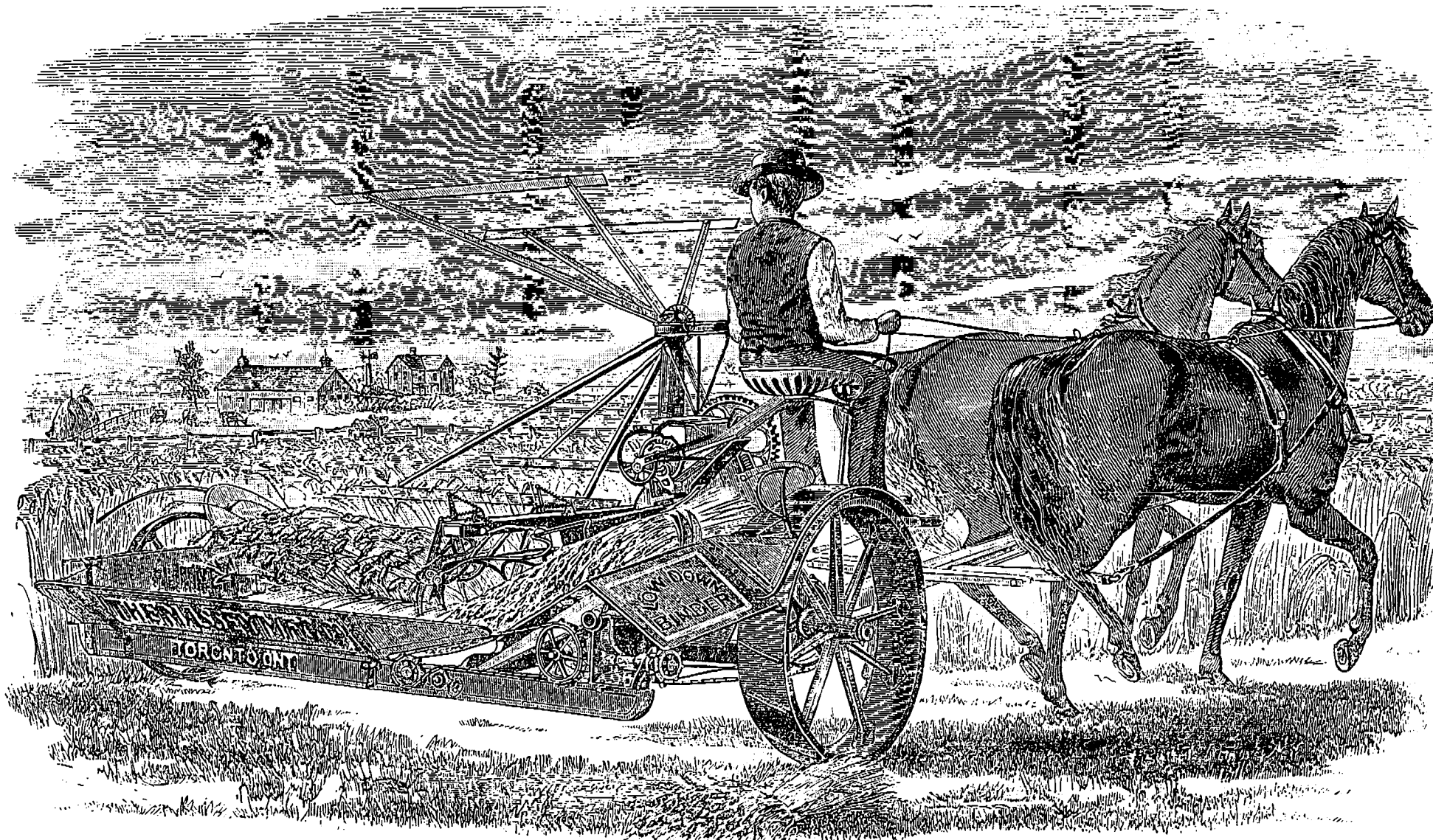
Yours truly,
GEORGE CONDIE, Montague P.O.
ROBERT CONDIE, "
PETER CLARK, "
JAMES KING, "
JAMES DILLBOROUGH, Lomborg P.O.
JAMES PATTERSON, "

BELMONT, Nov. 23th, 1883.

Massey Manufacturing Co., Toronto:

SIRS,—The Low Down Binder that I bought from your agent, J. H. Boake, works well, and if it works as well as the large ones, which I believe it does, it has advantages over the large ones. 1st. It works well with two horses; 2nd, it will go through any common gate; 3rd, and when done cutting, I can run it in the drive barn, without taking it apart, and it is ready to hitch on to at any time. A great many people come to see it work, and all like it.

Yours, etc., ANDREW VENNING.



LONDON, September 8th, 1883.

To the Massey Mfg. Co., Toronto:

GENTLEMEN,—This is to certify that the Low Down Binder purchased from your agent at London, has given me great satisfaction, is easily handled by one span of horses, convenient to handle, and does its work well.

WALTER BROWN.

CHINGUACOUSY, November 19th, 1883.

To the Massey Mfg. Co., Toronto:

GENTLEMEN,—I purchased from your agent, Jos. Lawson, last season one of your Low Down Binders. I cut and bound about 80 acres of grain; the Binder done the work well, and I had not the slightest trouble. I think it is the best Binder in the market. My pair of horses had not the least trouble drawing it; I can run it through any common gate, and as easily stored away as a common reaper.

WILLIAM MCCLURE.

BENMILLER P.O., Colborne Tp., Ont.

Massey Manufacturing Co., Toronto:

DEAR SIR,—The Low Down Binder I purchased from your agent, Mr. Downs, has given me complete satisfaction in every particular, and I do not think it draws any heavier than old Johnston single reaper that you made some years past. I do not want to say any flattering words, more than I am perfectly satisfied.

Yours truly, VALENTINE FISHER.

STAYNER, September 3rd, 1883.

The Massey Mfg. Co., Toronto:

GENTLEMEN,—We have seen one of your Low Down Binders in operation to-day in Nottawasaga Tp., on the farm of Mr. P. O'Connell, and we congratulate you on the enterprise you have shown in producing such a perfect machine. The work done by it cannot be surpassed by any machine; the cutting is clean, the binding and delivery of sheaf is complete, and can be handled by two horses; the leverage for tilting and adjusting the reel, and raising and lowering the machine is very simple; and the convenience of going through any ordinary gate. We consider it superior to any other Binder that we have seen to supply the wants of the farmers in this section of country.

JOHN MILLER, Creamore, P.O.
JAMES MILLER, "
NEAL MCARTHUR, "
ANGUS KERR, "
M. J. O'HARE, "
PATRICK MCSHERRY, Stayner, P. O.
PATRICK O'CONNELL, "
JOHN MCCOLEMAN, "
J. D. McMILLEN, "
CHAS. CHAPMAN, "
PETER CURRIE, "
And others.

FALLOW FIELD, August 11th, 1883.

Mr. Geo. Burroughs:

SIR,—This is to certify that we examined into the working of the Low Down Binder sold to Robert Wallace, and worked on his farm, and would say that we are much pleased with the result both in standing and lodged grain. It is simple and easy to handle, and of very light draft compared with other Binders, and we consider it well adapted to the wants of farmers of this country on account of requiring only two ordinary horses to work it, and also on account of its small size, and the convenience of being able to drive through an ordinary gate or gap, the same as an ordinary reaper. And it comes nearer to what we want than any Binder we have yet seen working.

BERNARD ROONEY.
FRANCIS MCKENNA.
ROLET ARMSTRONG,
MINK KENNY, JR.
T. D. DAVIDSON.
THOS. ROBERTSON, Belles Corners.
JOHN G. DAVIDSON.
THOS. GOOD.
J. A. K. WILSON, North Gower.
WM. CURREN.
R. WALLACE, SR.
R. WALLACE, JR.

READ WHAT THEY SAY ABOUT THE TORONTO CORD BINDER.

From Chinguacousy.

CHINGUACOUSY, Nov. 19th, 1883.

Massey Manufacturing Co., Toronto:

GENTLEMEN,—The Toronto Cord Binder I purchased from your agent, Joseph Lawson, of Edmonton, has given me the very best of satisfaction. I cut and bound last season some 225 acres, all kinds of grain, some very badly down, and I must confess I was delighted with the manner it handled the laid down grain, I think it is as close to perfection as possible. I consider the twine no expense as you get that much more on your field which you cannot get with a common reaper. A number of my neighbors who seen it work prefer it to any Binder they have seen, and say they will have a Toronto next season.

Yours truly, CHRISTOPHER ANDERSON.

From Carberry, Man.

CARBERRY, MAN., September 22nd, 1883.

T. J. MCBRIDE, ESQ.,
Manager Massey Mfg. Co., Winnipeg.

DEAR SIR,—I write you to state that I have used one of your Toronto Binders this season, having cut with it 220 acres of grain. The machine gave me the utmost satisfaction, not having during my whole harvest caused me any delay in any shape, as there was not anything went wrong, not even a nut lost. And I consider that your Binder is made of the very best material and workmanship, and I feel safe in recommending it to my brother farmers.

Yours respectfully, JNO. MOFFATT.

From St. Clements, Co. Waterloo.

ST. CLEMENTS, Co. Waterloo, Sept. 17th, 1883.

To the Massey Manufacturing Co.:

GENTLEMEN,—We, the farmers of St. Clement and vicinity, having seen one of your Toronto Elevator Cord Binders at work on the farm of Mr. Jacob Busch (Township of Wellesley, Concession 7, lot 3, St. Clements, P.O.), cutting stout and badly down oats, were surprised at the style of work done, cutting the down grain as well as could be done by any reaper, and doing the binding well, in fact doing its work to our entire satisfaction, and we believe it just the Binder for the heavy crops grown in this section of country. We also have examined it as to workmanship and material and pronounce it first class, and would advise farmers to carefully examine the Toronto before purchasing a Binder.

JACOB BUSCH, Purchaser.

- | | |
|--------------------|------------------|
| GEORGE WAECHTER. | WILLIAM VEITEL, |
| JONAS HERGOTT, | ADAM ESBAUGH, |
| P. B. GREYERBIEHL, | GEORGE K. MEYER, |
| JOSEPH KRAEMER, | ELIAS HERGOTT, |
| JOHN R. MEYER, | ADAM SCHEFFNER, |
| HENRY RANK, | JOS. DIABOLD, |
| FRANK HUCC, | JOS. STRASER. |

OUR AGENCIES

And Branch Houses in Manitoba and the North-Western Provinces are situated at the following points, where a supply of all machines made by us can be obtained. A large stock of Binding Twine and all duplicate parts of machines will be found constantly on hand.

MANITOBA:

- Balmoral.
- Brandon.
- Birtle.
- Beulah.
- Carberry.
- Deloraine.
- Glenora.
- Gladstone.
- Griswold.
- Langvale.
- Lorette.
- Manitou.
- Minnedosa.
- Nelson.
- Niverville.
- Portage la Prairie.
- Russell.
- Sunnyside.
- Stonewall.
- Souris-Plum Creek.
- St. Norbert.

MANITOBA:

- Ste. Agathe.
- Treherm.
- Virden.
- West Lynne.
- Winnipeg.

ASSINIBOIA, N.W.T.:

- Broadview.
- Grenfel.
- Indian Head.
- Moosomin.
- Qu Appelle.
- Regina.
- Troy.
- Whitewood.
- Wallscly.
- York City (York Farmers Colonization Co.'s Lands).

ALBERTA, N.W.T.:

- Calgary.
- Edmonton.

Our Agents will cheerfully give intending settlers any information they may require in regard to the localities and soil, where they are located, and before proceeding up country please call at our

Branch House, 27, 29 and 31 King Street, (near Market), Winnipeg.

and our manager, Mr. T. J. McBride, with his great experience in every portion of the North-West, will gladly render you any possible assistance, and impart information that will aid you in reaching your destination.

Quebec Branch:

JAS. H. SHARP, Shipping Agent,
103 and 108 COMMON ST. MONTREAL, QUE.

Eastern Branch:

TIPPET, BURDITT & CO.,
ST. JOHN, N. B.

READ WHAT THEY SAY ABOUT THE TORONTO CORD BINDER.

From Mariposa.

MARIPOSA, Woodville, P. O., Oct. 10th, 1883.

The Massey Manufacturing Co., Toronto:

GENTS,—The Binder I bought from your agent, N. B. Campbell, has proved very satisfactory to me. I have done some tall cutting, nine acres in six hours, and heavy grain, and my men say not a loose sheaf in the field. I have cut ten acres with a small team in a day, no breaks. The Binder is simple, much more so than any I have seen, and the weighing trip is far ahead of the bulk trip. I have bought a good many hundred dollars' worth of machines from Campbell, but the Binder is the best investment on the farm, the best labor-saving and money-saving.

CHRISTOPHER ALLWELL.

MARIPOSA, October, 1883.

I have cut two seasons now with one of your Toronto Binders without a break or any trouble. I am master of all kinds and conditions of grain, high or low, down or standing. It pays the average farmer to use a Binder.

(Sd) R. ADAMS, Reeve,
Woodville, P. O.

From Goldstone.

GOLDSTONE, P. O., Co. Wellington.

To whom it may concern;

As Mr. Jas. Gregory, of Drayton, agent for the Massey Manufacturing Co. asked me to let him try one of the Toronto Elevator Cord Binders on my farm last harvest, I allowed them to do so without any idea of purchasing one; but when the machine was put to work and did its work so well, and so satisfactorily to myself and also a great many of my neighbors, I could not think of letting it leave my farm. I therefore bought the machine, which has given the best of satisfaction in heavy and lodged spring wheat and heavy oats. I am satisfied it will do good work where any other machine will not work at all.

Yours truly,

THOMAS WHALE, SENR.
W. T. WHALE, JUNR.
Lot 10, Con. 10, Tp. Peel.

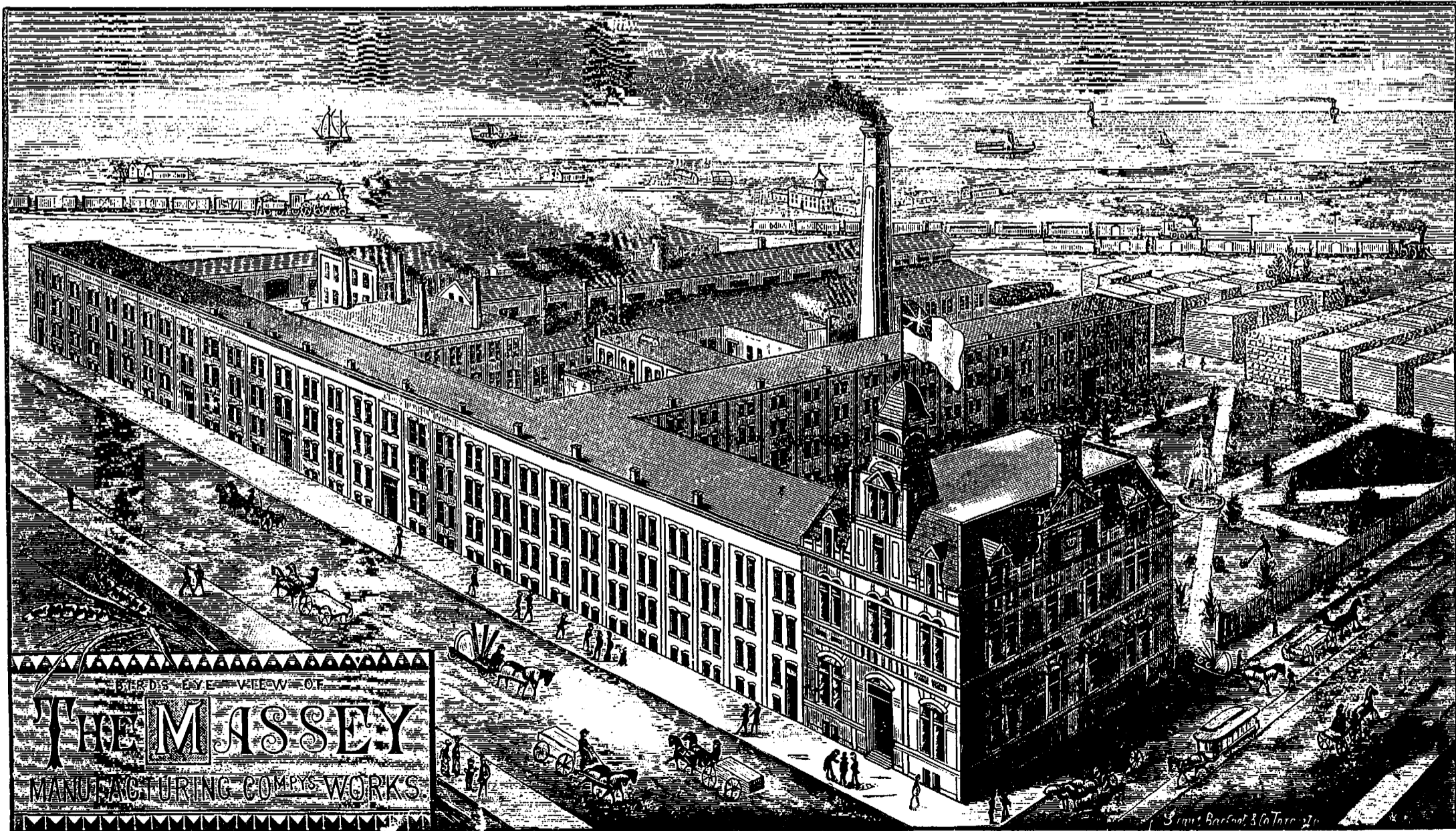
From Milford, Man.

MILFORD, MAN., July 26th, 1883.

Massey Manufacturing Co.:

The Self-Binder I bought from your agent, Mr. Bryan, in 1882, has given me entire satisfaction. I cut 115 acres and it never cost me one cent for repairs. I used three horses about ten hundred each and they could work it to perfection.

ALEX. NASMITH.



THE WORKS OF THE MASSEY MANUFACTURING COMPANY, TORONTO, ONT.