

◆ Massey's Illustrated ◆

(PUBLISHED MONTHLY.)

September Number

New Series, Vol. 5, No. 9.

Toronto, September, 1893.

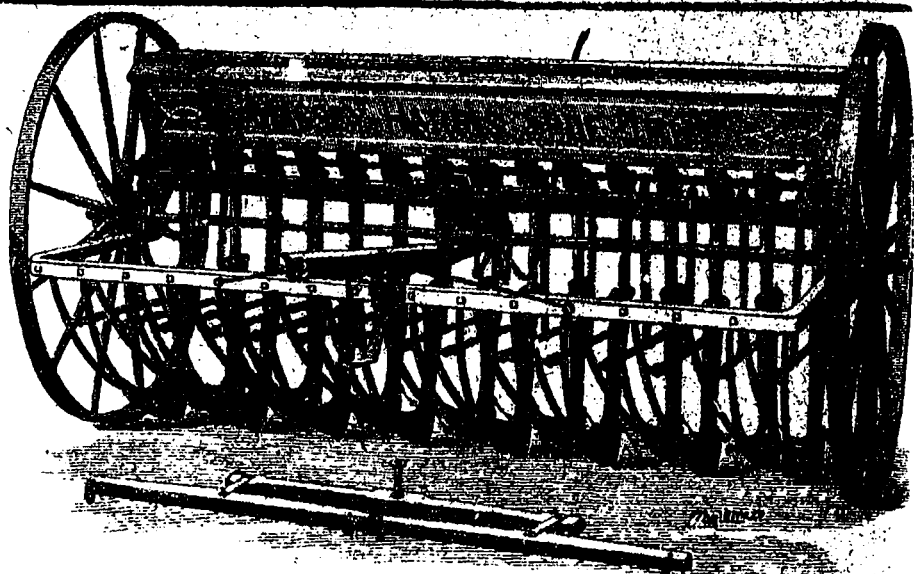


SUBSCRIPTION PRICE 50c PER ANNUM.
5c PER COPY

THE
New Massey-Harris Shoe Drill

is a model in appearance as well as in operation. It is simple, light, very easy to handle, easy on the team, and its work is of a character that challenges criticism. This machine can be made to do good work where no other drill will operate. On land where a long stubble has been lightly plowed under, or where there are heavy clumps of sod or grass, the Shoes will cut through or ride over it with the greatest facility. The shape of the Shoes and the Draw-Bars is such as to cause them to pass over any obstruction without the least difficulty. Again, in certain kinds of soil the hoe points of a Hoe Drill will gather the sticky clay and are unable to clean themselves, which results in clogging up and stopping the team. The knife edge of the shoe of a Massey-Harris Shoe Drill will, however, cut through such soil and cause the sides of the hard steel shoe plates to clean perfectly. Thus it is quite possible to sow on wet land with one of our Shoe Drills when a Hoe Drill could not be made to work. It is possible, also, with the new Massey-Harris Shoe Drill to sow seed at a more uniform depth than with any other machine yet invented. Not only may the seed be sown deeper than with any other drill, but it is also possible to sow nearer the surface, and, at the same time, to cover it perfectly—a great advantage when putting in certain kinds of seed. The seed grain being sown in the track or cut made by the shoe, is planted in very even, straight rows; hence the rows can be closer together than is otherwise admissible. The hoes on the Massey-Harris Shoe Drill are six inches apart. Where the soil is well cultivated, the earth falling back in the track of the shoes will automatically cover the seed, but as an additional provision a length of chain is attached to each runner, which covers the seed perfectly, no matter what the nature of the soil. Experience has taught, too, that the cut made by the shoe presses or packs the earth each side of the cut, so that when the seed is covered in, high winds will not uncover it, as is the case when sown by other methods,—a difficulty which has hitherto been hard to overcome on prairie lands.

There no longer exists any doubt but that in many sections this class of drill is the most profitable to use, and we therefore invite your careful consideration of the illustrations and brief description given herein



Solid Steel Frame.—A most important feature in the construction of a grain drill is its frame work, which is subject more than any other part of the machine to severe and sudden strain. We have, after carefully experimenting and thoroughly testing the relative merits of

many styles of frames, adopted for the Massey-Harris Shoe Drill a frame made from a single and continuous bar of high grade angle steel, which possesses the requisite strength and elasticity necessary to secure a proper foundation upon which to support the seed hopper, attach the draw-bars, shoes, lifting levers, etc. This frame is exactly the same as that used on the Massey-Harris Cultivators and Sectional Seeders. There are no joints in the frame, and there is no tendency whatever to twist. It will successfully resist the most sudden shock. No doubt this solid steel frame is the strongest, lightest and most attractive in appearance yet produced.

The Shoes or Runners.—Perhaps no greater improvement has been made than in the shoes or runners, and in the present general arrangement and perfect adaptation to the varying conditions of the soil. The machine being absolutely under the control of the operator, any desired depth of sowing may be obtained.

Controlling Lever.—This is most conveniently located, and by it a very light

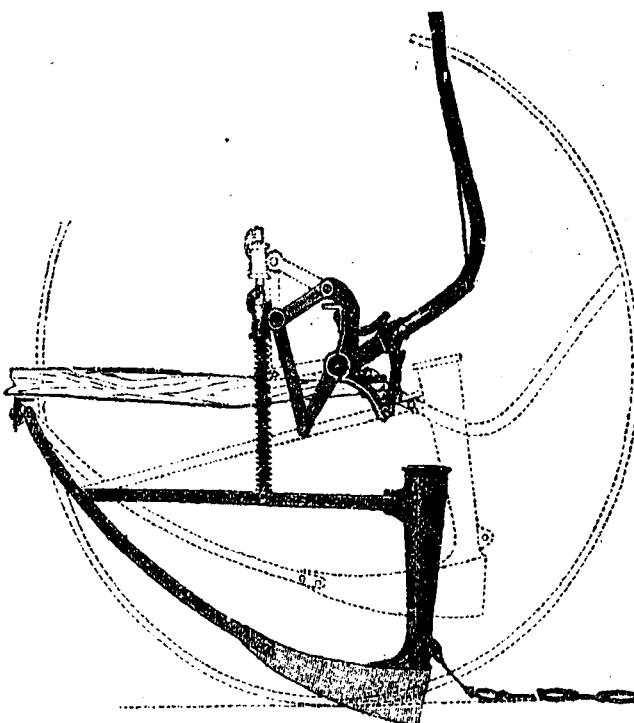
pressure or an exceedingly strong one may be applied. This same lever, when thrown in the opposite direction, will lift the runners up from the ground, ready for transportation.

The Pressure.—This can, as stated above, be made as light or heavy as desired; does not prevent the shoes or runners from following the unevenness of the ground surface and readily passing over obstructions which may be encountered. Each runner acts independently. By our method there is greater flexibility than in any other machine yet invented.

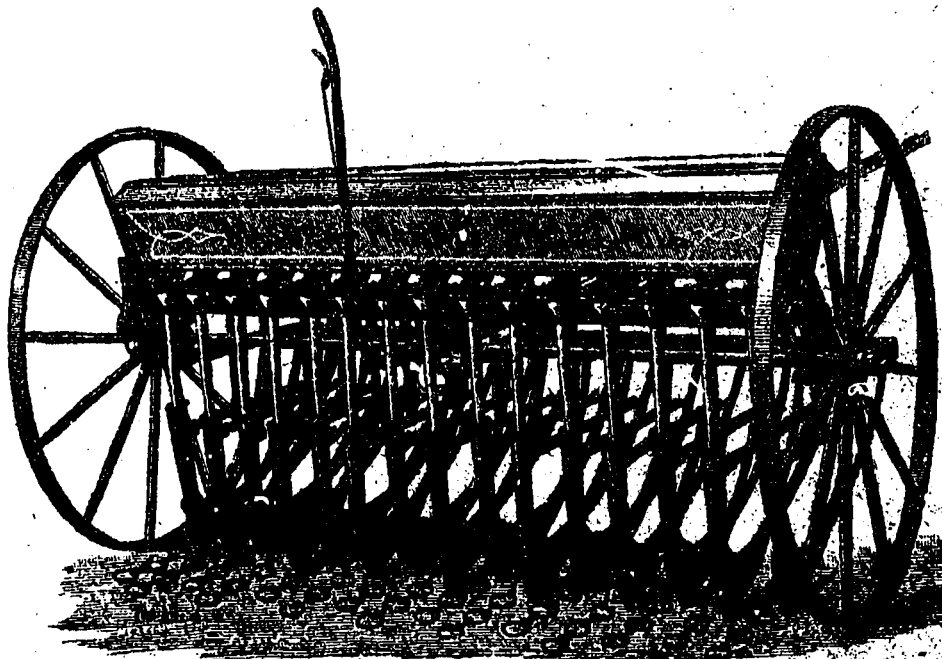
The Feed Runs or Distributors are the same as used on the Massey-Harris Sectional Seeders.

Rubber Conductors.—These are extra long and will never stop up when working on soft land, as the ends are not cut off square but on the slant, which results in other advantages also. These special rubber tubes are used on all the Seeders and Drills we make.

Whiffletrees complete are sent out with each Shoe Drill.



This shows the action of the Lever. Shaded portions of cut show the pressure applied, and the dotted lines indicate the position of the lever and parts when shoes are lifted for transportation



MANUFACTURED BY

MASSEY-HARRIS CO., Ltd.,

TORONTO, CANADA

MASSEY'S ILLUSTRATED.

SPECIAL WORLD'S FAIR SUPPLEMENT.

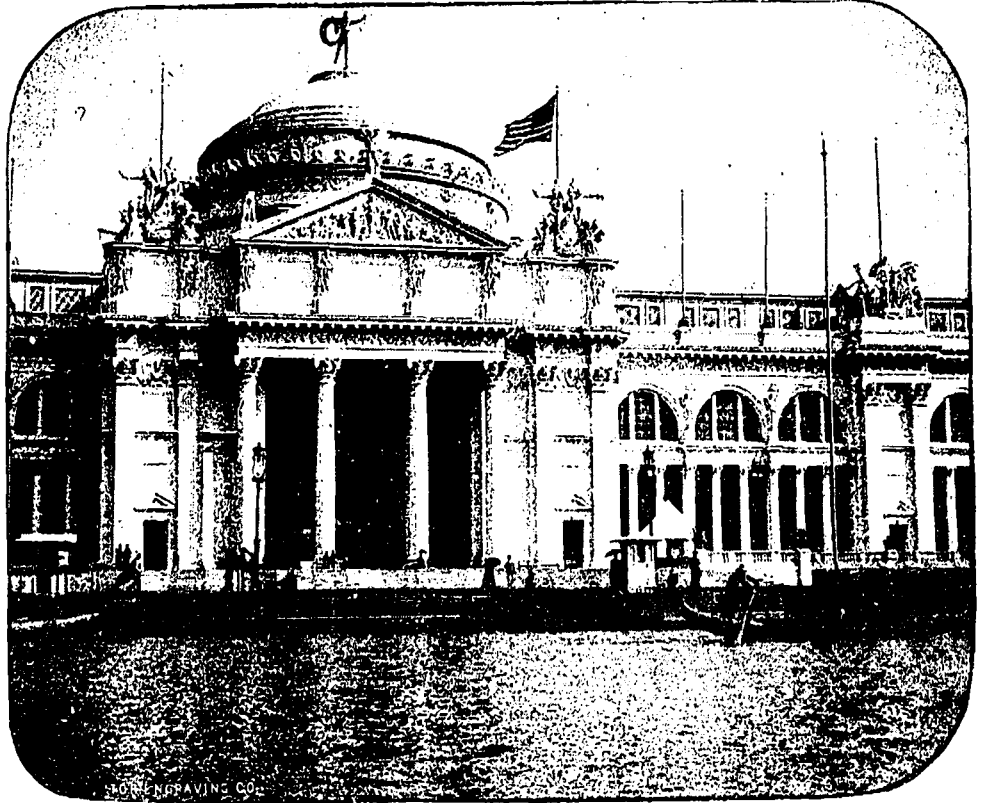
MASSEY-HARRIS CO'S (Ltd.) EXHIBIT AT THE WORLD'S FAIR.

ANNOUNCED BY EVERY ONE THE LARGEST AND HANDSOMEST AGRICULTURAL MACHINE EXHIBIT AT THE EXPOSITION.

As the visitor enters the main entrance of the magnificent Agricultural Palace he finds himself in a handsomely finished rotunda, which is arched by the beautiful dome of the building, the interior being artistically frescoed. Passing from the rotunda along the main aisle the admirable produce exhibits of the various States and foreign countries, elaborately and tastefully arranged, are in full view. Following the same aisle across the building, he enters the Implement Annex (which is really a part of the Agricultural Palace) and immediately on the right hand is the large and elegant exhibit of MASSEY-HARRIS Co., Ltd.

The space occupied by this Company is centrally located, and in plain view from all parts of the Implement Annex. Many a Canadian, on coming to this splendid exhibit, has expressed himself as being highly pleased at the magnificent display made by the MASSEY-HARRIS people, and not only Canadians, but United States and foreign visitors, alike speak of it in the highest praise—one and all pronouncing it the finest and most complete exhibit of farm machinery at the Fair.

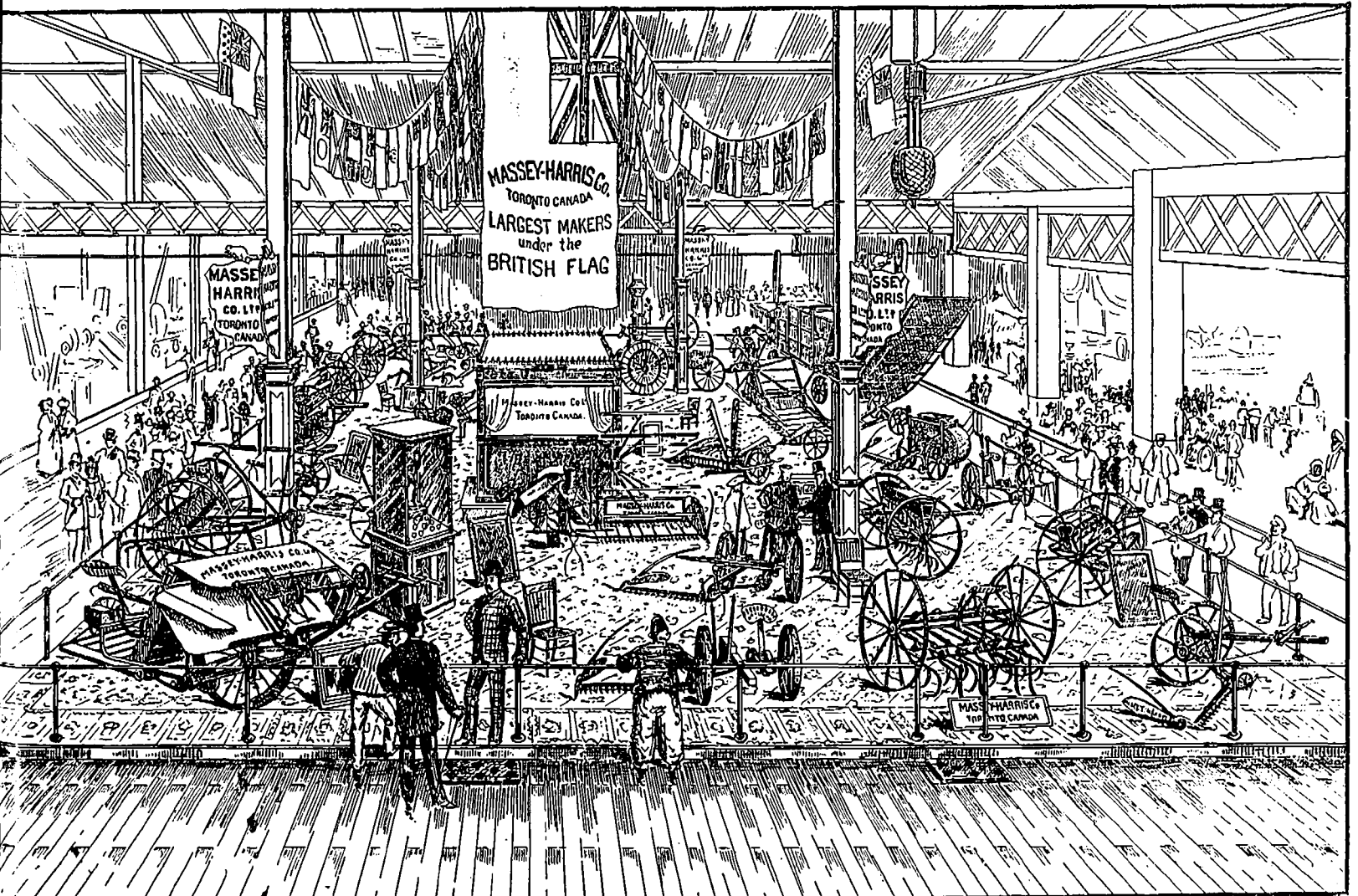
Not alone has the beauty and finish of the



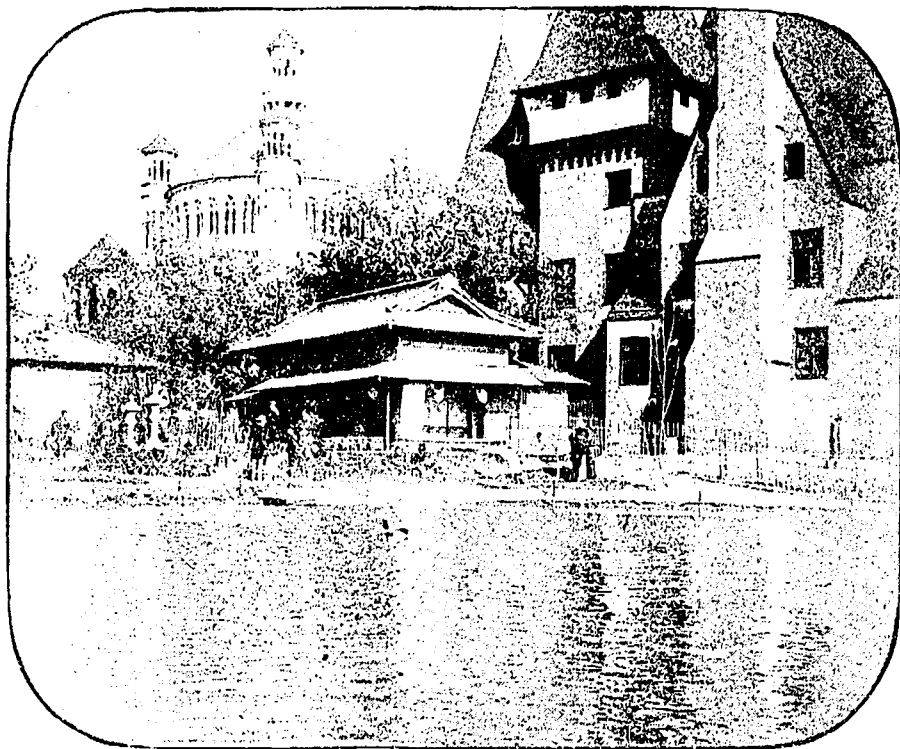
Specially engraved for Massey's Illustrated. Photo. by W. E. H. M.
MAGNIFICENT ENTRANCE AND DOME OF THE AGRICULTURAL PALACE.

exhibit attracted attention, but the machines and implements themselves have received universal praise for their simplicity and excellent mechanical construction.

The court containing the Company's exhibit includes an area of nearly 1,000 square feet, and despite its extent is very fully occupied, their display embracing a full line of agricultural



Specially engraved from "official" photo, for Massey's Illustrated.
GRAND EXHIBIT OF MASSEY-HARRIS CO., LTD., IN THE AGRICULTURAL PALACE.



Specially engraved for Massey's Illustrated. Photo, by W. E. H. M.

JAPANESE TEA HOUSE, SWEDISH RESTAURANT AND FISHERIES TOWER IN BACK GROUND.

machines and implements—in fact, they are the only single concern showing a complete line of farm machines.

The *Dominion Illustrated* thus describes the exhibit of MASSEY-HARRIS Co., Ltd.:

This great Farm Implement Company occupies the largest space in the Agricultural Building allotted to any one concern, their exhibit comprising a complete line of agricultural implements, all being fully in keeping with the great enterprise and business sagacity which have characterized this organization, and which have opened up channels of trade in all parts of the world. A large and handsome British ensign surmounts the exhibit, and bears in large white letters the significant words: "Largest Makers under the British Flag." An array of upwards of 100 foreign and colonial flags radiate from this central banner, and they are intended to indicate that the Massey-Harris Co. do business in each country so represented by its pennant. Probably there is no other firm in the world that can make a similar boast.

In the centre of the court stands a handsome office made of native Canadian wood. The panels below are artistically filled in with specimens of the various woods and also iron and steel parts which enter into the construction of the machine, including specimens of castings, steel forgings, knives and knife sections, which are made by the Company from raw materials. The plate glass windows are richly draped, and surmounting the cornices of the structure are gilded Reaper finger bars. Surrounding this office is arranged the Company's large exhibit of sixty or more implements on a carpeted floor, the court being enclosed by a handsome nickel railing. The implements are of much beauty and design, and are very richly finished. The machines attracting special attention are the Massey-Harris Wide-Open Binder, Toronto Mower, Brantford Mower, Massey-Harris Cultivator, Sharp's Hay Rake—all of which are elegantly plated and beautifully finished. The wood entering into the construction of these machines is all native Canadian, and being finely polished, attracts much attention. The other implements are all handsomely painted in the same colors which they are usually painted for sale. Many of the machines are shown in full motion.

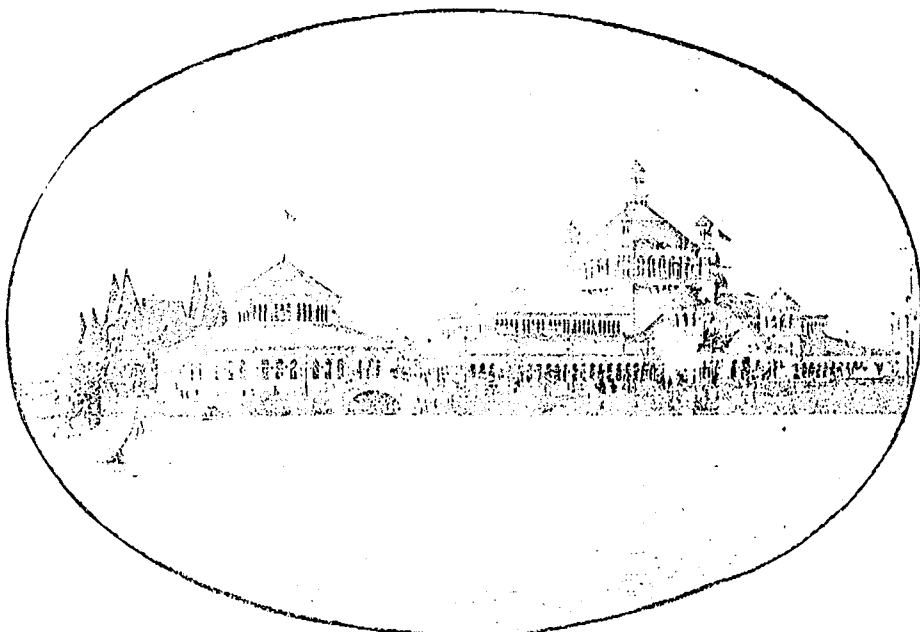
Another feature of the exhibit is a large showcase containing the many trophies and medals won by the Company at field trials in various parts of the world.

Visitors at the stand receive the most courteous attention, and a large number of comfortable chairs have been provided for their convenience. Further, writing materials are placed at the disposal of callers, and many Canadians avail themselves of the opportunity of having their mail addressed in care of the Company (Section E 13, Agricultural Annex.) Canadians are cordially invited to make themselves at home at the Company's stand, which is conveniently located and a desirable place to make appointments, &c. A Visitors' Register is kept.

In addition to the implements made by the Company, they also display on their stand a handsome Thresher and Engine made by Sawyer and Massey Co., Hamilton. Many parts of the Engine are silver-plated and some of them finished in polished brass, while the Separator has sides of highly finished birch with panels of white wood, one side being pannelled with bevelled plate glass, and the interior illuminated with incandescent electric lights, showing all the working parts which are in full motion and run almost as noiselessly as a watch.

The Company also show a full line of Plows made by the Verity Plow Co., Ltd., of Brantford.

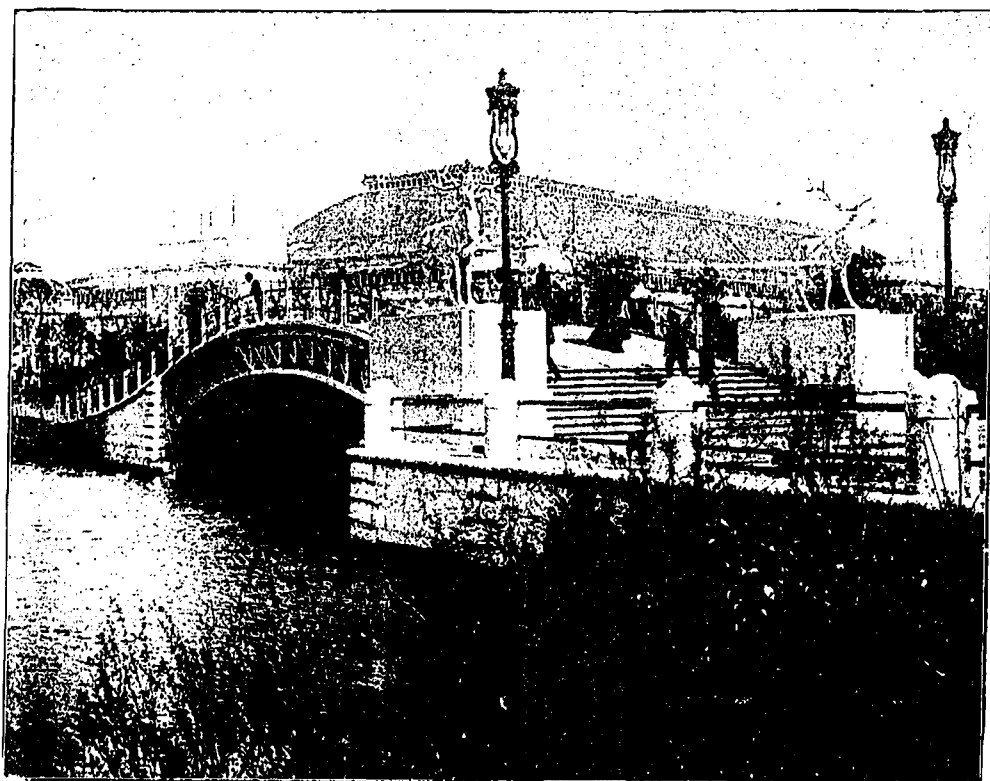
This very extensive and complete exhibit made by Massey-Harris Co.—as one can easily understand,—is attracting much attention, especially from American and European exhibitors and experts. By its means Canada is being well advertised and in a way that is sure to lead to good results.



Specially engraved for Massey's Illustrated. Photo, by W. E. H. M.

THE FISHERIES BUILDING.

Over 45,000 machines and implements were produced by MASSEY-HARRIS Co., Ltd., for the season of 1900. A large proportion of the annual output goes to foreign countries—a trade which is continually on the increase, and which cannot but be of great value to the Dominion. Most of the material used by this company are home products.



Specially engraved for Massey's Illustrated. Photo, by W. E. H. M.

VIEW IN THE PARK LOOKING TOWARDS THE GREAT MANUFACTURERS' BUILDING.

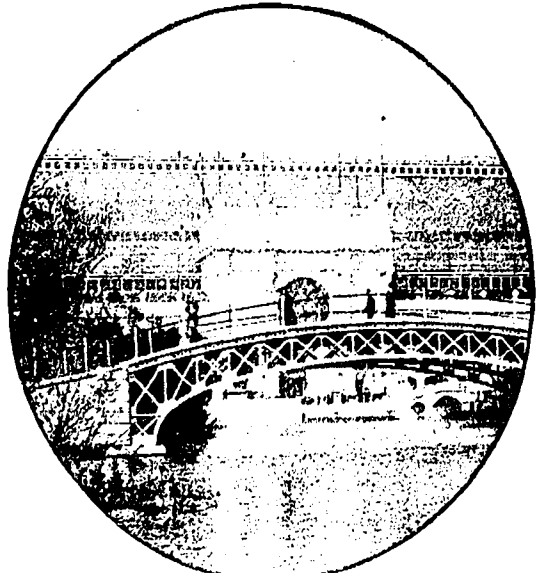
HOW I MADE MY PICTURES AT THE WORLD'S FAIR.

BY W. E. H. MASSEY.

One day last summer while out in the country I was walking along a small village street with my camera in hand ready to make an exposure, when a small boy came running up saying, "Mister, give us a tune on that, please." I have had some amusing experiences while out picture making, but never before had I been credited with carrying about a concertina, for which my innocent photographic instrument was evidently mistaken.

However, the World's Fair camera detectives, of whom there are several stationed at every

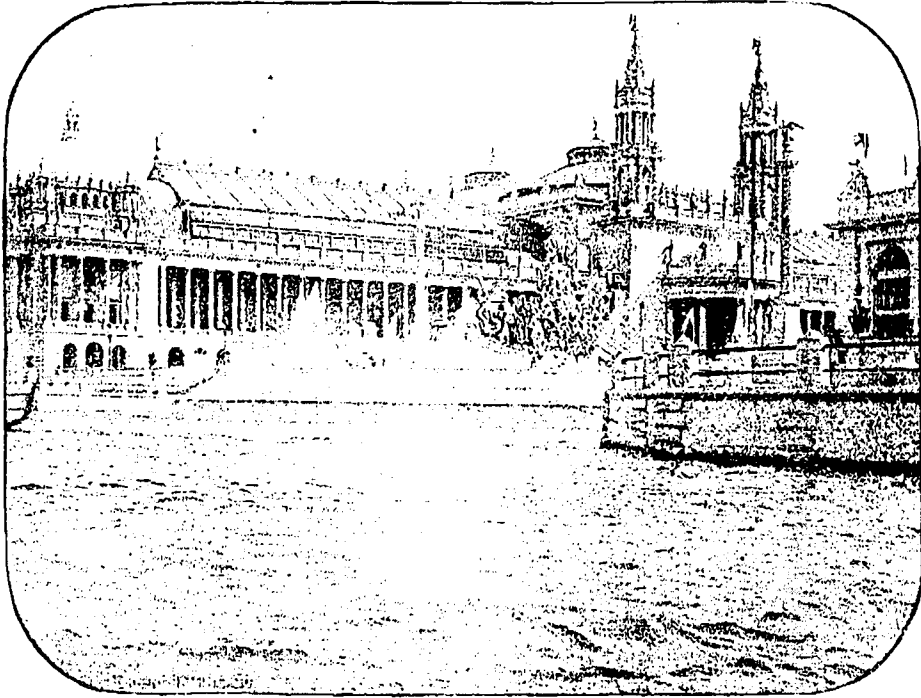
out the exhibitor's consent, and worst of all, no "tripod" or stand can be used. This last restriction confines the amateur to the use of what is known as the "hand" camera, which practically means that what photographs he does take will be "snap" shots—that is, made instantaneously—for it is not possible to hold a camera sufficiently steady to make "time" exposures. True, one can occasionally find a railing, a chair, or a box to rest the camera upon for the purpose of focusing with greater care and making a longer exposure, but opportunities of this kind are rare, and seldom admit of taking a picture from the most desirable point of view. "Instantaneous" or "snap" shot exposures require the strongest light, hence the photographer who visits the Fair is really limited to out-of-door work except in a few in-



Specially engraved for Massey's Illustrated. Photo. by W. E. H. M.
VIEW LOOKING TOWARDS THE WEST CENTRAL ENTRANCE OF MANUFACTURERS' BUILDING.

stances, as the interiors of the buildings are not light enough for "snap" shots. Therefore, as the best photographs cannot be produced without the use of a tripod to admit of accurate focusing, and further, as explained, it being possible to photograph only such objects as are in the strongest light without giving lengthened exposures, it will be seen that the amateur photographer at the World's Fair is pretty badly handicapped.

All these restrictions are made by the Exposition authorities to protect a "concession." This concession is an exclusive right to make and sell pictures in and about the Exhibition grounds and buildings, which concession has been sold for a large sum of money. At first it was determined to shut out amateurs altogether and allow no artist within the gates except the official photographers. Such an indignation was awakened, however, from one end of the United States to the other that the restricted privileges mentioned above were finally granted, but were nevertheless so unsatisfactory that the war was waged further, and other privileges

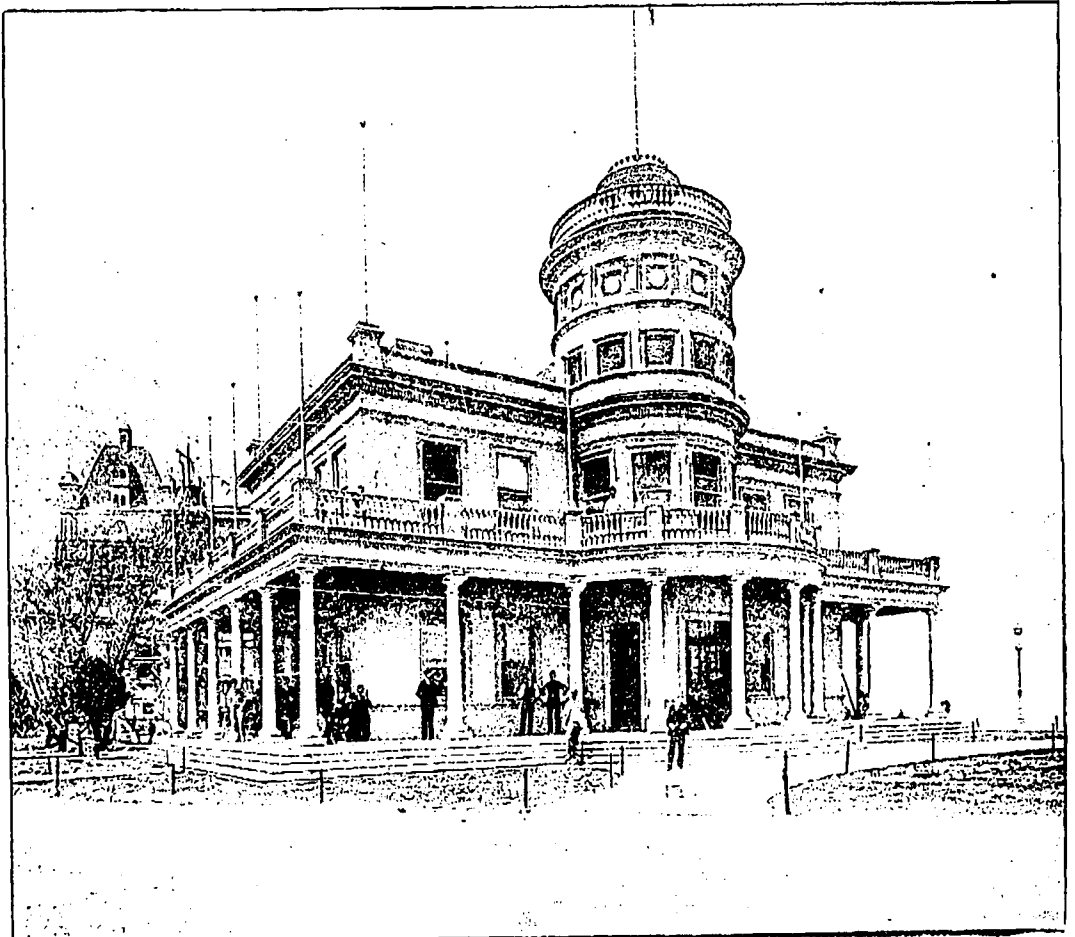


Specially engraved for Massey's Illustrated. Photo. by W. E. H. M.

THE GREAT MACMONNIES' FOUNTAIN IN FULL PLAY—MACHINERY HALL IN THE BACK GROUND.

...ance, are not so easily deceived: and though modern cameras scarcely look like photographic instruments at all it is next to impossible to get through the gate with any kind of a camera without being stopped, and many a fellow has had to open his box of lunch to prove that was not a camera. I had heard that the life of the amateur photographer at the World's Fair was hard, and that he was not held in very high esteem. This I realized to be a fact all too soon. Of course an enthusiastic amateur, such as I must confess I am, would have no more thought of going to the World's Fair without a camera than he would think of starting off without a reasonably well-filled purse. Therefore the morning after my arrival in Chicago the latter part of May last—it being a delightfully clear and bright day—found me at the World's Columbian Exhibition gates with a camera "loaded" and ready for business.

Scarcely had I passed the turnstile when two men, noticing the black case in my hand—at once suspecting it to be a camera—demanded to know if it were. On my answering in the affirmative a fee of \$2.00 was ordered to be paid, this fee entitling me to the use of the camera for one day, and that, too, under rigid restrictions. Amongst other things no camera is allowed which takes a view over 4x5 inches (which was the size of the instrument I had with me). No pictures can be taken in the Art Gallery, and none of individual exhibits with-



THE CANADIAN PAVILION ON THE LAKE FRONT.

were granted, and still further modifications are likely to be made. Meantime, however, the camera "fiends" have had to make the best of the situation.

Most amateurs are more interested in photographing the handsome exteriors of the buildings and the pretty bits of landscape surrounding them, than they are the interiors. While they must forego the much desired opportunity of using a regular view camera with a tripod, it is nevertheless quite possible to obtain passable pictures with a hand camera which will constitute most interesting souvenirs. The buildings being constructed largely of the wonderful white "staff," very readily admits of making instantaneous exposures. Having

longed to them. The poor much-used "permit" (which I at last tied to the camera handle that, if possible, all the world might know I was not a thief and a robber) had to be produced no less than eight or ten times that day, if not more. Sometimes a guard who challenged my right to be making photographs would walk away as though really disappointed at being unable to exercise the full extent of his authority—that is, to make an arrest.

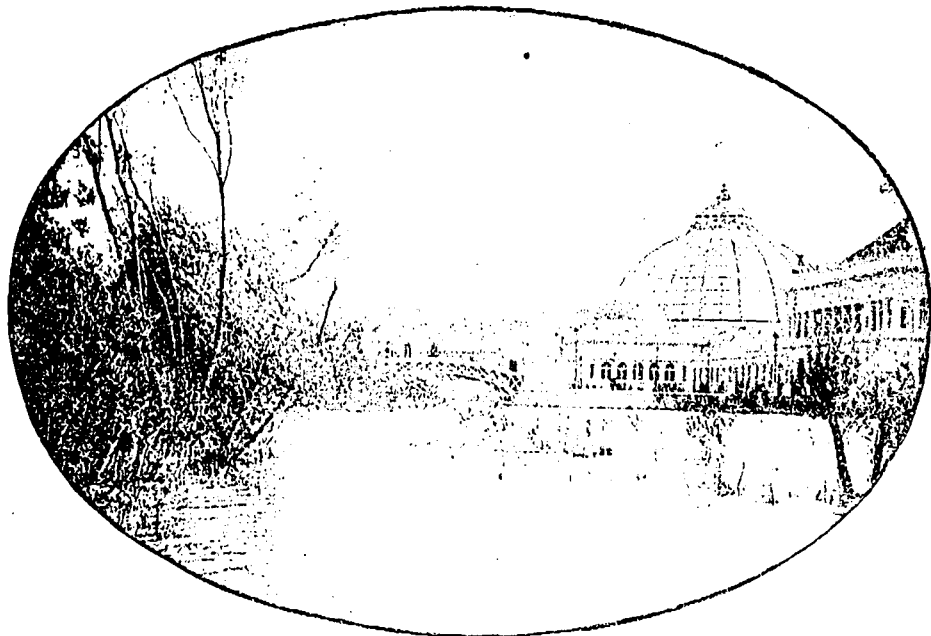
Any person who manages to smuggle in a camera without paying the regular fee is destined to be "run in," and even some dignitaries and newspaper correspondents who have been given permits (not on the usual forms) granted possibly by letter from the Director-General,

course, but there are always some special pictures or particular points of view which we cannot obtain, and which we must make for ourselves; and further, in the very act of taking a photograph of a view we study it and become the more interested in its preservation.

By far the most interesting feature of the World's Fair is the buildings themselves and their charming surroundings. I do not mean to under-estimate the magnificent exhibits, which in all of the departments I fully believe have never before been excelled (and I have seen many of the great exhibitions of recent years); but the admirable grouping of the splendid structures in which the exhibits are placed and the beauty of the park, surpass anything I have ever been privileged to see. As to the buildings, one hears so much of their enormous size (which is all quite true) that they little think of them as great works of art, which they really are. They are just as artistic as they are big, and must be seen and studied to be appreciated. These magnificent white buildings have been grouped with the greatest care, and with the surrounding landscape—which is like a fairyland, beautified with artificial lakes and canals, the latter spanned here and there with handsome white bridges—combine to make up a veritable paradise. I was simply charmed with the Exhibition Park, and found my greatest pleasure in wandering about the buildings and studying the beautiful vistas from various points of view. Under the varying conditions of sunshine and shadow, there seemed to be an unending beauty in this marvellous creation of man.

Naturally enough, such a place would delight the amateur photographer's heart, and it was with the hope of preserving some of these charming views as souvenirs, that I used my camera while there.

While my pictures are but meagre representations of the beauty of the original, they may perhaps convey an idea at least. Most of the views which accompany this article, and which



Specially engraved for Massey's Illustrated. Photo. by W. E. H. M.

VISTA LOOKING TOWARDS THE HORTICULTURAL BUILDING—TRANSPORTATION BUILDING IN DISTANCE.

therefore, obtained my "permit" and signed the pledge of obedience to the rules. I set out to get my two dollars' worth of views. Having made one exposure, while focusing for the second I was startled by a tap on the shoulder and a uniformed Columbian guard demanded:—"Is that a camera, sir? Show your permit?" A little surprised I produced the special pass, which being satisfactory we parted company. A little later I started across the Art Gallery, as it was the most convenient route to the point I wished to reach. When but a short distance inside the entrance a guard very politely offered me free storage for my instrument. I showed the permit. "That don't matter," said he. "No camera allowed here under any circumstances" (of which I was not aware up to this time.) An explanation that I just merely wanted to pass through the building did not satisfy him, but while the argument was in progress we had gotten half way across, so he concluded it was about as well to let me go to the opposite entrance as to make me return to the one I came in at. A few views in the vicinity of the State and foreign buildings were then taken without interruption. Soon, however, another guard, some distance off, espied me in the act of getting the German building on the focusing glass. As he hurried to me in apparent good nature I held up the invaluable permit and shouted to him to stand still and have his picture taken. It worked like magic—the smile depicted in that countenance would have cured a bad case of dyspepsia. His features, though, assumed normal condition when he learned that his order for one would have to be filled from Toronto and that the picture would not be finished (developed) for some weeks.

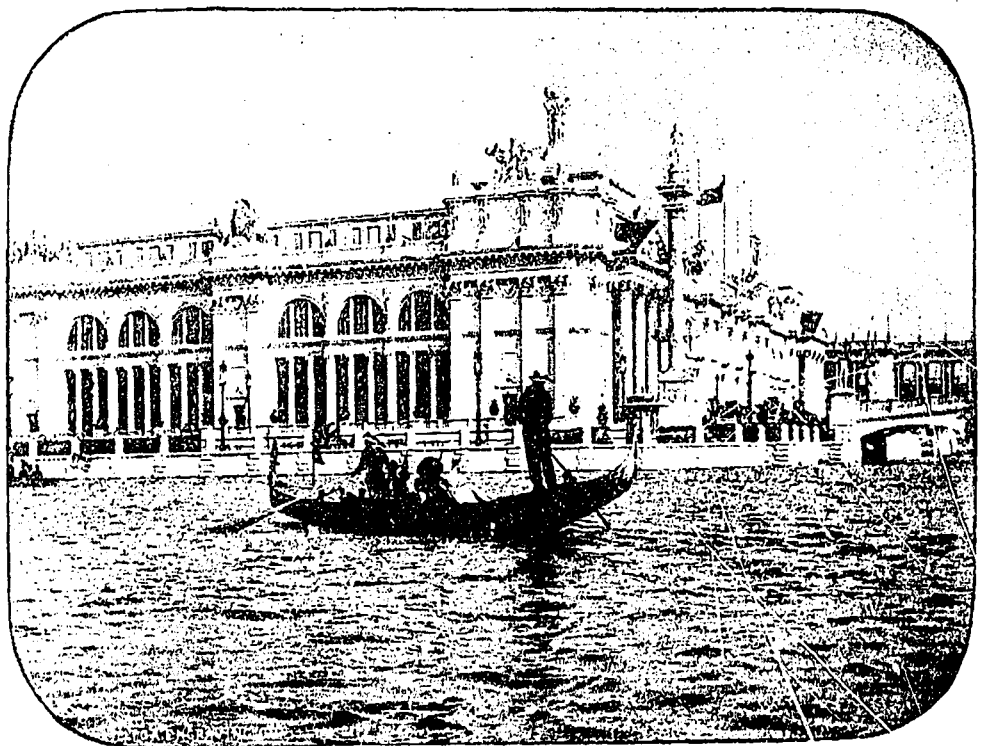
The Columbian Guards are for the most part a decent lot of young fellows—quite unsophisticated, and many of them from the back country districts—who have been clad in gay uniforms and endowed with sufficient authority to make them feel—some of them, at least—as though a good deal of the World's Fair be-

or even the president himself, have been given a free ride in a patrol wagon,—all for the dreadful crime of taking a few photographs at the World's Fair.

Such are some of the annoyances the poor afflicted amateur photographer has to put up with at the World's Fair.

But if he can only succeed in capturing some of the hundreds of fascinating scenes which win his admiration he will feel repaid for all his trouble. Photographs can be purchased, of

have been reproduced by the photogravure process, were taken from a gondola or an electric launch going at full speed. It is needless to say that under these circumstances one has to work pretty dexterously and watch very closely to get the picture correctly located on the film or plate. The fact that this can be accomplished even with a measure of success indicates the wonderful strides in advance which the photographic art has made in recent years.



Specially engraved for Massey's Illustrated. Photo. by W. E. H. M.

VIEW ON THE GRAND BASIN, SHOWING WEST CORNER OF THE AGRICULTURAL PALACE.

• Massey's Illustrated •

(PUBLISHED MONTHLY.)

A Journal of News and Literature for Royal Homes

NEW SERIES.]

TORONTO, CANADA, SEPTEMBER, 1893.

[Vol. 5, No. 9.

From the Youth's Companion.

LOST IN PATAGONIA.

IN FOUR PARTS.—PART I.

JUST ninety years ago this 26th day of September,—as I see from the yellow old log-book lying open before me, and from which the facts of this story are taken,—the brig *Xerxes* sailed from Boston, bound for what was then spoken of as the Northwest Coast, or Northwest America, on a trading voyage.

That was by no means an uncommon "venture" on the part of Boston and other New England traders in those days. Vessels freighted with cloths, hatchets, knives, rum, and a great variety of cheap trinkets, were despatched to these then little known coasts to traffic with the Indian tribes.

In exchange for the goods taken out, the traders got fine furs and many other things of value.

A fortune was sometimes realized by a single successful voyage, for the Indians then knew little of the actual commercial value of furs, and New England goods were a novelty for which they willingly paid dear.

On the other hand, many a good ship with her crew was lost; either captured by the savages, or wrecked on these then uncharted shores. It was a long and a hazardous voyage, of two years' duration at best, for Cape Horn had to be doubled by all these adventurous traders.

A vessel sailing from Boston for Nootka Sound, or Queen Charlotte's Island, might not be heard from again until she dropped anchor in Boston Bay—unless she chanced to fall in with some similar trader homeward bound. Captain, mate, supercargo, and sailors said good-bye to their home friends for two years or more, and chances were about even that it was a final farewell. But stout hearts were plenty, and every year several of these brave barks set sail, allured by the ever golden dream of profit.

AN OLD LOG-BOOK.

From this old log book of the *Xerxes* I find that the captain's name was Elisha Dustin, of Salem, Mass. The record is mainly in the captain's hand-writing; he wrote a round though rather painful hand, and the ink has stood well.

I would give something to know how that ink was made. He wrote with a goose-quill pen, which sometimes gave him trouble; he was not a thoroughly accurate speller. Those troublesome terminations—"tion," "sion," and "cion"—were not quite at his command, and sometimes, in bad weather perhaps, he indulged in the more phonetic "shun" which I for one deem equally as good and would be glad to see universally adopted. But he was a pretty good grammarian, and evidently a careful recorder of events.

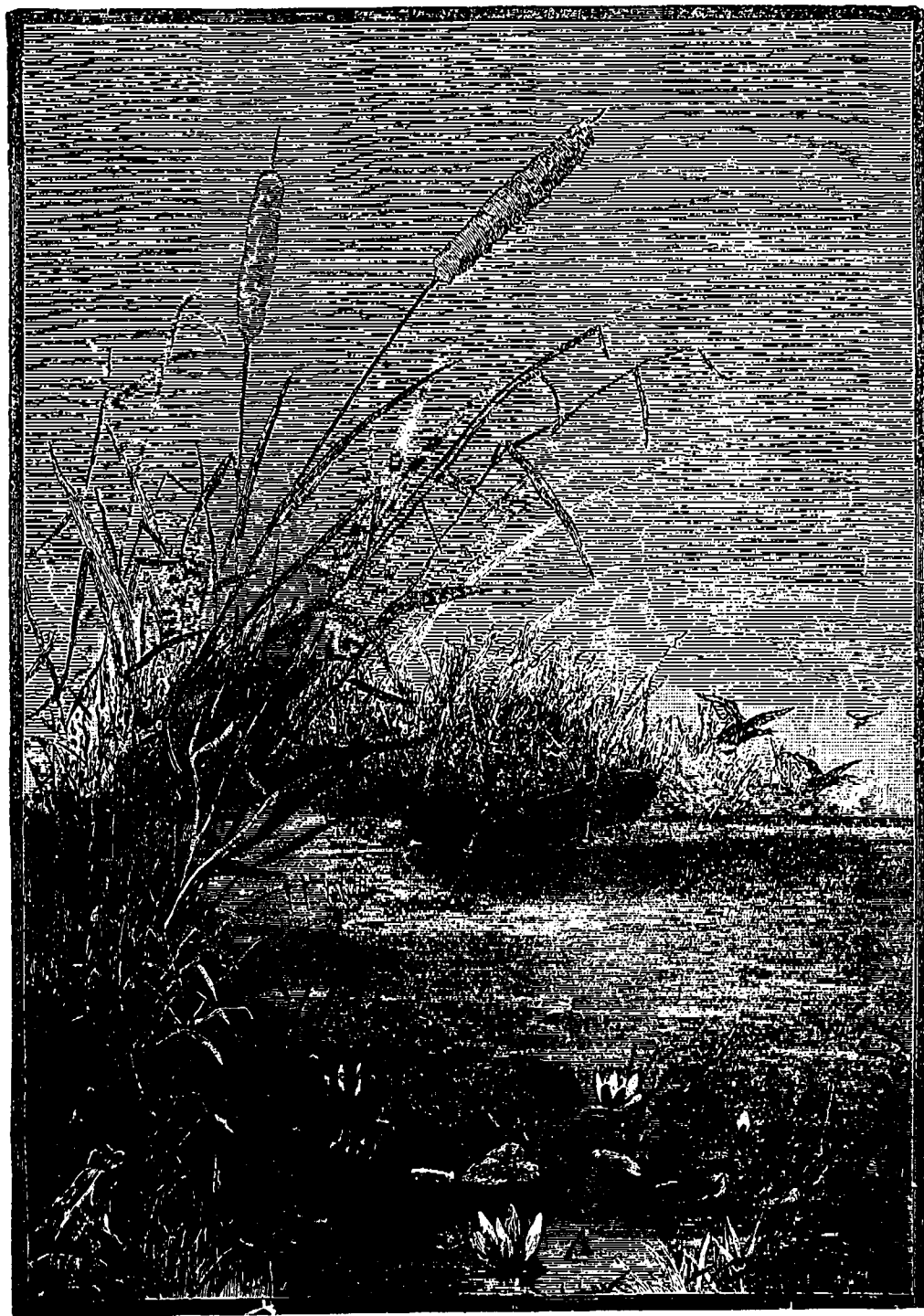
The mate's name was Valorous Hobbs. They used to pronounce that name with the accent on the second syllable, *lo*, and this syllable was the short, or nickname, for it. The supercargo's name was Lyman Stowell, of Newburyport; and there was another young man of some standing on board, though I cannot ascertain exactly in what capacity he shipped, named Pleemon (thus the captain spells it)—Pleemon

Frost; in all save this one place, however, he alludes to him as "Pleem." The leading sailors were named William Lovewell, Columbus Lovewell, Arumah Brown, Ebenezer Hartly, Caspar and Columbus Judkins, a Spaniard whom the captain spells Fredreago Costello; in all, a crew of twenty-seven, mostly New Englanders from the eastern counties of Massachusetts.

Running over the old log, I find that they had a good voyage to the Cape, experienced some hard weather there, saw ice, were afterwards in fear of Spanish privateers and pirates; that they gave the coast of Peru a wide range; that they had some sickness, like scurvy, on board, from subsisting so long on salted stores; that they were at Nootka Sound, on the northwest coast, in July the following year, also in September of that year; that they had an encounter with the Indians there, who seemed to have been then both numerous and warlike;

that the trouble was settled, and the traffic was good; that young Stowell, the supercargo, one day traded a hatchet for a solid nugget of gold, weighing five ounces; that Lo Hobbs, the mate, fell into a dispute one day with Tolaboona, a chief, and knocked him down with his fist, and had to flee on board for his life, but that they shook hands again in the afternoon; that rum and the small-pox had already made havoc among the Indians, and that the traders brought them both these agents of destruction; that the Indians fought with *cheetoths*, a tremendously heavy club, or battle-axe; that one of these weighed twenty-nine pounds and four ounces, and that Tomeesa, another chief, could launch it a distance of fifty-six paces at a single cast.

The *Xerxes* finally sailed from Nootka in November, but touched at points near the great River Columbia, also on the coast of California, then Spanish territory. The traders had an en-



counter with a "free-booter" off the coast of Mexico, and beat off the pirate, or privateer, whichever it was, with the brig's carronades.

DISABLED.

I further learned that in March they were homeward bound, and in the latitude of Chonos Archipelago, west of Patagonia, approaching Cape Horn again; and that on the night of the 14th of the month, the weather being very thick and a gale of wind blowing, the brig came in violent collision with an iceberg, or at any rate with a large mass of floating ice, broke her bowsprit and foremast, and crushed a dangerous hole in her hull, "on the bends forward;" that they believed themselves in great danger, and were obliged to use the pumps; and that next morning, the lofty headland of the *Tres Montes* being in sight, low down on the eastern board, the captain, after consultation with James Codman, the carpenter, and the Spaniard, Costello, determined to put into the Bight of Chiloe, and there, if possible, careen and repair the ship somewhat, before attempting the passage of the dreaded Horn.

The voyage up to this point so closely resembles scores of others of those times and other times, that I should have found no materials for a story in it but for an adventure of a party from the brig's crew, while they lay careening and repairing in a bay of the Gulf of Chiloe, or the Gulf of Ancud, as it is variously called.

No very clear description of this bay, where the *Xerxes* put in, is given; but I judge from certain words that it was in the extreme north-western part of the Chiloe Gulf, in latitude 43° 20', longitude 72° 30', or not far from that position. By reference to a map, it will be seen that the lofty range of the Andes Mountains here closely approaches the coast, but has dwindled to insignificant though rocky hills, with a few scattered peaks, two of which are volcanic. The Pacific side of the mountains, in this latitude, is well wooded and a pleasant region; but from the top of the range, which is here not more than fifteen miles from the coast, the country falls off eastward in dreary plains, the desolate campos of Patagonia.

There was then a tribe of Indians, or natives, inhabiting Chiloe and the neighboring islands of the bight, which the captain speaks of as Chiloes; but with them the *Xerxes* had no dealings. The brig was laid up in a little land-locked cove, and timber on shore was felled, hewn and brought off. A part of the crew were at work meanwhile scraping the barnacles from the sides and bottom of the vessel.

SMELLING APPLES.

Early the third morning after lying up here, Clum Lovewell, one of the sailors from Haverhill, Mass., created some merriment by singing out, "Mates, I can smell apples!" and he gave several deep sniffs into the fresh morning breeze off shore.

"Apples, you young lubber!" exclaimed the carpenter contemptuously. "That's a fine nose of yours. Can't you smell a good old Massachusetts pumpkin while you're about it?"

"But I can smell apples!" roared Clum. "I can smell 'em plain and good!"

"Can't you smell a school of mackerel just outside Plymouth Bar? Seems to me I can?" exclaimed Lyman Stowell, the supercargo, laughing. "Captain Dustin, look a' here"—these trading crews from early New England were often on easy terms of familiarity with their officers. "Here's a lad that smells apples off shore! What think o' that for a nose?"

The captain laughed, and said, "There's not an apple-tree within fifteen thousand miles of us—more's the pity. Why, boy, a good August pippin or a summer-sweeting wouldn't go so bad, would it, now? Or a mess of fresh apples-sass, to cut the grease off this salt meat a little."

"Ay, ay, captain!" responded a chorus of voices.

"Well, men, patience, and please God, we will see Boston Light again this night five months hence."

That day Indians showed themselves on the shore; they were not Chiloes, but a tribe call-

ed Picunchees, inhabiting the main land, and having their haunts in the passes of the mountains. They were not savages exactly, having been in contact with the Jesuits for many years. In their talk they made use of many Spanish words, and the sailor Costello could understand somewhat of their conversation. They were friendly to the whites, and gave them beef. They wore loose ponchos, made of skins, and had long lances with iron heads, which they had obtained from the whites.

But their most formidable weapon was a huge sling shot, which they both threw and used for striking at close quarters. It consisted of a round, very heavy kind of blue stone, of about three pounds' weight, closely covered with raw hido plated line, three feet long attached to it. They would throw these shots, called *bolos*, a hundred yards with accuracy, or at close quarters strike a blow sufficient to break a man's skull, or indeed that of an ox.

The Picunchees mingled freely with the crew on shore, and came on board at will, for they were seen to be peaceably disposed. On the second morning two of them came off to the brig in a canoe, clambered upon the swinging stage, where some of the crew were scraping barnacles and calking, and while standing there watching the sailors at their work, one of them drew a *red apple* from his poncho and took a bite from it!

Instantly a shout rose! All hands came hurrying to see what was going on, and then the exclamations burst forth afresh.

"It's an apple! It's an apple the beggar's got! An' what did I tell you yesterday?" shouted Clum Lovewell. "But ye cast shame on my nose. Next time I'll believe my nose for all o' whole lot o' a lubbers, an' I axes its pardon!"

The apple-eating Picunchee, much astonished at the clamor, stopped mid-way at his bite; the sailors gathered around him, and failing to make him comprehend their eager questions, rumaged his poncho themselves. He had one red apple in it. They seized upon that apple

as cattle long away at pasture crowd upon the lad with the salt dish. William Lovewell got possession of it, and with his knife cut it into little slices, enough to go around the ring of twenty-four sailors; they even ate the skin of it, and the stem and the seeds. Then Costello was bidden talk with the amazed but grinning Indians, and learn whence these apples came.

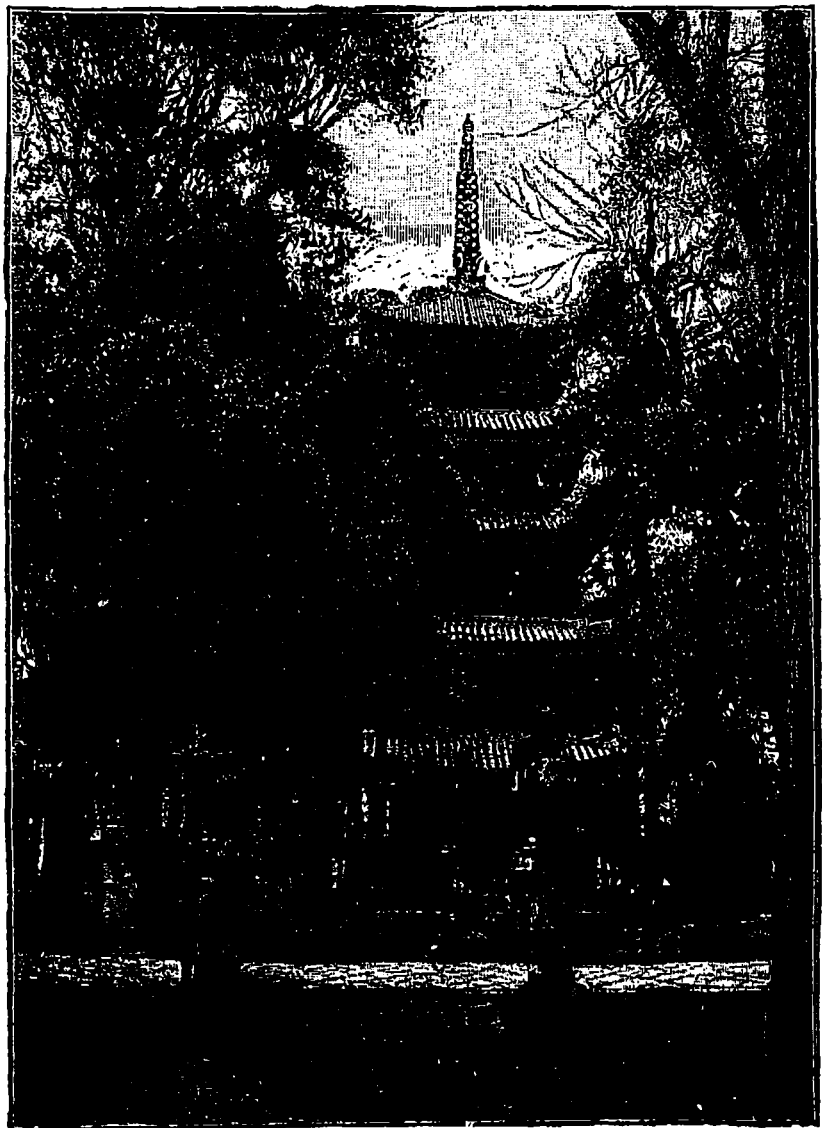
AN EXPEDITION.

The Picunchees pointed shoreward, inland, and Costello was able to gather from their replies, that at a distance of ten *leguas* (thirty English miles), on the other side of the *monte*, there was plenty of apples. One of the Picunchees asserted that he had recently been there; and he gave them to understand that the apples grew wild there in great abundance, and that the orchards covered a great extent of territory.

Clum Lovewell was delighted. The captain was much surprised at this singular intelligence, and among the apple-hungry crew nothing was now talked of save a jaunt after apples; for the Picunchees unhesitatingly offered to conduct them to the *manzanillos*, or orchards.

At length Capt. Dustin gave the mate, Valorous Hobbs, permission to take six of the crew with sacks and go after apples. The party, as made up the following morning, consisted of Lyman Stowell, Pleem Frost, the Spanish sailor Costello, Arumah Brown (called "Rumy"), Neeze Hartly, and Clum Lovewell, with the mate. The two Picunchees went with them as guides. They took food from the ship's stores for three or four days, and had three muskets with ammunition, these latter more for the purpose of shooting game than for defence, for they trusted the Picunchees and they expected no enemies; the Indians spoke of none. The mate, however, wore a light *cullacs* in a belt.

They set off in buoyant spirits, for in addition to the expectation of fruit, was the pleasure of an outing on shore. They agreed to make the



trip of thirty miles—as reported—that day. Then they meant to spend a day at the orchards, eat their fill of apples, get their sacks full, and go back the third day. Capt. Dustin had ordered them to return to the vessel by the fourth day.

The two Picunchees led the way by a well-beaten path, first over a wooded mountain and then down to the shore of a considerable lake, where there was a village of six *toldos*, or Patagonian huts,—also a log shanty, built some years previously by a shipwrecked sailor, who had died there, but who left the name of Henry G. Ackley, cut with a knife on the door post,—thence easterly, through a deep gorge between precipitous hills. It was a rough and very rocky place, and the stones, probably obsidian, cut the sailors' shoes to pieces like glass. The Picunchee guides proved good walkers, and the sailors, out of practice from being so long on shipboard, were rather bad ones; but they had true New England pluck, and kept on from morning till late in the afternoon, expecting to reach the "orchard" that night.

The Indians, when questioned by Costello, constantly said, "A little more;" yet they were evidently honest, even if inaccurate as to distance, and the party pressed forward till sunset, having passed two considerable lakes since emerging from the pass in the mountains, and being still in a very wild, craggy tract of country, on the head waters of a small river, flowing due east by their compass.

The coming on of night, with fog, compelled them to camp. They were not a little disconcerted, being very footsore, and were somewhat disturbed, too, by the unearthly, squalling of several pumas, which were attracted by their camp-fire. Withal, it was far from being a warm or comfortable night.

But they were all young men, and with morning light came courage. They set forward early, but were no longer as hopeful as at starting out from the vessel; and the idea of carrying back each a bushel of apples on his shoulder began to be ridiculed by all. After three or four miles, as they thought, another lake came in view—that, I suppose, which now bears the name of Naguclhuapi. They had already come a distance of not less than thirty or forty miles. From this point the path, followed by the light-walking Picunchees, led them over high, partly open land, along the slope of the *cordilleras*, with the lake spread out on their right, to the eastward.

About the middle of the forenoon, having reached the top of a considerable ridge, the Picunchees pointed off to a vast slope of land about the head of the lake and bending round towards them on the western shore.

"*Los manzanillos*," they said (the apple forests).

Beyond it to the north-west, rose the summits and peaks of the Andes, from one of which, far in the north, ascended a thin wand of white smoke. The nearer slope was open land in spots, but mostly covered with woods of dark, russet-green color.

The distance around the northern arm of the lake was still ten or twelve miles. Not a little encouraged, however, and inspired by the noble scenery, the little party of wayfarers went on again. The walking was difficult, for the high lake-shore was furrowed down from the mountains by numerous deep ravines, filled with thorn-brush; and at length about noon they arrived at the brink of one of these great *barrancas*, or gorges, so deep and precipitous that to get across it seemed a formidable undertaking. A rapid creek brawled amidst the brush at the bottom of it. In width the ravine was no more than two hundred yards, and on the opposite bank they saw a clump of apple-trees; but it was more than three hundred feet in depth—sheer precipices of crumbling yellow rock and gravel.

The day was bright and the noon heat was so great that the leg-weary sailors sat down in the shade of a group of *souse-brush* to rest, while the guides looked for a place to cross, both below and above. They went to a distance, and presently Rummy Brown saw a party of natives on the other side, but a mile off or more.

"I see Indians," said he, and pointed them out.

"There's a lot of 'em."

Costello supposed that they might be a party of Picunchees after apples like themselves.

"They are coming this way," said Clum Lovewell. "I can see five—six—seven of 'em." Clum's eyes were well nigh as good as his nose. "They've each one got a long pole on his shoulder. And there come a lot more through some bushes behind 'em, on horseback!" he exclaimed.

HOSTILE INDIANS.

The party was a large one, and came slowly out towards the ravine. Just then the two Picunchees returned. Costello pointed out the approaching party to them, and as soon as the guides saw them, they expressed great alarm, exclaiming, "*Los Twelches!*" and instantly sought the shelter of the brush.

"Ask them who the *Twelches* are?" the mate said to Costello.

It was not easy to find out much from the Picunchees, but Costello concluded that they were a tribe which the guides had not expected to see here, and of whom they stood in great fear; for they declared repeatedly that both themselves and the whites would be killed, and that they must return with all speed.

"And get no apples now we've tramped two days for them?" cried Pleem Frost.

This idea did not suit the New England boys at all. Costello, however, agreed with the two guides that they had better be off and make as few tracks as possible; he declared that he should keep with the Picunchees.

"You're a coward, Fredreago!" said Valorous, angrily. Then ensued many hot words.

Meantime the party of Indians came up in plain sight, less than half a mile distant. "They're big chaps!" exclaimed Clum; "or else them be mighty little hosses they're riding, for their feet 'bout touch the ground each side."

"But they've got nothing better than bean poles over their shoulders to fight with," said Rummy. "I shan't run as long as I've got a good gun in my two hands."

But the two guides dropped upon their hands and knees, and crept off towards a thicket in the rear. Costello started after them.

"Wal, go along, then, you yaller coward!"

cried Valorous. "We sha'n't hurry. However, I don't half-believe these folks will meddle with us."

"Nor I," said Frost, "if we mind our business."

The Picunchees were already out of hearing, and Costello hurried after them. They ran for a long way, and finally reached the Picunchee village on the shore of the first lake, late in the night.

Next morning Costello presented himself on board the brig. He was haggard, and his feet were badly cut. Either to excuse himself, or because his head had been completely upset with fright, he told a dismal story. Strictly questioned by the captain, he said that the mate and the others had been cut off by a large band of hostile savages, in a ravine, and murdered there. He had only escaped by running all night. He even asserted that he had seen the *Twelches* strike down his ship-mates, and had heard their dying cries.

His tale struck horror to the remainder of the brig's crew. Capt. Dustin half-believed, half-distrusted, the man; he at once selected twelve men, armed them and set off at noon that day, taking Costello,—who had been allowed two hours' rest—as a guide,—also five Picunchees. The two who had been out before refused to go back. Very little could be learned from them, and what they did say, Costello probably interpreted to suit himself.

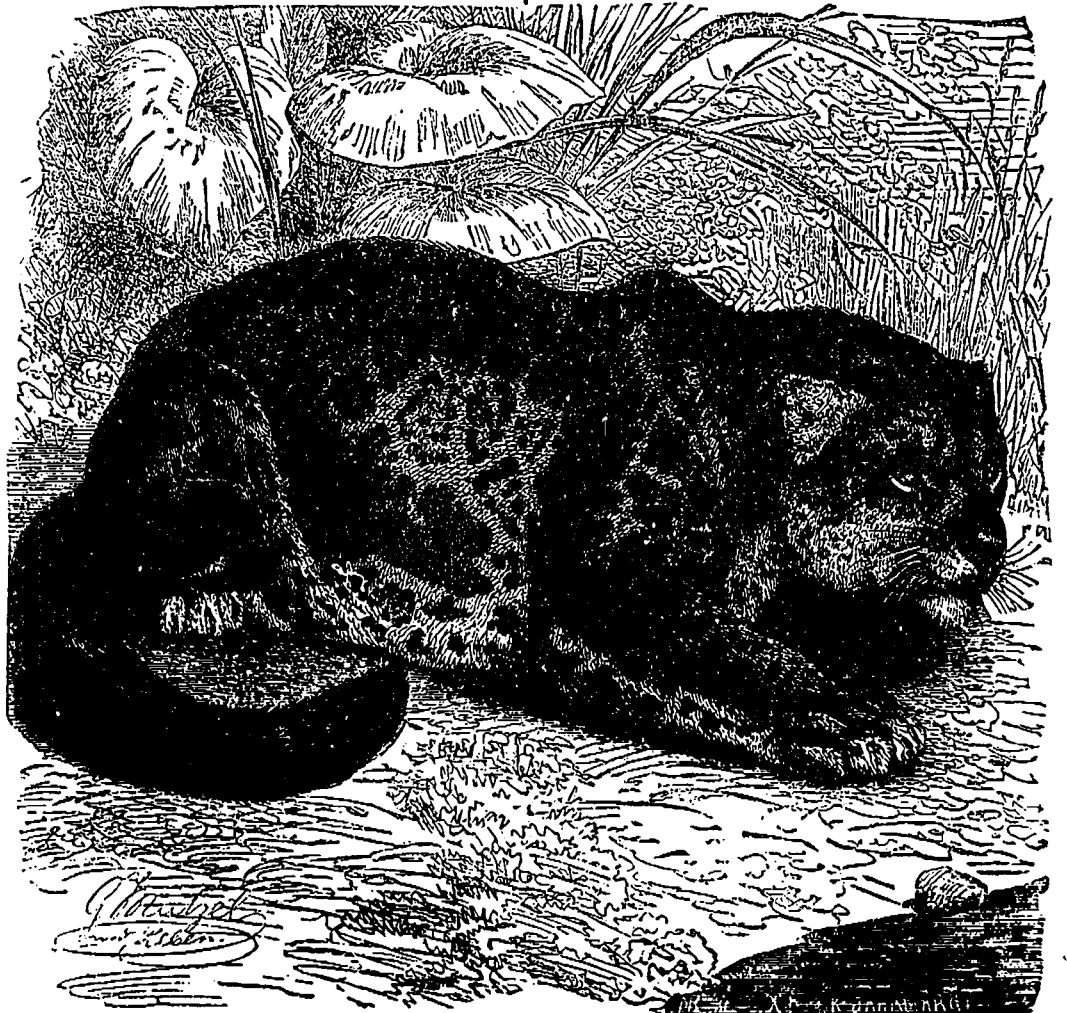
The relief party reached the large lake late the second afternoon. But Costello was unable to find the ravine where the "massacre" had occurred. They penetrated the apple forest as far as the northern arm of the lake, fired guns and kindled beacon smokes, but failed to obtain any trace of the missing men, and on the fifth and sixth days returned to the brig.

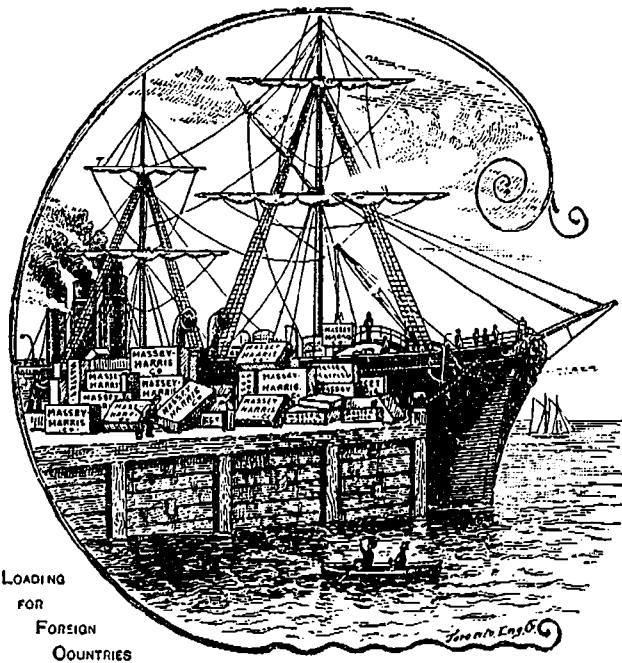
On the whole, Costello's account was taken to be true.

The six men were that night recorded in the log as lost on shore in Patagonia; and the captain reproached himself greatly for allowing them to go on such an errand. Valorous, the oldest of the party, was but twenty-four years old, while Rummy and Clum were no more than eighteen or nineteen,—not much better than boys, in fact, any of them.

Meantime, what had been their fate?

(To be continued.)





TWO YEARS OLD.

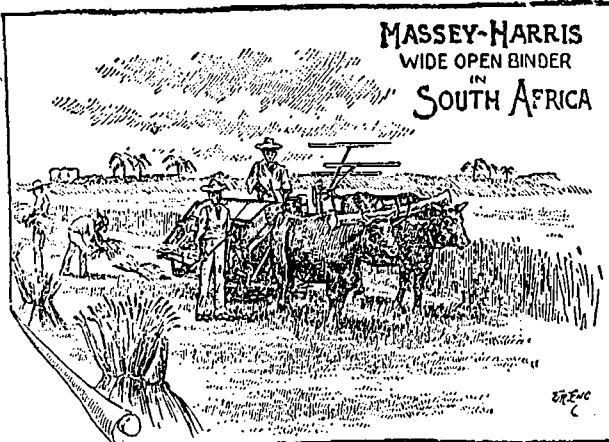
MASSEY-HARRIS CO., LTD., CLOSE A SECOND EMINENTLY SUCCESSFUL YEAR IN ITS HISTORY.

A RETROSPECTIVE GLANCE.

THE people of Canada have now had an opportunity of judging as to the expediency and desirability of the organization of MASSEY-HARRIS Co., Ltd. Immediately upon the announcement of the proposed incorporation of this Company certain newspapers and individuals took it upon themselves to pre-judge it; and heaped no end of abuse upon its organizers because of things they unjustly surmised this new Company would likely do; and which, as a matter of fact, they have never been in a position to do had they so desired. As to whether their forecast of MASSEY-HARRIS Co's policy was correct the public may now have an opportunity of determining for themselves, as the Company is just entering upon its third year. Such judgment without a trial was not only unfair but unjust, particularly when the very best of reasons for this move were clearly apparent, and the objects of the organizers were fairly stated. Further, the Company was not founded by a band of speculators, whose sole object was to make money at the expense of reputation and character; but the organizers were every one of them men of undoubted character—men well

and favorably known throughout the entire Dominion as the most reliable and stable manufacturers of agricultural implements. These were not men who had achieved the degree of success they had attained by speculation or gambling in stocks, produce, or real estate; but they were worthy citizens who had worked hard all their lives in the implement business and whose names were familiar household words in the homes of Canadian agriculturists. They foresaw the downward tendency of the agricultural machine business—the unwarranted and senseless competition leading to many failures and foreshadowing the ultimate decline in the quality of machines produced.

They could propound no other remedy than the dissolution of some of the too many existing manufacturing concerns and the organization of a new Company which should have a sufficiently large capital to put it on a proper financial basis, and which should do away with the expense of maintaining four or five sets of agents in every village, to say no-



thing of the cost of four or five separate managements and the running of an equal number of separate institutions.

It was also apparent that great saving could be effected in the cost of producing and distributing the goods under one management, while the sole possession of the amalgamated patent rights made it possible to put all the best points of each of the old machines into one new machine of a given kind. Therefore, foreseeing these advantages and realizing it to be the only solution of the existing difficulties, the promo-

ters of MASSEY-HARRIS Co., Ltd., brought about its organization. Being firmly convinced of the wisdom and necessity of the move, they entered upon it with honesty of purpose, making a declaration at the time that if the enterprise worked out as anticipated, the savings effected would not go into the stockholders' pockets alone, but should be shared by the farmers, as we previously intimated at the beginning of this article. This was, however, poohoed and decried by a few pessimists, though beyond question the management of the new Company were of such reputation that they retained the confidence of the farmers of Canada, as the great success of the enterprise has indicated, and certainly the results prove conclusively that our agriculturists have not misplaced that confidence.

Some of the advantages which have accrued to the farming community are as follows:—

1. Through savings effected by consolidation of management, of agencies, and also in manufacturing and distributing goods, the Company has been able to make a substantial reduction in prices.

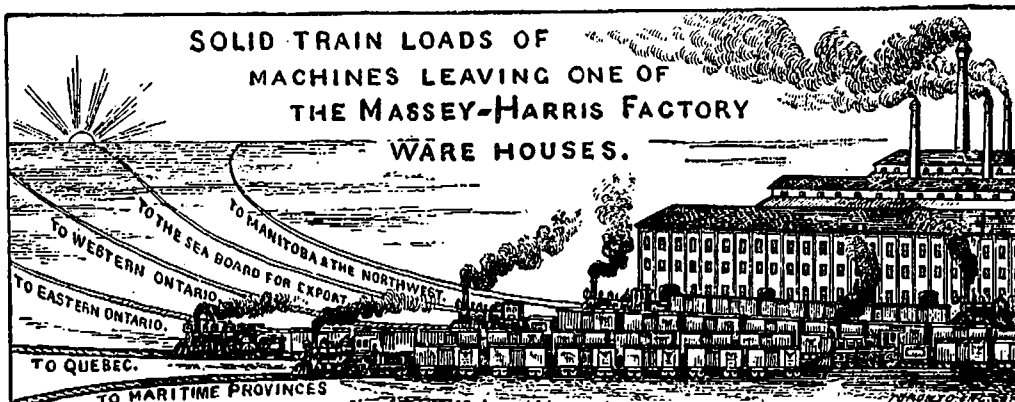
2. The Canadian farmers are now able to buy their implements at as low, if not lower prices than the farmers of any other country in the world.

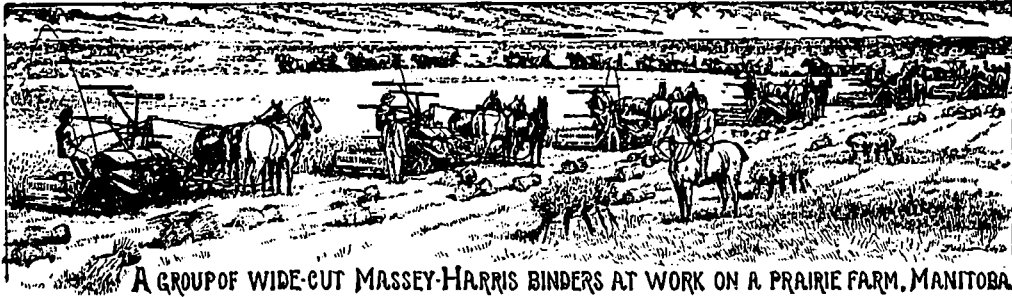
3. The consolidation of patent rights has made possible the uniting of the best points of the several machines made by the former concerns into one machine. Result: Better machine than ever.

4. Canadian implements are now recognized as having no superiors: They have captured the foreign markets, where they command the highest prices known to the trade, and where they have won the highest awards.

5. The organization of MASSEY-HARRIS Co., Ltd., has put the Canadian implement business on a more solid financial basis and given it sufficient capital to provide the necessary warehouses and carry the required stocks at convenient centres, so that the agriculturist can depend on more prompt and more efficient service.

Canadians have been quick to acknowledge these great advantages and have given this worthy Company their most hearty support. The few individuals (principally rival firms' agents) who have resorted to slandering the Company and its founders in order to accomplish their ends, have only wasted their energy and have done themselves great injury, so apparent was the falsity of their assertions. The malicious statements made by them against MASSEY-HARRIS Co.—amongst other things alleging that it was a combine organized specially for the purpose of extorting high prices, squeezing out other firms, and otherwise con-





A GROUP OF WIDE-CUT MASSEY-HARRIS BINDERS AT WORK ON A PRAIRIE FARM, MANITOBA

trolling trade—have been proved by the Company's real course of action to be absolutely false and without foundation, to say nothing of the fact that the MASSEY-HARRIS people are not, nor have they been, nor do they strive to be in a position to do these things. These statements have been libellous and might have been suppressed by legal measures, but the Company have found it entirely unnecessary to seek any further defence than the judgment of our fair-minded farmers as to the truthfulness of these allegations. They have further felt assured that the agricultural community cannot easily be hood-winked by such barefaced slander, and that they cannot fail to appreciate the benefits derived from the organization of MASSEY-HARRIS Co., Ltd.

There are no less than eighteen or twenty implement concerns in Canada, whose aggregate businesses amounts up into several hundred of thousands of dollars. MASSEY-HARRIS Co., Ltd., cannot therefore be considered a monopoly. This Company does not seek to control the Canadian implement business, nor has it made any effort in that direction. It does not hope to obtain any more trade than it merits. By the most energetic measures and untiring enterprise the Company aims not only to maintain its present enormous trade both at home and abroad, but to still further increase it by producing the best possible machines and selling them at the lowest possible price, which has been the directors' policy since its inception. The principles which govern it are the very best. From the commencement of their business it has been the aim of MASSEY-HARRIS Co., Ltd., to secure a substantial and enduring success by thoroughly deserving it—by furnishing machines of such undoubted excellence that each one will be a standing advertisement and recommendation of its worth. They will neither make nor recommend a machine or implement of inferior construction, and their guarantee will not be attached to any machine or implement that

does not reach the standard of excellence they deem essential, not only for their own reputation, but for the protection and satisfaction of their customers. *Labore et Honore* is the Company's motto, and by Labor and Honor alone does it hope to succeed. That the honorable efforts of the management of this enterprise have worthily achieved success is clearly evidenced by the



great quantities of machines and implements they have already sold. For the season of 1892, 41,474 machines and implements were produced, while over 45,000 machines and implements were manufactured by them for the season of 1893.

It should be clearly evident to every reader of MASSEY'S ILLUSTRATED that a vast army of men has been employed in building and distributing this tremendous output. A careful estimate indicates that no less than 7,000 people are now directly

sustained through the business of MASSEY-HARRIS Co., Ltd., alone, and that about 4,000 persons are supported through the preparation and handling of the enormous quantities of raw materials used by them. It must be gratifying to Canadians to know that by far the greater portion of the 40,000,000 pounds of steel, pig iron, bar iron, malleable iron, etc., etc., now annually used by the Company is produced in Canada, while the 5,500,000 feet of lumber and the 148,000 square yards of cotton duck are Canadian products.

Now that so large a proportion of the annual output of MASSEY-HARRIS Co., Ltd., goes to foreign countries—a trade which is continually on the increase—the value of this industry to Canadians is greatly enhanced. Who can estimate the worth of this one industry to our citizens? It takes a good many acres of wheat to supply bread to all the people employed directly and indirectly in this great industrial enterprise, and the products of many farms to provide them with Canadian beef and other necessities of life.

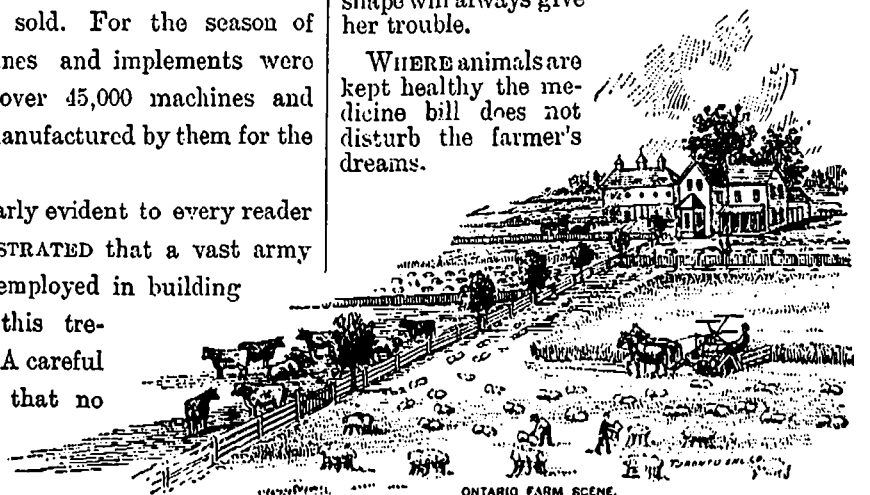
Five or ten minutes spent every morning during winter in rubbing the body briskly with a flesh brush, or piece of flannel over the hand, will do much to keep the skin active and prevent colds.

If one live far from bakeries and breadshops, crackers may be kept with great advantage in the house, if the secret of freshening them by putting them for three minutes in a hot oven be known.

If ants infest the storeroom shelves, a tiny range of powdered alum makes a threshold which they never cross. A few cloves strewn over the shelves, and occasionally renewed, will also usually disperse them.

One may know how to make twenty different omelets; but if she does not know that a little salt rubbed on the discolored spoon or fork will restore its silver tint, the serving of eggs in any shape will always give her trouble.

WHERE animals are kept healthy the medicine bill does not disturb the farmer's dreams.



ONTARIO FARM SCENE.



TWILIGHT-LAND.

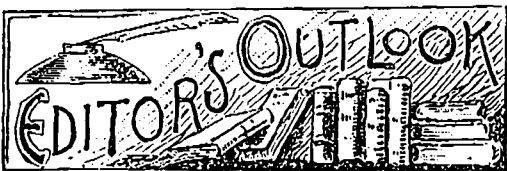
Here we are in twilight-land
Creakety-creak,
Rocking chairs at every hand
Sway, and swing, and squeak;
Here is neither park nor street;
Bare are the little twinkling feet;
White are the gowns and loose;
No place here for ball or bat,
No need now for coat or hat,
None for stockings or shoes.

What are the stories of twilight-land?
Hark, ah, hark!
Call the sweet names where they stand,
Waiting in the dark,
Cinderella and little Bo Peep,
Who lost her sheep, her pretty sheep;
Jack Horner, bold Boy Blue,
And the three bears living in the wood,
And the wolf that ate Red Riding Hood,
And the spinning pussy, too.

The little children in twilight-land
Are still as mice,
And the story-teller must understand
She's to tell each story twice,
The crickets chirr, the stars' eyes wink;
Perhaps the man in the moon may think
Them sautey in their play;
But, whatever is heard or said or done,
Each sleepy, weary little one
Gets rested for next day.

For the pillow is white in twilight-land,
And white the bed,
And the tender, loving mother's hand
Is laid on the drowsiest head,
And list, the tune she hums and sings,
As with soft creak the rocker swings,
How far away it seems!
That tune—that lullaby—ah, me!—
They are leaving twilight-land, you see,
For the stiller land of dreams.

—Clara Doty Bates.



FROM the prize lists published, it is seen that the Canadian cattlemen did well at the Chicago World's Fair. A large proportion of prizes came to Canada for horses also, the noble Clydesdales standing very high. Ontario and Quebec ran neck and neck in the cattle competitions; in horses, Manitoba had an innings with the older provinces.

FROM almost all parts of Canada came reports of an exceptionally good August. Not only were the grain crops magnificent, but the weather, also, was favorable. In some localities the straw was thin, but nowhere that we have heard from has the grain been inferior. Harvesting in the wheat fields began early and the crop was secured safely before the end of the month.

THE hay crop was exceedingly heavy. In many districts operations continued until the last week of last month. When at length completed, the barns were filled with one of the best crops of hay ever cut in this country. A

portion of it—not very large—lost in the curing owing to the frequent rainstorms of July and August, but the abundance and the good condition of the greater part of it more than makes up for the deficiency of the badly cured part. Our farmers should all use hay tedders, and they will be

more certain of saving their hay crops. The advantages of tedding are worthy of careful investigation. Peas, barley, and oats, some of which have not yet been harvested, are heavy crops and unless damaged by the excessively heavy rains of last week and this week, ought to prove satisfactory yields.

DROUGHT and hot spells ruined the pasture in some localities. Clover and timothy will show up well. The crop report issued by the Ontario government may be summarized thus:—Corn is fair, potatoes possibly up to the average and roots will yield over the average. Apples are a complete failure, grapes exceptionally fine, and pears and berries above the average in most sections. A scarcity of butter is reported in the West, the dry weather having lessened the milk supply. Bees are everywhere reported in a healthy condition and the supply of nectar good. On the whole, the report is a more cheerful one than some of the earlier forecasts allowed us to look for. The total area under crop is 8,054,612 acres, as compared with 8,060,206 acres last year.

THE first of the leading Canadian Fall Fairs has just closed at Stanstead, Que. The display of stock was especially interesting and noteworthy. Taking it as a whole, it equalled the magnificent showing of last year, although a slight decline was noticeable in the milk grade, and, moreover, some of the best herds contributed their best animals to the World's Fair, Chicago. The sheep display was also exceedingly good, especially in Leicesters, Shropshires and South Downs. The eastern townships are famous for their grazings and fine live stock, and the Stanstead show brought together some very excellent specimens in the classes referred to and in heavy cattle.

IN Nova Scotia as well as in Ontario, greater attention is being given to the dairying industry. Driven by decreased returns from cattle-raising, the farmers are seeking a more profitable sphere of labor in the production of butter and cheese. The Provincial government is doing a good work in inculcating a scientific knowledge of dairying. In the school of agriculture at Truro, the most improved appliances are now used. In addition to the ordinary instruction in the institution, special lectures are being delivered for advanced pupils of the Normal school. These are followed by practical demonstrations, which enable the students to apply the knowledge they have acquired. During the vacation a special butter class will be formed so that students may give their undivided attention to the subject. The general public is not to be neglected. A course of practical instruction to farmer's wives and daughters was given last month. This is a genuine method of improving trade. Let the products be the best, and they will always command the best prices.

THE much-looked-for report of the commissioners appointed to investigate the complaints about the Ontario College of Agriculture has at

last been made public. It will be received by many with much regret. It will cause the resignation of two or three most efficient members of the college staff, and will leave heart burnings all round. It falls most heavily on Professor Shaw and next on Professor Sharman. The latter has resigned, and the former is defending himself in the public press, presumably previous to handing in his resignation. Principal Mills is sustained, but the evidence, such as it is, leaves no doubt that it was most unfortunate the president did not try to secure harmony between himself and one of the very best agriculturists on this continent. Professor Shaw's withdrawal will be a distinct loss to practical farming in the Dominion. He possesses wide and accurate knowledge, and on the farm he had the opportunity, surrounded with good conditions, to experiment and to observe, and to formulate such as he cannot do on a private farm. He found the farm, not in very good condition, and in three years he converted it into a well-kept, well-farmed place, where practical instruction was given to the students by a master of the art. He showed what he could do, and his students seemed to drink in his instruction, and to idolize the teacher. In such an institution as the college at Guelph, there must be strict discipline, but it seems hard when professional men, men of culture and education cannot pull together so that there might be no serious misunderstandings and division of counsel. The report is not sufficiently clear or conclusive to form a judgment, upon it, as to who the guilty party is, but should Professor Shaw determine to go he will carry with him the good wishes of many of the powerful agricultural community of Ontario.

THE recent complaints that the settlement of crofters at Saltcoats had proved a failure, leads the *Calgary Tribune* to say:—"The duty of our government, for instance, is to encourage farmers of experience and means to settle among us rather than those classes who have neither farm experience nor the means of living without public assistance. We need not bother ourselves about Scotch Crofters or Hungarian Jews from Chicago, or the unemployed workmen from Homestead or Pittsburg when we can secure farmers from Washington, and Idaho, and Oregon and Nebraska, who have made a success of farming, who pay their own way, who bring their bands of stock and cattle, and are in all respects desirable, peaceable and industrious settlers. All that such settlers ask is that the government will not add to the expense of reaching their homes in the North-West Territories by maintaining a useless and costly quarantine system, subjecting them to inspection fees on horses which are seldom inspected, and annoying them with irritating customs regulations that are of no real value to the country. They merely ask the government to 'lie up' on what are vexations to the settler and do no practical good to anybody. Good settlers from any quarter ought and are always welcome in Canada. At the same time, it is emphatically the duty of the Canadian government to swell the volume of British immigration as much as possible by making Canada an easy and a pleasant country to live in, so far as laws can effect that greatly to be desired end. And there is little doubt that British born settlers would prove better Canadian citizens than would subjects of the United States, who would be liable to return to their native states as soon as a wave of prosperity returns to these countries.

A LARGELY attended meeting was held in Toronto last week in the interests of the proposed Hurontario Ship Canal. The meeting was strongly in favor of the project, the promoters making a good case. A convention will be called of representatives from the various districts interested.

THE scarcity of farm labor has this year, again, given much trouble and discomfort and caused great loss to the Ontario farmer. It is perennial. It is in times like these that the value of machinery is properly estimated. When harvest comes on, and every second is precious as gold, then the farmer turns to his faithful Massey-Harris machines, which never fail him, however the hired man comes short of his duty. Yet the farm help question is one not easily got rid of. This season the wages in harvest time was from \$1.25 to \$2.00 per day, and from \$26 to \$30 a month all found. In a few districts the great scarcity did not increase the wages, a rather curious experience.

THE annual summer fair of Winnipeg was held last month and while in the opinion of good judges, some features have not been given the usual praise. A great improvement was noted in the general excellence of the display over last year. The falling off was chiefly in the live stock department, and is to be regretted, for Manitoba should make rapid advances in stock and mixed farming which is profitable in Ontario, and should become general in the west without loss of time.

IN England in 1845 the average yield of wheat was 18 bushels per acre, in 1885 it had increased to over 31 bushels per acre,—the result of scientific agriculture. In France thirty years ago, 22 bushels was an average wheat crop, now 33 bushels, an increase of 11 bushels per acre. In some of the best soils in Northern France 60 to 80 bushels per acre of wheat have been raised. What is the average in Canada—down in round numbers to 18 bushels—SCIENTIFIC AGRICULTURE PAYS always and anywhere, and under all and any circumstances. Try it.

MR. HERBERT GARDNER, the British minister of agriculture, has determined to shut out Canadian cattle from the British market. Two facts prove that he is animated by political reasons. 1st, It has been already demonstrated that no pleuro-pneumonia exists in Canada. A rigid examination of the lungs, etc., of cattle slaughtered immediately on landing, showed no trace of that disease. 2nd, Farmers in England are speaking out in favor of the restriction on economic grounds. Danger to their cattle from contagion has been abandoned now, and the effect upon the market prices is urged as a sufficient reason why there should be no unrestricted importation from Canada. As was pointed out in these columns once before, Mr. Gardner represents a constituency in which the agricultural interest is very strong and he was pledged at his election to come to the farmers' assistance to the best of his ability. He is now fulfilling his pledge. But there lies an appeal from Mr. Gardner and his farmers to the British people, and there are not wanting indications that the final court of appeal, the voters, are decidedly against the restrictive measures now in force. Scotland is aroused to a pitch of excitement over the question. Public meetings are being held, sometimes two or three a week, in which farmer, artisan and merchant join in denouncing Mr. Gardner's measures. There is, therefore, some hope that the pressure of public opinion may effect a relaxation by next season. It is gratifying to know from returns recently published at the port of Montreal that the volume of the cattle trade has been much better than could have been expected under the circumstances, and that the greater portion of the traffic has been in fattened cattle.

THE Patrons of Industry have been for some time devoting their consideration to a political platform, and they have at length decided

upon a creed with fourteen articles, some of which will commend themselves not only to farmers but to the general community. Here they are: 1, Maintenance of British connection. 2, Reservation of public lands for the actual settler. 3, Purity of administration and absolute independence of Parliament. 4, Rigid economy in every department of the public service. 5, Simplification of the laws and a general reduction in the machinery of government. 6, Abolition of the Senate. 7, Reduction of the Grand Jury from twenty-four members, as at present constituted, to twelve members, seven to constitute a quorum. 8, A system of civil service reform that will give each county power to appoint or elect all county officials paid by them except county judges. 9, Tariff for revenue only, and so adjusted as to fall as far as possible upon the luxuries and not upon the necessities of life. 10, Reciprocal trade, upon fair and equitable terms, between Canada and the world. 11, Effectual legislation that will protect labor, and the results of labor, from those combinations and monopolies which unduly enhance the price of the articles produced by such combinations or monopolies. 12, Prohibition of the bonusing of railways by Government grants as contrary to public interests. 13, Preparation of the Dominion and Provincial voters' lists by the municipal officers. 14, Conformity of electoral districts to county boundaries, as constituted for municipal purposes, as far as the principle of representation by population will allow.

Principal Canadian Fairs.

FOLLOWING are the dates of the chief fairs to be held in Canada this year:—

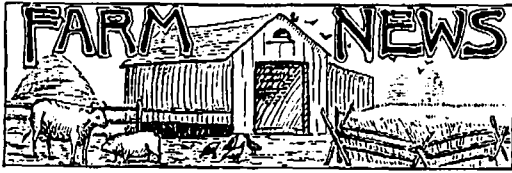
| PLACE OF FAIR. | DATES. |
|----------------------|----------------------|
| Toronto..... | Sept. 4th to 16th. |
| Sherbrooke, Que..... | Sept. 4th to 7th. |
| Pleton..... | Sept. 12th to 13th. |
| London..... | Sept. 14th to 23rd. |
| Wellesley..... | Sept. 19th and 20th. |
| Renfrew..... | Sept. 19th and 20th. |
| Guelph..... | Sept. 19th to 21st. |
| Whitby..... | Sept. 19th to 21st. |
| Perth..... | Sept. 19th to 21st. |
| Belleville..... | Sept. 19th to 22nd. |
| Ottawa..... | Sept. 22nd to 30th. |
| Peterboro'..... | Sept. 25th to 27th. |
| St. Catharines..... | Sept. 25th to 27th. |
| Kingston..... | Sept. 25th to 29th. |
| Woodstock..... | Sept. 26th and 27th. |
| Milverton..... | Sept. 26th and 27th. |
| Durham..... | Sept. 26th and 27th. |
| Paisley..... | Sept. 26th and 27th. |
| Brantford..... | Sept. 26th to 28th. |
| Walkerton..... | Sept. 26th to 28th. |
| Collingwood..... | Sept. 26th to 29th. |
| Lindsay..... | Sept. 27th to 29th. |
| Cannington..... | Sept. 28th and 29th. |
| Brampton..... | Sept. 28th and 29th. |
| Tilsonburg..... | Sept. 28th and 29th. |
| Stratford..... | Sept. 28th and 29th. |
| Aylmer..... | Oct. 2nd and 4th. |
| Cayuga..... | Oct. 3rd and 4th. |
| Paris..... | Oct. 3rd and 4th. |
| Arthur..... | Oct. 3rd and 4th. |
| Stayner..... | Oct. 3rd to 5th. |
| Almonte..... | Oct. 3rd to 5th. |
| Chatham..... | Oct. 3rd to 5th. |
| Markham..... | Oct. 4th to 6th. |
| Elora..... | Oct. 5th and 6th. |
| Beachburg..... | Oct. 5th and 6th. |
| Otterville..... | Oct. 6th and 7th. |
| Ridgetown..... | Oct. 9th to 11th. |
| Woodbridge..... | Oct. 17th and 18th. |
| Simcoe..... | Oct. 17th to 19th. |

A meeting of the Canadian Fairs and Exhibitions will be held in the Directors' Room at the offices on the Toronto Exhibition grounds, during the second week of the Exhibition. All Exhibition Associations are invited to send delegates.

DULL business and the bank failure in Winnipeg have affected money in the west, but the good crops are regarded as the means by which the situation will be relieved.

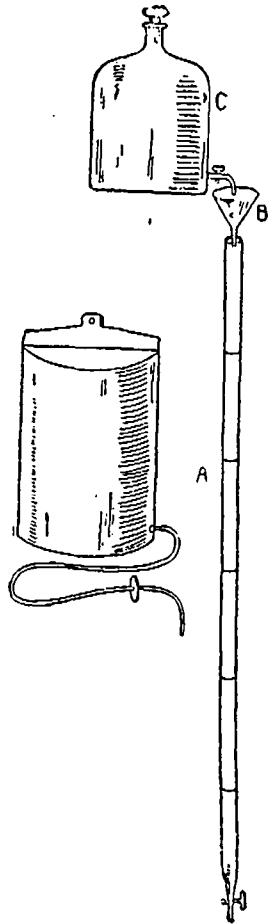


- 1st.—Peace restored in Nicaragua. . . . Heavy crop of hay reported from Kingston, Ont. . . . Sixtieth anniversary of the liberation of the slaves in British West Indies observed in America. . . . The Campbell heresy case discussed by the Montreal Presbytery.
- 2nd.—The corner-stone of the new Erskine Presbyterian church, Montreal, laid. . . . French blockade of Bangkok raised. . . . Advanced Prohibitionists held convention at Owen Sound.
- 3rd.—Bank of England advanced its rate of discount to two and three-quarters per cent. . . . Miss Fleming, Brampton, Ont., drowned in Lake Rosseau.
- 4th.—Corner stone of St. James' Anglican church, Morrisburg, Ont., laid with Masonic honors. . . . Opening of the C.A.A.O. annual regatta at Hamilton, Ont. . . . The British naval manoeuvres closed.
- 5th.—President Cleveland arrived in Washington. . . . Judge Davis, of London, Ont., died. . . . Two young sons of Mr. Mitchell, Sarnia, Ont., accidentally killed on the Grand Trunk railway. . . . Sarah T. Bolton, authoress of "Paddle your own Canoe," died in Indianapolis.
- 7th.—Emperor William left Cowes, where he had spent a week at the yacht races. . . . The extra session of Congress opened at Washington. . . . Sale of the Thousand Islands countermanded.
- 8th.—Italian man-of-war *Etna* left Montreal for Quebec. . . . Autumn session of Imperial House of Commons announced. . . . Members of the Canadian Bisley team arrived at Montreal.
- 9th.—Bank of England advanced rate of discount from three to four per cent. . . . Great scarcity of small silver announced in Italy. . . . Fierce rain and wind storm swept over Great Britain, causing great damage to crops.
- 10th.—Two hundred boys from Dr. Barnardo's homes left for Canada. . . . William Elliott, a well-known man of Bolton, Ont., was thrown out of his buggy and killed. . . . Prince of Wales' *Britannia* beat the American *Nahavoc* at Cowes' yacht races.
- 11th.—President Cleveland hanged in effigy at Golden, Col., by Free Silver enthusiasts. . . . Alex. Murdoch, engineer, Sarnia, killed by a driving belt. . . . China announced her intention to occupy the Chinese Pamirs.
- 12th.—Thomas Lock fell from a train at Durford, Ont., and was killed. . . . Yellow fever appeared in Brunswick, Georgia. . . . One hundred thousand pounds was withdrawn from the Bank of England for shipment to Canada.
- 14th.—Great Liberal rally held at Montreal at which the leader of the party spoke. . . . Hamilton's civic holiday. . . . The religious riots at Bombay suppressed by an imposing military demonstration. . . . *Lucania*, the new Cunarder, made twenty-five and a half miles per hour on her trial trip.
- 15th.—Behring Sea award issued. . . . Yellow fever epidemic in Honduras. . . . D. M. Cameron, ex-M.P., appointed Sheriff of Middlesex, Ont. . . . Coatsworth grain elevator, Buffalo, burned. . . . Floods in Austrian Galicia damaged crops and property to the extent of many millions of florins.
- 16th.—Carl Mueller, the German painter, and director of the Art Academy at Dusseldorf, died to-day. . . . International Peace Congress opened at Chicago. . . . Grand Trunk Railway declared a dividend of 2 per cent. per annum on all guaranteed stock. . . . The religious riots resumed in Bombay.
- 17th.—Legislative Assembly N. W. Territories met. . . . Windsor, Ont., banks supplying large amounts of Canadian currency to American firms. . . . Chas. J. Tupper left Liverpool by Allan Liner *Parisian* for home.
- 18th.—The vicariate of Idaho, raised to the dignity of a Bishopric. . . . Hon. Isidore Thibault, the Quebec millionaire, died to-day. . . . British steamer *Indra* stranded on Haisker, one of the outer Hebrides group.
- 19th.—The annual games of the 48th Highlanders held in Toronto. . . . The great Havemeyer sugar refineries, employing 4,000 men, resumed work.
- 21st.—Monument to President Lincoln unveiled in Edinburgh, Scotland. . . . Navigation returns of Montreal up to to-day show 494 vessels arrived in port against 446 for the same period last year.
- 22nd.—The Royal Canadian Dragoons arrived in Toronto from Quebec and took up their new quarters at the Fort Barracks. . . . The paid admissions to the World's Fair amounted to 152,380.
- 23rd.—The Manitoba School case reached the Supreme Court. . . . Body of W. D. Ross, of Ottawa, found at Hamilton. . . . Foul play feared.
- 24th.—Epidemic of dysentery raging in Japan. . . . A fire in Chicago destroyed 250 houses. Damage over \$1,000,000.
- 25th.—Town of Merced Falls, Cal., destroyed by fire.
- 26th.—The Negroni Caffarelli Palace, Rome, burned to the ground.
- 28th.—Bishop Chester (Protestant) of Killaloe, died. . . . Annual meeting of Dominion Rifle Association opened at Ottawa.
- 29th.—Heavy rain storm passed over Ontario, damaging oats, barley and peas.
- 30th.—Sir Charles Tupper arrived at Winnipeg en route to visit the Crofters settlements at Saltcoats, Minn.
- 31st.—Chicago limited express broke through an iron bridge at Chester; 13 killed, many injured. . . . Flour mill burned at Winterbourne; loss \$35,000.



Milk Tester.

The illustration here given shows some additions to the milk tester which save time to the operator. A is a glass tube, with a glass stopcock, called a burette.

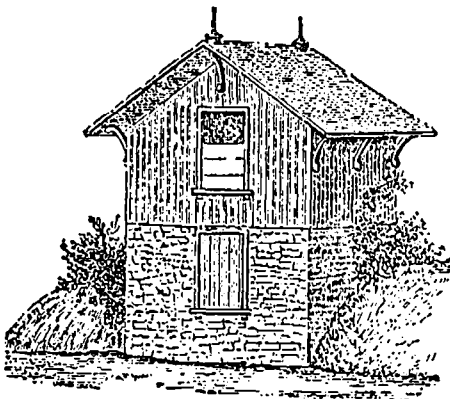


It is graduated in tenths of a c.c., but the marks shown in the drawing are for the proper amount of acid to be used. B is a glass funnel; C is a reservoir bottle holding two quarts. When ready to test, fill the bottle with acid, and then run the burette full. The testing flasks can then be supplied with the required amount of acid from this, in one-quarter of the time necessary to accomplish the same work with the measure furnished with the machine. In adding the hot water, we have another method which is quite handy, shown at the same figure. It is a can with a flat back, to which is attached a small rubber tube four feet long. This hose has attached to it a joint drawn down. Just

above the glass joint is a pinch cock. The can is hung on the wall above the tester. When ready to add the hot water to the test, fill the can, and from this add the needed amount to the flasks.—E. J., in *Rural New Yorker*.

Side Hill Ice-House.

Farmers who are thinking of building an ice house this fall may study the plan given here, with advantage, although the expense of such a house as represented would be rather more than that required for a house good enough for the general run of things.

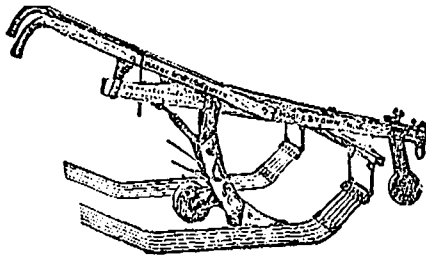


The engraving, reprinted from the *Country Gentleman*, represents the form of construction, when the lower part is built of stone and the upper of common vertical boarding. As the lower part is more than a foot in thickness, the timbers of the upper must be so constructed as to give an equal thickness, and to allow all the contents to settle alike. If, however, the whole is built of stone, this provision as to thickness is not necessary. It is hardly

necessary to mention the common provision for making non-conducting walls by allowing air spaces to be filled with sawdust. This sawdust should be ten inches or a foot in thickness and carefully and compactly filled in. If there is a perfect drainage below, the side walls well constructed, the ice covered with sawdust on top, over which there is a free ventilation, the ice will keep well. An interior size of 14 by 16 and 9 feet high will hold about 40 tons, and will keep plenty of ice during the time mentioned for a moderate family, if properly cared for.

Potato Digger.

One of the hardest problems inventors have had to face has been the construction of a workable potato digger. The *Rural New Yorker* gives as reasons: This is because digging is the hardest and most complicated part of potato growing—weeds, stones, vines and hard-packed soil have all to be overcome in digging potatoes. The actual force of throwing the tubers out of the soil is but a part of the process—they must be screened or sifted from the earth as well. In fact, this sifting has proved the worst obstacle in the path of the inventor. It was easy enough to devise a strong plow that could pass under the tubers and throw them out with dirt, stones and vines, but a good portion of the potatoes were more or less covered and hidden from sight. The problem then, was to devise an attachment for shaking out the dirt and stones, and leaving the tubers on the top of the ground. Two distinct methods have been worked up by inventors. One is represented by a large, heavy, complicated machine with cog wheels, shakers chains and many parts. This is to scoop up vines, dirt and tubers, shake out the former and pass the latter out behind on the surface of the ground. These complicated machines do good work, the objections to them being that they are of very heavy draft, expensive in price, and so complicated, that the average cost of repairs is quite a large item.

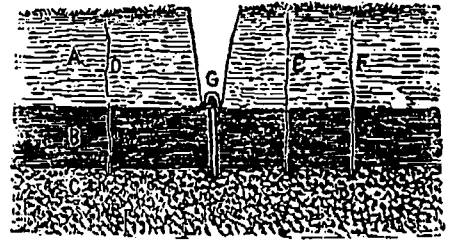


The other plan was to devise a plow with a simple screening attachment without expensive fixtures or heavy weight. The argument in this case was, that the average farmer did not want a complicated or expensive machine, but one that his single team could easily handle and which would not demand annual investments for repairs. Beginning with the shovel plow with spikes or fingers ranged about it, this idea has been developed until we have the arrangement shown in the accompanying cut which is the best simple device yet produced. In this machine the potatoes do not fall behind at all. They are simply plowed to right and left, falling upon the long screens which run lightly and easily over the ground almost exactly as one would dig in the soil with his fingers.

Artesian Drainage.

J. E. WING writes the *Country Gentleman*:—"The drainage of springy land is often very difficult. The ditches put through the wet place are found to drain only imperfectly the surrounding soil. I have seen water stand on the surface of the ground with tile buried 8 feet below—all clear and free and in good working order. The reason is, the water is forced out of the ground by an upward pressure, and comes through little seams and veins distributed through the soil, many of them near the tile perhaps; yet the water will come nearly or

quite to the surface before it works its way to the tile. The condition producing this state of affairs is illustrated in the cut. A shows upper



stratum of wet soil, which is often peaky or mucky; B is a layer of hardpan or tough boulder clay or marly clay; C shows the gravel water-bearing stratum; D E F are the minute natural water channels from latter to surface. The tile is generally laid directly on the hardpan, as shown at G. If conditions are favorable, this will dry it sometimes. To cut deeper into the hardpan is useless unless you can go clear through, and this is often impossible. I have done it, however, with the very best results. To go clear through the hardpan is often too expensive and even impossible. I have cured very difficult places by taking a post-hole digger and sinking a small hole through the hardpan down to the water-bearing gravel, as shown below G in the cut. The water will generally rush up and flow off through the tile. This should be done at intervals of about a rod."

DURING the first five months of 1893 Chicago received 107,471 carloads of live stock, compared with 129,370 last year.

IN Pennsylvania, according to a recent census bulletin, there are 513,403 existing mortgages calling for \$613,105,802.

MANY farmers have tried to increase their income by increasing the size of their farms, but it will not maintain the ratio.

A WELL-CONSTRUCTED silo has more to do with the good keeping qualities of its contents than does the artistic packing of the fodder.

THE *London Times* urges British farmers to adopt some method of preserving butter, so as to save the trade in the English market.

LOTS of grumbling is heard about all kinds of farming being "overdone." If this "overdone" business is the cause of the finer breeds of stock now bringing such good prices, we hope it will continue. Everything can be remedied except discontent, and the only cure for this is to cure it before it gets a lusty growth in your disposition. Perhaps you are "overdoing" in kicking, and are "underdone" in the matter of thinking. An old idea, but it may be new when applied to yourself.

IN the pathological laboratory of Johns Hopkins Hospital it was necessary recently to determine the exact action of the poison of the rattlesnake. The creatures were kept in a wire covered box. When one was required for experimental purposes, it was caught round the neck by a noose at the end of a stick. A deep glass vessel was then presented to the enraged animal, and it instantly struck its edge with its fangs. The poison, which was caught in the bottom of the vessel, was free from all foreign admixture. Minute quantities injected beneath the skin of rabbits produced marked leso. For some reason or other the snakes refused food and in order to keep them alive an egg mixture had to be forced down their throats by means of a stout glass tube.—*Scientific American*.

Libe Stock.

The Greedy Pig.

In a farmyard old there lived a pig,
With bristles black as ink,
And all the day, so I've heard say,
He did nothing but eat and drink.

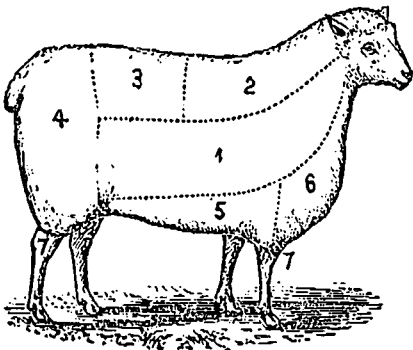
At length he ate so very much
That he grew remarkably stout,
And there he would lie in front of the sty,
Too lazy to waddle about.

One day the farmer spied him out,
And piggy was straightway taken,
And soon, alas! it came to pass
He was turned into streaky bacon.

O fat pig! O black pig!
And pig with the curly tail,
Why, why did you stuff when you't had quite enough
And leave me your fate to bewail?

Talk on Wool.

IN an interesting article which Mr. Henry Stewart contributes to the *Country Gentleman*, he predicts a steadily increasing demand for wools, and that of many grades suitable for all demands of necessity or fashion. He says: "Wool is now differentiated by breed, and by the parts of the sheep's body. It must not be supposed that the whole body of a sheep bears the same kind and quality of wool. This would be a wholly mistaken idea, and one that would stand prominently in the way of any intelligent consideration of this subject. And this is one of the most important things for the wool grower to study when he is thinking of improving his wool-bearers. The diagram here given



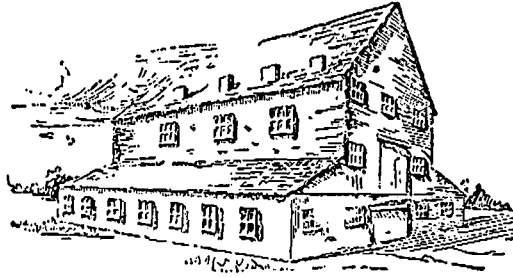
will represent the difference in the quality of the wool of any one of the Down breeds, and approximately of that in a Merino. For the quality of the fleece is yet dependent to a large extent on the form of the frame, even of the most highly bred Merinoes, and it will be centuries, perhaps, before the most skillful breeder will be able, if ever, to overcome the tendency to this local variation in wool. Hence the wool-sorter's occupation will still remain until by successful crossing and long continued breeding the whole carcass may bear wool of a high value if this were desirable. That it will be desirable to the wool-grower seems to be very certain, although there is a necessity for many grades for the manufacturer. The wool from the centre of the sides, marked 1, is of the finest quality. At 2 and 3 the fleece becomes coarser and shorter, and as the breech is approached, at 4, this coarseness, and length, too, are increased. The most inferior part of the fleece is on the belly and brisket, as at 5 and 6, that on the legs being almost like hair. Every Merino breeder will know how much has been done with that breed in bringing the fleece to a more even sameness of quality, for in some of the Merinoes the belly wool is much better than in the Down breeds, and the leg wool is wool down to the hoofs."

Plan for a Sheep Barn.

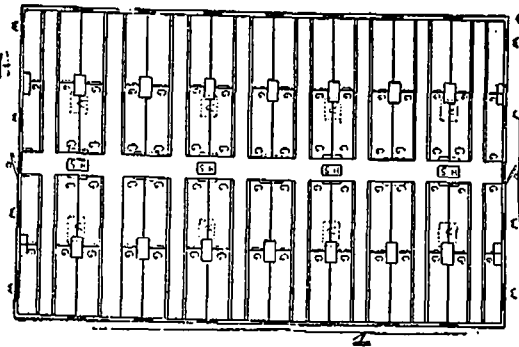
THE following illustrations show a sheep barn on a large scale. The lower story is 96 by 160 feet outside, with the side walls nine feet high. The upright or centre part I have planned is 48 by 160 feet, with 24-foot posts

above basement. This part may be varied by making it wider or narrower, higher or lower, according to the storage capacity required.

There is provision for eight ventilators, four on each side, and these come from nearly over the division between the pens on each side of the barn. There are three windows and a door on each end of the upper story and three windows on each side. Three doors may be made on each side, if desired, for ventilation and for running a belt from the engine to the thrasher placed on the floor. These doors should, of course, not go below the roofs of each lean-to.



The windows in the lower story, of which each side has seven, are placed directly opposite the division fences between the pens, so manure from each can be thrown out when cleaning out the outside rows of the pens. Each end should have four windows. This will give 22 windows to the lower story, affording ample light to all the sheep. Fig. 2 shows the lower story with



the pen or alley arrangement for the sheep-fold. The centre alley is eight feet wide and runs from end to end with a door at each end, shown at D. D. This alley is wide enough to allow one to drive through for cleaning the manure from the inside pens and may have a trap-door from the upper floor opposite each cross or feeding alley, or only four as shown in the cut, through which to throw down forage and bedding from the storage-room above.

The windows are shown, marked W. Each pen has a gate marked G. In the center of each lot of four pens is placed a water trough, as shown. These should be made of galvanized iron and be three feet long, one foot wide and six inches deep, placed in a light wooden frame fastened into the fence so as to extend into each pen. The water may be supplied from a tank in the barn above or from a spring; no matter whence, only that it be pure, fresh and abundant.

It is not necessary to pound the cow to get milk out of her.

GOOD training is necessary to properly develop the horse.

LET the sow be eight or nine months old before breeding her.

GIVING charcoal to the hogs acts upon the blood as a purifier.

THE same feed that makes beef in one cow makes butter in another.

THE proper way is to leave the colt in the stable when the mare is at work.

The average weight of beef steers in England 180 years ago was but 370 pounds.

THE brood sow will not need more than one half the feed if given good pasturage.

CORN is a standby in fattening hogs, but it should not be too much depended upon.

THE farmer whose principal product is grass appreciates the value of cattle and hogs.

GOOD sheep, fully as much as good stock of other kinds, will always fetch good prices.

WHEN possible now, do the hardest part of the work in the earliest part of the day.

It seldom adds to the beauty of a horse to rein his head out of the way that he naturally holds it.

The Poultry Yard.

STAGNANT water is one of the first steps towards cholera.

THE hen that is too fat is the one that is laying the soft shelled egg.

BETTER get rid of the chicken-killing dog before he gets rid of the chickens.

PULLETS will prove much more profitable if they are not crowded by the other fowls.

PLUNGING into hot water immediately after picking will often make the fowls for market look more plump.

Do not keep more fowls than you can readily feed without depending too much on the income of the business.

It is not a good plan to clip the wings of laying fowls, for the growth that goes to make up the lost feathers diminishes the egg-production.

TAKE a bit of lard the size of a marrowfat pea and rub it on the head and neck of your young chicks. You will rid them of the large grey lice.

It is not a good plan to confine fattening turkeys for any length of time. Let them run until within about ten days of the time you intend marketing them.

TRY raising Guinea fowls along with your chickens. They very seldom are troubled with the diseases that attack the ordinary domestic fowl, and the flesh is very sweet.

A PEKIN duck will lay from 120 to 150 eggs in a year, and it is not hard to make a pair of young Pekins weigh ten pounds when ten weeks old. They are profitable birds.

KEROSENE is beneficial in so many ways that it should always be kept among the poultry house supplies. Applied externally it is a disinfectant and killer of vermin. Internally a little in the water or feed will prevent cold and roup.



Vegetable Poetry.

POTATOES came from far Virginia ;
 Parsley was sent us from Sardinia ;
 French beans low growing on the earth,
 To distant India trace their birth ;
 But scarlet runners, gay and tall,
 That climb upon your garden wall,—
 A cheerful sight to all around,—
 In South America were found.
 The onions traveled here from Spain ;
 The leek from Switzerland we gain,
 Garlic from Sicily obtain,
 Spinach in far Syria grows ;
 Two hundred years ago or more
 Brazil the artichokes sent o'er,
 And southern Europe's sea-coast shore
 Beet roots on us bestows.
 When 'Lizabeth was reigning here,
 Peas came from Holland, and were dear.
 The south of Europe lays its claim
 To beans ; but some from Egypt came.
 The radishes, both thin and stout,
 Natives of China are no doubt ;
 But turnips, carrots and sea-kale,
 With celery so crisp and pale,
 Are products of our own fair land :
 And cabbages, a goodly tribe,
 Which abler pens might well describe,
 Are also ours, I understand.

London Young Folks' Inval.

Sardines.

MR. F. S. DELLENBAUGH, in a paper upon Finistère, read before the American Geographical Society, describes the sardine industry as it is practised off Pontaven, on the coast of Brittany. At times, he says, there are as many as twelve hundred fishing-boats collected at this point where the sardine, while on its north-

ward journey, attains its most desirable size for taking and packing. The boats are about thirty feet long, entirely open except for a short deck at the stern, and carry two masts that can readily be taken down.

The net, about twenty feet long and six or eight feet broad, is weighted on one long edge and buoyed with cork floats on the other, so that when it is in the water, behind the boat, it assumes an upright position like a wall, and in this position is towed through the water, by one end, as the boat moves slowly along.

The captain mounts the little deck at the stern with a bucket of bait called *rong*, the eggs of codfish, under one arm, and his practised eye ranges the water. When he discovers the proximity of the fish he scatters a little of the *rong* on one side of the net, and they rise in a shoal to take it. This is the critical moment. He throws a quantity on the opposite side, and the fish, making a dart for it, are entangled in the meshes.

When the sardines are numerous the boat does not halt to take the net on board ; by means of a certain pull the meshes are tightened, and with a buoy to mark it, it is cast off and left till a full catch is made. Another net is put out, and the operation is repeated till all the nets are used.

Then comes the picking up and extraction of the fish, the latter work being performed with great care because handling the fish injures them. The net is caught up at the ends and see-sawed till all the fish drop into the bottom of the boat, where they remain till the arrival in port.

There the fish are counted by the two-hundred into coarse baskets, and dipped in the water beside the boat to free them from loose scales and other matter. Thence they are carried to the factories and thrown upon long,

low tables, on each side of which is a row of women and girls, who, with a short knife, prepare them for the salt vats, where they remain for two hours.

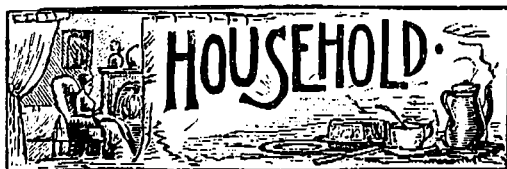
After that they are placed in coarse baskets and given a bath of sea-water under a pump. Then they are put to dry in the open air on wire racks. When the fish begin to shrivel, the racks are taken to the oil-room, where four or five tanks of olive oil are constantly boiling. Each rack is plunged for a moment or two into the hot oil and then set aside to drip, after which the fish are selected and carefully laid in tin boxes of various sizes.

When a box is full it is passed along to the oil-tap where the space remaining is filled with oil. The box is now ready to seal, and passes along to the solderer. After the soldering a hole is punched in the cover to let out imprisoned air, and immediately closed with solder. Next the cans are placed in a huge iron crate and lowered into tanks of boiling water. If there is still air in the can it will explode or bulge out, and the trouble can be corrected before the final packing in wooden boxes for export to all parts of the world.—*Youth's Companion.*

Foot and Fathom.

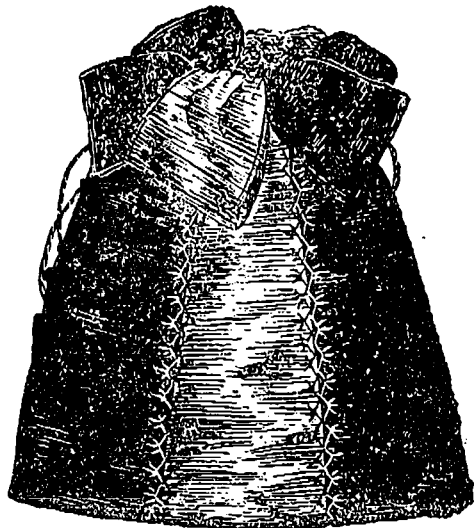
THE "foot" is named from the length of that member in a full-grown man. Some say that it was so called from the length of the foot of a certain English king, but it is believed to have been a standard of measurement among the ancient Egyptians. The cubit is from the Latin *cubitus*, an elbow, and is the distance from the elbow to the end of the middle finger. Fathom is from the Aryan *fat*, to extend, and denotes the distance from tip to tip of the fingers when the arms of an average-sized man are fully extended.





Shopping Bag.

No self-respecting lady can be without a shopping bag in these days. If she has any regard for appearances, she will not carry a leather satchel like a traveling salesman, but some pretty combination of silk or velvet. The bag shown in the sketch is made of two colors of wide ribbon overhanded together until within six inches of the ends; these are then turned over to form the loops and stitched down, or



CONVENIENT SHOPPING BAG.

basted and fastened with a row of feather-stitching on the right side. A second row makes a place for the cord or ribbon to draw it up by. Remnants of fancy brocaded ribbons can often be found on the bargain counters and purchased for a trifle. Black ribbon, brocaded with tiny rosebuds in old rose, with a centre stripe of old rose satin ribbon, makes a very handsome bag that can be worn with almost any costume.—*American Agriculturist.*

A Needlebook and Emery Bag.

To make the needlebook, illustrated in Fig. 1 procure a piece of soft chamois skin five inches wide and seven inches long, twelve inches of light pink satin ribbon one and three-fourths

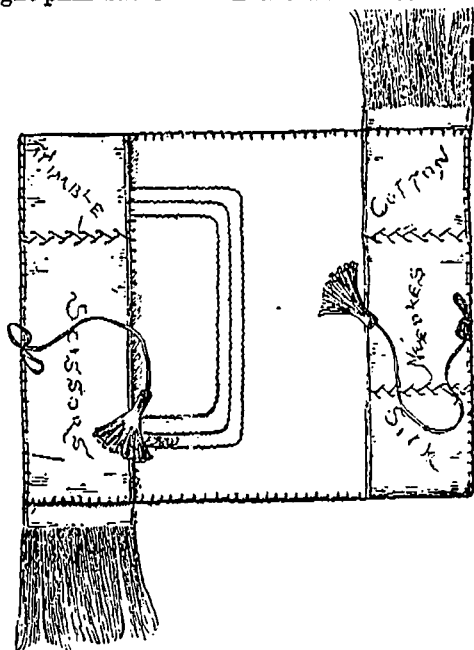


FIG. 1.

inches wide, and a piece of green satin ribbon of the same dimensions. The ribbon is used to face the ends of the chamois, the extra length

being fringed out. It is then divided, on the inside, into little pockets by rows of feather-stitching done in pink silk on the green ribbon and *vice versa*. The button-hole stitching around the edge is also done with silk. The leaves for the needles are made of pink and

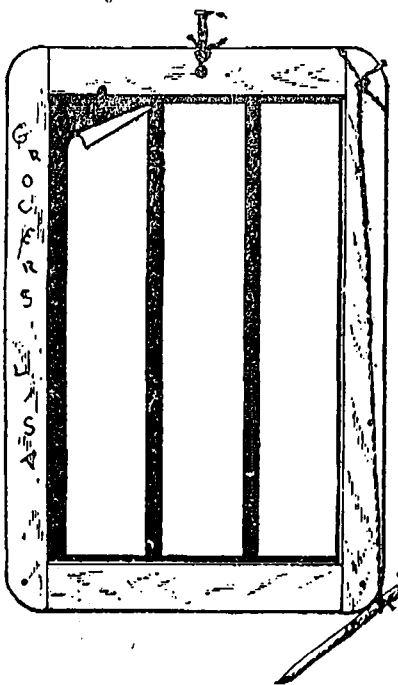


FIG. 2.

green flannel and button-hole stitched, care being taken to fasten them to the ribbon only so that the pocket for the scissors can be reached. The strings and tassels are made of chamois, the tassels being formed by cutting one edge of a strip of chamois into slits, rolling it up tightly and fastening it to the string. Fig. 2 represents an emery bag made of pink ribbon and fastened to a piece of chamois on which has been feather-stitched green ribbon as described in the construction of the needlebook. The lettering on both the emery bag and needlebook are done in gilt, but may be dispensed if so desired.—*American Agriculturist.*

A Kitchen Indicator.

A MEMORANDUM slate will be found very useful in the kitchen, and can be made by procuring a slate the dimensions of which are seven and one-half by ten and one-half inches, and



A HANDY SLATE.

pastings three strips of light brown paper on one side of it, as shown in the accompanying illustration. Print or write your household list on these, tie a nicely sharpened pencil at either of the right-hand corners so it will be ready for use, and when you think of a need, make a dash on the slate opposite the article. This is a nice little gift for boys to make.

Hints to Housekeepers

Powdered borax, plentifully used, will exterminate cockroaches and water-bugs.

Bread crusts should be dried in the oven and put away in paper bags until wanted for use.

Rusty black lace, which may have been long in the family, can be revived and made as fresh as new by the steam of green tea.

No hamper or other receptacle of soiled clothing, no matter how handsomely decorated, should be kept in a sleeping apartment.

An ink splash on the carpet should be first washed out with milk, and cleaned up afterwards with warm and nice soapsuds.

If your oven is too hot you can cool it by putting in a dish of water. If it is too hot on the top, lift the lids which are over the oven.

Put powdered or dissolved coppers down the sink and other drain pipes as often as once a week, and flush them well on washing days.

For frost bites keep away from the fire and rub the parts affected with snow or ice water until thawed, then treat as you would a burn.

When the eyes are tired, or inflamed from loss of sleep, apply an old linen handkerchief dripping with water as hot as you can possibly bear it.

To throw water on burning kerosene only increases the danger by causing the oil to spread, but salt, flour, or cornmeal will quickly smother the flames.

To take ink out of linen dip the spotted parts immediately in pure melted tallow; then wash out the tallow and the ink will have disappeared.

In ordinary burns and scalds the only remedy required, is to thoroughly exclude the air from the injured part. Cotton batting will do this effectually.

Dish-water, which is always impregnated with more or less vegetable matter, should never be thrown on the surface of the ground at the back door.

Always keep the inside of your coffee pot bright to insure good coffee. Boil it out occasionally with soap, water and wood ashes and scour thoroughly.

A grease spot can be absorbed out of existence by frequent applications of magnesia or buckwheat flour, sprinkled on abundantly and brushed off afterwards.

To relieve pain from bruises, and prevent discoloration and subsequent stiffness, nothing is more efficacious than fomentations of water as hot as it can be borne.

There are few servants so thorough that you should not inspect the refrigerator daily to see that no liquids are spilled or food allowed to spoil and contaminate the rest.

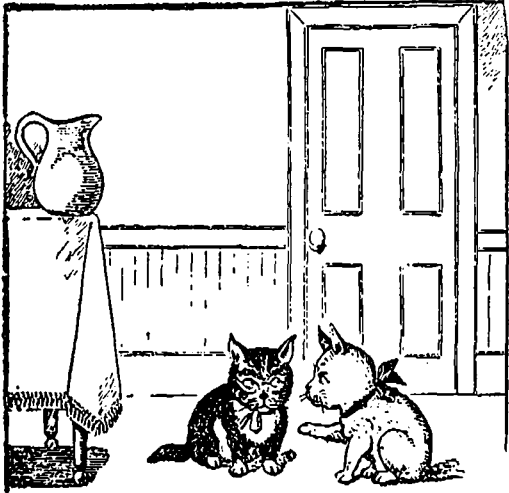
If a bag of flax seed is put in water to soak, some time before using the water for washing varnished paint, it will be a great help to clean and keep the paint bright.

White sugar is an excellent application for cuts, wounds and bruises, quickly subduing inflammation. Salt pork, raw, is also good and in some cases easier to apply.

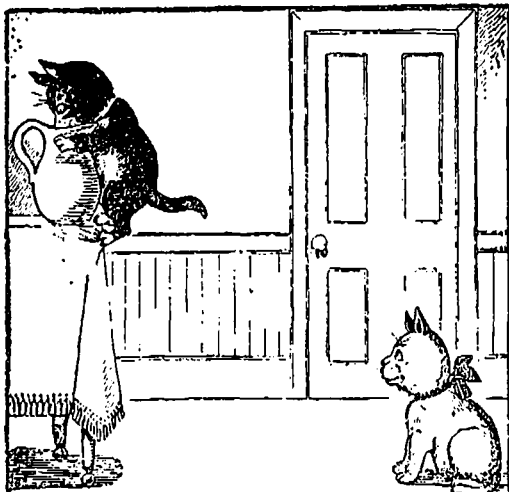
COCOA CREAM.—Beat to a stiff froth one pint of stiff cream; add to it three teaspoonfulls of Epp's cocoa, and enough granulated sugar to sweeten. Eat with cake as a light dessert. Sponge cake is best for this purpose.

STUFFED EGG-PLANT.—Wash the egg-plant, put in a kettle, cover with boiling water and boil until tender; take up, cut in half and scrape out the soft portion leaving the skin unbroken; mash the egg-plant fine, add butter, salt and pepper, mix well and put back in the skin, sprinkle the top lightly with bread crumbs and put in the oven to brown.

A CATS-PAW.



FIRST PUSSY.—You're no good, anyhow. I'll bet you can't jump upon that table and see what is in that pitcher of cream.



SECOND PUSSY.—Can't I, though!



FIRST PUSSY.—That cat certainly is a jay. It won't be any harm for me to help Bridget get this cream off the carpet.

Doctor—"You need a change in climate." Patient—"What's the matter with this climate?" Doctor—"It's too changeable."

Miss Pedagogue—"Name the principal parts of the verb to marry." Young Miss Wabash—"To marry, married, divorced."

Winks—"What an unbearably-conceited fellow that Lighthead is!" Jinks—"Yes, I think he must have left college in the freshman year."

The cobbler who posts a sign, "Shoes mended while you wait," casts an involuntary reflection on the prosperity of all his customers.

Late revellers singing "There's no place like home" always stop their melody just before they get there and creep upstairs in their stocking feet.

Miss Whacker—"Do you consider it a sign of weakness in man to weep, Mr. Factor?" Mr. Factor—"That depends who is playing the piano."

"Is Miss Penseratch trying to win a name for herself?" Miss Growler—"I should say so. Why, she almost proposed to old Mr. Ducats last night."

Summer Landlord—"Well, how does the thermometer stand this morning?" Summer Guest—"It does not stand, it lies, by about fifteen degrees."

Robbins—"I'm just back from Chicago and—" Dobbins—"Really, old fellow, I'm very sorry, but I'm so tied up financially that I can't lend you a cent."

"How is the table at the beach this summer, Hicks?" "Same as it was last year. Fact is, judging from the bread, I imagine some of it was left over from last year."

"John, what a lovely place! If we could only manage to raise the rent," Mr. Hunter Howes—"Oh, I have no doubt the landlord would see that to that in a couple of months."

"We hear a great deal about the seven ages of man, but no one ever alludes to the seven ages of woman—what is the reason?" "Gallantry, my boy, gallantry."

Among the vain men whom we meet,
The vainest one of all
Is he who boasts of his little feet,
When his head is just as small.

Mac—"That Miss Jumper is dreadfully masculine in all her ways." "What does she do?" Mac—"Oh, I have seen her get off the car before it stopped, without falling."

Man wants but little here below
While in this earthly school,
But while the weather's as it is,
He wants that little cool.

Deacon Bragg—"Do you think it is sinful to marry for money?" Rev. Mr. Tium—"It never occurred to me so; on the contrary, sometimes I have thought the fee was too small."

Keep cool! You'd better let the world
Wag onward as it will,
Than stew and fret until you're sick
And pay a doctor's bill.

Swizzle—"It's strange I meet Jones so rarely. How do you suppose I can arrange to see him oftener?" Bronson—"Borrow \$5 of him and you'll meet him every day."

A MILLION OR TWO AHEAD OF HIM.

"I don't like to seem disrespectful," said the world's fair visitor who was making his way up the stairway leading to the tower of the Pennsylvania state building, "but there isn't another square inch of space left vacant anywhere within reach."

And he wrote his name legibly on the placard which announced in big letters that anybody who defaced those walls by writing on them would be arrested.

HER IDEA OF IT.

A woman arraigned in a Vienna law court recently was asked by the judge if she had a clear character. The accused was silent. Then the judge, putting the question in a more direct form, asked: "Have you ever suffered a legal punishment?" "Yes," answered the defendant. "What was it?" "I am married!" At this judge, jury, and spectators alike broke into irrepressible laughter.

MODERN MUSIC.

How can we expect modern music to become popular with the masses when they are called upon to remember the compositions of men with such names as Dvorak, Paderewski, and Tcharkowski?

WISE PRECAUTIONS.

The following notice to lifesavers appears in a popular French bathing place: "When a lady is in danger of being drowned seize her carefully by her garments and not by her hair, as the latter is very apt to come off in your hands."

IN PASTURES NEW.

And now the bears are reported to be eating the cattle in Vermont. They have been feeding exclusively on bulls in this vicinity.



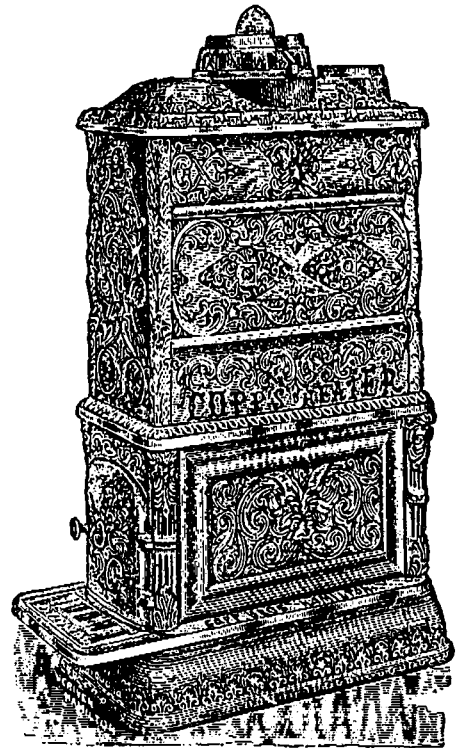
PATENT APPLIED FOR.

TOURIST.—What is your idea in working with the wire rope on?
NATIVE.—It ain't my idea; it's my boss's—there's a circus in town!

SOME SEEMING DISCREPANCIES.

What is the precise color expressive of anger or rage? Novelists seem hardly to have settled the point as yet, if we may judge from the two passages below, taken from a recently published novel:

1. Page 9. "Adrienne suddenly appeared, her face white with anger."
2. Page 20. "The little fellow was trembling with a blue rage."



COPP WARRIOR HEATER.

A short explanation of this magnificent and powerful heater may be useful to many who do not wish to go to the expense of a Furnace, and yet obtain a like result.

The fire box, as shown in cut, is large and roomy, and will take 32-inch wood. The heat and smoke pass from it to the upper section, and are conducted through eight horizontal steel pipes, each 5 inches in diameter, with a total length of 15 feet. The passage of combustion through these entirely exhausts all heat before reaching the smoke pipe.

Cold air is conducted under the centre ring, and comes directly in contact with the several heated steel pipes, and then passes to the central exit at the top intensely heated. The hot air then can either pass through pipes to different rooms, or be thrown directly into the room in which the heater stands.

The powerful heating capacity, the great economy, the ease to control, and the surpassing beauty of this remarkable heater, together with its durability, makes the Copp Warrior Heater the very neme of economic and scientific household, hall, and store heating, as hundreds testify.

Your letter of enquiry will have our immediate attention.

THE COPP BROS. CO., LTD., HAMILTON.

Rubber Belting!

THE CANADIAN RUBBER CO. OF MONTREAL

Manufacture the Best Threshing Machine Belts in America.

ASK THE MERCHANT YOU DEAL WITH FOR THEM, AND TAKE NO OTHER.

RUBBER WESTERN BRANCH: BELTING
 Cor. Front & Yonge Sts., TORONTO.

THE CHATHAM FANNING MILL.



1000 sold 1884
 1330 sold 1885
 2000 sold 1886
 2300 sold 1887
 2500 sold 1888
 3600 sold 1889
 4000 sold 1890
 4500 sold 1891
 5000 sold 1892

More than have been sold by all the factories in Canada, put together & doubled.

MILFORD, ONT., Prince Ed. Co., Aug. 12, 1893.
 Dear Sir,—I have one of your Chatham Fanning Mills and it does splendid work. I have also a Bagger and I would not be without it for any money if I could not get another.
 Yours truly, LOUIS H. McQUOID.

34,000 Chatham Mills now in use.
 Over 10,600 Bagging Attachments now in use.
 Bagging Attachment is run with a chain belt that cannot slip. The Elevator Clips are also attached to endless chain belt that cannot slip nor clog.
 SPECIAL ATTENTION GIVEN TO THE CLEANING OF ALSAC CLOVER SEED, MARROWFAT AND BLACK EYE PEAS.
 The Mill is fitted with Screens and Riddles to clean and separate all kinds of grain and Seed, and is sold with or without a Bagger, though it is not wise to be without a Bagger.

For prices and full information apply to

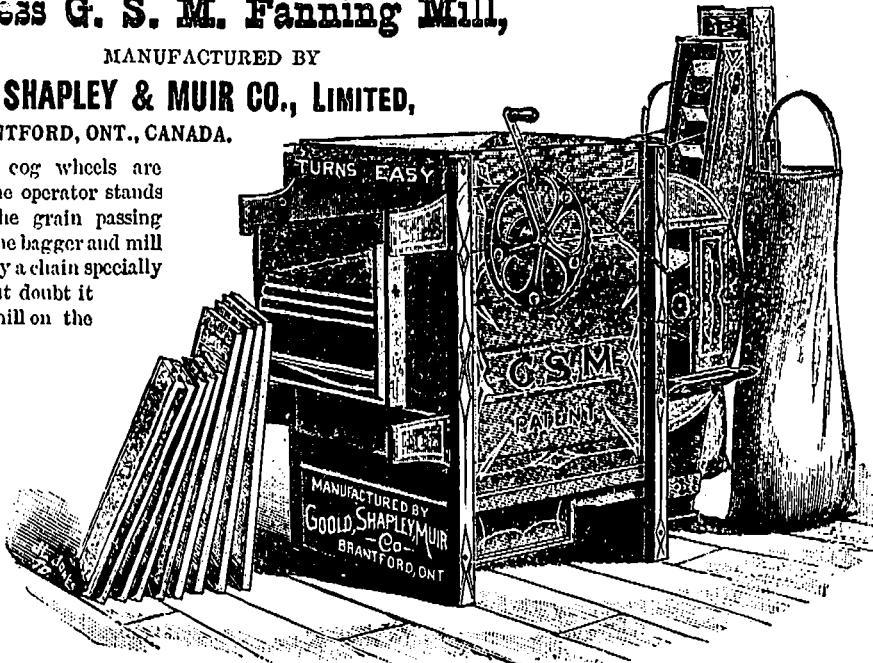
MANSON CAMPBELL, Chatham, Ont.

For Sale by all Agents of MASSEY-HARRIS Co., Ltd., in Manitoba and North-West Territories.

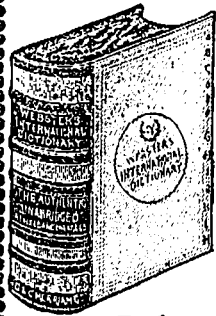
Gearless G. S. M. Fanning Mill,

MANUFACTURED BY
THE GOULD, SHAPLEY & MUIR CO., LIMITED,
 BRANTFORD, ONT., CANADA.

The old-fashioned cog wheels are done away with. The operator stands where he can see the grain passing through the mill. The bagger and mill is driven altogether by a chain specially made for it. Without doubt it is the best fanning mill on the market.

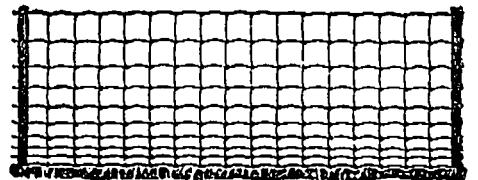


WEBSTER'S INTERNATIONAL DICTIONARY



Successor of the "Unabridged."
 Ten years spent in revising, 100 editors employed, more than \$300,000 expended.
 A Grand Educator
 Abreast of the Times
 A Library in Itself
 Invaluable in the household, and to the teacher, professional man, self-educator.

Ask your Bookseller to show it to you.
 Published by
 G. & C. MERRIAM CO., SPRINGFIELD, MASS., U.S.A.
 Send for free prospectus containing specimen pages, illustrations, testimonials, etc.
 Do not buy reprints of ancient editions.



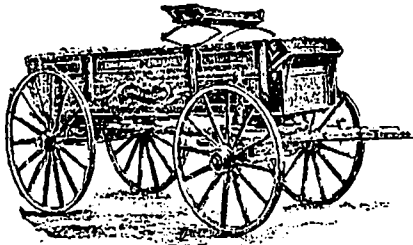
A GOOD TEST FOR FENCES

Is to hang a barrel of sods from a tripod so as to swing against the fence and act the part of a running horse.
 The Page Fence on exhibition at the Toronto, London, and other leading fairs, will be tested in this way.
 The Page needs but three posts to the hundred feet.
 Call and see it.

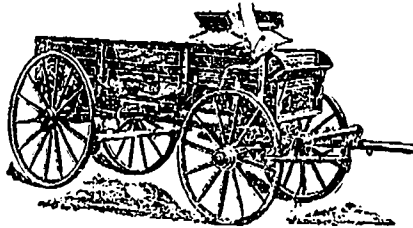
PAGE WIRE FENCE CO. OF ONTARIO, LTD.
 WALKERVILLE, ONT.



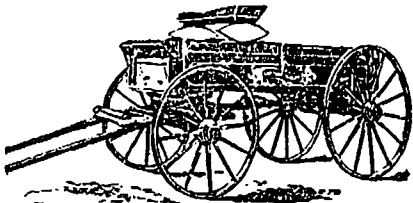
THE OLD RELIABLE CHATHAM WAGON



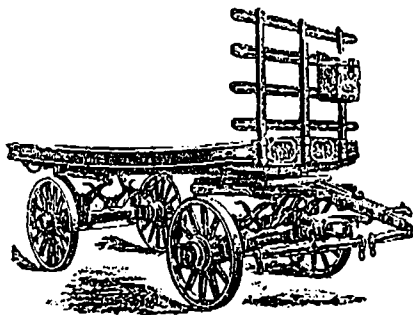
FOR USE IN ONTARIO, QUEBEC, Etc.



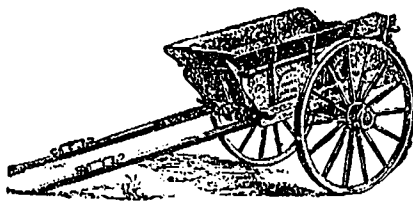
FOR USE IN BRITISH COLUMBIA.



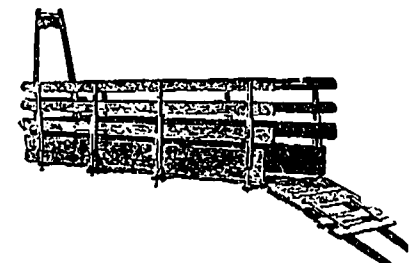
ONE-HORSE WAGON, WITH UPPER BOX.



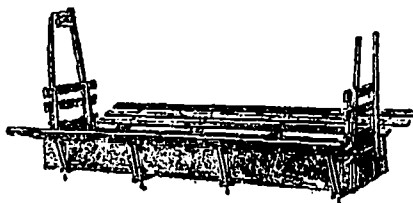
CHATHAM TWO-HORSE SPRING LORRY.



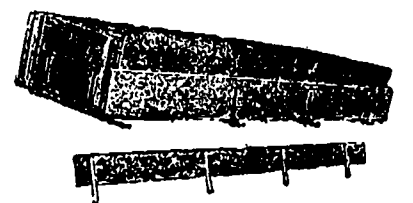
DUMP CART, WITH SPRING FASTENINGS.



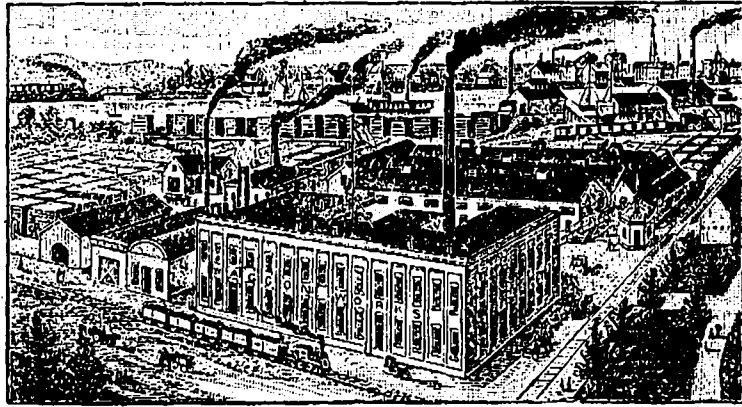
COMBINED WAGON BOX HAY & STOCK RACK.



HERE YOU SEE IT AS A HAY RACK.



HERE IT IS AS A WAGON BOX.



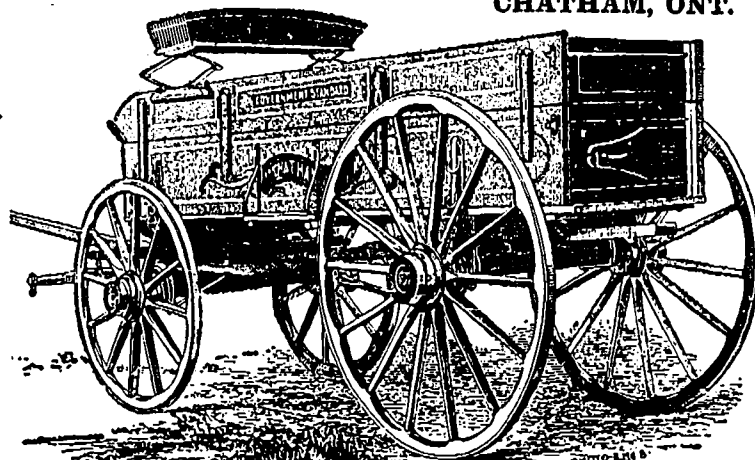
WAGON WORKS AND SAW MILLS.

TO THE TRADE:

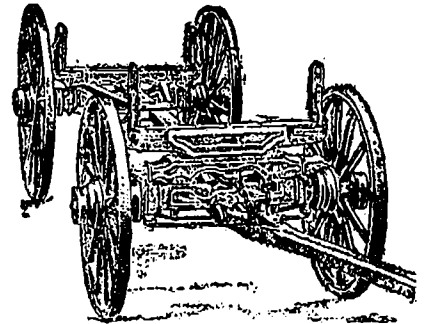
We make no claim to superiority in mechanical skill; any good mechanic can make as good a Farm Wagon as we can, IF—and that “IF” is the biggest word in the English language in this connection—so we say IF he has his own Saw Mills in a section of the country abounding in the very best woods for wagon purposes, as we have; IF he make his own Hubs and Spokes from the very best of white oak, as we do; IF he cast his own Arms in such a way, and of such iron, as to make them almost malleable, as we do; IF he have arrangements by which the best of iron is made specially for him, as we have; IF he keep in stock at all times, dry and under cover, every piece of wood used in a wagon for 3,000 wagons, as we do, and adopt our method of extracting atmospheric dampness from wood before using it in wagons; IF he have West's Cold Tire and Hub Band Setters, as we have, and so avoid charring the Fellies of his wheels, and give them just the right and uniform dish, and band his hubs so they can never loosen; IF he have that most important machine, an Arm Setter, as we have, which unerringly and accurately sets arms so as to give the wheels the proper pitch and gather; IF he have the right to use our Patents covering the method of making wooden axles with cast arms, without truss rods, unbreakable; Malleable Adjustable Stakes, our Climax Truss Rod, etc.; IF he use the best material the world furnishes for painting; and, finally, IF he have the best wagon mechanics to be found, he may make as good a wagon as we do, but without these we fearlessly assert he cannot do so. We do not claim that we make low priced wagons, but we do claim and aim to make **THE BEST**, which under all circumstances will prove the cheapest in the end. Referring the reader to the cuts on this page of some of the different vehicles, etc., we build, and soliciting correspondence,

We are, his obedient servants,

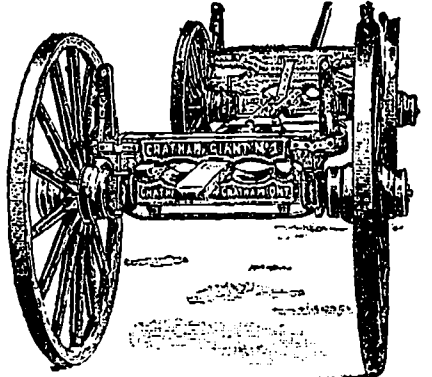
CHATHAM MANUFACTURING CO., LTD.
CHATHAM, ONT.



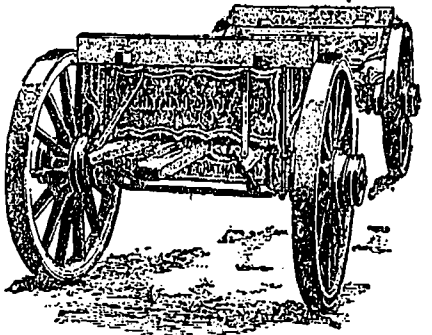
THE NORTHWEST FARMER'S WAGON.



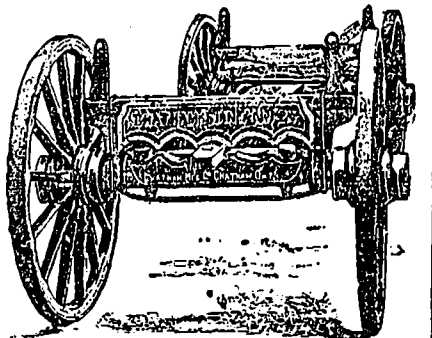
FRONT VIEW OF CHAUTAUQUA GIANT.



REAR VIEW OF CHAUTAUQUA GIANT.



CHATHAM GIANT LOG TRUCK.



CHATHAM GIANT FARM TRUCK.



FRONT AXLE OF CHAUTAUQUA GIANT.



FRONT AXLE CHATHAM GIANT.

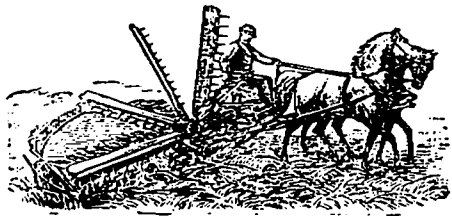


HIND AXLE AND BOLSTER OF BOTH THE ABOVE.

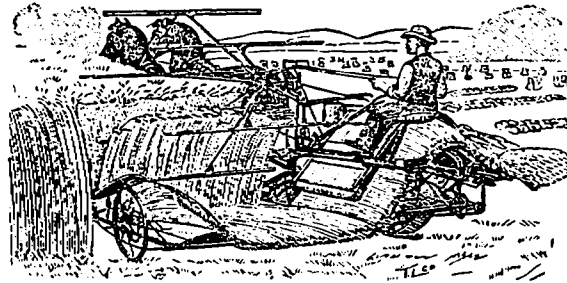


ONLY REAL OSCILLATING RUNNER IN THE MARKET.
IS THE BEST BOB-SLEIGH ON EARTH.

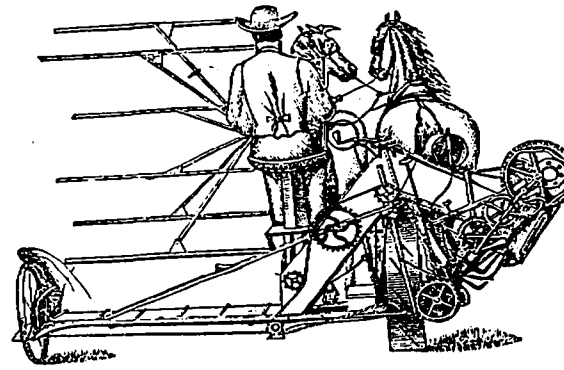
HIGH-CLASS HAY-MAKING MACHINERY.



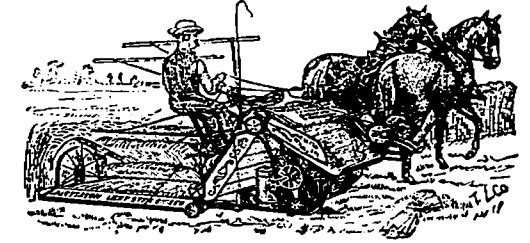
MASSEY HARVESTER AND BRANTFORD REAPER.



MASSEY-HARRIS WIDE-OPEN BINDER.

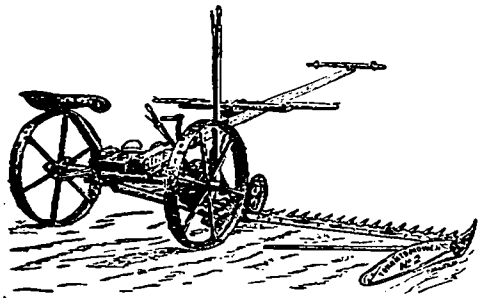


TORONTO LIGHT BINDER.

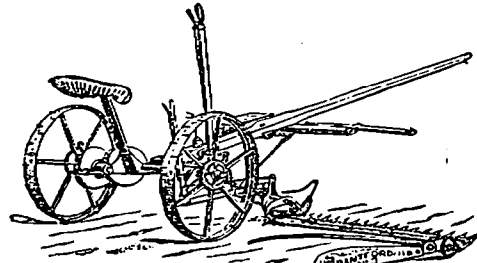


PATTERSON LIGHT STEEL BINDER.

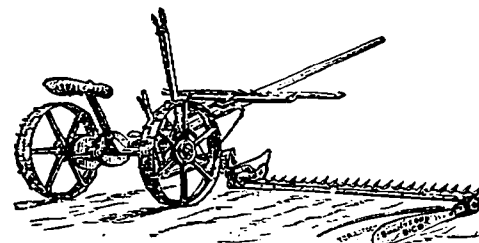
HIGH-CLASS HAY-MAKING MACHINERY.



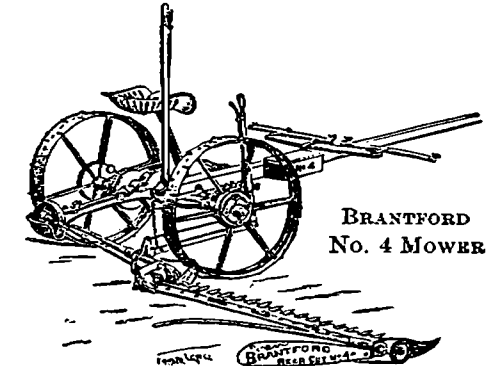
TORONTO MOWER No. 2.



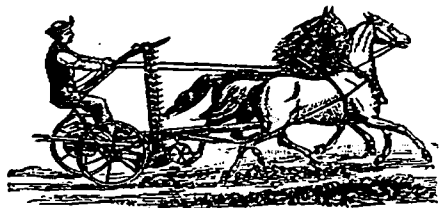
BRANTFORD MOWER No. 3.



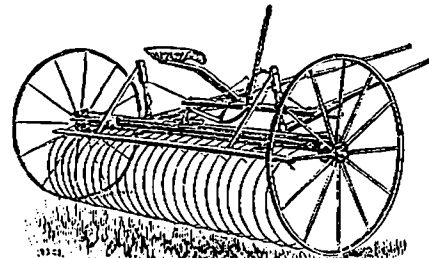
BRANTFORD BIG B MOWER.



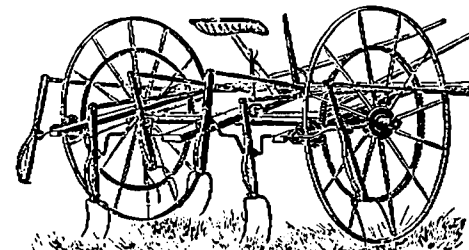
BRANTFORD No. 4 MOWER



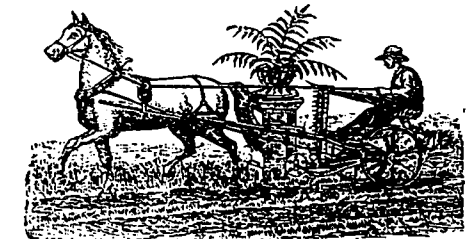
PATTERSON FRONT AND REAR CUT MOWERS.



SHARP'S, ITHACA AND TIGER RAKES.

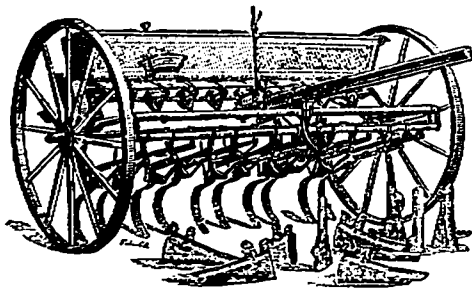


MASSEY-HARRIS HAY TEDDER.

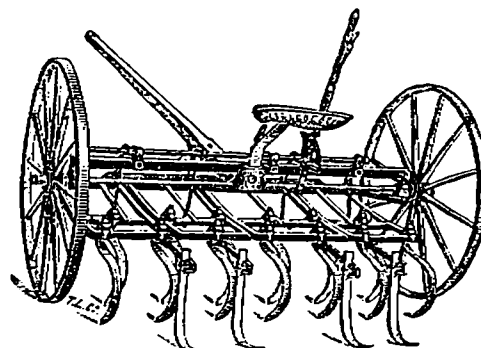


"BRANTFORD" & "TORONTO" ONE-HORSE MOWERS.

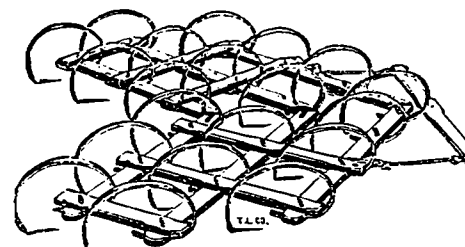
HIGH-CLASS SEEDING & CULTIVATING MACHINERY.



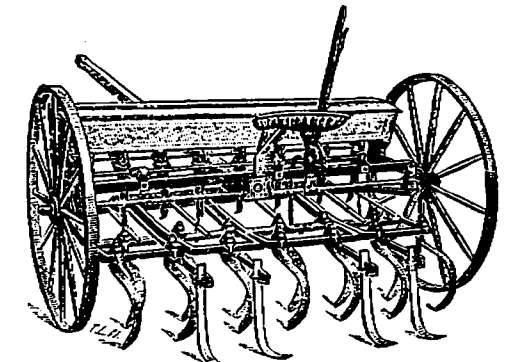
WISNER COMBINED DRILL.



MASSEY-HARRIS CULTIVATOR.



PATTERSON SPRING TOOTH HARROW.



SECTIONAL SPRING TOOTH SEEDER.

MASSEY-HARRIS CO., Limited, Toronto, Canada, Sole Manufacturers.

Sharp's, Ithaca,
Tiger
Rakes.



Top Line Co

MASSEY'S ILLUSTRATED
An Independent Journal of News and Literature for
Rural Homes.

PRINTED AND PUBLISHED BY THE MASSEY PRESS.

PROF. SCRUB, - - - - - Editor.
ALEX. FRASER, - - - - - Associate Editor.

SUBSCRIPTION PRICE:
To all parts of Canada and United States, only 50 cents
per annum, postage prepaid. Stamp's taken.

Always address, MASSEY PRESS, Massey St., Toronto, Can.

DONALD C. RIDOUT & CO.,
PATENT EXPERTS.

SOLICITORS OF HOME & FOREIGN PATENTS.

ESTABLISHED 1867. 22 King St. E., Toronto, Ont.

INSURANCE
ACCIDENT,
Employers' Liability,
PLATE GLASS

Capital { BRITISH and } over \$3,500,000
CANADIAN

EASTMURE & LIGHTBOURN,
TORONTO.

GOOD AGENTS WANTED.

SPECIALTIES
FINE ART • LIVE STOCK
MECHANICAL

WOOD ENGRAVING

HIGH CLASS

TORONTO ENGRAVING CO.
BRIGDEN MANG
REMOVED TO
53 KING ST. W.
COR. BAY
TORONTO

BOYS FOR FARM HELP.

The managers of DR. BARNARD'S HOMES desire to obtain good situations with farmers throughout the country for the boys they are sending out from time to time from their London Homes. There are at present nearly 5,000 children in these homes, receiving an industrial training and education to fit them for positions of usefulness in life; and those who are sent to Canada will be selected with the utmost care, with a view to their moral and physical suitability for Canadian farm life. Farmers requiring such help are invited to apply to

MR. ALFRED B. OWEN, Agent Dr. Barnard's Homes,
214 Farley Avenue, Toronto.

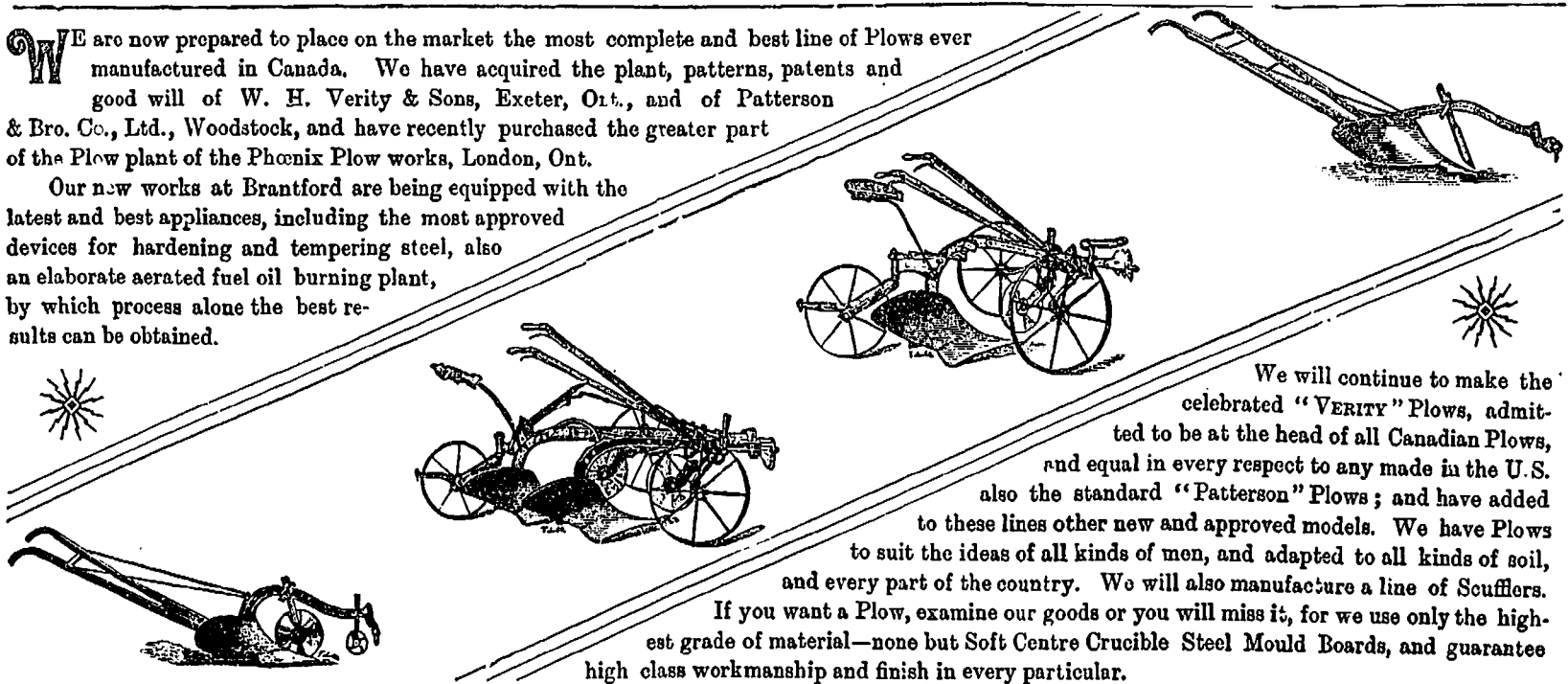
VERITY PLOW CO. LTD.

BRANTFORD, ONT., CANADA.

Successors of W. H. VERITY & SONS, Exeter, Ont., and PATTERSON & BRO. CO. (Plow Business), Woodstock.

WE are now prepared to place on the market the most complete and best line of Plows ever manufactured in Canada. We have acquired the plant, patterns, patents and good will of W. H. Verity & Sons, Exeter, Ont., and of Patterson & Bro. Co., Ltd., Woodstock, and have recently purchased the greater part of the Plow plant of the Phoenix Plow works, London, Ont.

Our new works at Brantford are being equipped with the latest and best appliances, including the most approved devices for hardening and tempering steel, also an elaborate aerated fuel oil burning plant, by which process alone the best results can be obtained.



We will continue to make the celebrated "VERITY" Plows, admitted to be at the head of all Canadian Plows, and equal in every respect to any made in the U.S. also the standard "Patterson" Plows; and have added to these lines other new and approved models. We have Plows to suit the ideas of all kinds of men, and adapted to all kinds of soil, and every part of the country. We will also manufacture a line of Scufflers.

If you want a Plow, examine our goods or you will miss it, for we use only the highest grade of material—none but Soft Centre Crucible Steel Mould Boards, and guarantee high class workmanship and finish in every particular.

VERITY PLOW CO. LTD.

ESTABLISHED 1864.



BELL

Pianos & Organs

RECOMMENDED AND USED BY ALL PROMINENT MUSICIANS.

Purchasers desiring a Strictly First-Class Instrument should get one bearing the above Trade Mark.

FOR CATALOGUES AND PRICES WRITE TO

THE BELL ORGAN & PIANO CO., LTD., GUELPH, ONT.



The "Original Candy"
Sewed Cotton Duck Belting.

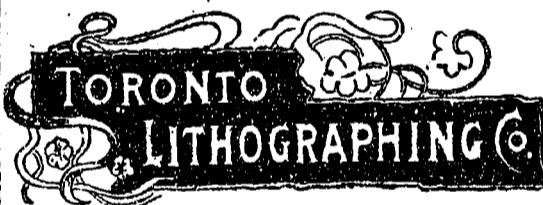
For Engines, Thrasher Belt, Main Drivers and for all places where belts are subjected to moist, dry, or atmospheric changes, the GANDY stands pre-eminent.

The Candy Belting Co.
BALTIMORE, MD.

Canadian Agent, **J. H. MORROW**, Brighton, Ontario.

**Massey Harvester
Brantford Reaper**

Send for Illustrated Catalogue.



The Canada Paint Co., Ltd.

FACTORIES AT MONTREAL, TORONTO, VICTORIA, B.C.

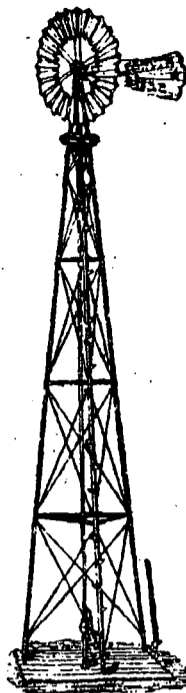
MANUFACTURERS OF

Varnish, Japans, Dry Colors,

Mixed Paints, Lead, Oils, Colors in Oil
and Japan.

PARIS GREEN, BARN ROOFING AND OUTHOUSE PAINTS.

Makers of Paints and Varnishes for Massey-Harris Co., Limited.



**WHY WASTE YOUR
STRENGTH WORKING**

away at the old pump when for a small sum you can get a

BRANTFORD

Steel Wind Mill

that will pump enough water for

THE LARGEST FARM

and never get tired, needs no feed, and lasts FOR A LIFE TIME. The Brantford Power Mill will, besides pumping water, saw wood, cut hay, chop grain, etc., etc. Those who have them say they could not get along without them. Address—

**GOOLD, SHAPLEY & MUIR
CO., Ltd.**

Brantford, Ont., Canada.

If you are needing any Implements used on the Farm, send for our handsome Illustrated Catalogues.

MASSEY-HARRIS CO., LTD., TORONTO, CANADA

BUNTIN, REID & CO.

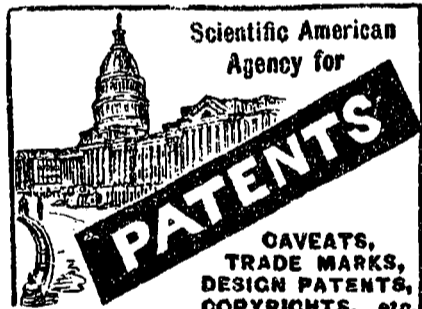
29 WELLINGTON STREET WEST,
TORONTO,

Wholesale Stationers.

Envelope and Blank Book Manufacturers.

PAPER MANUFACTURERS AND DEALERS.

Mills at Valleyfield, on the River St. Lawrence.



Scientific American
Agency for

PATENTS
PATENTS,
TRADE MARKS,
DESIGN PATENTS,
COPYRIGHTS, etc.

For information and free Handbook write to
MUNN & CO., 361 BROADWAY, NEW YORK.
Oldest bureau for securing patents in America.
Every patent taken out by us is brought before
the public by a notice given free of charge in the

Scientific American

Largest circulation of any scientific paper in the world. Splendidly illustrated. No intelligent man should be without it. Weekly, \$3.00 a year; \$1.50 six months. Address MUNN & CO., PUBLISHERS, 361 Broadway, New York City.



ROGERS' PEERLESS MACHINE OIL

is specially manufactured for Farmers' Machinery, and excels in all the qualities necessary for Farmers' use.

EVERY STABLE SHOULD HAVE
PEERLESS HOOF OINTMENT.

Rubber Belting!

IF YOU WANT THE
FINEST THRESHING BELTS

MADE, ASK YOUR DEALER TO GET FOR YOU THE

'MONARCH' BRAND

It will cost more at first, but will be economy in the end.

MANUFACTURED SOLELY BY

THE GUTTA PERCHA & RUBBER MANUFACTURING CO.

OF TORONTO (LIMITED).

61 & 63 Front St. West, TORONTO.

NEW STYLE
CENTRE CRANK
Traction
Engine.

THIS MAGNIFICENT ENGINE WAS DESIGNED BY
SAWYER & MASSEY CO., Limited,
HAMILTON, ONT., CANADA.
WHO ARE THE SOLE MANUFACTURERS.

HIGH-CLASS
Threshing Outfits

* *

"L.D.S."
Engines

Peerless
Separators

The Engines and Separators made by SAWYER & MASSEY CO., LTD., are now recognized as the standard of excellence by the trade generally.

