

# ◆ Massey's Illustrated ◆

(PUBLISHED MONTHLY.)

## June Number

New Series, Vol. 6, No. 6.

Toronto, June, 1894.

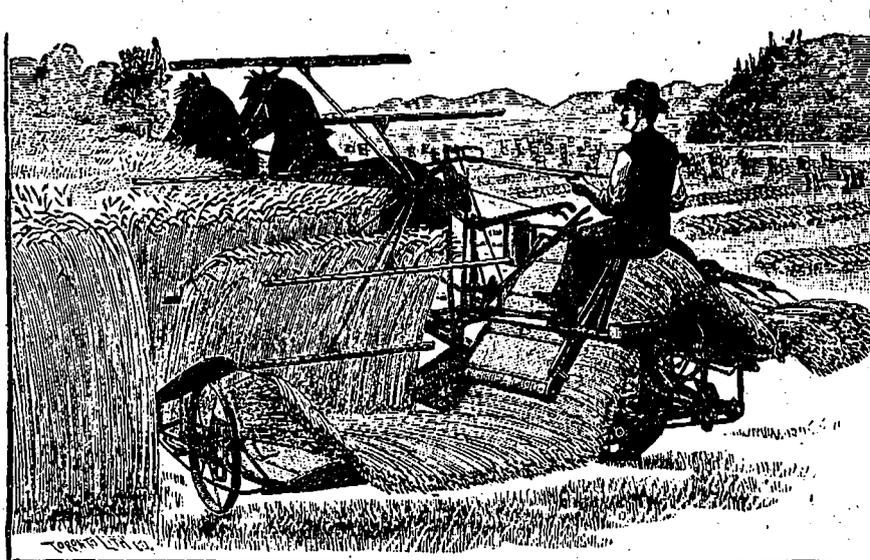


# THE MASSEY-HARRIS WIDE-OPEN BINDER

The only Open-Back Binder that has passed beyond its Experimental Stages.

It is capable of every desirable adjustment, and will save grain that other machines cannot pick up, elevate, nor bind.

Has won for itself a brilliant record in Europe, Australia and South America.

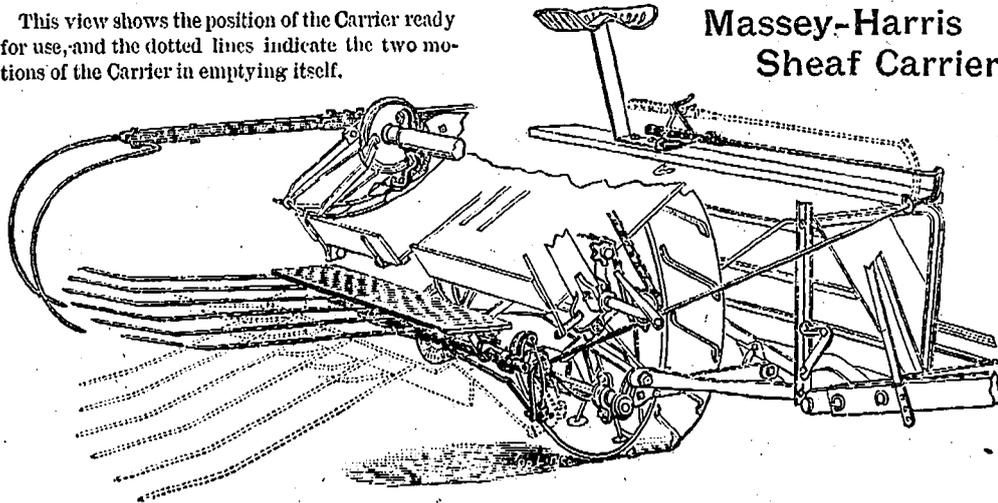


A marvellous success in all kinds of crop, and is proved to be the most durable, economical, and efficient, besides being the lightest draught Binder in the market.

The Massey-Harris Wide-Open Binder has the greatest capacity, and will perform the widest range of work of any self-binder ever produced. It will work with equal facility in the very shortest or the longest crops grown in any country. It is very light running, and is easier on the team than any other machine. So simple is the machine to operate, and so easy to understand, that a boy capable of handling a team of horses can manage it. The Patent Wide-Open Elevator, with Automatic Floating Canvas, will elevate crops of any length without shelling the grain.

This view shows the position of the Carrier ready for use, and the dotted lines indicate the two motions of the Carrier in emptying itself.

Massey-Harris Sheaf Carrier. Massey-Harris Transport Truck.



Massey-Harris Sheaf Carrier.

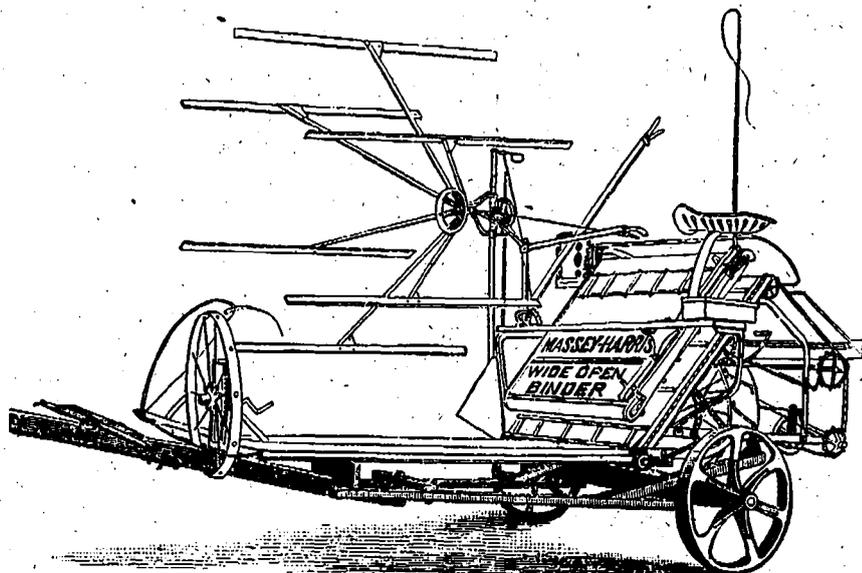
This is positively the best carrier ever invented, for many reasons.

It is supported from the main frame in a rigid manner, and places no undue strain on any part of the machine, nor does it interfere with the knotter in any way.

It operates very easily, and lays the sheaves straight and even, a thing never before accomplished by any maker on this continent.

When in position to receive the sheaves, the Carrier is "locked" and no pressure is required to hold it in place. It is attached close under the deck. A gentle pressure of the foot unlocks it. The first movement is downwards to an angle of 30 to 35 degrees, then backward under the deck—all from one quadrant.

To load the Massey-Harris Binder on a Massey-Harris Transport is but the work of a few moments of time by one man alone. The pole is quickly detached without the removal of a bolt, and also the pole brace; then the machine is tilted up, the Truck is placed underneath and the pole connected, as shown in the illustration below (all done without the use of a monkey wrench or other tool), when the machine can be hauled for miles in safety and comfort.



MASSEY-HARRIS BINDER ON TRUCK.

TORLINC.

# • Massey's Illustrated •

(PUBLISHED MONTHLY.)

## A Journal of News and Literature for Royal Homes

NEW SERIES.]

TORONTO, CANADA, JUNE, 1894.

[Vol. 6, No. 6.

### The Hudson's Bay Company.

In the year 1670, at the solicitation of Prince Rupert and the Duke of Albemarle, King Charles II. created by royal charter the "Company of Merchant Adventurers trading to Hudson's Bay." With characteristic lavishness the King granted to this company the sole trade and commerce of the vast and vaguely-defined regions to which access may be had through Hudson's Straits. Forty years before this, Louis XIII. had made a similar grant to the "Company of New France," and, for nearly a hundred years, there was a keen and eager rivalry between these hostile corporations. In order to control the lucrative fur-trade, the Hudson's Bay Company planted forts and factories at the mouths of the Moose, Albany, Nelson, Churchill, and other rivers flowing into Hudson's Bay. Again and again, adventurous bands of Frenchmen, like D'Iberville and his companions, made bloody raids upon these posts, murdering their occupants, burning the stockades, and carrying off the rich stores of peltries.

Growing bolder with success, the French penetrated the vast interior as far as the headwaters of the Mississippi, the Missouri, and the Saskatchewan, and reached the Rocky Mountains long before any other white men had visited these regions. They planted trading-

posts and small palisaded forts at important river junctions and on far-off lonely lakes, and wrote their names all over this great continent, in the designation of cape and lake and stream, and other great features of nature. The *voyageurs* and *coureurs de bois*, to whom this wild, adventurous life was full of fascination, roamed through the forests and navigated the countless arrowy streams; and Montreal and Quebec snatched much of the spoil of this profitable trade from the hands of the English company. Every little far-off trading-post and stockaded fort felt the reverberations of the English guns which won the victory of the Plains of Abraham, whereby the sovereignty of those vast regions passed away forever from the possession of France.

After the conquest, numerous independent fur-traders engaged in this profitable traffic. In 1783, these formed a junction of interests and organized the North-West Company. For forty years this was one of the strongest combinations in Canada. Its energetic agents explored the vast North-West regions. Sir Alexander Mackenzie, in 1789, traced the great river which bears his name, and first reached the North Pacific across the Rocky Mountains. In 1808, Simon Frazer descended the gold-bearing stream which perpetuates his memory; and, shortly after, Thompson explored and named another branch of the same great river.

Keen was the rivalry with the old Hudson's

Bay Company, and long and bitter was the feud between the two great corporations, each of which coveted a broad continent as a hunting-ground and preserve for game.

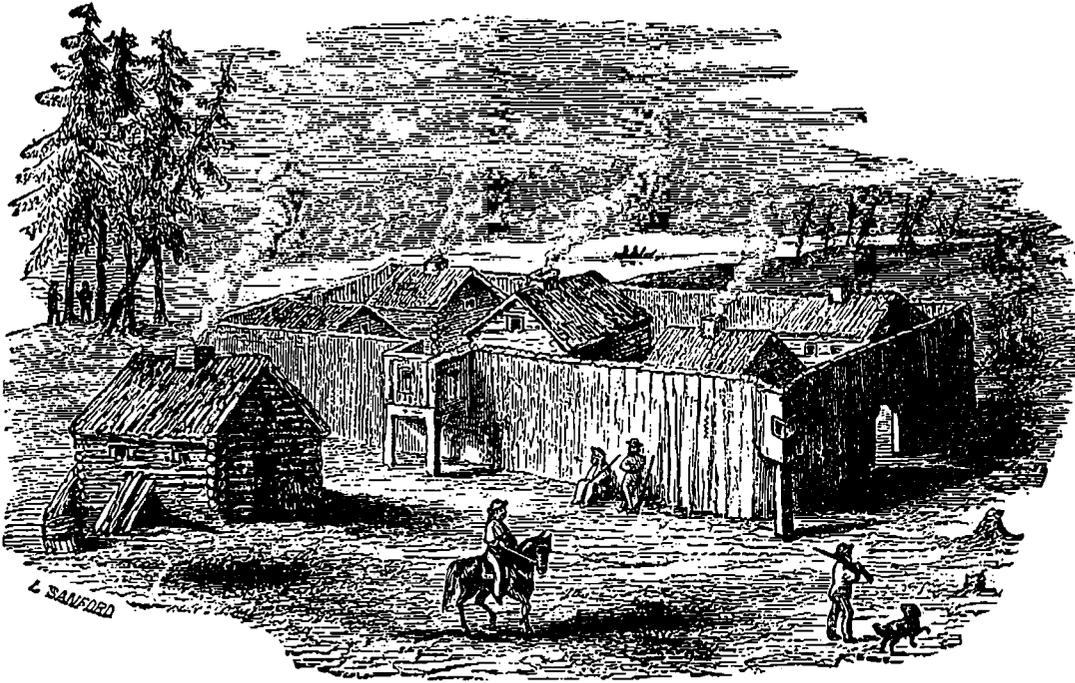
In the early years of the present century, the feud between the rival companies was at its height. With the skill of an experienced general Thomas Douglas, Earl of Selkirk, then Governor of the Hudson's Bay Company, resolved to establish a colony of his countrymen at the junction of the Red River with the Assiniboine, the key of the mid-continent.

In the year 1812, the first brigade of colonists reached Red River, by way of Hudson's Bay. A stern welcome awaited them. Hardly had they arrived at the site of the proposed settlement, when an armed band of Nor' Westers, plumed and painted in Indian fashion appeared, and commanded the colonists to depart. They were compelled to submit, and took refuge at the Hudson's Bay Post at Pembina, Undaunted by this failure they returned in the spring, built log-houses and planted their wheat. Again they were driven away and their homes burnt. With dogged perseverance they returned, and after eight years of failures, the first harvest was reaped. The colony now struck its roots deep into the soil, and flourished year by year, and by 1868 had increased to a population of about 12,000.

After forty years of rivalry, in 1821, the Hudson's Bay and North-West Companies com-



BLOCK HOUSE AND INDIAN TEPPIES, HUDSON'S BAY.



FORT, HUDSON'S BAY COMPANY.

bined their forces, and were confirmed by the Imperial Parliament in the monopoly of trade through the wide region stretching from Labrador to the Pacific Ocean. The government of the united company, while jealously exclusive of rival influence, was patriarchal in character, and through the exclusion, for the most part, of intoxicating liquors, greatly promoted the welfare of the Indians, and repressed disorder throughout its wide domains.

In 1868, the Rupert's Land Act was passed by the British Parliament, and, under its provisions, the Hudson's Bay Company surrendered to the Crown its territorial rights over the vast region under its control. The conditions of this surrender were as follows:—The Company was to receive the sum of £300,000 sterling in money, and grants of lands around its trading-posts to the extent of fifty thousand acres in all. In addition it is to receive, as it is surveyed and laid out in townships, one-twentieth of all the land in the great fertile belt south of the Saskatchewan.

In April 1869, the Dominion Government passed an Act, providing for the temporary government of the entire region, under the designation of the North-West Territory. Surveying parties were sent into the Red River country for the purpose of laying out roads and townships. This somewhat alarmed the people, lest this movement should in some way prejudice their title to their land.

Jealousies were awakened among the settlers and fanned into armed rebellion by unscrupulous agitators. In 1870 Colonel Garnet Wolseley led a force of 1200 men, regulars and militia from Ontario and Quebec, through the then wilderness to Fort Garry. The conspirators fled; the loyal inhabitants joyfully acknowledged the Queen's authority. The Dominion government took possession of this vast territory, divided it into the province of Manitoba and several territories, each with their own local government. In the land where they for so long held regal sway, the Hudson's Bay Company are now merely traders and storekeepers.

## Waterways of the Northwest.

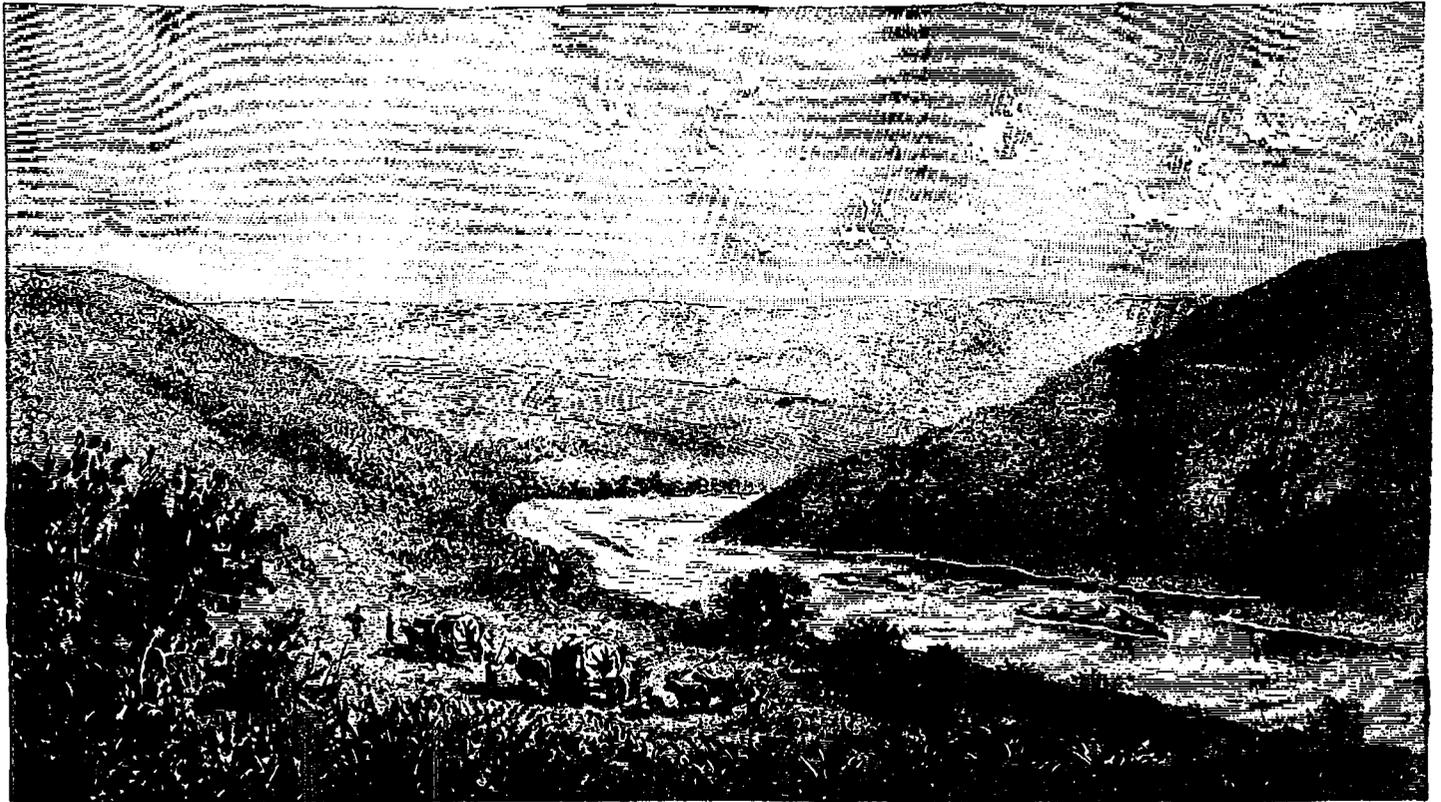
**C**HEAPNESS and uniformity of rates of transportation have become a vital requisite of industrial development. The products of the farms of the North-West must now travel thousands of miles to reach the market of Europe. And this will be so even when our own mineral wealth is utilized to a great extent. So the development and use of our waterways is an important and essential factor in our industrial economy.

A renaissance of general interest in the waterways of the world is in progress. Its functions, as an agent of commerce, are being largely studied to determine to what extent its extension and larger use can reduce the cost of transportation. The International Congress on Inland Navigation, which meets bi-annually in Europe, is doing much to promote the technical improvement of the waterway and to throw light on the economic aspects of the question of water transportation.

The steadily increasing demand for cheap rates has led shippers to increase the volume of water traffic. The increase of traffic on the Great Lakes is marvellous. During the year ending June 1892, over ten million tons of freight passed through St. Mary's lock, between Lake Superior and Lake Huron.

In a country so vast as the great North-West stretching from 49° north latitude to within the Arctic circle, and from the Upper Lakes to the Pacific Ocean, its growth and prosperity depends in a great measure on its inland navigable waters, for now its markets are far distant. It is indeed a land of grassy plain and shaggy woods, lofty mountains and rushing waters.

It is purposed to give a few rambling notes on some of the most important of the thousands of lakes, whose sheen in the sunlight brightens the land like silver stars; to say a few words of some of the many streams that dashing down



THE SASKATCHEWAN.

the mountain sides, find a quiet haven on the lower lands, and meandering across the plains, intersect like lacework the broad stretches.

Canada is peculiarly favored in her waterways. Including the great lakes which encircle it and which penetrate it, and the rivers of enormous size and length which permeate it, we have more than one-half of the fresh water of the entire globe. There are more than ten thousand miles of navigable rivers in the North-West—navigable, that is, not merely by canoes but by steamboats. The supplies for all the ports of the Hudson's Bay Company are carried by water from Winnipeg even to points beyond the Rocky Mountains, and within the Arctic Circle. It is possible to go by water from the mouth of the St. Lawrence through the great lakes, and down the Mackenzie to the Arctic Ocean, a trip of more than six thousand miles, of which less than one hundred and fifty miles will necessarily be on land.

The great lakes of the North-West are second in size only to the largest of the great lakes on the international boundary. Great Bear Lake is one hundred and fifty miles in length; Athabasca Lake two hundred and thirty miles long, averaging fourteen miles in width; while the Great Slave Lake is more than three hundred miles long, and has an average width of fifty miles.

Then comes Lake Manitoba one hundred and twenty miles long and twenty-five miles wide; Lake Winnipeg two hundred and forty miles long and fifty miles wide. Lake Winnipegosis is a magnificent sheet of water one hundred and twenty-five miles long, navigable for vessels drawing ten feet. These lakes are all connected, and, through the Nelson River, by winding ways, flow into Hudson's Bay, giving many miles of navigable waters.

This land is full of surprises. On the vast prairie west of Lake Athabasca, stretching away to the horizon, level as a floor, the traveller sees nothing but the boundless, verdant sward. Suddenly, without the slightest warning, he finds himself standing on the edge of a mighty gorge. Seven hundred to a thousand feet below flows a waterway half a mile wide—the noble Peace River. Some day steamers will float on this wonderful crooked waterway. For seven hundred miles from the foot of the Rocky Mountains along this deep and narrow valley, meanders the great stream which is unique among all the rivers in the world.

The Mackenzie River is described by Archbishop Clut as a deeper, wider and grander river than the St. Lawrence, and with its tributaries it furnishes more than twenty-five hundred miles of navigable waters. By using the streams on the Athabasca and Mackenzie Rivers, one may now travel from New York City to the Arctic Ocean along interior routes, carried nearly all the way by steam. He can travel on the Canadian Pacific Railway to Edmonton, thence about one hundred and fifty miles by wagon to Athabasca Landing, where he can take a steamer for over two hundred miles to the Grand Rapids of the Athabasca River. Then sixty miles of land portage. At Fort McMurray, the foot of the rapids, a steamer runs down the river to Lake Athabasca and into the Slave River, to the second and last obstruction, five rapids close together. Below

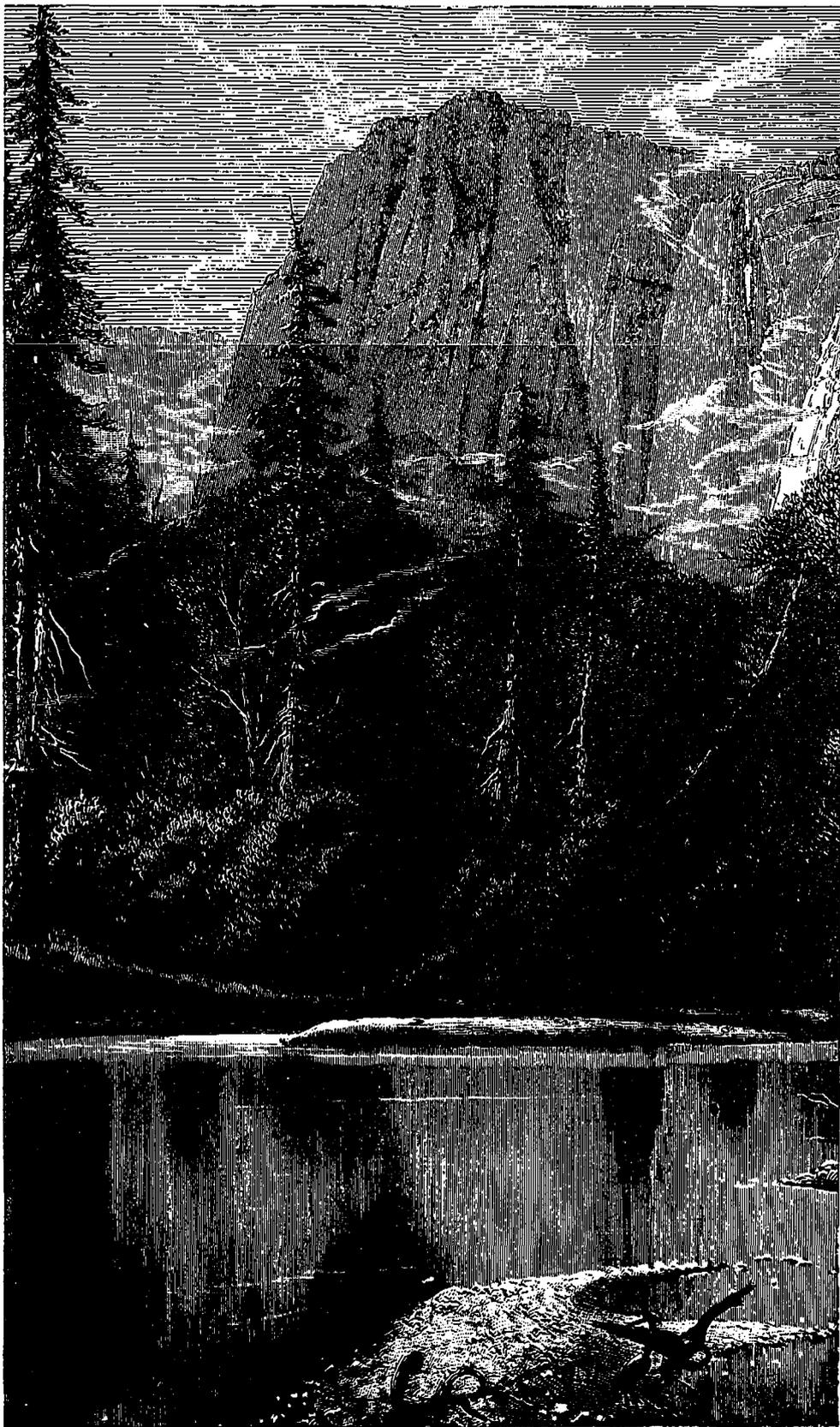
these rapids there is no further interruption of navigation for over one thousand miles down the Great Mackenzie River to the sea.

We give illustrations of a portage, making a portage, and tracking, incident to a canoe journey on some of the smaller streams.

The Red River is navigable from Moorhead, in Minnesota, to where it runs into Lake Winnipeg, a distance of four hundred miles—spreading out into many lakes on its course, somewhat resembling a string of beads. The Assiniboine, which flows into the Red River at Winnipeg, is navigable for over three hundred miles. The Saskatchewan takes its rise in the Rocky Mountains. It twists and turns around and divides into many branches that flow capriciously through the vast plains which they cut in various and frequently opposite directions.

Uniting again it flows into Lake Winnipeg. Its total length is about twelve hundred miles.

The various lakes, rivers and streams give abundant waterway for the "Fertile Belt." This may be said to be within a boundary which may be traced as follows: The Red River valley northward as far as Winnipeg; thence the valley of the Assiniboine River westward to the confluence of the Qu'Appelle with the Assiniboine; thence the valley of the Assiniboine north-westward and across the plains to the confluence of the two branches of the Saskatchewan; then along the valley of the North Saskatchewan westward to Edmonton; thence south-west to Calgary; thence along the base of the Rocky Mountains to the international line. This area of 350,000 square miles is ample enough and fertile enough to easily sustain a population of



IN THE ROCKIES.



A PORTAGE.

50,000,000 people, and that without taking into consideration its probable mineral wealth.

Winnipeg is, commercially, the converging point of this vast water system of the prairie region.

It is really amusing to see the changes Canada's surveyors and explorers have been making in the maps of twenty years ago. They have been finding new waterways and changing the courses of the old ones. They have whittled off part of that wonderful system of lakes and added other parts which once figured as dry land. Lakes like Lake Winnipegosis have changed in form wonderfully. Lake Mistassini, once supposed to be as large as Lake Superior, is now reduced to a very humble position amongst its many companions.

The government is mapping out this tangle of lakes and streams and lofty summits. The graphic reports of their surveyors are full of interest. Their scrambles above the snow line, clambering far up the slope of great moving glaciers, their toilsome progress as they cut their way through dense underbrush or crawl along the edge of dizzy precipices, their little mishaps, sometimes ludicrous, as when a pack horse rolls hundreds of feet down the side of a cañon and is found wedged between two trees, not at all hurt but painfully astonished, and above all, the splendid panorama they see, and the order they evolve from the jumble of ranges, spurs, valleys and cañons, havemade this survey one of the most interesting of recent geographical studies.

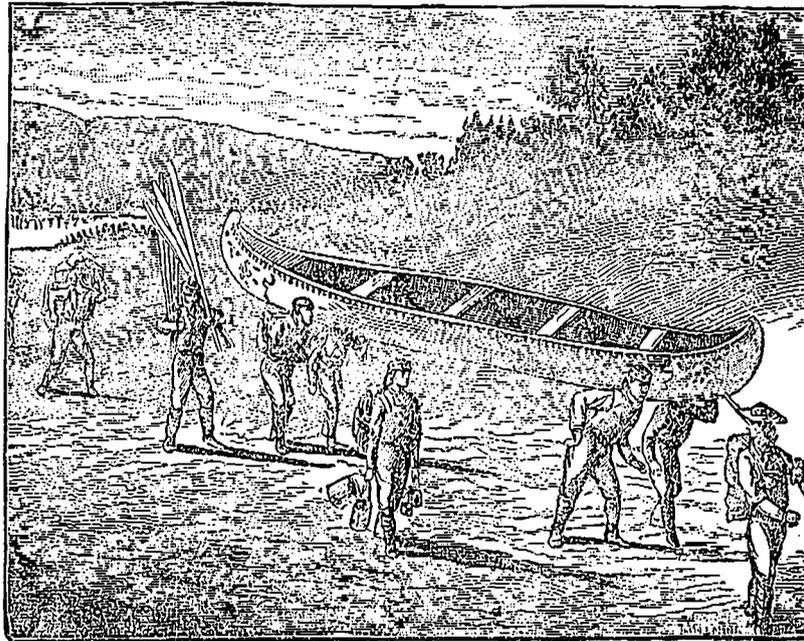
Nestled among the mountains are lovely lakes, some of them thirty or forty miles long, feeders of the many streams that furrowing through the plains below, give means of transport that though now unused, will, in years to come, add immensely to the progress and development of this great land. Hot springs are scattered here and there; waterfalls in abundance tumbling down the mountains for hundreds of feet—reservoirs of latent force in which the sanguine electrician sees the source of future light and heat and power.

Among the picturesque lakes, romantic rivers and grand mountains, is the Canadian National

streams that intersect the North-West, is that greatest of glaciers to be found in the Temperate Zones. Fancy a river of solid ice about 500 feet thick, stretching up the mountain for nine miles, with the width of a mile to a mile and a

Park. This is destined to be one of the famous breathing spots of the continent. Bridle paths lead up to the mountains, from whose tops magnificent panoramas unfold. Picturesque bridges span the Bow and Spray rivers, and from the Bow Bridge one sees a noble river shooting past at twenty miles an hour before it plunges over the falls.

The source of some of the very many



MAKING A PORTAGE.

half, moving down the slope in midsummer over a foot a day, with immense morains along the sides and front where quartzite blocks weighing many tons, have been pushed ahead or swept aside, and you have a faint picture of the Great Glacier of the Selkirks.

Something in the limitless sweep of the western plains and the heavenward lift of its lofty mountains makes our people undaunted by any problem, however serious, or any undertaking, however great. They realize that economy in transportation lies at the basis of their prosperity. They see that the average cost of transportation by rail is far greater than the average cost of transportation by water. They know it is physically impossible to transport their farms a thousand miles nearer the ocean. They believe it may be practicable

to bring ocean transportation a thousand miles or more nearer their farms. The Hudson's Bay, that gigantic arm of the sea, as long as from New York to Chicago and as wide as from Washington City to the Great Lakes, is thrust down the centre of the continent, and Port Churchill, on its western shore, is sixty-four miles nearer Liverpool than is the city of New York. It is not yet settled whether navigation can be made commercially practicable and profitable through Hudson's Straits, but it is purposed to find out whether or not it can be done.

Meanwhile Canada is working steadily forward to get a navigable waterway 14 feet in depth all the way from Lake Superior to the sea, by way of the Welland and St. Lawrence canals. The government of the United States is at work deepening the channels of the Lake to the depth of twenty feet. Both channels will soon be completed and available for use, and if the Hudson's Bay route should not prove to be feasible, a short cut may be added by way of Lake Nipissing and the Ottawa River, which

route involves the construction of only twenty-seven miles of actual canal.

Our people are realizing more and more the importance of utilizing their magnificent waterways. The City of Winnipeg is now discussing the desirability of improving the navigation of the Red River between that city and Lake Winnipeg, so as to enable the lake steamers to pass up the river to Winnipeg, which is now only possible at high water in the spring.

With its ten thousand miles of navigable waters and a practicable outlet to the ocean, who dare attempt to prophecy the possibilities of the North-West. All we know now is but a preface to a volume of unnumbered pages, which the future will unfold.

There can be no doubt of the bright outlook of a country whose resources are so ample and so varied, whose climate invigorates both mind and body, and whose enlightened people are so ambitious and so determined to achieve success.



TRACKING.



LAKE LOUISE.

Another phase in connection with the waterways of our North West is their immeasurable value in connection with the coming and important matter of

#### IRRIGATION

Agriculture, by means of irrigation, is a very different pursuit from the business of farming as generally understood. Apropos of the prevailing opinion that irrigation is merely a substitute for rain, it has been said that rain is a substitute for irrigation. Irrigation does more than rain—it enables the farmer to raise larger and a greater variety of crops. Though necessary where the rainfall is small, it is most scientifically employed in those portions of Europe where the rainfall is the largest and most certain.

The first and most obvious advantage of irrigation is, that it renders crops secure against injury or ruin by drought.

The second advantage is, that it permits of intensive cultivation. Where there is good soil and plenty of sunshine, and the farmer can apply water just when, where, and in what quantity he will, the tilling of the soil becomes a science.

Another feature of great importance is the fact that irrigation permits the widest diversification of crops.

Irrigation renders possible the highest conceivable development of independence and prosperity on the fewest possible number of acres. There is the scope for science and intelligence to work out the best possible results, and so secure the largest return from each acre and the nearest approach to perfection in quality. So it becomes purely an industrial problem, a question of brain and brawn, to obtain support from the small irrigated farm.

The drawback and bane of country life is its loneliness. Not only the young folks, but the old as well, keenly feel the dearth of human sympathy and companionship. The average size of our farms is about 150 acres. If these could be reduced to 25 acres, which is double the average size in many portions of the States where the lands are irrigated, six families would occupy

the space now held by one. Neighbors would then be six times as numerous, and the possibilities of social enjoyment multiplied in that ratio.

To increase the productiveness of our lands—to colonize them with a productive population, to develop the highest conditions of human happiness for the people—that is the great and precious end to which all our efforts should tend. This problem must be solved in the interest of the people and humanity. It is a great trust which God has committed into our hands. Let us seek to find the correct solution of it.

#### The Irrigated Lands of Utah and Arizona.

UTAH is in the geographical centre of the irrigation empire. In climate and altitude it represents the medium between the two extremes existing on the north and south. Whatever else may be said of the Mormons, it is conceded that they are by nature and habit the best of empire builders. When they entered the valley of the Great Salt Lake, forty-four years ago, they found an alkali desert awaiting them. They had heard nothing of irrigation, but their leader was a man possessing a genius for surmounting difficulties. He lost no time in wedding the limpid mountain stream to the arid soil of the desert. His followers were not only soon able to sustain themselves, but rapidly went forward in the accumulation of wealth. The average size of their farms is 20 acres. In certainty and variety of production these farms are nowhere

surpassed, and in beauty of surroundings these homes are the equal of any to be found on the face of the earth. Utah is full of beautiful valleys filled to their utmost capacity with prosperous twenty-acre farms, and uniting in a high degree the charms of country with the conveniences of town life. In some portions of Utah the agricultural village of Europe has been preferred. In those instances the farmers have their homes in the village, and go out to their farms each day. The success of the Mormon settlers was due in part to the fact that their operations were planned by one masterful mind. The common people thus labored with an intelligence superior to their own.

To the mind of the average American probably the most hopeless desert is that of Arizona. It is indeed a very arid country and nothing but the cactus and mesquite tree subsists naturally on its level plains. But that soil is rich beyond comparison, and when water is turned upon it becomes enormously productive. The traveler who leaves the main line of the trans-continental railroad and passes a few miles north to Phoenix finds himself in the midst of the Salt River Valley. Here he beholds the possibility of a new civilization in the heart of Arizona. Under the magic of irrigation the small farm flourishes and produces everything, even to the citrus fruits. The future of Arizona is beyond computation. It will be a rich and populous State and illustrate the highest possibilities of the irrigated farm.—*Exchange.*



NEAR THE SOURCE OF THE PEACE RIVER.



### THE LAND OF "PRETTY SOON."

I KNOW of a land where the streets are paved  
With the things which we meant to achieve,  
It is walled with the money we meant to have saved;  
And the pleasures for which we grieve,  
The kind words unspoken, the promises broken,  
And many a coveted boon,  
Are stowed away there in that land somewhere—  
The land of "Pretty Soon."

There are uncut jewels of possible fame,  
Lying about in the dust,  
And many a noble and lofty aim  
Covered with mould and rust.  
And oh; this place, while it seems so near,  
Is farther away than the moon,  
Though our purpose is fair yet we never get there—  
To the land of "Pretty soon."

The road that leads to that mystic land,  
Is strewn with pitiful wrecks,  
And the ships that have sailed for its shining strand,  
Bear skeletons on their decks.  
It is farther at noon than it was at dawn,  
And farther at night than at noon;  
Oh let us beware of that land down there—  
The land of "Pretty Soon."



A BILL has been introduced to the Dominion House by which it is forbidden to kill buffalo for five years from the date of the passing of the bill.

ONE of the latest departures in British agriculture is an experimental farm, an idea for which the Earl of Winchelsea, president of the National Agricultural Union, is responsible. Lord Winchelsea contends that the British agriculturist, if he is to cope with foreign competition, must no longer confine himself to crops which a dozen other countries can grow more cheaply, but must prepare for a serious effort to grow what really pays for growing. In order that a series of practical experiments may be made which will afford reliable information to farmers and others on this point he has established what he calls the "Cable Farm." The results of the experiment are to be carefully noted and published from time to time. The farm is situated on Lord Winchelsea's estate at Haverholme, Lincolnshire, and he will personally take an interest in its supervision. Ten acres of flax are already sown, and ground is being laid out with a view to various other crops not generally grown by farmers. The great advantage of the departure thus made is that it will bring the theoretical results obtained in the laboratory to the practical test of experience; and as it is intended in every case to effect an actual sale of the produce grown, the "Cable Farm" may be expected to throw an important light on such vital points as railway carriage, access to markets, in fact the whole question of what to grow and how to grow it.

AMONG the honors to Canadians bestowed on the Queen's birthday are knighthoods to Hon. Frank Smith, Mr. W. C. Van Horne, and Hon. Charles De Boucherville. Sir Francis Smith was born in Armagh in 1822. He began life in a humble way and rose to a position of commercial prominence, and amassed a fortune. His chief business was wholesale grocery, but his financial operations have been on a large scale in many lines. As president of the Toronto Street Railway for many years, he was much before the Toronto public. He invested deeply in shipping and in financial companies, being director and president in quite a number of them. He was at one time Mayor of London. He is a member of the Dominion Government without portfolio. Sir William Van Horne is well known as the prince of railway presidents. His start in life was at the lowest rung of the ladder. From being a humble telegraph operator, he is now the titled president of one of the greatest railways in the world. To sheer ability he owes his rise. Sir Charles De Boucherville, bears an old French-Canadian name. He has been twice premier of Quebec.

MAY wound up with a prolonged spell of rain and a cold snap, reminding one forcibly of raw March weather. Opening like a lamb it went out like a lion. A rainstorm swept the province, such as has been rarely surpassed, in May. Beginning on the 17th with a few showers it developed a cold, steady downpour which continued until the 25th and broke out again on the 27th, remaining unsettled until the end of the month. Large tracts of country lying near rivers were submerged, and the water destroyed and damaged considerable crops. The extent of the loss has not yet been ascertained, but reports make it out as serious in many sections. Frost was experienced during two nights when the soil was still soaking wet, and in addition to injuring fruit caused damage to crops. The hay crop, however, will benefit greatly by the rain which was much needed in many districts to make up for the dry fall and winter. The farmers will thus be able to counterbalance their other losses, as it is expected that the demand for hay and the prices will be exceptionally good this season.

FROM accounts to hand it is shown that the trade in live stock in Chicago during the past year has been one of the most remarkable on record. While everything looked promising at the commencement of the season, the close of the year saw only disappointment. The only class of stock whose value ruled strong were prime corn-fed heaves, the supply of which was very limited. The quality of most of the cattle marketed was very inferior, and too many half-fed animals were sent forward. The number of cattle received at the yards was 3,133,406, or 488,363 less than in 1892, the decrease being

entirely in natives and Texans. Calves showed an increase of 12,981 head. There was a decrease of 1,657,157 in the number of hogs received, as compared with the year previous. Prices fluctuated considerably, ranging from \$8.75 in February to \$1.50 in August for good hogs. The sheep trade beat all previous records, the receipts for the lightest month in 1893 being greater than those for the heaviest of 1882. The total receipts were 3,031,174, and of these Texas contributed 500,000. October 16th was the banner day, with a total of 25,690, the week's run being 82,906, and for the whole month 325,036. The increase over 1892 is nearly 890,000. Prices fell from \$6 for good sheep early in the year to \$1.25 in November, while the outlook is not at all promising. The market for horses has been most unsatisfactory, except during the early spring months, when there was a fair demand for good horses. The adoption of electricity and the cable system for street cars has naturally affected this branch of live stock, and the financial depression as well took out of the market what life there was.

THE good prospects for abundance of pasture has drawn attention with more than usual interest to the cheese industry of Ontario. That the province is singularly well adapted to produce first-class cheese has been so well established as to require no discussion, but a few figures as to the advantages possessed by us, and how far we have developed them, will be found both interesting and encouraging. The soil, the water, the crops, the stock, and the farmers to utilize them are of first-class quality. There are over 175,000 farms in Ontario manned by as enterprising and intelligent husbandmen as are to be found anywhere in the world. For dairying purposes they possess over 800,000 milch cows, capable of producing 3,200,000 lbs. of milk, worth \$32,000,000 at one cent a pound. It has been computed that there are less than five cows to the 130 acre farm, a very small proportion. But not only could the number of cows be beneficially increased, the product per cow could also be made greater. The estimate is placed at 4,000 lbs. of milk per cow. By improving the breeding, the feeding and the general care the yield of milk might reasonably be raised to 6,000 or 7,000 lbs. Indeed a higher figure than these has been reached by the average count of many herds in the province. Taking ten of the best agricultural States in the Union for ten years, from 1883 to 1892 inclusive, the average yield per acre of grain—wheat, barley, and oats—has been much higher in Ontario than in the highest State, showing that the productiveness of Ontario soil gives a valuable advantage to the farmers here in dairy production. In the same ten years the quantity of cheese manufactured in Ontario rose from over 53 to over 98 million lbs., an increase of over 40 million lbs., representing an increase in money value of over three million dollars. This increase has been gradual, and has been maintained last year, which was the highest year yet recorded. The British market offers the best outlet for Canadian cheese. From Canada there was exported in 1893, 133,946,365 lbs. of cheese valued at \$13,407,470, of which sum Britain paid \$13,360,237, leaving \$47,233 to the United States, a proportion, however, which could be materially increased were the quality of our product of a higher standard. That Britain depends greatly on Canada for her cheese supply will be seen from the following figures for 1891. In that year the values of cheese imports from the leading countries were:—Holland, £761,387; United States, £1,779,260; Canada, £1,991,597; New Zealand, £74,257; all other countries, £206,903. Figures might be further quoted to show that the cheese industry has taken a wide hold on this Province, and that money is being made in the business, but as our purpose is to deepen the interest of the average farmer in this resource at a time when the price of wheat is exceedingly low, a few details will suffice. If the leading cheese centres in the

Province be taken it will be found that in 1892 the amount earned per head of the population has been in this ratio:—Leeds, \$37; Grenville, \$31; Oxford, \$28; Dundas, \$24; Hastings, \$23; Lennox and Addington, \$21; Frontenac, \$17; Middlesex, Perth, and Lanark, \$15 each; Stormont, \$14; Northumberland and Prescott, \$13 each; Peterboro', \$12; Elgin, \$11; Bruce, \$6. These figures are instructive. They should be pondered by the farmers. Why should not rich, fertile Bruce earn as much or more per head than say Leeds? Its acreage is almost twice as large, which makes up for the difference in the population, and its facilities are as good. The explanation will be found in the fact that Bruce has 22 factories to the 76 in Leeds. The growth of cheese factories have been found profitable, and it is for the farmers themselves to see to it that they take full advantage of the most approved methods to utilize to the utmost cent the products of the dairy.

THE Poultry and Pet Stock Associations of Ontario's annual reports issued last month show an amount of progress and success which is as encouraging as it is surprising. The associations are to be congratulated on their work and on the advancement they are able to take credit for. A feature of the printed report this year is the set of illustrations that accompany it. Lovers of fine birds will find the cuts of the various kinds of fowl very interesting.

THE Dairy Commissioner of Canada is usually up to date. His services have often been recognized, and the account of his labours during the past year, which has been issued by order of Parliament, bears further testimony to his usefulness. His visit to Britain, where he advertised our dairy products, has produced good results already. Not only have Canadian goods been better known in the British markets, but the more developed methods used by British farmers, and which were studied by Professor Robinson, have been explained and made known to the Canadian farmers. The Commissioner has filled the pages of his voluminous report with information of great importance, and every farmer's club ought to secure copies of it.

THE agricultural resources of Canada have been made familiar to British farmers during the past winter by means of lectures given by tenant farmer delegates who visited the Dominion for the purpose of learning what they could on the spot, so as to be able to advise their countrymen aright as to the prospects of farming in Canada. There were delegates from Scotland, England, Wales, and Ireland. Their official reports have just been received, and interesting reading they make. The delegates came out under the auspices of the Dominion Government, and the reports are published by the Department of the Interior, and have been given wide circulation among the farming classes of the British Isles. A perusal shows how well the salient points have been seized upon, and how much can be learned even on a flying tour such as taken by the delegates. As a matter of course a great deal of attention is given to Manitoba and the North-West as the great field of settlement; the advantages of the country, its fertility, climate, etc., are intelligently touched upon, and much valuable information is given to intending settlers. But, as if to meet the complaint that Manitoba and the western territories were absorbing all the immigration efforts of the Government, the report give facts and figures regarding all the other provinces which ought to have a good effect in Britain. The great advantage of visits such as those of these delegates is that the information they carry home with them is received with credit, which sometimes official statistics do not so well deserve.

On the 16th of last month the lungs of Canadian cattle were submitted to examination at the British ports of landing, and the much looked-for inspection was begun. Suspicious cases were forwarded to London and the reports on these were submitted to Mr. Gardner, President of the Board of Agriculture. The other day in answer to a question in the House of Commons, Mr. Gardner said that traces of pleuro-pneumonia were discovered in the lungs of an animal shipped at Montreal, and that the case was being rigidly examined by experts. It is to be hoped the Canadian government are represented at this test examination by men of undoubted standing, for there is no doubt the British authorities are very reluctant for political reasons to remove the restrictions on our cattle trade. The *Dundee Advertiser*, a strong government supporter, but having the interests of its great constituency of farmer readers first at heart, publishes, in an issue just to hand, the following just strictures: "The fact is, that the Board of Agriculture has, in its short existence, shown red tape adherence to petty matters of form that is not at all in keeping with a modern institution which is supposed to be scientific if it is anything. The examination of lungs from Canadian cattle is not necessary at this time of day. The British Board of Agriculture has been met at every point by experts of the highest eminence. Our official veterinary experts at the Board of Agriculture have fared very badly at the hands of Williams, Hunting, and incidentally at the hands of M. Nocard. This is clearly seen in the additional papers and correspondence which have just been issued in regard to the landing of Canadian cattle in Britain. It cannot be held that the experts at the Board of Agriculture are more capable than the unofficial veterinarians who have made independent examinations of certain lung specimens in dispute. Professor Brown argues in vain for the existence of various types of pleuro-pneumonia. His contention is supported by the feeblest of proofs. He has learned caution in the course of the long-continued dispute. He cannot forget that a case which he stated to be genuine pleuro, was demonstrated by Williams and Nocard to be corn-stalk. But still he clings to the opinion that he and his fellow-experts at the Board of Agriculture did find pleuro-pneumonia where outside authorities have failed to detect anything more deadly than broncho-pneumonia. The test to which Canadian cattle are now to be submitted is quite unnecessary. Every reasonable requirement has already been met by the Dominion Government. Further than this, why should cattle from the Dominion be submitted to a test which would be far too severe for our home bred stock." This is plain enough, and from a friendly source too. It shows that strong feeling exists in the grazing districts of Britain against the unreasonable hostility to Canadian cattle which the government affects. The result of the latest expert enquiry is looked for with much anxiety, as on it will, to a great measure, depend whether this season's trade will be practically ruined, as was last year's.

THE prosperity of a country depends largely upon the prosperity of the agriculturist, who raises the raw material needed to clothe and feed us. This is being recognized more to-day than ever before. The keenest brains of the world are being spent in devising appliances to make the life of the farmer easier, more comfortable and more profitable. The Bolster Spring, made by the Windsor Bolster Spring Co., is one of the results. The inventor claims that this simple appliance will enable the farmer to get his produce to market in better shape and will save wear and tear. We would recommend our readers to write for particulars.



1st.—Mgr. Fabre, Montreal, celebrated the 21st anniversary of his elevation to the Episcopate. Degree of L.L.D. conferred on Lieut.-Governor the Hon. Dr. Shultz, of Manitoba, by Queen's University. Mr. G. G. Macpherson nominated for the Ontario Legislature by the Reformers of North Perth.

2nd.—Henry Grundy, deputy registrar of Peterboro', dismissed. Shock of earthquake felt at Cardiff. Coxe, Brown and Jones, the tramp army leaders, arrested at Washington. Great destruction of property in Cleveland by riotous mob.

3rd.—Reduction of staff begun by the C.P.R. at Montreal. Fargo station, near Chatham, Ont., destroyed by fire. Ascension Day observed as a political holiday in Canada.

4th.—Constable Lindsay, of Comber, Ont., fatally shot. T. P. Watson elected Conservative candidate for East Kent. J. J. Ryan and Joseph Wright, the Canadian oarsmen, arrived in London.

5th.—Ontario Legislature for 1894 prorogued. Mr. Henry McCready accidentally killed near Waterdown, Ont.

7th.—The annual meeting of the Hamilton Board of Fire Underwriters held. Treasurer Nicholls, of London West, dismissed by Reeve Macdonald. Prohibition resolution brought before the Dominion House of Commons by Mr. Flint. Toronto rate of taxation fixed at sixteen mills on the dollar.

8th.—Mr. Joseph Tait nominated for the Ontario Legislature by North Toronto Reformers. Irish Times announced that the Ulster Steamship Company is about to commence direct steamship communication between Dublin and Canada. The Presbyterian Synods of Toronto, Kingston, Montreal and Ottawa met.

9th.—Subscription in London, Eng., to the Peter Redpath memorial for McGill University amounted to £163.

Mr. G. G. S. Lindsey nominated by the Ontario Legislature by the West Toronto Reformers. Cardinal Taschereau and the entire hierarchy in Canada petitioned the Dominion Parliament against the Manitoba and North-West School Law.

10th.—The monument to Mary, the mother of Washington, was dedicated in Fredericksburg, Va., in the presence of President Cleveland and over ten thousand people. Home Secretary Asquith married to Miss Margaret Tennant.

Capt. D. C. Foster Bliss reinstated in the Ottawa Field Battery.

11th.—Big strike broke out at the Springfield Mines, N.S. "Doc" Andrews found not guilty by a Toronto jury. Rev. Prof. John Campbell exonerated of the charge of heresy by the Synod of Montreal and Ottawa.

12th.—Beautiful bronze statue of Christopher Columbus unveiled in Central Park, New York. Judge Scott, of Brampton, died. The annual convention of the Irish National League of Great Britain pledged continued support to the British Liberal party.

14th.—Professor Henry Morley, L.L.D., the versatile author and lecturer, died in his seventy-second year. Rev. J. W. Langley, while preaching in Philadelphia on "The Uncertainty of Life," was stricken with paralysis.

15th.—W. Charles Moss, Q.C., nominated for South Toronto in the Reform interest. A heavy frost visited the Niagara Peninsula. A handsome memorial was unveiled in Rochester Cathedral, Eng., to Captains W. G. Stairs, H. B. Mackay, and W. H. Robinson, who died in Africa, by their comrades of the Royal Military College of Canada.

16th.—The United States intimated her withdrawal from the Berlin agreement with respect to the Samoan Islands. Rev. Principal Grant gave evidence before the Fees' Commission to-day.

17th.—The four representatives to the Intercolonial Conference left Sydney for Ottawa to-day. Owing to the great coal strike all the shops on the Grand Trunk Ry. system were shut down to-day. Toronto military tournament opened.

19th.—Funeral of Mr. John Hearn, M.P., took place at Quebec. Rev. Archdeacon McMurray, of Niagara, died to-day, aged 81 years.

21st.—W. R. Meredith, M.P.P., opened the Conservative campaign for the Ontario Legislature by a speech at London. The Manchester ship canal opened by Her Majesty, the Queen.

22nd.—The thirteenth annual meeting of the Royal Society of Canada was held. The French ministry was defeated on the Miners' Eight Hours Bill and at once resigned.

23rd.—The treaty of Africa concluded between Britain and Belgium.

24th.—Queen's Birthday observed in Canada. United States flag torn down at St. Thomas, Ont., by excursionists.

25th.—Queen's Birthday knight-hoods conferred on Hon. Frank Smith, W. C. Van Horne and Judge Casault, Quebec.

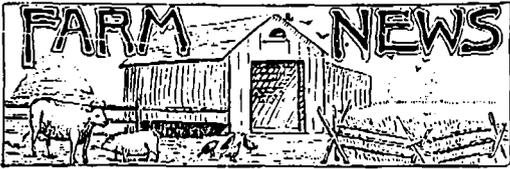
26th.—Queen's Birthday officially celebrated in England.

28th.—Heavy storms reported from the English coasts. Sir Oliver Mowat opened the Reform campaign by a huge demonstration at London, Ont.

29th.—Snowfall took place in northern portions of New York State.

30th.—Annual meeting of Supreme Grand Orange Lodge for Canada closed at Lindsay, Ont.

31st.—Disastrous floods in British Columbia; great damage to the farms in the Fraser valley.

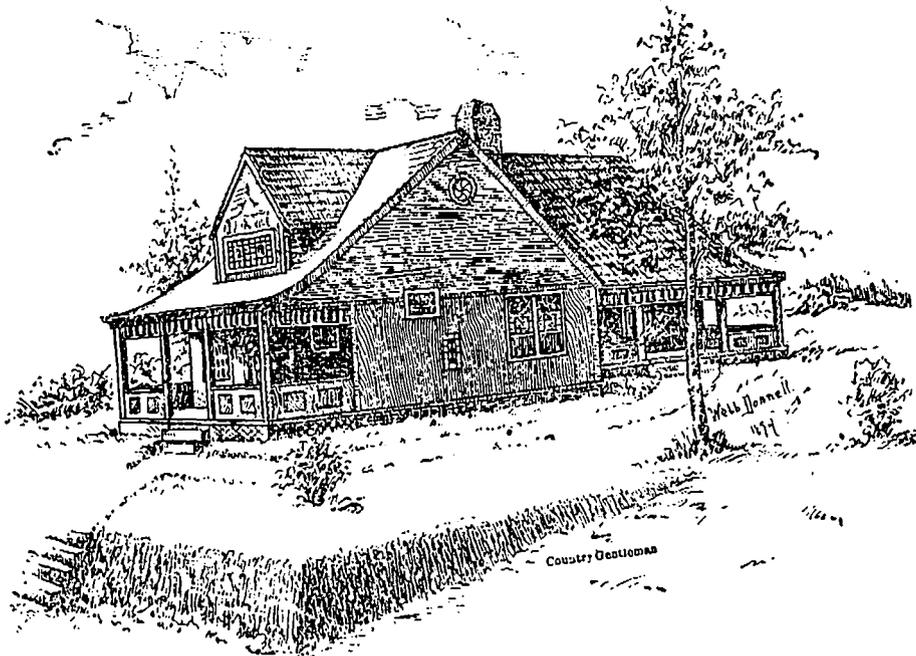


Farmers' Homes.

THE building of a snug and convenient home seldom receives the amount of thought as to plan and arrangement as the case deserves. Every change that economizes labor, and expense, and that adds to the pleasure of our short struggling lives, ought to be welcomed as an improvement of importance. And nowhere can conditions be changed to more advantage

the front piazza and toward the north from the piazza at the side. This gives a southern exposure to all the rooms except the library, and brings the narrow plant-room opening out of the dining-room—which is in reality a big bay window—upon the south side of the house, where it can have the full winter's sun. The one chimney provides a flue for the kitchen range, and an open fire-place in the library and dining-room—the whole house being heated by steam or furnace. The opposite corner in the dining-room is cut off by a bric-a-brac, or "old china" cabinet, to correspond with the chimney corner. The plant-room opens out of the dining-room, and here is afforded a chance to insert a light door frame with open-work around it, which will let in a flood of light, and many glimpses of growing and flowering plants. A suggestion for such open-work is presented

every other shingle rounded or pointed. Such methods cheapen the whole effect. The best quality of shingles, laid *perfectly true*, make a beautiful wall surface, especially when given a soft tone with a stain of artistic color. One word in regard to cost. These sketches are given rather as suggestions than as hard-and-fast plans to be rigidly followed. Some features may appeal to one and some to another. One's house will be most satisfactory if it contains some of his own individuality. He may be pleased with some given plan, but desire to change some of its features. The plans in this way may prove helpful. Moreover, to give an estimate of cost for a particular plan would be manifestly unwise, for materials and labor vary so widely in different places as to make cost a matter of locality. One should decide on his plan, and then consult a builder in his own vicinity to learn the cost of the proposed house.

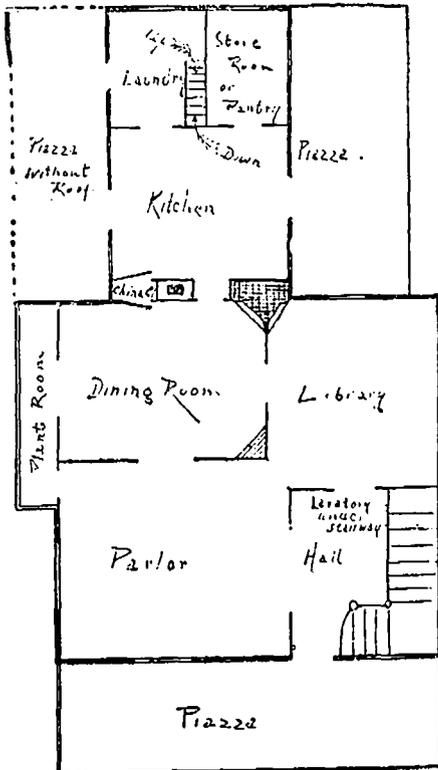


AN ARTISTIC COUNTRY HOUSE.

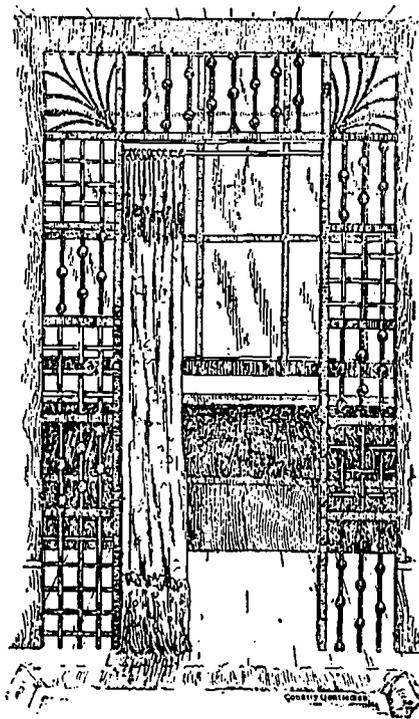
than in the farmer's home, did he but study the problem as it deserves. The sketches presented herewith are from the plans of Webb Donnell, and they will be found to be particularly good.

They show an exterior, the first floor plan and a doorway, which may be useful to those who think of building. The house is one story in height, but possesses plenty of room on the second floor for four medium-sized bed-rooms,

herewith. Large doorways with portières are between the hall and parlor, and the parlor and dining-room. The china-closet opens from both



First Floor Plan.



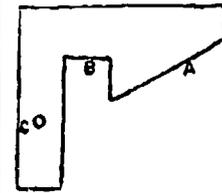
Doorway between Dining-Room and Plant-Room.

the dining-room and the kitchen. The kitchen sink is against this same wall. The plant-room may have a glass door communicating with the southwest piazza for summer use, if desired.

Such a house should, for best effects, be shingled on walls and roof, and the whole stained; and in shingling, one should think twice before using the plan so often seen of having every other shingle drop an inch or so below the one preceding, or having the base of

Ingenious Gate Latch.

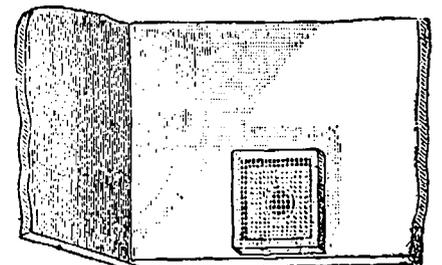
Try an experiment with this gate latch. If you have to open the gate often you will find



it to be about the most convenient you have ever tried. It is nailed loosely to a post by a large 4-inch wire nail. A small strip is fastened to the gate, strikes A, and falls into the slot B. At C a strip on the post holds the latch upright and prevents it from falling back too far. The latch is cut from inch wood, is cheaply made, and can be profitably used on many of the gates and doors on the farm.

A Good Strainer.

E. N. MILLEN supplies a cut of a water-tank strainer to the *Country Gentleman*. He thus describes it: Water is piped to my barnyard from a spring a hundred rods away. The half inch supply pipe enters near the bottom of the tank, and is kept from freezing by being continually immersed. But the one-inch overflow pipe, which goes out about three inches from the top of the tank, used to get clogged with ice in winter and dirt in summer, causing much annoyance. To obviate this, I hit upon the



following device, which has stood the test of years: A hole three inches square (a round one of this diameter would do as well) was sawed in a six-by-six piece of inch pine. This was nailed on the inside of the tank, with its centre over the opening of the overflow pipe. Over the hole in the block was nailed a five-by-five piece of galvanized wire netting, of quarter-inch mesh. Now, any ice that may form is kept an inch away from the mouth of the overflow, for the water never freezes inside the wire netting. It always has a free passage through the meshes of the wire below the ice, and up between the wire and the side of the tank to the outlet.

BEANS are discovered to be great honey producers. A bee keeper in Santa Clara Valley Cal., when other sources of nectar failed moved his hives into his bean fields and a large crop of delicate honey was the result.

Stock raising and grain growing naturally go together on a well regulated farm.

or three bed-rooms and a bath-room. The plan contemplates an outlook toward the east from

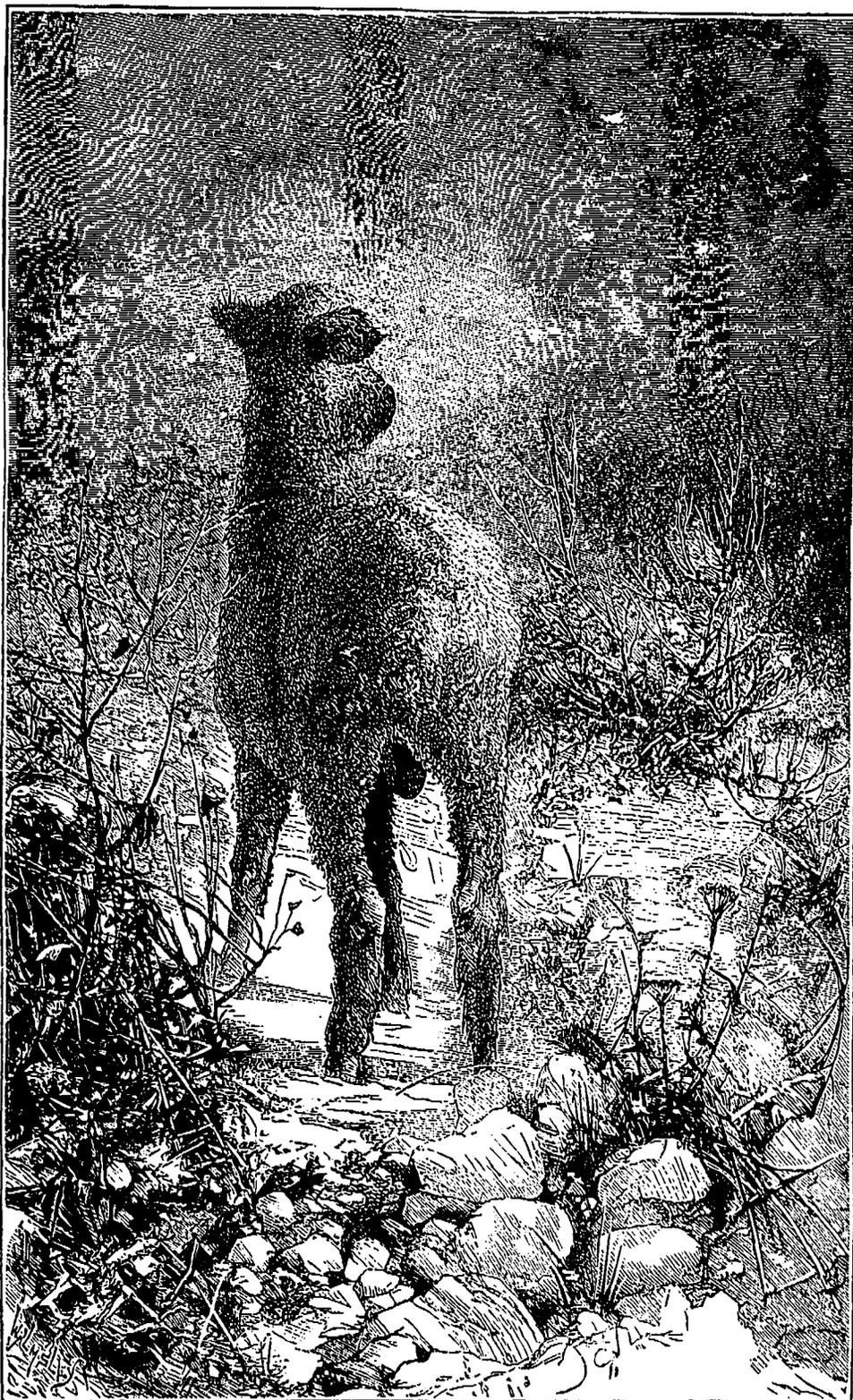
## EDITORIAL NOTES.

LAST year the Ontario Government established a binder twine factory in connection with the Central Prison at Toronto, but it does not appear to have been a very profitable venture. The prison authorities have admitted that they made a loss the first year of \$10,000 and they have further admitted that they cannot compete with the regular factories in the manufacture of twine. That is, that with prison labor and no wages to pay, they cannot make twine any cheaper than the regular manufacturers, who are giving profitable employment to a large number of citizens. We wish to call the attention of the farmers of the west to this fact. There has been a considerable demand for free binder twine in the West. Binder twine is one of the things regarding which there has been a popular demand for the removal of the duty. From these facts it would appear that there has not been a great margin upon twine, and evidently manufacturers have not taken advantage of the duty to increase the price. When the regular manufacturers have been selling twine cheaper than the government could manufacture it with prison labor and no wages to pay, it seems conclusive evidence that the farmers have been getting twine at very low prices, in proportion to cost. This then being the case, would indicate further that the duty does not increase the price of twine, and therefore the duty is not a drawback to the farmer. The more manufacturing we can have done at home, the better it is for the farmers. A duty which keeps out foreign goods and leads to the manufacture of the goods at home, without increasing their cost, is a direct gain to the farmers, as the employment of an industrial population provides a market for the farmers' produce. Why then agitate for the removal of this duty? After all, there is no market of so much value to the farmer as the home market. Export markets are necessary for surplus produce, but the home market is always the more profitable, and the portion of the farmers' produce sold at home brings a greater proportionate return than what has to be sent abroad. This can be illustrated in the case of wheat. Manitoba hard wheat has been selling during the past winter and spring for milling purposes both here and in Eastern Canada at from ten to twenty cents per bushel above export values. In other words, the Manitoba farmer has obtained ten to twenty cents more for his wheat for home consumption than he could have got for it in England. This shows the value of the home market to the farmer, and what is true of wheat is true of about everything else the farmer has to sell. In fact, some classes of produce cannot be exported at all, and would be valueless except for the home market. It is sometimes asserted by unthinking persons that the factories of Eastern Canada are of no benefit to the western farmers. This is, of course, a very unreasonable assertion. These factories give employment to a large number of men, who make up the home market for the farmers' produce. As we have already shown, Manitoba farmers get a much better price for their wheat in Eastern Canada than they can get for it in any foreign country. These factories, which it has been said are of no benefit, are the principal factors in producing this market for Manitoba wheat. When the farmer buys Canadian-made binder twine, or farm implements, or any other article of home manufacture, he has the satisfaction of knowing that he is indirectly paying for these articles in trade. What amounts to the same thing, he sells bread and meat and vegetables to the home industrial population from whom he buys his implements, clothing and other requirements. This is a fair exchange, and is a good reason why the farmer, above all others, is interested in having a large industrial population at home. It also shows why the farmer should buy home-manufactured, in preference to foreign-made, goods. The farmer, as we have

shown, feeds the man who makes the home goods. On the other hand, he receives no such benefit from goods made abroad. To carry out this reasoning to its proper conclusion, it is evident that those who give a preference to foreign goods are doing what they can to destroy their own market and build up a market for the benefit of the farmers of some other country. As the home market is by far the more profitable market for the farmer to sell in, it is in his interest to encourage the building up of the home market by every means in his power, and this home market depends mainly upon manufacturing.

THE saying that figures won't lie, must have been invented before political partizanship became the institution that it is to-day. The way figures can be manipulated to serve party purposes, is something astonishing. There is nothing which can be made to lie to better advantage than figures, for they have the semblance of truth, and therefore make the lie appear more real. The more truthful a false assertion may appear, the greater is the lie contained therein. When figures are so manipu-

lated as to present a case in a false light, they are the most deceptive of any deception which can be practiced. Unprincipled politicians understand well the art of manipulating figures and making them lie to the best advantage to suit their own ends, knowing, as they do, that there is no lie so readily absorbed as the statistical lie. This has been exemplified in the trade returns. The other day we picked up a paper and noticed an article headed as follows: "Canada's Declining Trade, Gradual Falling off of the Commerce of the Country." The article went on to show by the aid of figures, deftly manipulated, that the country was going to wreck as fast as the iniquitous policy of the government could drive it. The very next paper taken up—which happened to be on the opposite side of politics, contained an article headed thus: "Wonderful Expansion of our Trade. Returns Show a Most Gratifying and Prosperous Condition." The article which followed showed the country to be enjoying a veritable wave of prosperity. Striking upon these two articles one just after perusing the other, each showing exactly the opposite condition, though based on the same facts, was enough to provoke a smile, were it not for the serious nature of the business. There is a



serious side to this, which should not be passed over lightly. To exaggerate and misrepresent everything which can be turned to party account, seems to be the recognized order of things with many party journals. Many otherwise excellent journals are thoroughly unreliable when it comes to discussing political issues, or questions of any political bearing whatever. They exaggerate to make a matter look favorable to their own party, and twist and distort facts to make it appear to the disadvantage of the opposite party. This is dishonorable and dishonest, and were it practiced in connection with any other matters than political questions, it would be looked upon with contempt by honorable people. In politics, however, anything is considered fair. No matter how mean an advantage may be taken of the opponent, it is all right. It is a matter for very great regret that this is the case, and it is to be hoped the day will come, and speedily, when mean misrepresentations of this nature will be scorned by all.

In this country we are apt to think only of the farmer when talking of low prices of wheat. Most people seem to think that the farmer is the only one who has suffered from the present period of depressed values. Such is a popular error. Speculators have been greater sufferers than the farmers. While the farmers have had a very poor return for their labor, speculators have sunk their money by the millions. The crop year of 1891 proved a disastrous period for the grain trade, while the farmers actually were the gainers to the loss of the grain importers abroad. It will be remembered there was a short crop scare that year. Russia and France had poor crops, and it was feared there was to be a shortage. The European importing countries, especially France, imported enormous quantities of wheat, and prices were advanced 30 cents per bushel. Things did not turn out, however, as was expected. The crop of the United States was vastly under-estimated and the expected shortage did not materialize. Instead of a shortage it turned out that there was abundance of wheat, and while the farmers gained from the advance in the price, the men who bought the wheat lost heavily through the decline which followed. The farmers were therefore the class who gained by the wheat "boom" of 1891, and the money which was lost by the millions, by importers in Europe, went into the pockets of the farmers here and elsewhere. Ever since 1891 the course of prices has been against holders of wheat, and though the farmers have not received profitable prices the past two years, they have done better than speculators and others who have bought wheat to hold. Taking the last three years, the farmers have had by far the best of the wheat deal, for they had one good year at the expense of importers of Europe. The many failures of foreign grain firms and bankers who advanced on wheat securities, indicates where the heavy losses were.

THERE is abundant scope for the use of education in an agricultural life, and yet it seems peculiar that many persons seem to believe that education should command something better than farming. The son of the farmer who receives the best education of any of the family, is sent to the city to a clerkship or something of this nature. How remarkable this is when the matter is looked into. The position of the farmer is certainly immeasurably above that of the clerk, and as for education, there is vastly more use for education upon the farm than there is in ordinary mercantile business, or in a trade. The clerk or the mechanic can learn his trade by practice, and with the exception of a few branches, any person of intelligence can learn any trade without even a rudimentary education. Agriculture, however, is a study in itself, and a many-sided study at that. True, many farmers are unfortunately lacking in education, and on this account they can never

fully appreciate the beauties and wonderful attractiveness of an agricultural life. We can think of no calling which opens a wider field for study and pleasant research than agriculture. It is the study of Nature herself. In agriculture, experiments can be carried on without end, and on a scientific basis, as well as merely from the point of view of labor. Botany, chemistry, geology, the study of animal and insect life, and many other distinct science can be introduced in intelligent agriculture. Education of a high order can be applied daily upon the farm, and the room for study and research here opens out with such a variety of subjects and such a wide range that there is never any room for a relapse of interest in the work of the farm. Why, then, is it that so many people give up the farm and seek the dull and toilsome life of the city? It must be that agriculture has never been understood by them. They have never appreciated the opportunities of life on the farm. They have toiled along as mere machines, going through with their work as thousands have done before them, and not applying study, experiment and education to the labor and details of the farm. The study of agriculture should begin with the children at school. In every rural school in the land, agriculture should be taught, along with the rudiments of kindred sciences, such as botany, etc. When the children learn the principles of agriculture, they will take a pleasure in the practical work which the ordinary farmer unhappily is not able to derive from his labor. The lack of this knowledge accounts for so many weary and discontented plodders upon the farm, when in reality farming should be the most pleasant, independent and contented life which can be found. It is the life designed by nature for man, and the only one which supplies all the primitive necessities of life. The teaching of agriculture in the schools should be resorted to, not only for the benefit of the farmers of the future, but also with the object of endeavoring to correct the evil tendency now so prevalent to leave the farm and move to the cities. If the young people—the sons and daughters of the farmers—were given an insight into the beauties and mysteries of agriculture, and their young minds were led to become interested in the study of agriculture, we imagine the disposition to leave the farm would be checked, and a generation of contented and enthusiastic farmers would occupy the land in the future. Even from the worldly point of view, the position of the farmer is the least assailable. The great majority of residents of the city are thoroughly dependent upon others. They are not sure of hardly a day's work ahead, and while not knowing what moment they may be thrown out of employment, they have at the same time to face the fact that they have nothing ahead to rely upon in case of emergency. The few who are in business for themselves are liable to be overtaken by disaster through the acts of others, and the majority of those who are in business are wearied in body and mind in the constant endeavor to meet their obligations and keep up in the race, in these days of keen competition. The successful ones in business are less than one in ten. The farmer, on the other hand, can live almost within himself, and in case of necessity can procure his living direct from his farm.

THE farmers of Canada's great Prairie Land are now in the midst of their spring work—sowing their seeds in the rich black soil. It is a busy season with them. With our short summer seasons, there is no time to waste, and this is not the country for the laggard farmer. From the time work can begin in the spring, until the harvest is off in the fall, it is all activity upon the farm. Even between seeding and harvest time there is no time to lose, for there is new land to be broken, old land to fallow, fences and buildings to look after, etc. The crops come on so fast that the interval between seeding and the beginning of the hay harvest is brief. Let us hope that the seed now being sown will prove good seed in good ground,

and that the Lord of the Harvest will vouchsafe an abundant return of bright golden grain. We shall also hope that prices for grain will prove more profitable next season than they have been during the past season, Canada depends upon her farmers for her prosperity, and this is particularly true of Manitoba, which is so largely an agricultural region.

#### Irrigation in the North-West.

AN irrigation convention was held at Calgary lately to which great importance is being attached in view of what it is likely to lead to in the way of development of the arid regions of western Canada as embraced in the southern portion of Alberta and the western portion of Assiniboia. It has long been admitted that some of the very best parts of these territories are unsuitable for settlement because of the lack of rainfall sufficient to supply the moisture demanded for growing crops, and enterprising men in other parts of the territories, who have long been casting covetous eyes upon these regions, desiring to see them opened up and settled, have been investigating this plan of artificially supplying needed moisture with a view to learning if it could not be made to do service in reclaiming these lands. It is only some two or three years since irrigation first began to be talked of in the North West, although it has been in use in precisely similar regions of the United States for many years. This plan of supplying the deficiencies of nature has indeed been used by man in various forms from the very earliest times. Remains of irrigation canals and evidences that such works existed are still to be found in the countries of Europe, Asia and Africa which were peopled by mighty nations long before the time of Christ, and these remains indicate that the systems were sometimes very elaborate and complete. In our time some of the very richest lands in the world are made so by irrigation. It is resorted to to some extent even in England. But the greatest irrigating country in the world is probably the United States, although even there the scheme is practically only in its infancy. It is principally in the western States that irrigation is used. The State of Utah is one of the best examples of what can be accomplished by intelligent effort in this direction. There the despised Mormons have succeeded in converting areas which were at one time regarded as irreclaimable desert into veritable gardens. The only limit to the possibilities of development by irrigation of the arid regions of the United States is placed by the supply of water. It is estimated by competent authorities that only about one-tenth of the arid regions can be reclaimed owing to the scarcity of waterways.

In Canada the parts which are at present occupying the attention of those interested in this scheme are those mentioned, in the southwestern portion of the Territories, although there are parts of British Columbia which would yield even richer returns for investment of this kind. But at present these are not receiving much attention and the efforts of the delegates who attended the Calgary convention will be mainly directed to furthering such work in the parts of the Territories mentioned. This section of country is merely a continuation of the arid lands of the United States, although there is not nearly so large an area of it in Canada as in the States. The land is open prairie, with a fine soil and climate and no obstructions to cultivation. At present it is only suitable for ranching, but under a proper system of irrigation it could be made to support a very large farming population.

This convention was called, as we understand, to give the whole question of irrigation a general study. It was decided after much information had been presented that the first thing necessary for the development of the scheme would be the passage by the Dominion Government of an act securing the protection of water rights and providing a plan whereby bonds could be issued for irrigation purposes. It was

also thought that a Government irrigation farm, something after the style of the present experimental farms, would be a great advantage. A scheme was also presented to the convention and approved of, providing for the extension of the boundary of Alberta, so that it would take in the arid districts of Assiniboia, and for the erection of the whole territory thus formed into a province which would be given full power to deal with this matter, and, if necessary, assist in developing the scheme. The arid lands which are now held by the Dominion Government could be handed over to the government of the new province providing it a substantial asset to work with. As they remain at present no value is attached to these lands but if they could be made valuable by a work of this kind the people who carry it out should reap the benefit. If this larger scheme is for any reason found by those who are pushing the idea to be at present impracticable they should at least secure provision for a thorough official investigation of the whole matter including a survey of the parts concerned with a view to determining the probable cost and best methods of carrying on the work so that anything which may be done by private enterprise will be done with due consideration for the work as a whole. The Government can find time and money to spend in making the most minute studies of the currents and other characteristics of the St. Lawrence river—a very laudable work in itself—in the interests of eastern trade and commerce and it should likewise be willing to perform similar services for the western part of the Dominion when the interests of the people demand it.—*The Colonist.*

**DO YOU NEED REPAIRS ?**

MASSEY-HARRIS Co. carry at all their warehouses a general assortment of repairs for the machines sold by A. Harris, Son & Co., the Massey Manufacturing Co., the Patterson Bro. Co., Massey & Co., Van Allen & Agur and Sawyer & Massey Co., but unless customers will make their wants known early in the season, and before repairs are actually required for use, disappointment and loss may occur in some instances.

The company is very anxious to meet all requirements, but their business is of such magnitude that unless repairs are ordered early extra expense for express charges and delays must necessarily occur. A little forethought on the part of customers would assist very materially in preventing disappointment and the expense of extra charges at the eleventh hour occasioned by neglect.

If you need repairs kindly take a memorandum of the same (and note the letter and number on the casting) and enquire at the company's nearest agency for the piece or pieces, and if they are not in stock leave your order with the company's agent who will send it to head office, Winnipeg, and the goods will be sent forward so you will receive them in good time. A great many customers postpone this very important matter until the day the goods are actually required. This should not be so, and we trust that customers will do their part to assist in this matter by exercising a little forethought as before stated.

**NORTH-WEST FARM LANDS FOR SALE.**

The following choice lands in various parts of Manitoba and the North-West Territories are offered for sale at most reasonable prices and on favorable terms. Particulars may be had from, or offers of purchase made to the individuals as designated below.

DISCRPTION OF PARCELS.				Man. or N.W.T.	Nearest Town or Post Office.	NAME AND ADDRESS OF PARTIES TO APPLY TO.
Parts of	Sec.	T. R.	E. or W.			
N W ¼	22	17	28 W	Man.	Fort Ellice	A. B. Harris, Birtle, Man.
N E ¼	2	8	20 W	Man.	Carrolton	J. Y. Bambridge, Souris, Man.
N W ¼	14	7	20 W	Man.	Carrolton	J. Y. Bambridge, Souris, Man.
S W ¼	6	13	17 W	Man.	Aikenside	John Sproat, Rapid City, Man., or John Cleghorn, Douglas, Man.
N E ¼	20	11	17 W	Man.	Douglas	John Sproat, Rapid City, Man., or John Cleghorn, Douglas, Man.
S E ¼	31	6	9 W	Man.	Beaconsfield	W. D. Staples, Treherne, Man.
E ½	16	1	15 W	Man.	Cartwright	Morris Watts, Cartwright, Man.
S W ¼ and W ½ S E ¼	23	12	5 E	Man.	Cook's Creek	T. J. McBride, Winnipeg, Man.
S E ¼ and S ½ N E ¼	14	4	5 E	Man.	St. Malo	T. J. McBride, Winnipeg, Man.
S W ¼ and S ½ N W ¼	17	9	5 W	Man.	Elm Creek	T. J. McBride, Winnipeg, Man.
S W ¼	4	1	15 W	Man.	Cartwright	Morris Watts, Cartwright, Man.
N E ¼	12	12	15 W	Man.	Petrel	R. F. Hay, Carberry, Man.
S W ¼	22	13	15 W	Man.	Osprey	J. A. McGill, Neepawa, Man.
S ½	24	6	10 W	Man.	Beaconsfield	W. D. Staples, Treherne, Man.
S W ¼	2	15	30 W	N.W.T.	Moosomin	Colin McLean, Moosomin, N. W. T.
S E ¼	16	22	14 W 2nd	N.W.T.	Fort Qu'Appelle	J. McNaughton, Qu'Appelle Station, N. W. T.
N W ¼	5	14	14	Man.	Osprey	J. A. McGill, Neepawa, Man.
N W ¼	20	5	14	Man.	Grund	Jas. Luncan, Glenboro', Man.
E ½	20	5	18	Man.	Langvale	Jas. S. Reekie, Boissevain, Man.
S E ¼	1	9	9	Man.	Indian Ford	W. D. Staples, Treherne, Man.
S W ¼	31	8	8	Man.	Indian Ford	W. D. Staples, Treherne, Man.
N W ¼ (with house and stable.)	28	14	25	Man.	Lucas	A. B. Harris, Birtle, Man.
N E ¼ (160 acres.)	26	17	27 W	Man.		A. B. Harris, Birtle, Man.
N E ¼	15	4	8 W			A. B. Gunn, Manitou.
S. W. ¼	27	17	7 W	N.W.T.		R. S. Garrett, Grenfell, N. W. T.

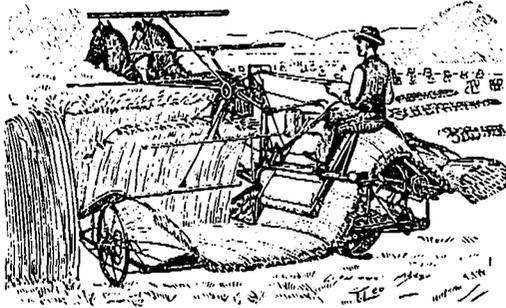
Also wood lot No. 5, known as the N. ½ of the N. ½ of legal sub-division 11 and 12, in the N. W. ¼ of Sec. 14, T. 5, R. 8, W. A. B. Gunn, Manitou.

These lands are nearly all most eligible and convenient to Church, Market, and School.

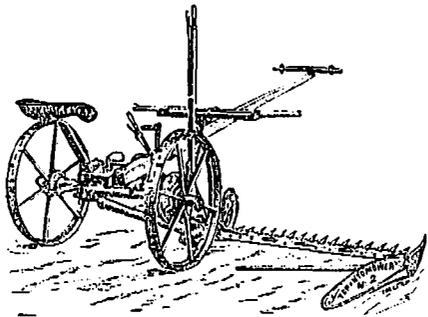
AGENTS AT ALL LEADING POINTS		SETTLERS' OUTFITS A SPECIALITY.		
<b>MASSEY-HARRIS CO. LTD.</b>				
<b>FARM IMPLEMENTS</b>				
<b>MARKET SQ. WINNIPEG, MAN.</b>				

# MASSEY-HARRIS CO., Ltd.

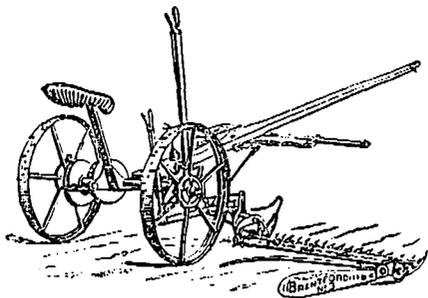
## TORONTO & WINNIPEG.



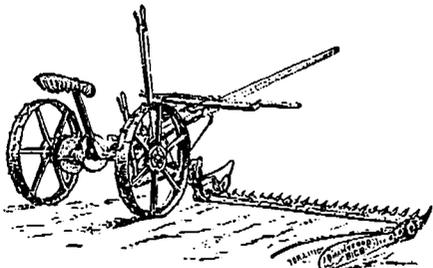
MASSEY-HARRIS WIDE-OPEN BINDER.



TORONTO MOWER No. 2.



BRANTFORD MOWER No. 3.



BRANTFORD BIG B MOWER.

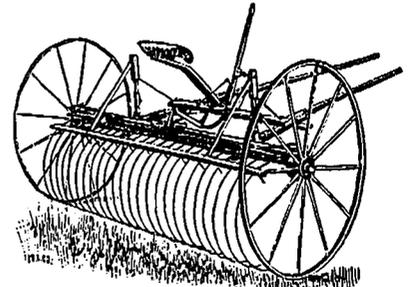


**A FULL LINE**

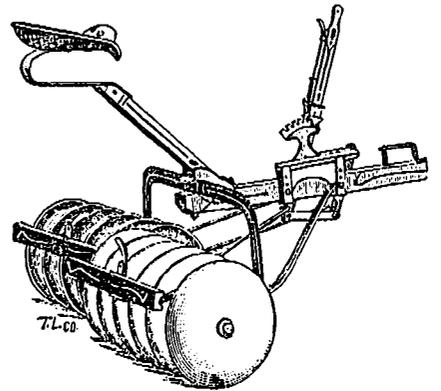
—OF—

- Binders,
- Mowers,
- Rakes,
- Tedders,
- Seeders,
- Drills,
- Cultivators,
- Harrows,
- Breaker Plows,
- Stubble Plows,
- Sulky Plows,
- Gang Plows,
- Traction Engines,
- Separators,
- Horse Powers,
- Tank Pumps,
- Fanning Mills,
- Wagons,
- Sleighs,
- &c., &c., &c.

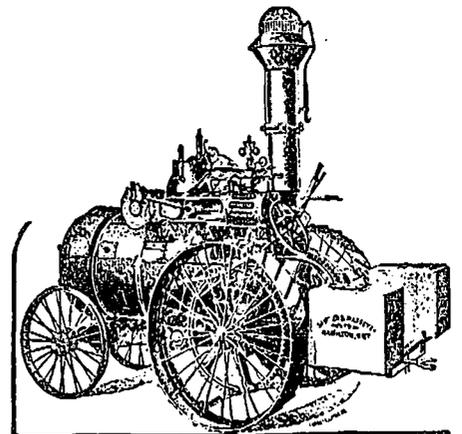
**SEND FOR CATALOGUES.**



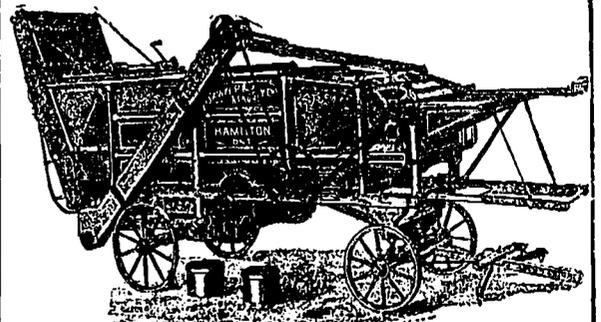
SHARP'S AND ITHACA RAKES.



DISC HARROWS.



STRAW BURNER TRACTION ENGINE.

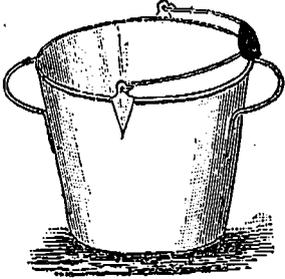


"PEERLESS," Best Separator Made.

### Tide Stock.

#### Support for Milk Pail.

AN ingenious yet very simple contrivance is here shown by which a pail can be easily held steady between the knees while milking. The pail is supplied with "ears" made of brass rod of about a third of an inch in diameter soldered



to the sides of the pail. The ears project side-wise from the pail  $2\frac{1}{2}$  inches and 4 inches across. One end of the support is soldered at top of pail, the other  $1\frac{1}{2}$  inches below the top, thus allowing the pail to tip toward the cow, while supported by the ears resting on the knees of the man instead of by squeezing the knees on both sides of the pail. There is no patent on this.

#### Galled Shoulders.

ON many farms the teams are idle during the winter, and unless care is taken when they are put to work in the spring, they will get galled shoulders. Prevention is easier than cure, especially so when the teams must be kept at work. So far as it is possible to do it, it is best to commence the work gradually and then increase it as the team gets accustomed to it. See that the hames fit properly. Not only should the collar fit well, but the hames should be properly adjusted so that in pulling the weight will come evenly on the shoulder instead of in one particular spot. Care in this respect will aid materially in preventing galls. Keep the collar clean and well oiled. When at work a horse will often sweat under the collar though he does not in any other place. If the collar and shoulder are not kept clean, soreness is sure to be the result.

At the start, for a few days, wash the shoulders regularly in strong salt water. Use all the salt that the water will dissolve and then bathe the shoulders with a sponge or old cloth. Because of the way that collars fit and the way the hames are adjusted, the points of the shoulders are the most easily galled. The collar should fit snugly; a loose collar will work and be sure to cause a gall; a tight one will choke and prevent the animal from doing his best when at work.

Rest is the best remedy for galled shoulders, but in the spring this cannot often be given. When the animal must work provide some way of keeping the pressure off the sore; this can be done by putting a pad above or below it. A piece of cloth or a long, narrow sack filled partially with clean hay makes a good pad.

Use vaseline as a salve to heal up a wound or sore. Commence treatment as soon as the gall is noticed, as the animal cannot do as much work and will suffer in health and thrift until cured.

CONTINUALLY grading up the stock is the most practical method for the average farmer.

GREAT care ought to be taken to protect accidental lambs from the cold winds of spring.

It will be found profitable to milk the heifer as long as possible the first of her dairy life, giving her generous feeding to make rich blood. This will lay the foundation for a profitable dairy cow.

ALL straw and no hay will turn a bright heifer into a dull cow.

FAILURE to make sheep pay can, in a great measure, be traced to want of proper care at this season.

WITHOUT exercise the sheep are liable to become constipated and feverish, and to fall off in their appetites.

THERE are very few farmers who cannot raise a few hogs with profit. It must be remembered that good pasturage is the secret of success with them.

IF corn fodder is cut and steamed, or moistened with boiling water, it will be found an excellent and agreeable change of diet for cows.

THE farmer who keeps a dairy has a more constant source of income than one engaged in almost any other branch of the farming business.

IT is both injudicious and cruel to deprive cattle of salt. They will often prefer impure water to pure drinking water, because in giving tank-water they are not kept properly with rock salt. In their desire for saliva food, animals will drink the most impure fluids, and will even eat earth.

A GOOD cow ought to more than pay her way every week in the year. If she pauses two or three weeks in milk production before dropping her young, the loss of milk ought to be more than made up by the value of the calf. In thoroughbred animals, whose young are most valuable, the increase of stock may easily be worth as much as the milk or butter product for a year.

THE best food for fattening young pigs is milk with equal quantities of bran and meal. At the early age of five months the muscular development is not mature, and should be encouraged by food containing much lean making material or nitrogenous matter. If milk can be procured, it may be mixed with equal parts of bran or corn meal, so as to make a slop which might be easily drank; ten pounds in four quarts of milk, and two pounds of the mixed meal may be given daily to each pig in such a mess.

### The Poultry Yard.

THIN-SHELLED eggs may be used to advantage in incubators, as they are more easily pierced by the chicks.

SULPHUR is quite useful to promote general health and thrift among fowls. Once or twice a week a teaspoonful may be mixed in the feed of a dozen hens.

WHEN young turkeys are four months old they will do better in trees at night than in either house or shed. Here they will be quite free from cold and roup.

FEW eggs are obtained from a hen that walks listlessly along, with little desire to scratch, but only willing to eat when the food is spread for it. Such hens get up late, retire early, have large heads, thick legs and a generally clumsy form.

BREEDING and food mating and feeding are hand-maidens, and must be found closely associated if we expect to make any considerable improvement in our breeds of fowls.

By continuing from year to year the selection of only the best layers for breeders, will eventually produce a strain of fowls vastly superior to anything now found in the yard.

WHEN chickens get sick and droopy there is some cause for it. Do not imagine that it is just the way of all fowls and let them die, but look for the trouble and see that it is speedily done away with.

DUCKS, if provided with comfortable quarters where they can rest at night and are reasonably well fed, will often commence laying the latter part of January or the first of February and lay very regularly until warm weather.

THE hatching and rearing of chickens artificially is a branch of industry that might be profitably undertaken by ladies, who would attend more faithfully to the many little details in the rearing, on such success depends.

THE farm that does not support a flock of poultry is not managed to the best purpose. On the contrary the farm on which too much poultry is kept will be the loser to the extent that it is over burdened, for where poultry is crowded into a house it ceases to be profitable.

PUT a tablespoonful of sulphur in the nest as soon as the hens or turkeys are set. The heat of the fowls causes the fumes of sulphur to penetrate every part of their bodies, every louse is killed, and as all nits are hatched within ten days, when the mother leaves the nest with her brood, she is perfectly free from nits and lice.

GREEN bone contains the natural juices and is not soluble, but is a food. It contains lime for the shell of the egg, nitrogen for the white, a proportion of oil and fat, and also serves as a grit. There is nothing which can approach it as a food for poultry, so far as a combination of excellent materials for egg formation is concerned.

TURKEYS should have an abundant supply of green food. They are fond of white cabbage, and if they are allowed to get at growing cabbage they will devour large quantities. They are also fond of lettuce and bore cole. If turkeys have been well fed from the first, they will be quite fat enough without being put up and fattened.

THE large breeds have a decided advantage over the others, for those who keep poultry in villages, as they are more easily kept under restraint and bear refinement better. A four foot fence will keep them within bounds, and although larger, the Brahmas or Cochins do not need so much room for a given number as do the Spanish or Leghorn.

A POUND of cut bone will be an excellent allowance for 16 hens, or an ounce for each hen per day. This is cheaper than corn, and has the advantage of containing more egg-producing food than corn. A pound of bone will give as good results as four pounds of corn, but we do not infer that nothing but bones should be allowed. Give grain and green food, but make the green bone a part of the ration also.



### How the Railway Whistle was Invented.

WHEN locomotives were first built, and began to trundle their small loads up and down the newly and rudely constructed railways of England, the country roads were for the most part crossed at grades, and the engine-driver had no way of giving warning of his approach except by blowing a horn. This horn, as may be imagined, was far from being a sufficient warning. If a cow strayed upon the track, "so much the worse for the coo," as George Stephenson said. But by-and-by it became inconvenient for others than the cows. One day in the year 1833, a farmer of Thornton was crossing the railway track on one of the country roads with a great load of eggs and butter. He was going to Leicester to sell the produce. Just as he came out upon the track a train approached him. The engineman blew his tin horn lustily, but the farmer did not hear it. He drove squarely upon the track, and the engine plunged into his wagon. Fortunately the farmer was not seriously injured; but his horse and especially his eggs and butter were. Eighty dozen of eggs and fifty pounds of butter were smashed into an indistinguishable, unpleasant mass, and mingled with the kindling wood to which the wagon was reduced. The horse breathed his last in a few moments. The railway company had to pay the farmer the value of his fifty pounds of butter, his nine hundred and sixty eggs, his horse and his wagon. It was regarded as a very serious affair, and straight-way a director of the company, Mr. Ashlen Bagster by name, went to Atton Grange, where George Stephenson lived.

"What shall we do about this?" he exclaimed. "We can't have such dreadful things as this happen on our railway, you know."

Stephenson was inclined to take the matter with true North-country philosophy, but the director was aroused.

"Now, upon my word," said Ashlen Bagster, "why can't you make your steam make a noise somehow that will warn these people?" He thought of no method to accomplish this, but at that time people had, in a general way, a high opinion of the capabilities of the power of steam.

"That's an idee, mon," said Stephenson, "Bless your soul, I'll try it!"

He went to a maker of musical instruments, and got him to contrive an apparatus which, when blown by steam, would make a horrible screech. This was attached to the boiler of an engine, and the first locomotive whistle was in full operation. The railway directors, greatly delighted, ordered similar contrivances to be attached to all their locomotives, and from that day to this the voice of the locomotive whistle has never been silent. So it may be truly said that the locomotive whistle had its origin in the smashing of eighty dozen of eggs.

### Treating.

A YOUNG newspaper man in the city of Chicago, some years ago was exposed to that most frequent of temptations, the treating temptation. It came to him with regularity and frequency from his associate workers and from the men he not infrequently was sent to interview.

There was a certain vague sense of humiliation in his breast as he refused to accept the proffered liquor, a something he could not very well define, but which was present in such force that he was obliged to take cognizance of it. And he did, and in this way:

He said to himself that if any man jeered

him, even in a semi-polite way, because he did not drink when liquor was offered him, he would summon up all the contempt in his nature and let the contempt whip the humiliation out of the field.

And it worked to a charm.

The man who will laugh at another man, and especially if that other man is a young one, because the young man will not break faith with his common sense and his ideas of right and wrong, and his firm determination to shun liquor as the most dangerous of skulking foes—that man is deserving of nothing but the biggest dose of contempt in the young man's supply of medicaments. And it is one of the hopeful signs of the times that the predicament the young newspaper man found himself in is less liable to be experienced now than for any time in ten years.

It is not a token of any higher form of being or of any quality of supreme importance, this possession of the ability to feel contempt, but neither is it a quality of mind to be despised, and it may be of regnant value to a young man who needs the help that it will give, in some instances, better than anything else.

Just follow up the contempt with a generous commiseration for the jeerer, and if you can help him to see his shallowness and his superficial knowledge of what is right and wrong, all the better.

There is nothing in this world more royal than staunch manhood.

### How Marbles are Made.

Most of the stone marbles used by boys are made in Germany. The refuse only of the marble and agate quarries is employed, and this is treated in such a way that there is practically no waste. Men and boys are employed to break the refuse into small cubes, and with their hammers they acquire a marvelous dexterity. The little cubes are then thrown into a mill consisting of a grooved bed-stone and a revolving runner. Water is fed to the mill and the runner is rapidly revolved, while the friction does the rest. In half an hour the mill is stopped, and a bushel or so of perfectly rounded marbles taken out. The whole process costs the merest trifle.

### A Few Things to Avoid.

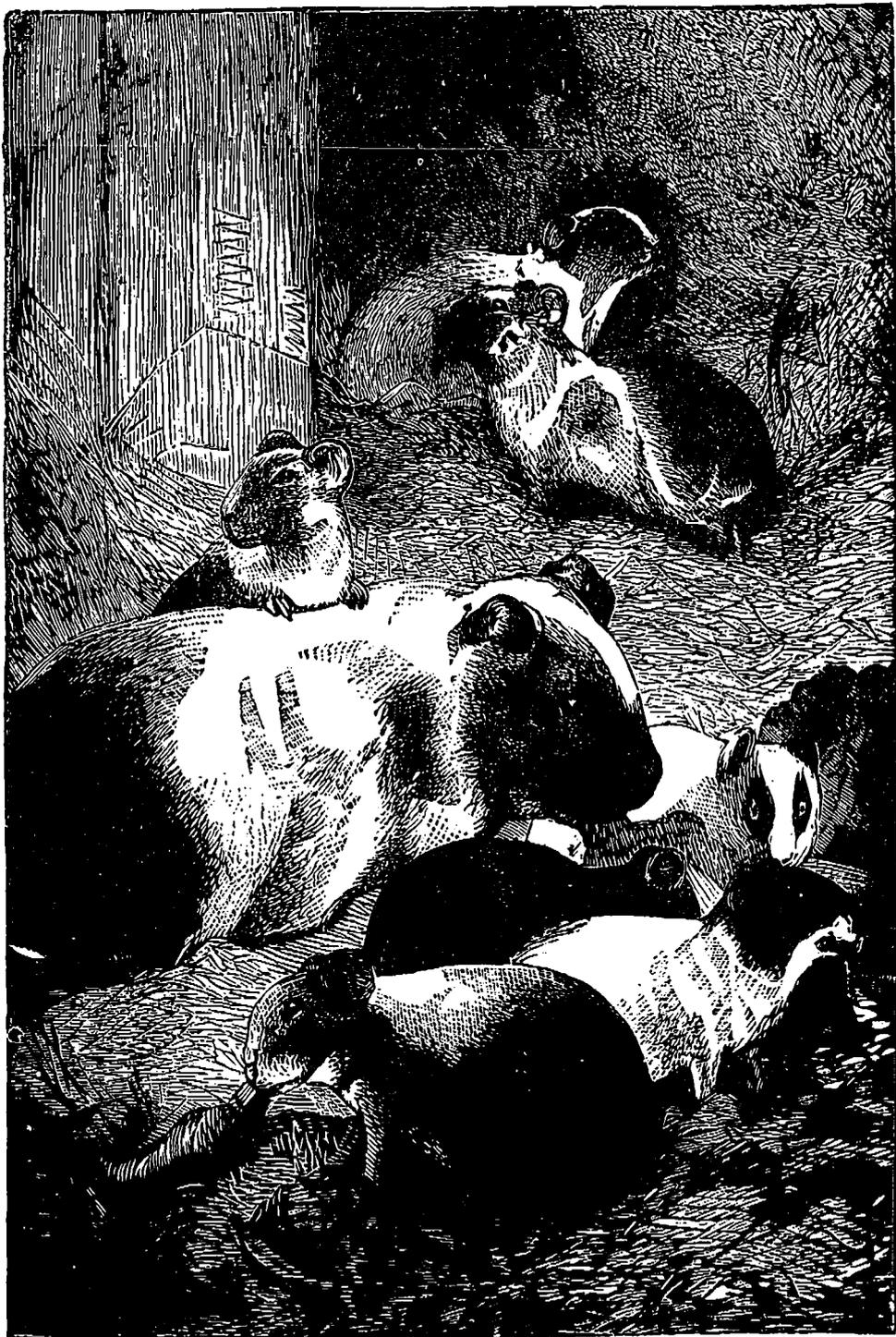
NEVER call upon people just at bedtime or during dinner, or before they are down stairs in the morning.

Never stop people who are hurrying along the street and detain them for 10 or 20 minutes.

Never when you see two people engaged in earnest talk, step in and enter upon a miscellaneous conversation.

Never begin to talk about "this, that and everything" to one who is trying to read the morning paper or a book or anything else.

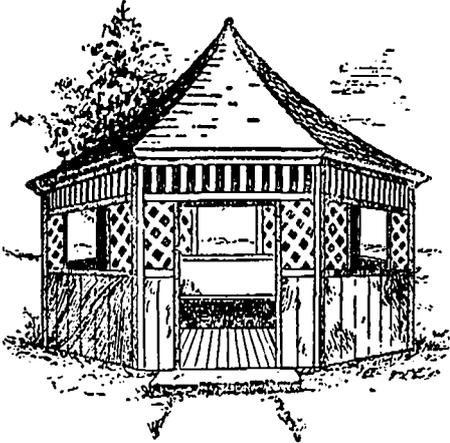
Never fail to keep an appointment.





An Artistic Summer House.

It pays, even in dollars and cents, to make one's home attractive, but it also pays much better in the increased comfort and enjoyment that is afforded every member of the family when the home is attractive. An attractiveness, it may be said, that can be secured at small expense, if one has a little taste, and will



ATTRACTIVE SUMMER HOUSE.

devote some of his extra moments to the work of beautifying his home and its surroundings. Directly in this line is the construction of such a summer house as is shown in the illustration. Such a house will make a magnificent play room for the children, a cool summer sewing room for the mother, and a place to rest or read for any member of the family. It is built in the form of an octagon, and has a dishing, shingled roof, and matched siding where the sills are boarded. If vines are made to grow over the sides the beauty of the structure as an ornament to one's grounds will be greatly enhanced. The whole building should be stained to secure the best effect, the roof being of a darker color than the sides, and of a color to contrast harmoniously with them. Such a building could have window sashes fitted to it, and covers made to put over its lattice work, when it would serve as a pleasant play room for children on sunny winter days.

To relieve calloused feet, rub them frequently with kerosene.

Silver clasps replace the button and straps on umbrellas of the period.

To soften leather hardened by repeated wettings, rub it well with kerosene.

To renew woodwork and furniture, varnish with black varnish, plentifully diluted with kerosene.

For bleeding at the nose Dr. Hutchinson recommends plunging the feet and hands in water as hot as can be borne.

To relieve chilblains, soak the feet in hot water and rub them with kerosene, or with kerosene and lime water.

For ear-ache mix a very few drops of sweet oil with a like quantity of chloroform and wear a piece of cotton moistened with it in the ear.

The pulse may change many beats, and still the sick person will not be in danger of death. But as a rule if the temperature reaches 108 or 109 death soon follows.

Warts may be treated with a mixture of equal parts of tincture of iodine and acetic acid. One drop night and morning will gradually effect a cure, but must be applied to the hard skin only and not allowed to spread on the surrounding flesh.

## Lamp Cooking.

ANY contrivance which enables the housewife to dispense with the heat of a cook stove in summer will always be welcome. Most of us know the merits of gas and oil stoves, but few are aware that the ordinary kerosene lamp may be pressed into the service of the cook, and if rightly managed will do a considerable amount of the family cooking. If the lamp has a central draft burner which produces an intense

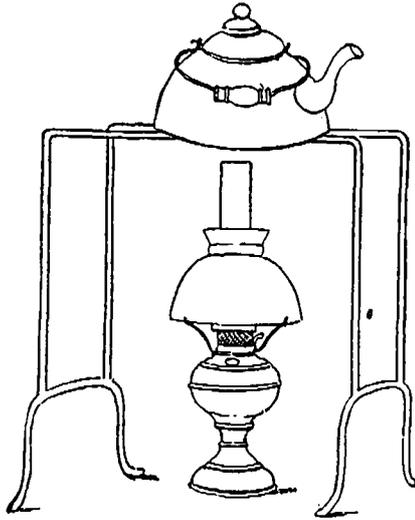


FIG. 1. IRON FRAME FOR LAMP COOKING.

heat, a pint of water may be brought to the boiling point in five minutes. The frame work which supports the vessel can be made in a variety of forms, of wood or metal, or of both. Fig. 1 shows a metal frame. Two flat pieces of iron are bent in the curves of a semi-circle so as to have a width of base of about one foot; in each of these puncture two holes to admit the upright and connecting rods, which are about of the size of an ordinary iron kettle handle and bent out in the middle at the top so as to form a wider base on which to rest the vessel. These are connected by a network of thin wire so that the very smallest saucepans can be rested upon it. Fig. 2 shows a wooden frame in the form of an X, with a strip under the bottom long enough to widen the base to a point of security, and connected with another like it by supporting rods as used in the metal frame. It can be constructed by anyone who can drive a nail or handle a saw. A frame wide enough for two lamps will enable the housekeeper to use a

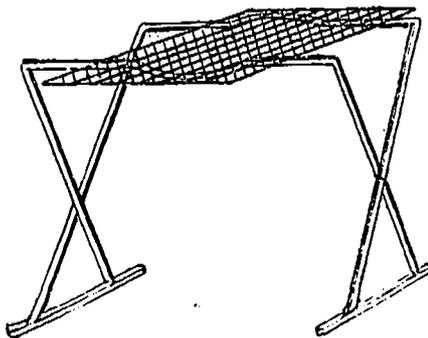
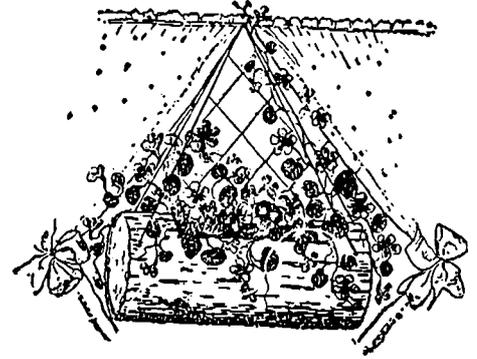


FIG. 2. WOODEN FRAME FOR LAMP STOVE.

wash boiler if handled with care. The economy, as well as the convenience, of this mode of cooking will at once be apparent. A quart of kerosene will last twelve hours, and will give a brilliant light as well as furnish heat for cooking. If, in addition to this, she will provide herself with an asbestos, metal rimmed plate to place under the vessel in which she is cooking the morning or evening meal, the housewife may sew or read at ease and let the article cook itself, without fear of burning or the necessity for frequent stirring. No article of food cooked on an asbestos plate will ever burn, it may dry up, or simmer entirely away if left long enough, but it will not burn to the bottom of the kettle. —*American Agriculturist.*

## For the Piazza.

IN summer, it is not enough that the house should be decorated, the piazza must be made beautiful also. A charming little ornament for holding growing vines can be made from a long tin box, such as ginger-snaps come in. Put on the cover and hammer it down securely all around; with a can-opener cut a square opening in the top. Punch holes in the bottom for drainage, and in the top for wires which are to suspend it. Cover with bark glued or sewed on, fill with earth and plant with nasturtium seeds, and you soon will be repaid for your slight trouble. They are equally pretty for hanging in the house in a sunny window in winter. Larger logs for standing on the piazza steps or about the grounds may be made by taking two



PRETTY HANGING BASKET.

rounds sawed from a log for the ends. On this have a tinsmith tack the tin. The bark also may be nailed on. —*American Agriculturist.*

## Hints to Housekeepers.

Steep salt fish in sour milk to freshen.

Rapid growth of the finger nails is considered to indicate good health.

If irons be rough and sticky rub them on fine salt sprinkled on a board.

Fine china should be washed in warm water. Hot water cracks the enamel.

A whisk-broom is the best clothes sprinkler, and the water should be hot.

Melted beeswax mixed with sweet oil in the form of a salve is good for burns.

Mashed cranberries in a poultice bag applied to the affected part are excellent for erysipelas.

In beating whites of eggs for meringue or frosting do not add the sugar until the egg is stiff.

A spoonful of vinegar put into the water in which meats or fowls are boiled makes them tender.

Lemon stains on cloth may be removed by washing the goods in warm soapsuds or in ammonia.

The rubber rings of preserve jars will recover their elasticity if soaked for a while in weak ammonia water.

In severe paroxysms of coughing, a tablespoonful of glycerine in hot milk or cream will give speedy relief.

A feather-bed which has done service for a generation or two is hardly a desirable thing upon which to sleep.

Immerse a tea-stained tablecloth in a strong solution of sugar for a few minutes, rinsing it afterwards in soft water.

Among the new conveniences for table service is the cold meat fork. Three prongs (broad) and the handle flat and long.

Always keep a jar of cracker dust on hand for breading, or else save up all pieces of bread, and once a month dry them in an open oven, then place them in a bag and pound until fine.

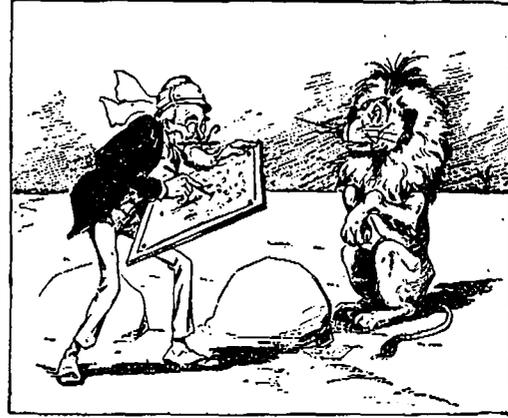
In preparing frogs for the table use only the hind quarters. Wash in warm water; then soak in vinegar and salt for an hour. Scald them and then remove the skin. Wipe dry and fry in butter.



D'AUBER.—Heavens, a lion! I am lost!



—“Say! I’ll make a fine picture of you, if you will sit for me—



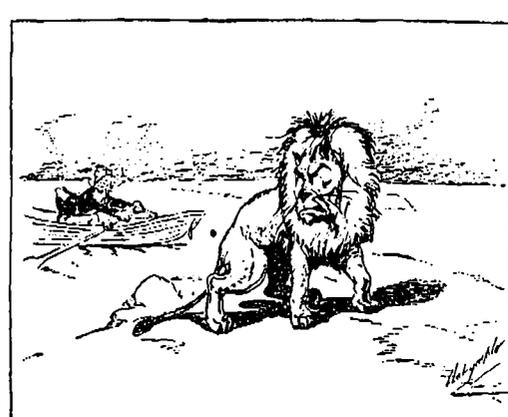
—“Ahem! Your front face is a little too big for the paper; just turn one side.—



—“Ah! your profile is perfect. Don’t move ’till I tell you.—



—“Jove! that was a narrow escape.—



—“Now you can turn around.



Nothing so needs reforming as other people’s habits.  
 “All the world’s a stage.” Most of the people in it hang on by the straps, too.  
 Some preachers are afraid to declare that the wages of sin is death, for fear their pay will stop.  
 Little Dick.—“What kind of a cow is a milch cow?”  
 Little Dick.—“It’s the kind that gives Dutch milk.”  
 Mamma.—“Aren’t you home from school earlier than usual to-day?”  
 Bobby.—“Yes, mamma, I wasn’t kept in to-day.”  
 Hineks.—“Did they lower a boat when he fell overboard?”  
 Francis.—“No; they were too busy lowering the record.”  
 The men who write the popular songs of the nation care not who make the laws—so long as their offence is not made criminal.  
 Caller.—“I’ve found that there dorg that y’r wife is advertisin’ five dollars reward fer!”  
 Gentleman.—“You have, eh?”  
 Caller.—“Yep, an’ if ye don’t give me ten dollars I’ll take it to ’er.”  
 If you pick up a starving dog and make him prosperous, he will not bite you. This is the principal difference between a dog and a man.  
 Teacher.—“What did King John of France say when he was ransomed for such an enormous sum of money?”  
 Brightest in the Class.—“Dear me.”  
 “Yes, I have bought a piano for my daughter. She will give lessons and so help to keep the wolf from the door.”  
 “If the wolf is at all musical in his tastes.”  
 There is no danger that the political crank will ever produce a revolution in this country. What makes him truly terrible is his habit of producing a revolver.  
 Miss Lofteigh.—“There are some social chasmas that cannot be bridged with gold.”  
 Mrs. Dowtit.—“Yes, but if you have enough of it you can fill them in.”  
 The teacher.—“Johnny, you may tell the class where North America is on the map.”  
 The Brooklyn scholar.—“It’s right west of Greater New York, mum.”  
 Actor.—“When I am acting I forget everything about me; I see nothing but my role; the public disappears entirely.”  
 Friend.—“I don’t wonder at that.”  
 Precept is not always example. It is all right to impress a child with the Little G. W. cherry-tree story; but it is sometimes foolish to follow it with the gift of a hatchet.  
 “Cholly has such a habit of telling all he knows,” said one girl.  
 “Yes,” replied the other, “but it wouldn’t be so bad if he would only make a point of knowing all he tells.”  
 First Rabbit.—“There comes that city sportsman again.”  
 Second Rabbit.—“Well, if he doesn’t let us alone, I’ll run in front of his prize-medal dogs, and let him shoot at me.”

In silence the family are sitting,  
 Each keeping as still as a mouse,  
 As they ponder the annual question;  
 “Is it better to move or clean house?”

Mrs. Brown.—“There’s Mrs. Montmorenci over there. I wonder how she can enjoy the opera. Why, she’s deaf as a post.”  
 Mrs. Gray.—“But see how elegantly she is dressed.”

Senior partner.—“One thing I like about our new clerk is that he is reliable. You can always tell what he is going to do next.”  
 Junior partner.—“And what is that?”  
 Senior partner.—“Nothing.”

Johnny.—“Pop, what is this Appian Way there’s so much about in this book?”  
 Mr. Read (who is superintending his son’s education).—“It’s ‘when in Rome do as the Romans do,’ I suppose!”

First laundress.—“Why is it that Mr. Simpson doesn’t have his initials marked on his cuffs and collars, do you suppose?”  
 Second laundress.—“It may be because his name is Alphonso Spaulding Simpson, possibly.”

In a Nebraska Church.—“Tenderfoot (as collection is being taken)—“My purse is in my hip pocket.”  
 Native.—“Better let me pay for us both; a reach in that direction is likely to be misconstrued around this section.”

Mike.—“It’s like old times to see you again, Pat. Why did you never write me a lither since last we met?”  
 Pat.—“Oi didn’t know your address, Mike.”  
 Mike.—“Thin why in the name o’ sinse did ye not write for it?”

Orator.—“Where else will you find in one spot such products as marble, iron, clay, chalk, copper, lead, slate, glucose, fruits of all kinds, hemp, flax, and all manner of grains?”  
 Man in the audience.—“In my boy’s pocket.”

“Did you hear about Palette’s great success? He painted a picture of a bell not long ago, and accidentally hung it where the summer sun had a chance to shine on it.”  
 “Well?”  
 “In about half an hour it began to peel.”

Poet.—“I hope you have received the little volume of poems I ventured to send you.”  
 Baroness.—“Indeed I have—it is charming—I wonder where I have put it.”  
 Little Karl.—“Under the leg of the table, mamma, to make it steady.”

Detective.—“Yes, I’ve got the description of the missing jewelry written down all right. Now, how much money did the fellows take?”  
 Mr. Billus.—“I don’t know exactly. Marie, my dear, how much money was there in my pockets last night?”

Behold the fool saith, “Put not all thine eggs in the same basket”—which is but a manner of saying, “Scatter your money and your attention;” but the wise man saith, “Put all your eggs in the one basket and—WATCH THAT BASKET.”

“Brethren,” said a preacher when the collection was being made, “perhaps one of you will be good enough to put a needle and some thread in the bag so that I may be enabled to make some use of the buttons with which you are all so liberal.”

Marie.—“Oh, I was so very, very sorry to find you out when I called yesterday.”  
 Myrtylla.—“I, too, regretted it, of course. But do tell me why you were so very, very sorry.”  
 Marie.—“Because I’d just seen you enter the house five minutes before.”

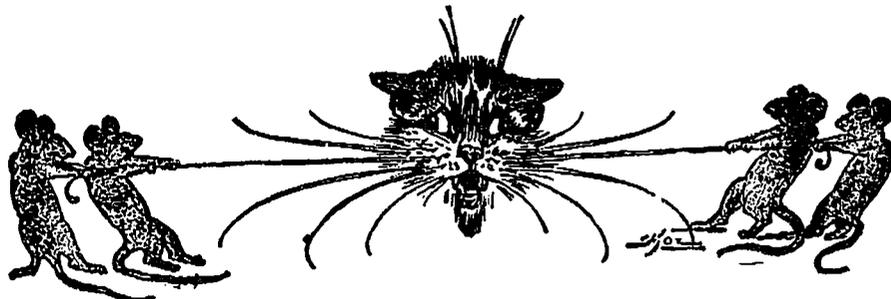
“I see,” said Stubbs, “that Dr. Michael Foster tells the British Association that smoking tobacco produces defective vision; do you believe it?”  
 “Oh, I’m sure of it,” replied Mrs. S., “for I saw your friend Batts last evening pulling away quite unconscious that there were several ladies in the room.”

Husband (triumphantly).—“I’ve done it! I have played two games of chess blind-folded.”  
 Wife.—“Well, I’d like to run out for half an hour. Suppose you mix the bread, mind the baby, stir the pudding, baste the roast, watch the vegetables and answer the doorbell for awhile? You needn’t be blind-folded.”

Mrs. Spouter.—“Where are you going to-night, John?”  
 Mr. Spouter.—“I am due, my dear, to address the Consolidated Cohorts of the Home Industries of Hohokus.”  
 Mrs. Spouter.—“If you would stop your talking and do more working, several home industries I know of would prosper better. Hustle down, now, and bring up the coal!”

A story is told of two Irishmen who were caught asleep one night in the loft of a burning building. One of them hastily drew on his trousers and jumped from the window. In his fright and hurry he had unconsciously pulled on the garment wrong side foremost, with an effect, which when he recovered his equilibrium after the jump, excited his profound consternation. “Pat! Pat!” called out his companion, still in the loft; “air ye kilt intirely?”  
 “No, Moike,” replied Pat, in hopeless tones, “it’s not kilt Oi am, me b’ye, but I fear me Oi’m fatally twistid!”

One morning, Jerrold and Compton proceeded together to view the pictures in the gallery of illustration. On entering the anteroom, they found themselves opposite to a number of very long looking-glasses. Pausing before one of these, Compton remarked to Jerrold: “You’ve come here to admire works of art! Very well, first feast your eyes on that work of nature,” pointing to his own figure reflected in the glass; “look at it! There’s a picture for you!”  
 “Yes,” said Jerrold, regarding it intently, “very fine—very fine, indeed.” Then, turning to his friend, “Wants hanging, though.”



A TUG-OF-WAR.

# 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.

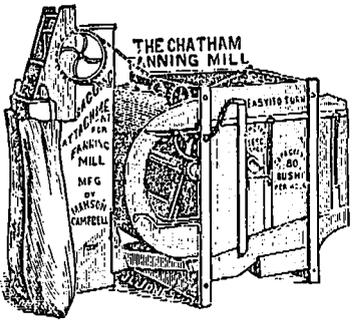
**RUBBER**

**WESTERN BRANCH:**

Cor. Front & Yonge Sts., TORONTO.

**BELTING**

## THE CHATHAM FANNING MILL.



1330 sold 1885  
2000 sold 1886  
2300 sold 1887  
2500 sold 1888  
3300 sold 1889  
4000 sold 1890  
4500 sold 1891  
5000 sold 1892  
6000 sold 1893

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

**NOTICE TO THE FARMERS OF CANADA.**  
Although the Grange Wholesale Supply Co., of Toronto, are advertising Chatham Fanning Mills for sale, they are doing so without any authority from me, and have no arrangement with me to supply them, and I have never sold them a Mill since I have been in business.  
**MANSON CAMPBELL.**

40,000 Chatham Mills now in use.  
Over 14,000 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.

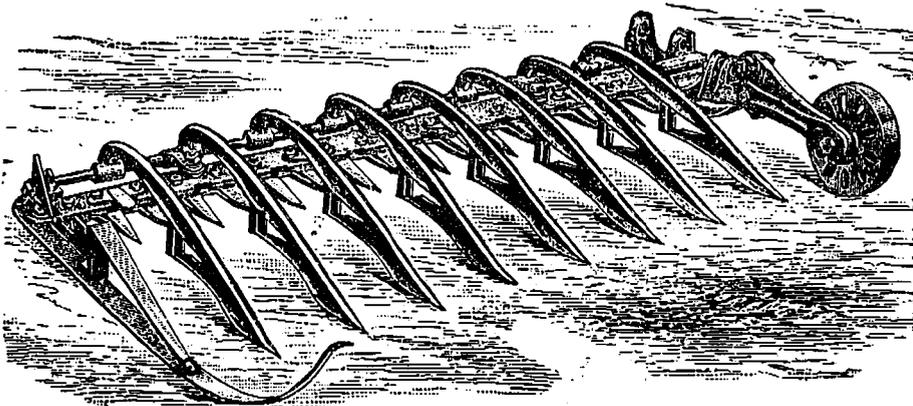
For prices and full information apply to

**MANSON CAMPBELL, Chatham, Ont.**

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

## THE GENUINE TOLTON PEA HARVESTER.

SIMPLE, SUBSTANTIAL, LIGHT, STRONG AND DURABLE.



Thousands of them now in use in Ontario, in the hands of the

Leading Farmers, who endorse it as being highly satisfactory.

**GREATLY IMPROVED FOR 1894. PATENTED 1893.**

This Pea Harvester pays, and is one of the greatest labor-saving machines in use—harvesting from eight to ten acres per day in the most complete manner. It is endorsed by all first-class farmers who have this Harvester to be as useful in the pea field as the mower is in the hay field. It can be attached to any mower bar, and has the only Vertically Acting Lifter, having a practically successful movement to suit the unevenness of the land, of which we are the sole Manufacturers and Patentees. Send for circular with prices and instructions. Order early and secure one.

**TOLTON BROS., GUELPH, ONT.**

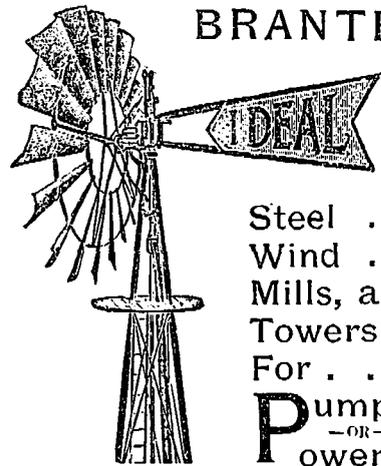
## Free to All!

For only 10 cents to pay for a subscription to our 32-page family journal, we will send you, absolutely free, Fine 18k Rolled Gold Ring, Beautiful Breast Pin, Collar Button, Pen and Pencil, Handkerchief, Key Ring and Tablet, and 100 Pictures.

This great package of goods sent free, as above, or we forfeit \$100.00. Address,

**C. R. VICTOR & CO.,**  
P. O. Box 1356, NEW YORK.

## BRANTFORD!



Steel . . .  
Wind . . .  
Mills, and  
Towers .  
For . . .  
**P**umping  
—OR—  
Power.

Iron Pumps, Water Tanks, Piping, Grain Grinders, &c.

THE—

**IDEAL JR.**  
Sectional Power Mill

IS A MARVEL.



Send for particulars.

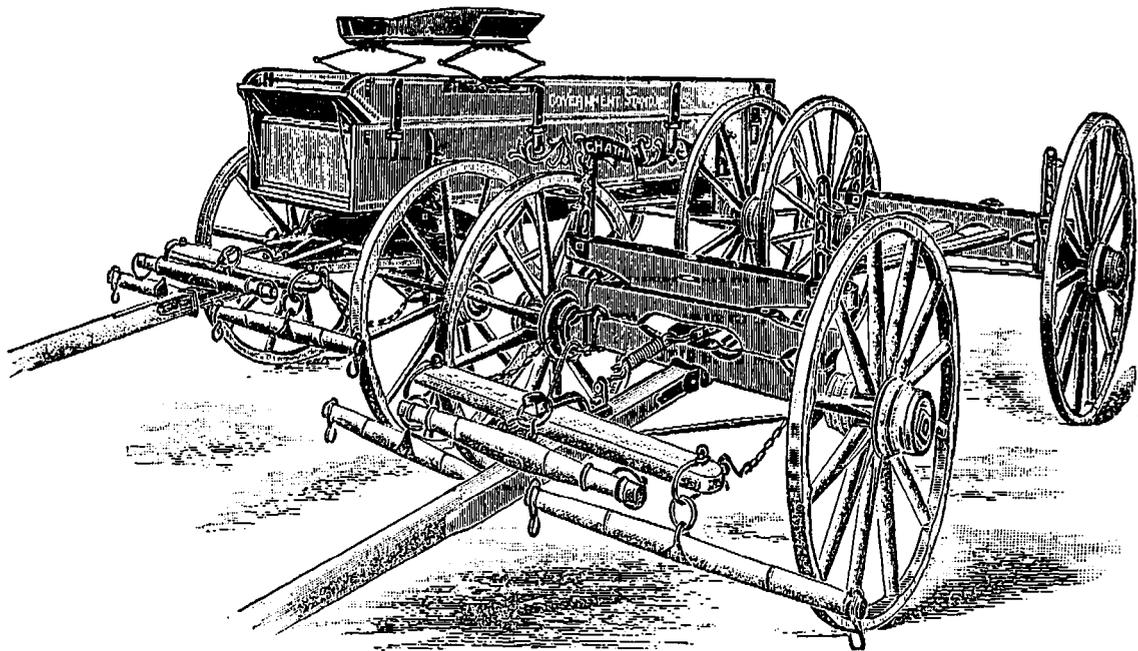
Mention this paper. **BRANTFORD CAN.**

✿ — **THE NEW** — ✿  
**CHATHAM & CHAUTAUQUA**  


---

**GIANT WAGON.**

**WITH UNBREAKABLE AXLES AND UNBREAKABLE ARMS.**



THE BEST MADE ON EARTH.—So said the Judges on Vehicles at the World's Fair, who awarded us a Gold Medal and Diploma over the heads of numerous old and extensive builders in the United States and Canada.

**THE AXLES ARE UNBREAKABLE, BECAUSE**

## VAN ALLEN'S PATENT GIANT ARMS

Throw all the load directly on the Arms, and the Arms are also unbreakable, because they are the best refined Malleable Iron, warranted as strong, more durable and lighter running than Steel Skeins. These Giant Arms completely revolutionize the building of wagons. Our 3-inch Malleable Giant Arm Wagon is warranted stronger, though less in price, than any ordinary 3¼ to 3½-inch cast-iron arm wagon, and our 2½-inch Malleable Giant Arm Wagon is warranted stronger than any ordinary 3-inch cast-iron arm wagon, and less in price.

The Demand for these Wagons is so great that, though we are turning out 12 per day, we are taxed to the utmost to supply it.

Send in your Orders Early.      Terms and Prices Liberal.

**CHATHAM MFG. COMPANY, LIMITED.**  
**CHATHAM, CANADA.**

# Brantford Bain Wagons

THOUSANDS IN USE.

ARE ALWAYS RELIABLE  
GIVING ENTIRE SATISFACTION.

Highest Grade  
Material used.

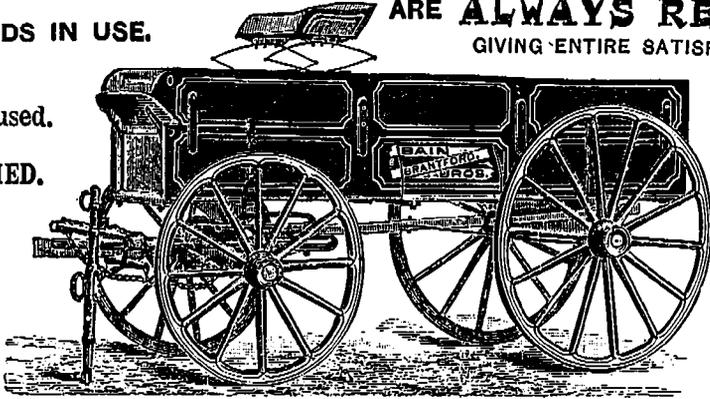
FINELY FINISHED.

Well Proportioned.

Light Running.

Durable.

Fully Warranted.



OTHER LINES :

Log Trucks,

Farm Trucks.

One-Horse

Wagons.

Dump Carts,

Slighs.

If you require anything in our line we invite you to inspect our **GOODS** and get our **PRICES** before placing your order elsewhere. It will pay you to do so.

Our German correspondent will be pleased to hear from all our German friends in their own language, and send them German printed matter.

Call on our Agents everywhere established, or write to

**BAIN BROS. MFG. CO., Ltd., BRANTFORD, ONT.**

## North's Fruit and Dairy Bolster Spring

Write for special discount and terms to Dealers. Order a sample set and secure exclusive agency for the best selling article manufactured in Canada.



The above cut represents North's Fruit and Dairy Bolster Springs, to convert a common wagon into a spring vehicle. This celebrated Wagon Spring is now manufactured by the Windsor Bolster Spring Co., of Windsor, Ont. An article that every farmer, fruit grower, truckster and dairyman should have. They are worth many times their cost and guaranteed to give entire satisfaction. Circular, Price List and full information on application to

**Windsor Bolster Spring Company, Windsor, Ont.**

SOLE MANUFACTURERS FOR CANADA.

TO PUBLISHERS AND PRINTERS.

**FOR SALE**

A large number of electrotypes that have appeared in **MASSEY'S ILLUSTRATED**. Many of these are original. Prices very low.

We can also furnish electros of a very choice selection of half-tone views of the World's Fair at Chicago. These were specially taken for this Magazine by Mr. W. E. H. Massey. For samples and prices address, **THE MASSEY PRESS, Massey Street, Toronto, Canada.**

## 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.

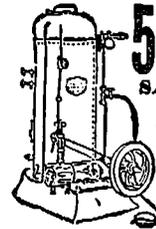
## PATENTS

CAVEATS, TRADE MARKS  
COPYRIGHTS.

**CAN I OBTAIN A PATENT?** For a prompt answer and an honest opinion, write to **MUNN & CO.**, who have had nearly fifty years' experience in the patent business. Communications strictly confidential. A Handbook of Information concerning Patents and how to obtain them sent free. Also a catalogue of mechanical and scientific books sent free.

Patents taken through **Munn & Co.** receive special notice in the *Scientific American*, and thus are brought widely before the public without cost to the inventor. This splendid paper, issued weekly, elegantly illustrated, has by far the largest circulation of any scientific work in the world. \$3 a year. Sample copies sent free.

Building Edition, monthly, \$2.50 a year. Single copies, 25 cents. Every number contains beautiful plates, in colors, and photographs of new houses, with plans, enabling builders to show the latest designs and secure contracts. Address **MUNN & CO., NEW YORK, 361 BROADWAY.**



**5 HORSE POWER \$165**  
Engine and Boiler

SAW MILL ENGINE AND  
BOILER, \$450.00.

Other Sizes in Proportion.

ENGINES and BOILERS  
FROM 2 TO 500 H. P.

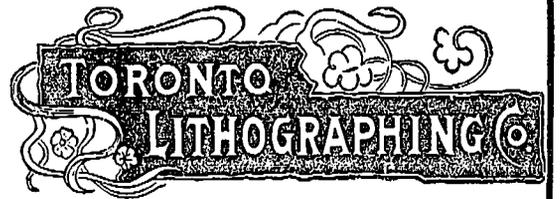
For Circulars address

**ARMSTRONG BROS., SPRINGFIELD, O.**

Write for Catalogue

—OF—

**Massey-Harris Wide-Open  
Binder.**



TO BEE KEEPERS

Send for our Circular and Price List of Bee Keepers' Supplies; also sample copy *Canadian Bee Journal* free. Four awards received at Chicago World's Fair.

TO HORTICULTURISTS

Send for our Circular and Price List of "Ideal" Spraying Pumps.

TO DAIRYMEN

And all interested in the cheapest method of pumping water, send for description and prices of Steel Wind Mills.

Address,

**Goold, Shapley & Muir Co. Ltd.**

**BRANTFORD, CANADA.**

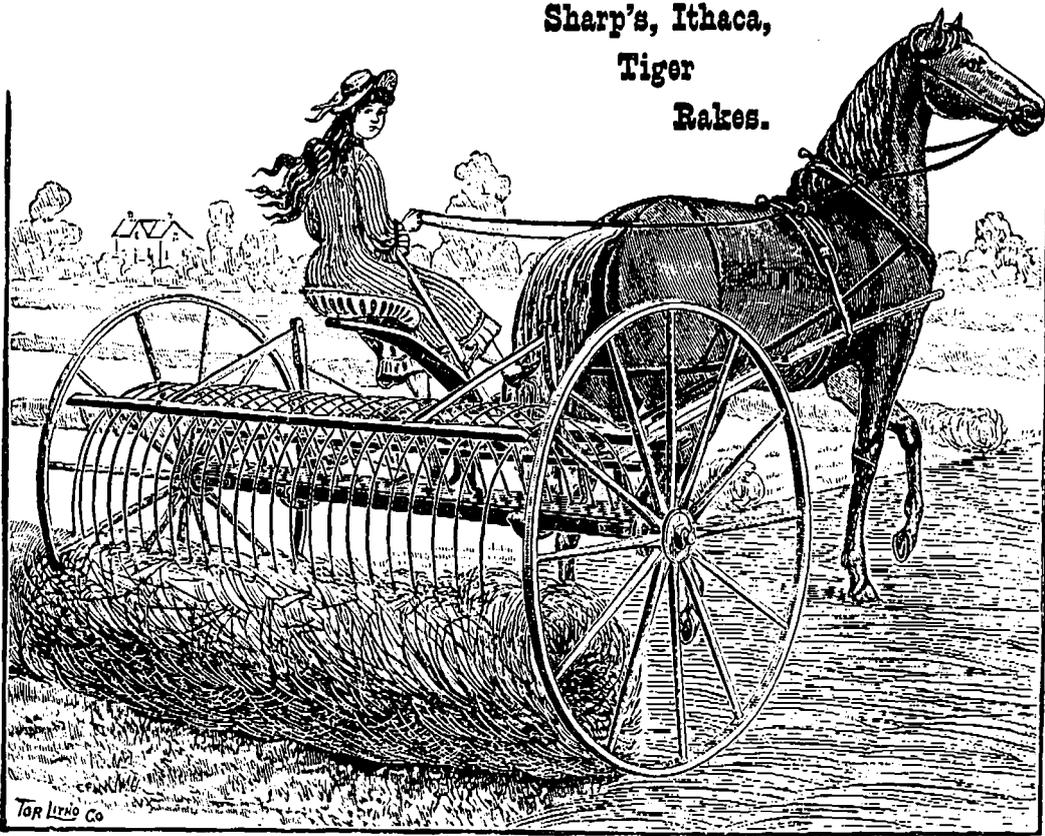


**ROGERS' PEERLESS MACHINE OIL**

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

EVERY STABLE SHOULD HAVE  
PEERLESS HOOF OINTMENT.

Sharp's, Ithaca,  
Tiger  
Rakes.



MASSEY'S ILLUSTRATED

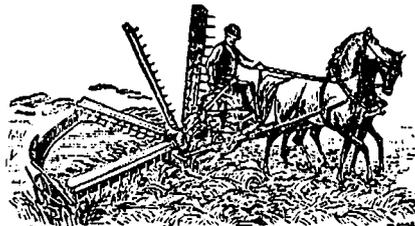
An Independent Journal of News and Literature for Rural Homes.

PRINTED AND PUBLISHED BY THE MASSEY PRESS.

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

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

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



MASSEY HARVESTER.  
BRANTFORD REAPER.

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.

SPECIALTIES -  
FINE ART - LIVESTOCK  
MECHANICAL

HIGH CLASS  
WOOD ENGRAVING

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

BOYS FOR FARM HELP.

The managers of DR. BARNARDO'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. Barnardo's Homes,  
214 Parley Avenue, Toronto.

VERITY PLOW CO. LTD.

VERITY PLOW RIDING ATTACHMENT.

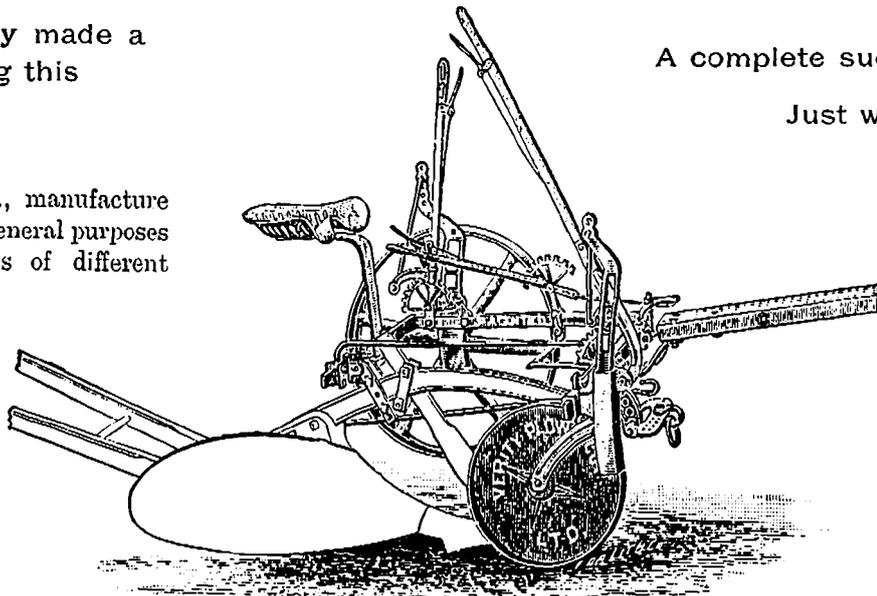
Any Plow can be quickly made a Riding Plow by using this Attachment.

A complete success.

Just what was wanted.

You need it. Try it.

The VERITY PLOW CO., Ltd., manufacture a large line of Plows for sod and general purposes suited to the varying conditions of different countries.



Our works at Brantford are 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.

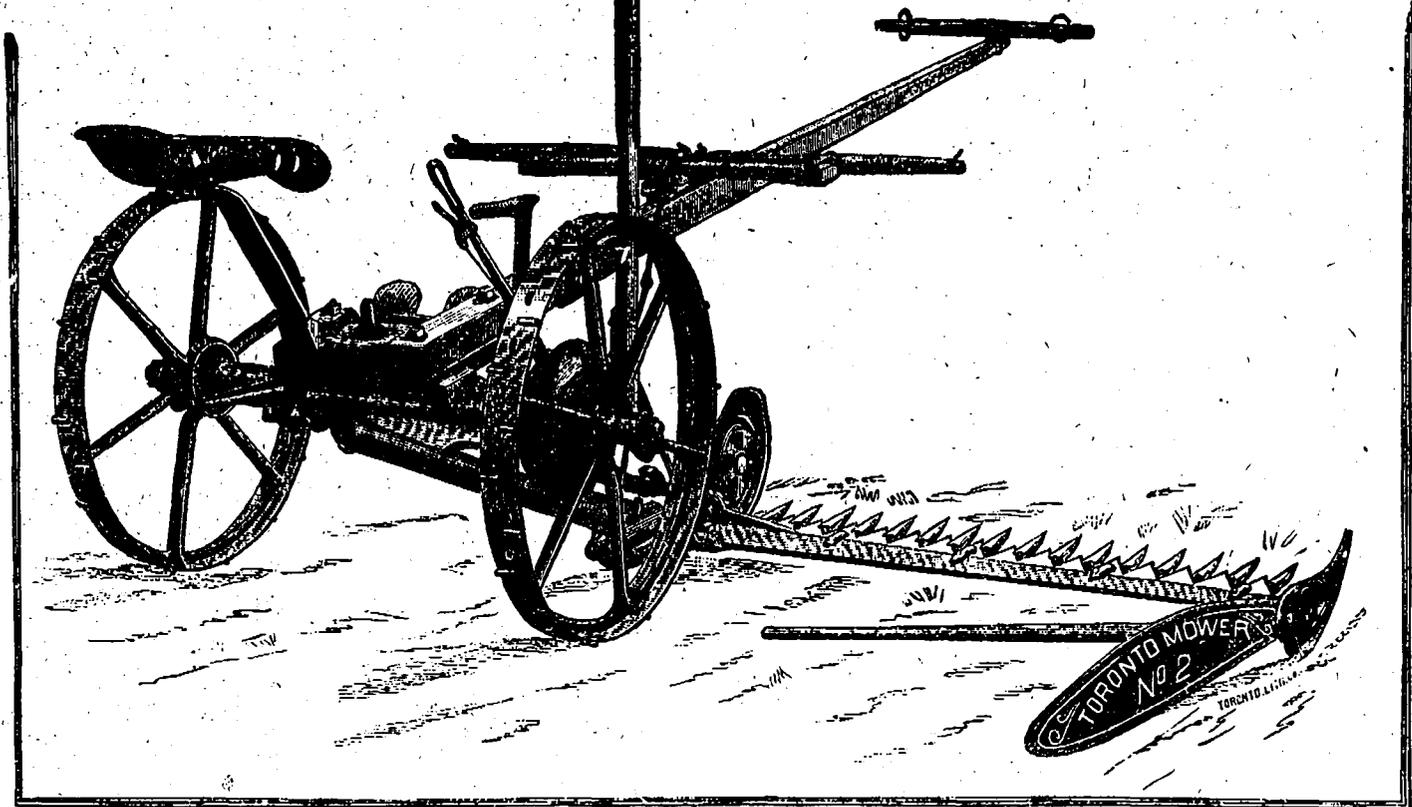
American Soft-Centre Steel  
MOULDBOARDS  
on all our Plows.

VERITY PLOW CO. LTD.

BRANTFORD, ONT., CANADA.

# Toronto Mower.

The Toronto Mower is made in two sizes and widths of cut.



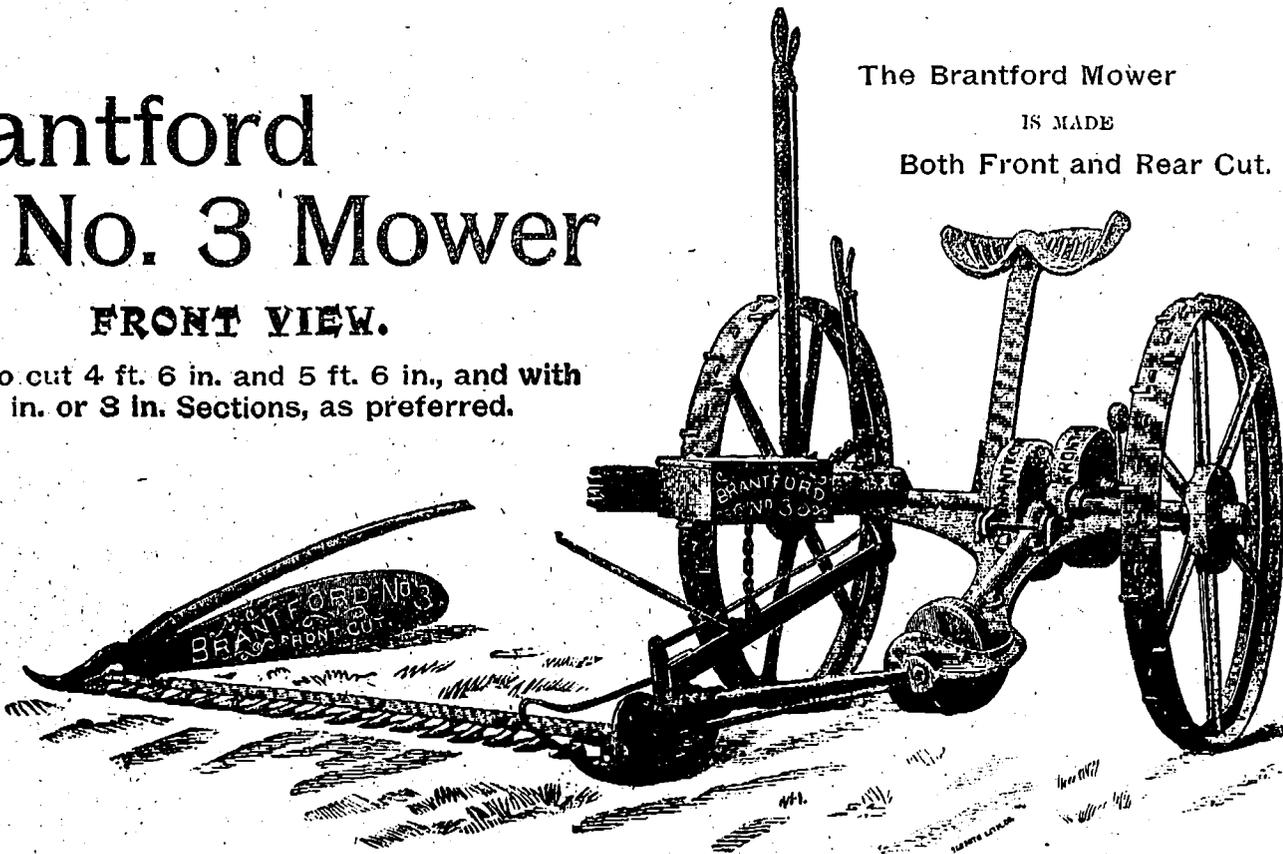
**NEW SMOOTH FINGER BAR.**

# Brantford No. 3 Mower

**FRONT VIEW.**

Made to cut 4 ft. 6 in. and 5 ft. 6 in., and with 2½ in. or 3 in. Sections, as preferred.

The Brantford Mower  
IS MADE  
Both Front and Rear Cut.



**Massey-Harris Co., Ltd., Toronto, Can.**

# 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.

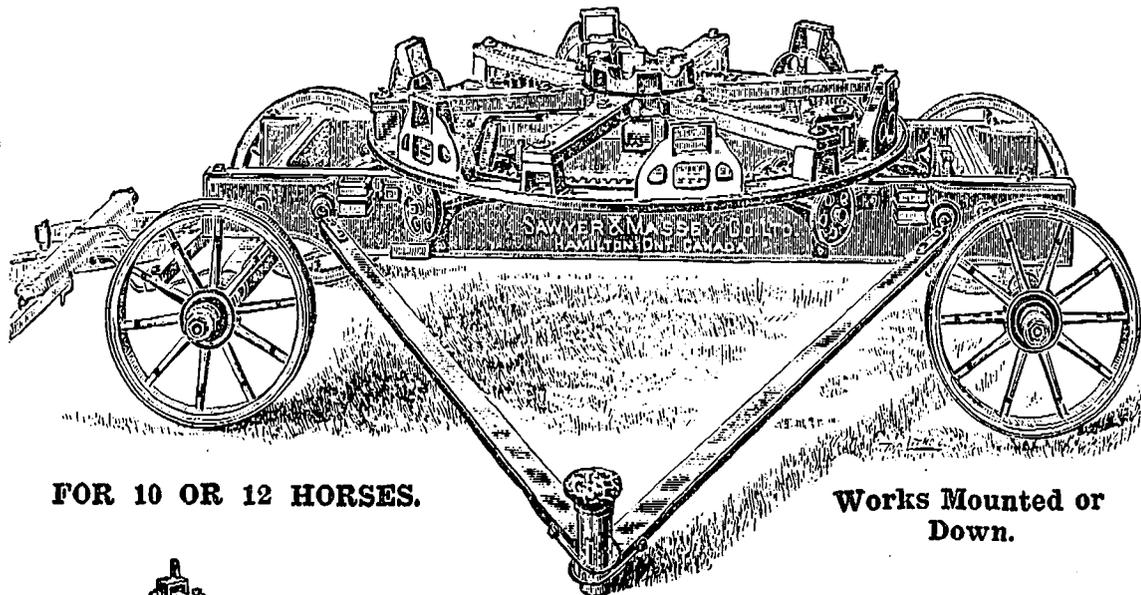
OF TORONTO (LIMITED).

61 & 63 Front Street West, TORONTO.

## \* \* HORSE POWERS \* \*

WELL  
MADE.

\*  
Prices  
are  
Right.

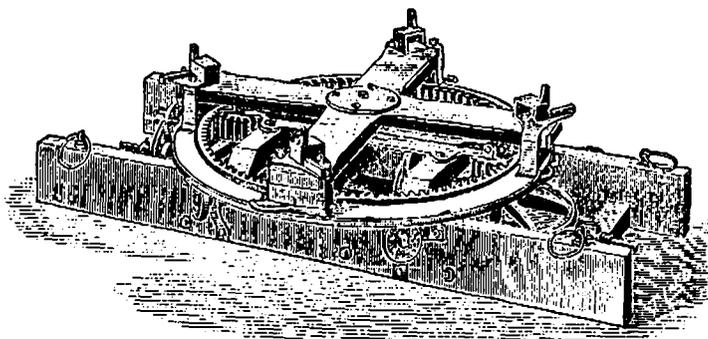


FOR 10 OR 12 HORSES.

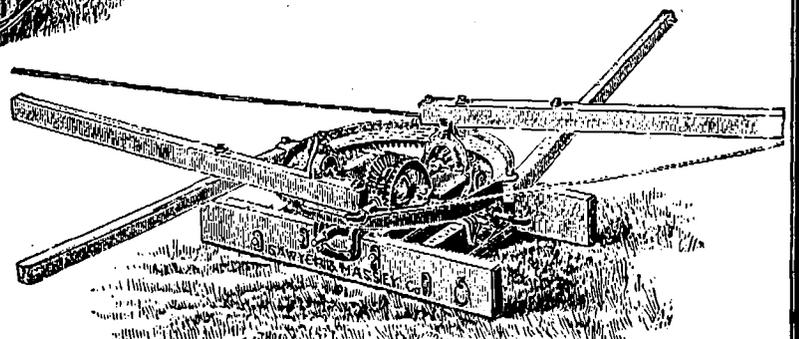
Works Mounted or  
Down.

GRAND  
WORKERS.

\*  
Write  
for  
Particulars.



4 TO 6 HORSE POWER.



2 TO 4 HORSE POWER.

We also build a Sweep Power suitable for eight horses, the engraving of which is not shown.

## Sawyer & Massey Co., Ltd., Hamilton, Ont.