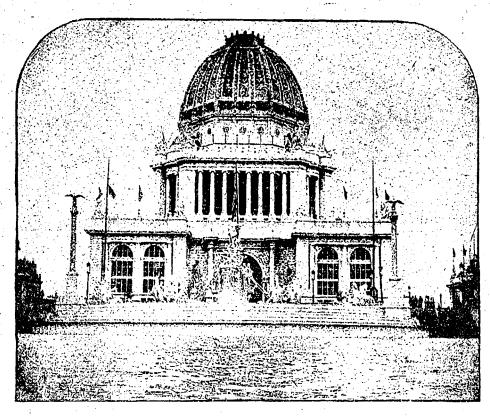
Massey's Allustrated •

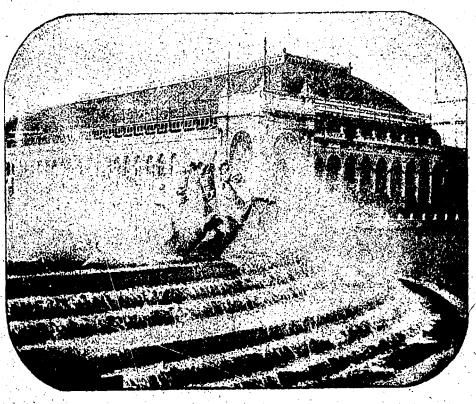
Christmas Number.

New Series, Vol. 5 No. 12.

Toronto, December, 1893.

WORLD'S FAIR YIEWS.









REAT GILDED STATUE OF THE REPUBLIO IN THE GRAND BASIN. BEE PAGE 4.

NEW MASSEY-HARRIS COMBINED HOE DRIE

AND BROADCAST SPRING TOOTH SEEDER

POSITIVELY THE LICHTEST, THE STRONGEST, AND THE BEST COMMINED MACHINE YET PRODUCED.

All Steel. * Neat in Appearance. * Mechanical Principles Unarrelled



It represents the best features of the "Wister," the "Lighthader," and the "Superior," together with some valuable new features

CONSOLIDATED IN ONE MACRINE.

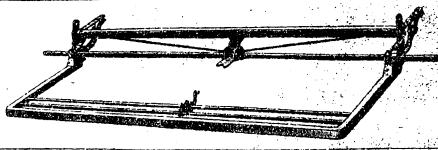
The perfecting of this tool tas taken two years of arduous labor on the part of our inventive staff.

IT IS ANOTHER ILLUSTRATION

of the advantage of the organization of Massey-Harris Co., Ltd., for otherwise the construction of this admirable implement would have been impossible

SOLID ANGLE STEEL FRAME.

The same of the second second



SOLID STEEL AXLE (Trussed.)

It is but the work of a few moments to replace the hoes with spring teeth, or vice versa.

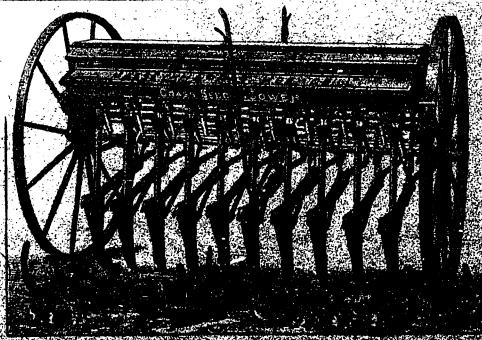
The machine can be instantly changed from "drill" to "broadcast," or vice versa.

Hoes or Teeth can be instantly set zig-zag or straight, as needed.

The method of applying the pressure for regulating depth of sowing is simply perfection.

Reversing the pressure lever throws the machine out of gear and lifts the hoes for transportation.

The self-adjusting force feed run will sow all kinds of seed without "cracking," and will sow accurately as to quantity, when the Index finger is set as desired.



HOTICE The Pessure Levice shallocam Found completions that levice strains to annually a land that the process of the levice strains and the levice strains are strains and the levice strains and the levice strains are strains and the levice strains and the levice strains are strains and the levice strains are strains and the levice strains and the levice strains are strains and the levice strains are strains an

• Massey's Allustrated •

(PUBLISHED MONTHLY.

A Journal of News and Literature for Rural Homes

New Series.]

TORONTO, CANADA, DECEMBER, 1893.

[Vol. 5, No. 12.

Rio de Janeiro.

PROBABLY no place on earth is more inappropriately named than Rio de Janeiro. There is a tradition that an early Portugese navigator, when exploring the coast of Brazil, entered this bay in the month of January. From the great size of the bay, which extends inland seventeen miles and has an extreme width of twelve miles.



PRESIDENT PEIXOTO.

he supposed he had discovered a river similar to the Amazon and Orinoco and he forthwith namedit Rio de Janeiro, which in English means River of January. To our ears the sound is cold. Our rivers in January are not inviting except to venturesome shaters, but January and June are the same upon the placid waters of Rio Bay. Perpetual summer smiles upon it and no icy winds blow from the heights which surround it. Our engraving shows the city and bay.

The City of Rio is the metropolis of South America. Being the terminus of several lines of railway, its commerce, both foreign and inland, is very great. It museums and botanical gardens are much noted.

The Bay of Rio de Janeiro enjoys the distinction of being the most magnificent harbor in the world. Travellers assert that the Bay of Naples, the Golden Horn of Constantinople, and Sydney Cove, the pride of Australia, must each and all yield the palm to the land-locked and mountain-girt Bay of Rio.

During the reign of the late Emperor it rested in almost profound peace. Great improvements were carried on both in the city of Rio and throughout the empire. Slavery was abolished without the firing of a shot. But two or three years ago the form of Government was changed. Discontent with the ruling powers has grown till now Brazil is being torn by civil war; her navy is bombarding her capital, and no one can tell how much of the stately fabric of the late Brazilian empire will be left intact, before the nation has adjusted its political institutions to the Brazilian average of civilization.

The immediate cause of the trouble is somewhat obscure. President Peixoto and Admiral Mello, whose portraits we give, are the leaders of the government and the malcontents respectively. While Peixoto denounces the revolutionists as rebels, Admiral Mello accuses the President of seeking to place Brazil under the rule of absolute tyranny. Both parties seem to be able to appreciate the advantages of being

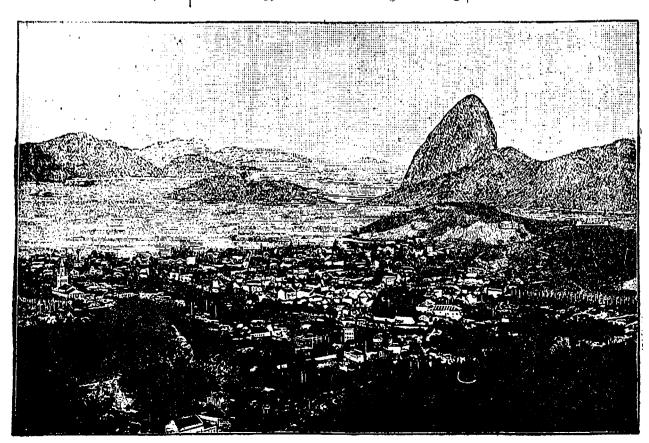
able to lie by telegram. The result has been considerable confusion to the outside world which has daily read announcements, first, that the insurrection is on its last legs, and secondly, that the government is just on the point of collapsing. It is not safe to prophecy on South American affairs, so we will not hazard any conjecture as to what the result may be.

The great article of trade in Brazil is coffee.



ADMIRAL DE MELLO.

Nearly all the coffee used in the United States and Canada comes from Brazil. There are many grades of the berry, which are carefully assorted in New York, the best being labelled Mocha and Java. and the inferior sold cheap under the name of Rio.



VIEW OF RIO DE JANEIRO.

From the Youth's Companion.

LOST IN PATAGONIA.

IN FOUR PARTS-PART IV.

THE Twelches had been watching their movements in silence for some time, but pretty soon another outery was raised, from both sides of the strait; it continued at intervals for some minutes. Looking up the channel, the sailors saw four canoes.

There was but a single native in each of the four canoes. They paddled rapidly down past the rock where the three sailors had taken refuge, without making any hostile demonstration; but as soon as they reached the foot of the crags on each side of the narrow strait, four or five other Patagonians, with their lances and bolas, got aboard each one of them; these then paddled



slowly back toward the rock, evidently bent on an attack.
Rumy and Clum began hurling stones at

their assailants, and with much better effect than might have been predicted, for the canoes were perilous crafts, and as soon as a stone fell aboard one of them, causing dodging and some confusion, the Indians were put to their wits to keep their balance. One skiff was immediately upset, and the whole flotilla fell back.

Several of the Indians now got on the nearest of the nighboring rocks, and cast stones with slings, but the sailors could avoid the far-thrown missiles.

Not long after noon, however, the natives were seen bringing logs together, and constructing a raft. This gave Rumy uneasiness. "If they build a big raft, they can all get on it, and then float her down against the rock here," he said. "They'll have better foothold, and can jump from the raft to the rock, and use their lances on us.

Frost thought the best mode of resistance would be to wait till the raft was within a few yards of the rock, then suddealy rise and pour the stones upon them as fast as they could throw them.

The Indians had great difficulty with their

raft, however, not having the means at hand properly to bind the logs together. Several times they pushed off with it, but were compelled to put ashore again and get more logs. Night coming on, they abandoned the task, and kindled fires on both sides of the channel, both above and below where the fugitives had posted themselves. For a long time the boys expected that some attack would be made upon them. But the evening wore on; they were disturbed only by the constant shouting of the natives, calling back and forth to each other across the channel.

It began to rain after an hour or two, and to shelter themselves, they made a tent of the sail, stretching it over the barricade of logs. Frost complained bitterly of cold. for the storm wind was very chilling. No Indians showed themselves during the forenoon; sheeted gusts of rain were beating inclemently on the crags.

The position of the sailors became more and more uncomfortable, for as it drew afternoon, the storm increased in violence. Wet from the water that dripped through their coarse apology for a tent, the unfor-tunate New Englanders lay in great dis-The boys waited moodily for the comfort. day to drag by, having agreed to make an effort to escape as soon as darkness again fell. They got the two logs of the catamaran ready for launching again, and the strips of deck laid out for lashing on. Their plan was to try to run through the narrows ahead early in the night, and get as far as possible before another day dawned.

Despite the rain the savages again kindled a fire in the lee of the crags upon the west side of the channel. By the red blaze the Americans could see them fetching wood and throwing it over the clift. The light from it shone out across the narrow gut of water there; nevertheless. Rumy (who seems gradually to have grown to be the leading spirit of the little party) determined to launch the raft again. In themidst of the drenching rain and wind, he and Clum put it together and got ready to meant

After a time the natives got tired of fetching fuel in the rain; toward midnight the fire grew dim, and at length went out. "Come, Pleem!" Rumy now said to Fros "We're going to start."

But he made no reply.

We'll help you down the rock," Clum said to him.

He remained silent, and they then went to him to assist him to his feet, when they found that he was unconscious, though breathing rather heavily. At first Clum thought that he was asleep, but they scon found that they could not awake him.



At length they drew him down the side of the rock, and put him on the raft. They took also their mast, sail, and what was left of their veal, and then put off in complete darkness, with the rain gusts surging about them. Rumy stood on one side of the raft, Clum on the other, each with a paddle in his hand, and with quiet strokes propelled it forward toward the place where could still be distinguished the last faint red glow of the Indians' fire.

Suddenly they came upon some resisting obstacle. Clum got down on his knees and felt along the nose of the raft with his hand. "It's a line of some sort," he whispered.

"Take your knife and cut it," said Rumy. Clum essayed to do so, but meantime the raft swung around, and came, with a thump, in collision with some object moored by the line. Instantly then they heard, rather than saw, a sudden scramble, and a native shouted wildly as if just aroused from sleep—almost in Clum's face, he was so very near! In fact, it was a canoe moored there in the strait, with a native

lying covered up in it, probably as a watchman, but no doubt sound asleep at the time.

Starting back, Clum struck with his paddle, giving the savage so hard a blow that he fell into the water. But he rose and shouted again. Rumy sprang to that side, and struck at the Indian in the water. The raft canted violently, and both came near being thrown off. The Indian swam out of their reach.
"Quick with your knife!" cried Rumy. "Cut

that rope!'

Clum contrived to do so, and they pulled on, but the boat kept bumping rocks for some distance. Immediately, too, they heard shouts and other noises on the crags rear by; also the splash of stones thrown after them, at a venture, for it was impossible to see anything, even one's hand before his eyes, in the rain and darkness.

Thus they floated on for some distance, both standing near the forward end of the raft, guid-

ing it.

At length Clum said, "Let's look to Pleem."
whom, for the time being, they had almost forgotten, in the excitement of the passage through the strait. They felt their way back to the hinder end of the raft, where Frost had been placed. To their dismay, they did not find him placed. To their dismay, they did not find him there!

"He isn't here!" muttered Clum, in low

"Clum, he

tones.
"He's fell off!" cchoed Rumy.

slid off when the raft canted so, 'way back there!" Clum uttered a cry of distress and horror, and seizing his paddle, began to turn the raft

round.

"It's no use, Clum," said Rumy. He's sunk and drowned long ago. We couldn't find him. He never swum a stroke."

"O Rume, this is awful!" cried Clum, bursting into tears. "Poor Pleem! Poor Pleem!"

Toward morning the rain abated, though it

still continued thick, cloudy, foggy, and dark as Erebus. They paddled steadily on, and after a time heard the roar of billows ahead.

"Hark!" Rumy said. "It's either 'old briny or another lake. Oh, how I hope it is the sea! "I'm afraid it aint the sea," said Clum, "for the water here is fresh; I've just tasted it."

The lake, so far as they could see in such thick weather, extended off to southeast, and they were able to beat out upon it. They were so hungry as to chew the breast meat of a raw duck they had caught, and meantime sailed on, going they had now little idea whitherward.

The wind fell after a time, and left them toss-

ing about. But soon the fog lifted; it brightened and a northerly breeze filled their sail. As the sky cleared, they saw an island ahead; then the west shore, with mountains rising in the distance, and ere long the eastern shore, still more distant, with much loftier mountains.

After fully two hours' sailing, they came near what they first took to be the foot of the lake; but on nearer approach they found that a great bay opened south-westerly, round the head of a rocky promontory, while on the cast shore there was low, fertile land, studded with fine clumps of timber.

Here they landed to search for berries and anything else eatable, being nearly famished. After ranging about for some time, they came upon a wild cherry-tree and a thicket of wild gooseberries, off both of which they gathered a full supply, but took the utmost care about the cherry-stones; for Rumy firmly believed that these were the more or less direct cause of the fit which led to Frost's death.

They pushed off, made sail again, and bore away down the bay, heading southwest. The wind continued strong from the north, and in an hour they had run down to the foot of the

"We'll leave the raft here and climb to the hill yonder," said Rumy. "Seems as if we must see 'old briny' from there, for, of course,

the sea must be somewhere that way."

They were already within a few hundred yards of the shore, and just passed the point of a little projecting knoll with trees on it, when a

loud outcry broke upon their cars.
"Good heavens, Rume, only look at the In-

dians, and the canoes, too!" cried Clum, aghast.

Just round this little wooded point, was a whole encampment of natives. The savages had seen the raft, perhaps had been watching it for a long time. Even as the boys stared, in their first surprise, not less than ten large canoes were putting off, with a score or two of warriors, swinging their bolas and shouting exult-

ingly.
"Bout ship!" Clum cried. "Let's beat out

Rumy gave a sharp look around. "No use." ain't room. Can't get out. too strong."

"Then what'll we do?" cried Clum, trem-

bling.
"Got to fight," said Runy, picking up the gun-barrel. "Twill be our last battle, Clum," he added, his voice faltering a little. "They're too many for us this time. But those ruscals shan't capture me without working for it!" he avalaimed with a sudden flash of rising temper. exclaimed, with a sudden flash of rising temper.
They let the catamaran bowl ahead before the

wind, to go at full speed among the canoes and ashore, and like two plucky lads of the old time that they were, made ready as good a defence as they could. In a moment more they were close down upon the canoes.

A tremendous shout rose, and whiz, whiz, came three or four bolas—when an Indian in one of the nearest canoes suddenly called out

and waved his hand to them.

FRIENDS AND SAFETY.

"Como! Como! How-do! how-do!" he exclaimed. "Homblanco.' Hite man!" All the others, too, stopped short and stared at the

raft.
"Why, Rume, that's Pablo, one o' them Picunchees that went with us!" cried Clum. "Don't you see! Don't you know him?"

In a minute the Picunchees were about them; they recognized not only Pablo, but a dozen

others of this friendly tribe.

The young sailors had now but one question to ask of the Picunchees, and that was about the brig. With every sign they could invent they sought to learn if it was still in the bight. Seeing their earnestness, the Indians laughed. To tease them, probably, several shook their

heads, and pointed far away.
"She's gone!" groaned Clum.
"She's suiled and left us!" echoed Rumy; and

then tears came into the eyes of both.

"We shall never see home again," said Clum. "We shall die and lay our bones here in this heathen country, as that poor Ackley did. We might's well go and live in his old hut the rest of our days.'

Rumy said not a word but stood there the image of sorrow. Then the roguish Indians burst out in a loud horse-laugh—at sight of their woebegone faces. Pablo heard it and came up to ask what it was about. They told him in great glee. Then he turned to the boys, and nodding very fast and joyously, and by signs, gave them to understand that the brig was still on the coast.

They knew not now what to believe, but getting Pablo to point out the course to them, set off to learn for themselves. The distance over the hills to the coast was six or seven miles; but there was a native trail, and so anxious were the poor fellows, that they ran nearly all the way, till, reaching a little headland overlooking the bay, they saw, to their infinite joy, the old Xerxes, still riding at anchor there.

In half an hour more they were aboard, and

were greeted by their shipmates as men from

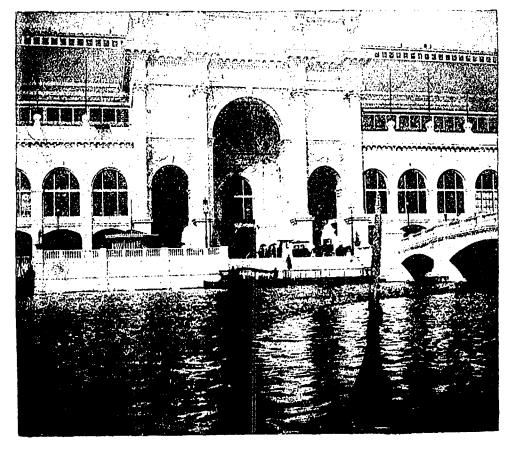
the grave.

That night Capt. Dustin made the following stry in his log-book—March 17. "This day entry in his log-book—March 17. "This day Columbus Lovewell and Arumah Brown, two of ye sailors who were reported to be killed while ashore, by ye Patagonians, came aboard in sorrie condishun. Costello did not tell ye truth. None of ye party were killed at ye time he told us. Hence I have ordered him to be scized and flogged with ye cat. Of ye four missing men three, to wit, Valorous Hobbs, the mate, Ebenezer Hartley and Lyman Stowell, the supercargo, were killed in an affray with ye savages, two days afterwards, and ye fourth, Pleem Frost, was drowned four days later. So, at least, say ye two sailors. I give myself great reproach for their untimely demise."
Thus ended the first trip by Americans to the

Manzanillos grandes, or the great natural apple orchards of Patagonia.

(THE END.)

THE "hock" in fowls is the part at the first joint above the toes, or, in other words, the place on the leg where the feathering stops. If the feathers project at this point and are large and stiff, the bird is said to be "vulture hocked," as vultures have similar appendages.



EAST CENTRAL ENTRANCE OF THE MANUFACTURERS' BUILDING

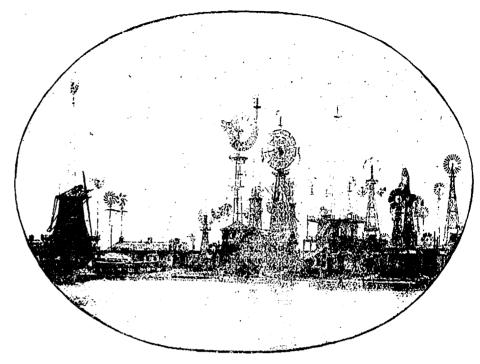
Our World's Fair Views.

Specially Engraved for Massey's Illustrated from "Snap-Shot" Photographs taken by W. E. H. Massey.

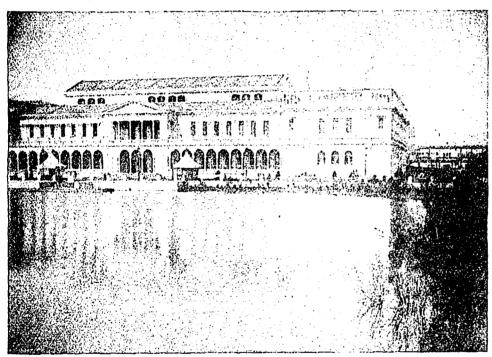
THE MASSEY'S ILLUSTRATED World's Fair Views have received favorable comment at home and abroad, and we have had applications for duplicate sets from many different publishers.

Ir is no mean honor to be noticed in the long established and conservative old English periodical, known as The British Journal of Photography, published in London, Eng.—at least so photographers of good standing say. The following is their notice of Mr. Massey's World's Fair Views, which appeared in their issue of Oct. 20th, last,—

Ir puzzles us somewhat to know precisely by what means Mr. W. E. H. Massey managed to snatch, under the very eyes of the *vigitantes* of the Chicago Exhibition, such a fine set of pictures as he has obtained, judging from such



THE WINDAUL EVILING



tration, while the large gilded statue of the Re-

This faces the Administration Building and stands at the opposite end of the "Court of Honor." On the previous page is a view of the great central entrance of the Manufactures Building. While this enormous building, covering some 36 acres of ground, is one of the largest ever erected, if not the largest, it is nevertheless architecturally fine, as may be imagined from this view of one entrance. This particular picture was taken from a gondola while passing through the canal.

Three very pretty water scenes appear on this page. One of the prettiest and most interpret.

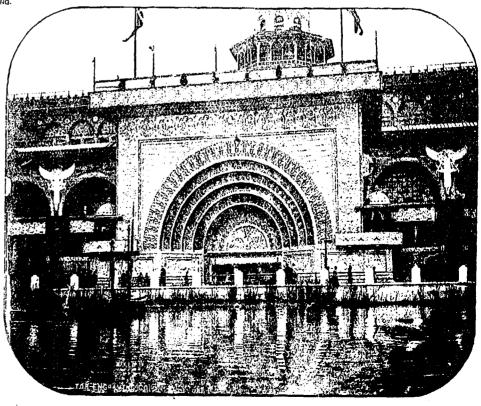
public standing on a shapely pedestal surrounded by water shows in another picture.

Three very pretty water scenes appear on this page. One of the prettiest and most interesting features of the outdoor exhibits was the display of windmills. Our view of the Women's Building was taken from a distance looking across one of the lagoons. The magnificent entrance of the Transportation Building has received frequent notice from various writers as being one of the most beautiful samples of de-

THE WOMAN'S BU LOING

samples as have been given in the Canadian Photographic Journal [reproduced from Massey's Illustrated]. The subjects are sharp, well selected, and fully exposed. The artist gives a graphic account of the petty harassments to which he was subjected by the agents of the concessionaire; but, as we read, he eventually circumvented them by the expedient of hiring a gondola, or an electric launch, and photographing therefrom while going, in some instances, at full speed past the respective subjects which he has so ably snap-shotted. "The magnificent buildings," he says, "have been grouped with the greatest care, and with the surrounding landscape—which is like a fairyland, beautified with artificial lakes and canals, the latter spanned here and there with handsome white bridges—combine to make up a veritable paradise."—The British Journal of Photography, Oct. 20th, 1893.

We have pleasure in presenting our readers with another budget of charming World's Fair views. On the front cover is a view of the handsome Administration Building as it appears when riding about the Grand Basin in a gondola or electric launch. The great Macmonnies' fountain somewhat hides the entrance in front of the building. A portion of this fountain in full play is shown in another illus-



MACHIFICENT GOLDEN ENTHANCE TO THE TRANSPORTATION BUILDING.



VIEW ON THE MIDWAY PLAISANCE LOOKING TOWARDS THE FERRIS WHEEL, THE CARS OF WHICH WERE NOT YET PUT ON

corative art at the Exhibition. Our picture shows it as it appears when passing in a gondola.

The three views showing the great Ferris Wheel in course of construction, will be interesting to many of our readers. As this stands a unique and daring piece of engineering, we have thought it worth while publishing the following description of this notable enterprise:—

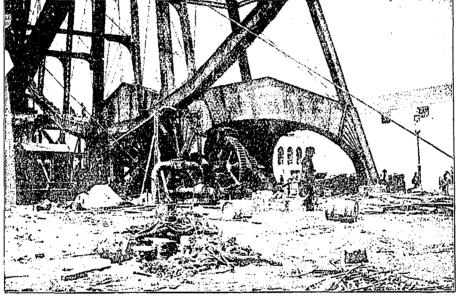
It is not easy for the mind to grasp the stupendous nature of this undertaking. The wheel itself is two hundred and fifty feet in diameter; at its highest point it

is two hundred and sixty feet above the carth. The Obelisk of Luxor or Trajan's Pillar at Rome would not be long enough to serve for a radial spoke.

Then, again, its enormous weight. The cantilever bridge at Niagara was looked upon as an engineering wonder when it was built. Its construction took three years. The Ferris Wheel was built in five months, and its weight is four times that of the Niagara bridge. The Cincinnati cantilever is a quarter of a mile long, and its weight is about the same as the Ferris Wheel. The bridge is set immovable, resting on two supports, while the wheel is swung upon an axle lifted 140 feet in the air.

The wheel was constructed, in its separate parts, at Detroit, and shipped to Chicago. So confident was Mr. Ferris in the accuracy of his plans and measurements that he did not have the wheel set up before it was shipped. When it was taken from the cars at Chicago every spoke and bar, truss and girder, went together as though each had been previously fitted to its neighbor.

The towers, eight in number, are twenty feet square and thirty-five feet high, of solid cement reaching from the foundation to the surface.



THE BASE OF ONE OF THE COLUMNS SUPPORTING THE GREAT FERRIS WHEEL. WORK NOT YET COMPLETED

Buried in the concrete are massive steel bars, and to them are bolted the steel towers which rise one hundred and forty feet in the air, supporting the wheel.

The axis of the wheel is 44 feet long, 32 inches in diameter and weighs 70 tons. It is the largest steel shaft ever forged, and was made by two men and a boy.

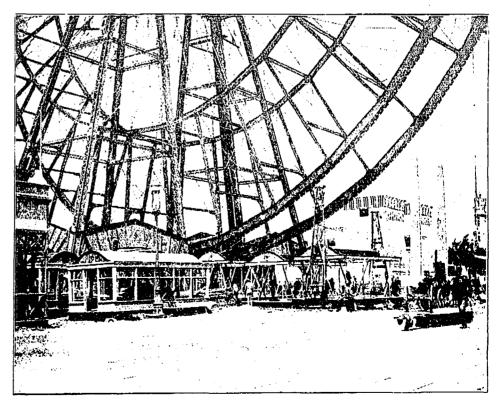
This gigantic shaft had to be lifted 140 feet in the air, and set in its sockets at the top of the towers. The great hubs were then fitted in place, and the work of hanging the wheel began. Beginning at the bottom, the heavy castings weighing five tons each, which form the rims of the two wheels—for there are two really, with the cars hanging between—were hung one by one on rods which carry the weight of the wheel. Slowly the circle was completed, the last of the sections being lifted two hundred and seventy feet, to drop into its place. Then the thirty-six cars, which could seat two regiments of soldiers, were attached, and the great wheel was fairly in place.

But would it move? Two thousand tons or more strung on a single axle—could this monstrous bulk be set in motion? A finger was

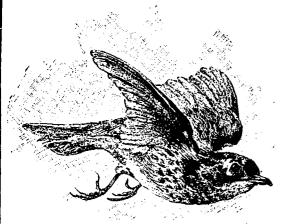
lifted, a throttle was opened, and the great wheel began to turn, and has gone on turning and stopping, obeying the lightest touch of its driver with a precision and accuracy that is not the least of the marvels of this mechanical wonder.

In July came the terific hurricane, the wind blew 110 miles an hour. But the wheel hardly shivered. It turned as evenly and smoothly as if fanned by summer zephyrs.

The wheel cost in place 392,000. It was a large sum to stake on an experimental idea. It turned out a brilliant success.



VIEW SHOWING THE LOWER CONSTRUCTION OF THE FERRIS WHEEL AND THE CARS SCATTERED ABOUT READY TO BE PLACED IN POSITION.



The March of the Magi.

WE wait upon the mountains.

Above us shine the golden lamps of God,

"Tis silent night.

And we, the Magi, worshippers of fire.

Renew the altars that have burned undimmed Upon these mountain-tops a thousand years.

Peed ye the flames, and sing:—

"I shall see Him, but not near, Shall behold Him, but not nigh. A Star shall rise from Jacob, And fill the midnight sky! And here upon the mountains Our altar-fires shall burn, Until that star of Jacob Afar our steps shall turn!"

Hail, splendid orbs!
God scatters ye like seeds in space, to bloom
In the wide gardens of heaven's flaming halls,
The firmament grows bright, a crystal floor
An ocean quivering with celestial fire.

Our father worshipped God Amid the palaces of the Persepolis. The city was the glory of the sun, The crown of all the cities of the world. 'Tis vanished now; her palaces are dust; The slimy lizards fill her broken payements Vanished are her kings.

Hail, splendid orbs!
Our fathers' eyes beheld thee,—all the great
Of earth, the earliest born of men. All hail!
Our father Abraham watched thee night by night.
In Mesopotanian tents. Jacob beheld
Thy silent marches under Manne's oak;
Joseph, at On. Zoroaster, priest of God.
Thy mysteries read; and he did prophesy
Another star should rise, and fill the sky
With brightness, and the earth forevermore
With wonder. Feed ye the flames, and sing:—

"I shall see Him, but not near, Shall hehold Him, but not nigh A Star shall rise from Jacob, And fill the midnight sky! And here upon the mountains Our altar-fires shall burn, Until the Star of Jacob Afar our steps shall turn!"

A thousand years
Upon the mountain-tops the holy seers
Have watched the rising stars, O weary nights!
It does not come; it does not yet appear.
The wondrous nights go on, and on, and on,
We feed the fires and watch, and it will come,
For God is God.—The altars blaze
And lift their splendors in night's shadowy halls
We keep the watch our fathers left to us,
And sing the song our poet-prophet sang.
And that the priests of Baal have sung with hope,
Through all the vanished nights of vanished years.

Behold you light!
It rises; wondrous sight,—a star, a cross,
A coronet of fire!—Let the altars die,
Our watch is ended. Lo, it westward moves,
Let us descend the mountain stairs, and hence
The glorious portent follow. Farewell,
Ye flaming heights, we go to lands unknown.
Towards the Jordan. Yet once more, O priests
The song of Balaam sing:—

"I shall see Him, but not near, Shall behold Him, but not nigh A Star shall rise from Jacob, And fill the midnight sky! And here upon the mountains Our altar-fires shall burn, Until the Star of Jacob Afar our steps shall turn: "—Selected.

It falls to the lot of the monthly visitor who sets out on his rounds at the beginning of December, to convey the greetings of the season a considerable time ahead. Therefore we wish our readers the compliments of the season—a Merry Christmas and a Happy New Year!



Prof. Thurston, consulting engineer, has a high opinion of Canadian agricultural and general machinery. In smoothness of running it is in his opinion, equal to any to be seen on the grounds. Prof. Thurston was officially connected with the Centennial, and noting the advances made in manufactures since 1876, declares that the exhibit made by Canada shows the dominion to have made greater progress in manufactures than any other nation represented at the White City. Coming from an American, this is praise indeed.—Exchange.

SIR JOHN C. ABBOTT'S death drew from prominent men of both parties, and from the press of all shades of opinion, here and in the Old Country, expressions of feeling which were a singularly fine tribute to the ability, sagacity and patriotism of the deceased, and which must have been very gratifying to friends and colleagues. Sir John died at a ripe age, but there is little doubt that his health gave way under the strain of office as premier. During his short term he won the goodwill of his party and the sincere respect of his political foes.

The tariff reform bill brought down by Mr. Wilson has been received with a hot fusilade from the Republicans, but there is every reason to suppose that it will pass into law without many material changes. It is regarded as, on the whole, favorable to Canada, while at the same time beneficial to the United States. But the fight over it will be severe and of long duration. The Republicans will find platform material in it, and will not let the opportunity to pass without a hard fought struggle, It is supposed that it will not receive the president's signature earlier than the middle of February next.

An event of more than local interest was the unveiling in Hamilton, of the magnificent bronze statue in honor of the Right Hon. Sir John A. Macdonald. The occasion was made much of by the citizens of Hamilton, but the event was regarded as of much wider range. As was to have been expected, the Dominion government was well represented, Sir John Thompson being present to deliver the leading oration of the day. A notable utterance also was the speech by Sir Oliver Mowat, who eulogized his old friend and intimate acquaintance of boyhood's days. All sections of the community are to-day united in according to the great chieftain, as he loved to be called, one of the highest niches in the gallery of notables Canada has produced.

The closing days of the World's Fair were be-clouded by an event which called forth the sympathy and horror of the civilized world—an event of a character which happens with too startling a regularity and method, on the other side of the line. Carter Harrison only suffered the fate of Lincoln and of Garfield, and although he was not president of the Republic, he was much in the world's eye at the time, as mayor of the city of the World's Fair. The assassin, Prendergast, did his work deliberately and effectually, and now he is a prisoner to stand trial for the foul deed. While justice will doubtless be vindicated, it is a sad commentary on our advanced civilization that in a large and enlightened republic, the lives of public men are placed in so great a jeopardy merely because of the public positions the men hold.

THE end of the old and the beginning of the new year is a time when we are naturally in a retrospective and prospective mood. No doubt much which has occurred during the past year has been the cause of regret, and people are glad it is in the past forever. Yet how much there has been to be thankful for. Have we not been able to pull through a year of unusual depression on this continent, with credit and comparative ease? While the troubles and needs of our neighbors have been overpowering, Canada has had comparative immunity from financial or commercial disasters, and the business of the country was never on a better or sounder basis. There has been no political upheavals no conspicuous breach of the peace; our laws have been respected. Our harvesthas been abundant, and as for weather, no climate under the sun could have been more kind and genial. At this writing, as the last hours of November are waning, winter's cold finger has not touched us, but the fall rains are descending to moisten the meadows ere King Frost have higher descent the grant to said. lays his hard fast sceptre over the soil. Surely we have been favored much and can draw from the past year an augury of good times in store for us. The future holds great possibilities for for us. The future holds great possibilities for all. We heartily subscribe to the famous man's remark "the blessed future." To the disappointed man, there is hope in the future, to the successful man, there is also a better future, to all who look bravely and rightly at the mich its duties and its reconsibilities, the life with its duties and its responsibilities, the future holds a welcome—a hospitable prospect. With faith in ourselves, with courage, and with well-laid, wisely-conceived resolves, let us hail eighteen hundred and ninety four, praying that the record we may roll up at its close may be creditable to ourselves and of benefit to our fellows.

The London Free Press considers that "there are proper and improper combines. Every school section, township or county is a combine; so is every joint stock or other company; so is the Patrons of Industry order; so are boards of trade. Sugar or cotton or binder twine or agricultural implement companies who unite and by saving expenses of travellers and clerks, and by centralizing their efforts, reduce the price of sugar to that of moulding sand, of cotton to that of straw, binder twine to a minimum, and of agricultural implements to a mero trifle, even while they do themselves good, are also doing the country good. There is one Agricultural Implement industry in Canada, that alone directly and indirectly gives support to chirty-five thousand people in employing seven thousand souls. Yet agricultural implements are cheaper in Canada than in any land on the face of this world."

Our readers are so greatly interested in the proper care of farm implements, and we have so often drawn their attention to the importance of suitable housing and treatment, that the following from our valued contemporary, the American Agriculturist, will appeal forcibly to their sense of the fitness of things:—"Upon storing farm implements in proper condition depends, in no small degree, the success of farming. man who provides a dry, airy shelter for farm tools and machines, and puts them in it when they are not in use, has done a wise and profitable thing; but he may have done only half of what he might and should do for the preservation and good work of his tools and machines. He should also put the tools and machines away in good condition. This includes freedom from dirt. The plow, for example, put away coated with mud, will rust and rot, though in good shelter; and such a coating is yet more harmful to the delicate parts of the machines.

Though bright steel surfaces are clean, they will probably rust, unless coated with oil in some form; and to be sure that even clean wood does not rot, one must coat it with paint or oil. For coating metal surfaces coal oil or beef tallow

is good. Of course the tallow should be applied in a liquid condition. It will pay to coat rough, but unpainted, metal surfaces, as well as polished ones. For farm tools and machines, mineral paint is better than artificial pigments, and brown mineral paint is very cheap indeed. Anyone ought to be able to mix it—use only boiled linead oil and the best is actually to be able to mix it—use only boiled linseed oil, and the best is certainly the cheapest; or one can buy ready-mixed paints of good quality at reasonable prices. One should have two brushes—a large one for ordinary surfaces, and a small one for narrow surfaces or small appropriate the contract of the contr corners. It is advisable to put away all tools and machines in condition for work-plows. hoes, harrows, or sickles, sharp and with all breaks repaired and weak parts strengthened. there will be more time for this at the close than at the beginning of the season's work; and then one has the comforting assurance that as soon as the season permits he may begin work. When one puts away the implements just as they leave the field, it is often found that it has been forgotten that some must be mended and others sharpened, and this is not recollected until they are brought ont for work; then valuable time must be lost in going to the blacksmith.

WHILE it would be impossible to give a list of the numerous awards captured by Canadians at the World's Fair, it is a gratifying task to emphasize their great success in a world-wide competition. The mineral resources of Ontario were well displayed, Manitoba's grains, roots and produce proved the fertility of the soil and the suitability of the climate for farming of all descriptions. The agricultural exhibit from Ontario captured over 180 awards, and the province received a decorative award, only one other court having that distinction. There is reason to be proud of such notable success. In fruit Ontario carried off an enormous number of prizes. Awards were granted for apples of 1892 and 1893, also for pears, quinces, grapes, native and foreign gooseberries, for continuous

exhibition of blackberries, and for fruits in solution. Niagara district received awards for grapes, apples, pears and peaches; Burlington for grapes, apples and pears; Wentworth for grapes, apples, pears and peaches; Essex, Simcoe, Grey, Huron, Belleville, and Eastern for apples. On peaches and other stone fruit, the continuous exhibit scored 85 points. Special awards were given to quite a number of private individuals. The Ontario exhibit was declared by the judges to be the largest, most comprehensive, best set up, and showing the highest standard of quality of any in the building. Looking deeper than mere awards, it might be said that the knowledge disseminated in the fruit court will be the means of attracting to the province a well-to-do class of peeple, anxious to engage in fruit-growing where the conditions are so favorable, and the returns so certain. "The brand Ontario on fruit packages," says an expert, "will be looked for hereafter, and a larger export trade than ever must come to us. Southern States, especially, will look to Ontario for apples that are high-flavored, and that will keep." As was expected the live stock stood high. Roughly speaking the following figures may be taken as indicating what Ontario took in live stock: Cattle, \$5,025; horses, \$3,320; sheep, \$7,151; swine, \$1,299; total, \$18,080. The prizes for poultry and pet stock will amount to about \$2,000, making a grand total of money prizes of about \$20,000. Besides the money prizes of about \$25,000. Desides the money prizes, two bronze and two gold medals were taken by Ontario hackney horses; six medals by American Arabs, five cups by Southdown, Leicester, Lincoln, Shropshire and Dorset horn sheep, and a silver cup, value \$100, for fat

WE give below the fac-simile of a letter received by the Massey-Harris Co., Ltd. It speaks for itself. It cannot but be gratifying to all Canadians to know that a purely Canadian concern has by solid worth won the highest praise from so many of both home and foreign lands.

DOMINION OF CANADA, DEPARTMENT OF AGRICULTURE.

Jan W Robertonn, Party Commissioner,

*OFFICE OF DAIRY COMMISSIONER,

J. O CHATAIN Dairy Consocious. Central Experimental Farm,

Ollawa, 9ct. 31, 189_

The Lassey Harris Co. (Ltd),

Toronto, Ont.

Dear Sirs .-

I am in receipt of your favour of the 10th inst., per W. E. H. Massey, Esq.

The article in the "Farm Implement News," which expresses its appreciation of the exhibit made by you at the World's Fair in very laudable terms, in my opinion does the display which you made only scant justice. For excellence, comprehensiveness and arrangement, I heard the praises of the Massey-Harris Court in all mouths, and the United States eri tics were quite as friendly and forcible in their commendation as our own citizens.

I offer you my congratulations.

Yours very truly, Jan Kobutom. Dairy Commissioner.



1st.—The funeral of the late Mayor Harrison, of Chicago, took place. . . . The bronze statue of Sir John A, Macdonald was unveiled in Hamilton. . . . Mr. Potter Palmer subscribed \$200,000 to the Women's Memorial Museum in Chicago.

2nd.—Imperial Parliament opened. . . . Pendergrast, the murderer of Mayor Harrison, was arraigned. Remains of late ex-premier Sir John C. Abbott interred at

Srd.--Prisoner Luckey found guilty of murder at Brockville. Ont. . . . Lady Aberdeen organized a branch of the National Council of Women at Montreal. . . . Clarence King, at one time director of the United States Geological Survey, was committed to a New York Insune asylum.

6th.—Severe snowstorm prevailed in the Midlaud Counties of England . . . Sir Andrew Clark, the famous English physician died. . . The general elections took place in Newfoundland, resulting in the return of Sir William Whiteway.

7th.—S. R. Armstrong was appointed town clerk of Peterboro, Ont. . . . The steamer "Fruser" was burned at Goose Island; eighteen lives lost. . . . State elections went largely republican.

8th.—Prohibition Association organized in Dufferin county. . . . Washington despatch says Queen Lilinokalani will be restored to the throne of Honolulu. . . . Prosbytery of Ottawa determined to present a formal address of welcome to Lord Aberdeen.

9th.—Prof. Herman Hagen, of Harvard, an eminient scientist, died to-day. . . . Francis Parkman, the eminent historian, died at Boston, aged seventy years. . . . Judge Jean Thomas Taschereau, ex-puisne judge of the supreme court of Canada, died to-day.

10th.—A conference was held in Montreal between representatives of the Dominion government and of the railway and steamship interests in the interest of immigration. . . . A. Currie, of Nottawasaga, was chosen by the Patrons of Industry to contest West Sincoe in the Ontario Legislature.

11th.—James Bain, jr., Toronto, was elected a member of the committee on Foreign Documents of the American Literary Association. . . . Martial law proclaimed in the province of Barcelona. Sir Francis Clareford appointed British Ambassador to Italy.

13th.—Rev. Dr. Morrison, founder of the Scotch Evangelical Union Church, died in Glasgow. . . . Dr. J. D. Edgar was appointed superintendant of the city hospital, Hamilton. . . . John MacLaren, Royal Insurance Co., Liverpool, the greatest English authority on fire insurance, died.

14th.—An epidemic of diphtheria reported in the town-ship of Renfrew. . . . The price of bread in Hamilton was reduced to eight cents per loaf. . . . The popula-tion of London, Ont., shows an increase of 900 according to the assessment returns just published.

Tith.—Prof. Harry Banford, M.S.C., late of Victoria University, Manchester, has been appointed to McGill University. . . . The mammoth cheese arrived at Montreal, on its way to Liverpool.

16th.—The police census places the population of Toronto at 188,222. Sir Robert Morier, British ambassador to Russia, died.

17th,—Prince Alexander, of Battenberg, died. A local branch of the National Council of Women, was formed in Canada,

18th.—Chicago will begin next year with liabilities amounting to one million three hundred thousand dollars. . . The German government has established a military camp at Malmedy in Rhenish Prussia.

20th.—Troop and Son, ship-brokers, St. John, N.B., failed with liabilities exceeding \$200,000.

21st.—Mr. Geo. H. Watson was elected president of the Toronto Reform Association. . . . The Queen returned from Balmoral to Windsor.

22nd.—Mr. Archibald. Montreal, was appointed to the Bench. . . . The post office at Oil Springs, Ont., was burglarized.

23rd.—Queen's won the Rugby championship of Canada over Montreal.

24th.—Louis Kossuth, the Hungarian patrist, is seriously ill at Turin. The death is announced of the Earl of Cromartie, second son of the late Duke of Sutherland.

25th.—Mr. Balfour leader of Opposition in Imperial par-llament, is suffering from la grippe.

27th.—W. T. Stead lectured in Toronto on the "Destiny of Canada."

28th.—Annual meeting of the Newsboy's Home of Toronto. Annual concert of the St. George's Society Toronto. Rev. Dr. G. L. Mackay, the famous missionary in Formosa, addressed a public meeting in Toronto.

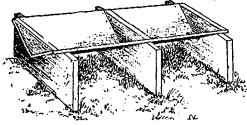
 $-29 {\rm th}.{\rm -Mr}.$ Christopher Robinson refused the honor of Knighthood offered to him.

30th.—St. Andrews Day celebrated.



A Good Strong Trough.

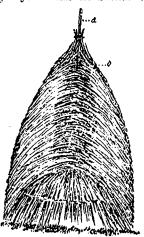
A VERY strong trough may be made of sawed lumber, as shown in the accompanying engraving, after sketches by J. C. Early. For every three feet length of trough use a plank support



two or two and one-half feet long, twelve inches wide, and two inches thick. Saw out from the middle of each piece a right angled triangular piece with sides forming a square of the same length. Use boards one inch thick for the sides, and nail the trough together as usual with the triangles sawed out of the two inch stuff for the ends. Now set the trough in the angles sawed out, but far enough away from the end piece to nail from the inside of the trough into the supports, and put the triangle sawed from the supports for the center, and nail that after cutting enough from the bottom corner to let the water run through.

Stacking Cornstalks.

CORNSTALKS have a certain food value, especially on a dairy farm. But to appreciate their full benefit one must have knowledge of right methods in curing them. At husking time, in the wet fall, after they have stood for weeks in the shock, the thick part of the stalk still contains a considerable amount of sap, so that if mowed away in the barn they are likely to mold and spoil. On the other hand, if they are left in the field until dry enough for the barn, the leaves and tops are leached by the storms. All things considered it is best to stack the stalks as soon as possible, even if they are to be put in the barn a month or two later. When sufficient corn is a month or two later. picked to leave stalks enough for one stack, hoose a good day for the purpose, leave the husking, and stack what stalks there are. When properly built, nearly all the butts of the stalks are on the outside of the stack, and the curing process continues without injury to the finer portions. A month or two later, if it is desired, they may be drawn into the barn without injury. A cold, windy day is not good for stacking, because it makes the stalks brittle and much of the best parts crumble and are lost. They need just the opposite weather, that is, still, warm and damp—a dampening day instead of a drying day. Then the stalks will be soft



and pliable as oiled silk, and pack away in the stack in the best condition.

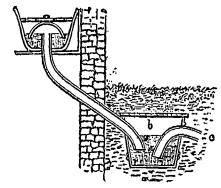
When the stack is completed up to where it is only four feet across it is time to put on the top. To do this procure a smooth stick, a, about eight feet long, which has one end made tapering and sharp. Thrust this nearly half its length into the top, being careful to have it in the centre and exactly perpendicular. Set up bundles around this and tie them firmly at the top. Now, if another twine, b, is drawn around lower down, it will give additional security against high winds, which sometimes blow away the tops of the stacks.

Waste Matter.

WE are indebted to the Country Gentleman for the following very interesting notes on disposing of farmhouse refuse. The suggestions are in reply to the following question:—

In building new house, I have arranged by sanitary plumbing and a sewer 350 feet long, to carry away the waste from kitchen, water closets, &c. My idea is to use this waste, not merely to get rid of it. I should like suggestions about taking care of and disposing of it at outlet of sewer. From outlet there is a fall of two or three feet to the rod for considerable distance.

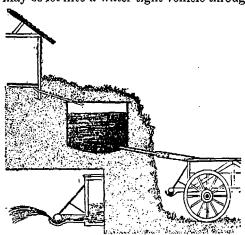
There are so many ways in which this waste water and refuse matter can be disposed of, that one is not able to decide which is best without examining the conditions on the grounds. As a general rule, however, it is best to use perfectly dry matter as an absorbent for the closet on The kitchen slops being many times the snot. greater in bulk may be carried off in the sewer, then applied for irrigation in such way as may be found convenient. The absorbent used for the closet may be road dust, perfectly dry, pulverized soil, dry peat or sifted coal ashes. A mixture of road dust and coal ashes answers an excellent purpose, provided the road dust contains clayey matter; clear sand is of little use. The contents being kept perfectly dry may be shovelled out as often as convenient. But if both substances are turned into the sewer to-gether they will form liquid for discharge through the sewer and greater care will be necessary to prevent its waste or escape. If the sewer is dug in, in contact with soil, much of its contents will be absorbed on the way down, and



the remainder of its contents must be secured by absorbents as they accumulate. If lead pipe is used for conveying off the kitchen slops it will be liable to become choked with grease. This is prevented by the contrivance represented in the annexed cut, which nearly explains itself. A two-inch lead pipe runs down and out into a stout oil-cask (which is below frost), discharging under water, thus making a second trap (besides the one in the kitchen sink), collecting the grease on its surface. The outlet pipe, starting a third from the bottom, enters the large stone or metal pipe and carries off the contents.

Liquid Fertilizers.

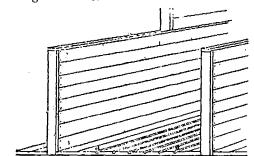
How to handle liquid fertilizers has been a study with the best farmers, and has been solved generally by the use of large quantities of absorbents, like dried muck, straw or other bedding. But this is expensive economy, as these absorbents are bulky, costly because hard to get in abundance, and the vehicle used to absorb the fertility increases the labor of application to the field. The plan of water-tight troughs and cisterns formerly adopted, has been abandoned, because requiring pumping and straining, or else difficulty ensued in distribution. But with the rolling land to be found on many farms it is entirely feasible to build a cistern or reservoir in a side hill; as shown in the illustrations from sketches by Hollister Sage, of Connecticut, to which the liquid may be conveyed by pipes or troughs from the farm drops, and from which it may be let into a water-tight vehicle through



a rude flood-gate or large pipe and faucet by gravity, the wagon standing below the level of the reservoir. Nor will this method be made less valuable in clogging in passing the fluid from the cistern to the wagon, because the need of power and pumps is dispensed with. The old-time sprinkler must be abandoned also, to have the greatest satisfaction. In its place must be substituted the liquid spreader adopted on most city street-sprinkling wagons. It is merely a saucer-shaped vessel and stationary ball at the end of a pipe, through which the water flows. On being freed from the pipe it is forced by the ball downward upon the saucer, from which it is spread regularly over an even area. Straw, sawdust and other refuse passes through. Two of these spreaders are used behind one cart, and rarely make trouble, even when the weather freezes. Such a cart is useful also in watering crops in dry weather. Filled with water it may be left in the centre of the lawn or garden and the whirling lawn sprinkler and hose attached to it to play all night over grass, strawberries, etc. The advantages it presents are numerous. It may be only partly filled with the liquid fertilizer where the stuff is too strong, and its contents diluted with water before distribution. This plan is often advantageous where the liquid is hauled up a steep hill. A light load of one-third or one-half a tankful may be carried up the slope, and be diluted, when in the field, with brook water.

Grooved Stable Floors.

Ir costs but a trifle more to fit open stalls with grooved or channelled flooring, and this works so satisfactory that it should come into more general use.



The plank used should not be over eight inches in width, and for a two-inch plank the groove should be cut seven-eighths of an inch wide and one inch deep. This can be done with a groove plane. With a common plane a V shaped groove can be quickly made by taking a little from the upper edge of both planks where they join. Both grooves are shown in illustration.

Live Stock.

Relieving Choked Cattle.

CATTLE frequently become choked by attempting to swallow a whole potato, turnip or apple, and unless discovered in time, death often ensues, and the attempt to remove the obstruction is often a failure. If the obstruction



INSTRUMENT FOR RELIEVING CHOKED CATTLE.

can be felt part way down the throat, one man should grasp the gullet and windpipe firmly below where the article is lodged. Another person should run a fork or rake handle, having the end blunt-pointed like a four-sided pyramid, down the animal's throat and gently strike the obstruction, each time giving the stick a quarter turn that the obstruction may be broken. After a dozen strokes, press hard on the obstruction, gently turning the stick around in both directions, remove it and if you find small pieces in a hole bored near the point of the stick, proceed as before. It will take but a stick, proceed as before. It will take but a moment to make a hole through even a hard apple. When this is done, the choking is greatly relieved. The obstruction can be crushed by heavy outward pressure on the windpipe, or by giving a dose of melted lard, or cotton-seed oil. Should the obstruction be far down toward the stomach, it is best to break it up or make a hole through it before trying to force into the stomach, as the latter often takes a heavy pressure to do this, and pressing so hard may cause internal injury, It will be observed that the form of the end of the stick prevents any injury to the windpipe.—American Agriculturist

THE ration that each animal can use to the best advantage will vary greatly.

Good feeding is by no means excessive feeding. It is the food that is digested and assimilated that benefits the animal.

On the feeding question there is more for investigation that, when carried out, will be of material benefit in making the farm pay better.

DIFFERENT rations are needed for growth than for fattening. Milk cows, or, in fact, all animals that are suckling young, need a different ration from what is best when fattening or working. The problem of feeding to the best advantage is gradually becoming a more important one. Farmers want to know which is the cheapest, at what price corn is cheaper proportionately than oats, wheat or barley, and at what price bran, oil meal and middlings can be purchased and fed to the best advantage.

IF a horse has a chronic lameness in either foot, the jockey can inject into the foot a solution of cocaine, which for the time being will render the horse sound; that is, it will dull the sensibility to pain for from half an hour to an hour and a half, and the horse will act as if he was sound. Another method in a case like this is to sever the nerves of the foot, there being two nerves, one on each side of the foot. This two nerves, one on each side of the foot. deprives the lower part of the limb of all sensation, and the horse will go sound for perhaps a year, when the nerves will form together again.

TRIAL and test for the past ten years, and the patient investigations of our dairy teachers and breeders as well, seem conclusive that the good qualities of a breed are transmitable, and that "good luck," when analyzed, is only the | building, 5 by 15, admitting space for feed-bins |

mating of two excellencies. A cow of great excellency, when mated with a sire that has noted dairy qualities behind him, will be far more apt to bring a heifer of great promise than the mat-ing of inferior qualities. Where the sire and dam are of high producing families of milkers, with large fat percentages, there is far more likelihood of a 14-pound butter cow than if neither had any family records. The fact is that there is an old dairy idol that has been "felled from its perch" in the last year, never to be again set up and that is that feeding will to be again set up, and that is that feeding will improve the quality of the milk a cow was born to, and if improvement is made in this it must be from the mating of high qualities, and the quality must come of breeding, not feeding; the quantity can be the only influence of the food. So it is that one is now beginning to hear that in the special breeds there are families noted for this or that, the result of the owners mating for special traits and peculiarities. This is the result, that desirable traits are secured in cows, the same as in breeds of horses for speed, strength or fancy movement before the coach. The day is at hand when men will tell of buying anything for a cow and "by tucking the feed to her" fashion her into the desired performance. The man who wants milk for a special line of trade may possibly yet find it as well to buy cows under certain limitations, but if it is quality that is wanted, then it must be bred for under the dairyman's own best judgment. The day of artificial or forced improvement of cows has passed. Cow, for excellence of milk and bettered quality, will be the result of breeding in the future. It has always been so, but except to the few, it has not been a recognized law of heredity.

The Poultry Pard.

Shelter for Fowls.

The necessity for separate shelter for farm fowls arises in many ways. First, if they are not so provided they will take up their quarters on the spars and rafters of barns, polluting the feed and causing no end of annoyance. Next, fowls cannot be reared at a profit unless properly cared for. They are of much importance and value if run on a paying basis, and to this end they must be comfortably housed. Fig. 1 represents the form of a house many readers

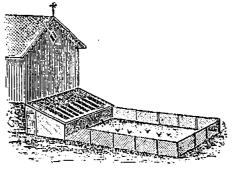


Fig. 1.

may be familiar with. The ground plan, fig. 2, shows that each pen has a number of nesting places where the eggs are laid. There are roosts to each pen also and moveable boxes are provided for the droppings. The length of the house illustrated here is 37 ft., and the breadth 15 ft, but any size according to needs, is as practicable as the size given. Besides the pens. a store-room is put in at the entrance of the

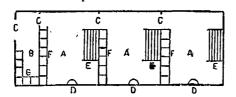


Fig. 2.—A. A. A. Pens; B. Store-Room; C.C. C. C. Doors; D. D. D. Outlets; E. E. E. Roosts; F. F. K. Nests; G. Bins and Bench.

and carpenter's bench, both of which you will find convenient about a well-kept poultry building. The pens have each a door entering from the other. The doors, as well as partitions of each pen, are made of wire-netting fastened to wooden frames, and so made in sections that they can be unhooked from one another and the entire building thrown into one, at the pleasure of the breeder—a convenience well worth try-ing to see its real value. When breeding ing to see its real value. When breeding several varieties, it is desirable to keep them pure and free from crossing, it can be done by having the outside runs partitioned off as the pens are within, keeping each pen separate from the other.

It does not suffice to give the hens corn, corn, corn, day after day. Bird and beast demand frequent changes of food as truly as man him-

THE man who puts fifteen eggs under a hen, instead of eleven or thirteen, so as to make sure of a good lot of chicks, wants more than he will get.

If the "shut in" hens are given a chance at cabbage, they will enjoy a treat and be benefited. It will not take two minutes to set out a head or two in the yard. They will do the

GEESE begin to lay early in March and will lay fourteen to eighteen eggs; these should nearly always be set under hens, as it is often the case that the mother will not become broody until late.

Do not wait till the combs and toes are frozen before you put the hen house in order for the winter. The extra lining and banking and that extra window can be seen to just as well in September as December.

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.

One can in general say that 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,



Mr. McKee, of Toronto, contemplating the Largest Ex-bibit in the Annex.—St. Louis Farm Machinery.



Some Christmas Fun.

It was we three boys that had it; I and my brother Jack and my cousin Bony. And it was fun, no mistake-all but the bread-and-milk part; and that wasn't so very bad when you came to think about it afterwards.

In the first place, you see, it was Christmas morning, and I and Jack and Bony we went away down in Mr. Scavey's woods, looking for running evergreens to trim up the meetinghouse. And we didn't find a very great lot, so we kept going and going in Mr. Seavey's old wood-road, further and further, till pretty soon we saw smoke through the trees.

"What's that!" said Jack, stepping up.

"Looks like smoke," said Bony.

"Tis smoke," said I.

- "I know that," said Jack; "but what's it there for? Nobody lives in these woods." said Jack.
 - "That's so," said Bony.

"So 'tis," said I.

"Any old how, I'm going to find out!" said Jack; and Bony and I said we were, too.

So we crept along and crept along, just as easy, till we came almost up to a little shed made of bark and stuff, with a canvas door.

"What's that?" said Jack.

"I guess 'tis," said Bony. "Let's go home."

"Indians," said I. "Ned Hayes said there was a fam'ly of 'em round, making baskets."

"So he did," said Jack. "I say, boys, let's we go and peep in. There's cracks enough, and I never saw any Indians close to."

And I never had, nor Bony, and so we said e'd go. At first I thought 'twould be kind of we'd go. At first I thought 'twould be kind of mean—I know if I was an Indian I wouldn't want folks pecking through cracks at me; and then I thought 'twouldn't, because I wanted to

So we went up easy. There was quite a wide crack on one side, and we took turns pecking. There was a man-Indian, and a woman-Indian.

and a little boy-Indian.

They weren't the reg'lar Indians that you read about, you know—the kind that paint all up, and ride round on ponics and scalp people. They looked a good deal like common folks, only a lot blacker, of course; and the Indian man was sitting on the ground weaving a basket, and the little boy was cuddled down in one corner on some boughs, with his eyes shut.

He wasn't asleep, though, for pretty soon he opened 'em, and 'twouldn't take half an eye to

see he'd been crying.

There was a fire in the middle with a tin pail hung over it on a stick; and in a minute the Indian woman took it off, and 'twas potatoes.

And they sat down round and commenced to eat'em, with salt on,—just potatoes and salt, and not a thing else, and 'twas Christmas Day! And the little Indian boy didn't eat much; we

could see that. No wonder, was it?

And his mother looked at him just the way I've seen my mother look at her boys when she thought maybe they were going to have the measles or something. And she and the Indian man jabbered back and forth a minute, and she got up and went to a little box there was, and looked in, and jabbered a little more, and tipped the box down-side up, and there was just a few crumbs fell out.

"Understand?" said Jack, backing off.
"There's nothing for him but 'taters and salt."
Bony and I nodded and waited for Jack to say something else. We knew he was goir g to say it.

"S'pose 'twas you?" said Jack. "How'd

"S'pose 'twas you?" said Jack. "How'd you feel? Let's we fetch 'em a Christmas dinner, boys."

That's what we knew he was going to say.
"All right!" said Bony; "we will."
"That's so," said I. "But how?"
"Borrow one of his baskets," said Jack: "I saw more'n a dozen in there."
"Maybe he won't lend one." said I.
But he did. Jack stepped up to the canvas door, and asked him, real polite, and made signs that we wanted to carry the evergreens in it, and we'd bring it back. And he jabbered to his wife a minute, and then threw a basket to Jack, and said, "Tak it!"

I didn't think that was a very polite thing to

I didn't think that was a very polite thing to do myself, but I s'pose 'twas his bringing up. So we took the basket and went home, after we'd filled it with evergreens, and dinner was all ready.

My! but we were hungry! If you don't believe it, you'd better just tramp round in the woods four or five hours some snapping cold

day, and see for yourself.

We rushed in all of a breath. Aunt Esther's folk's were there, and Uncle Jedediah's.

"Why, boys!" said my sister Katey. "What are you going to do with that big basket?"
We'd turned the greens out, you know.

We'd turned the greens out, you know.

We told as fast as we could, and that was pretty fast, because we all talked at once.

"Dear me!" said mother, and she looked sober as a judge, though Jack said afterwards he saw her eyes twinkle. "I don't believe I'll have enough for another family, boys. I guess they'll get along well enough." they'll get along well enough.'

I just looked at her. I didn't want to think my own mother'd be mean. But Jack, he fired

right up.
"Now, mother," he said, "you wouldn't say that way if you'd seen 'em—nothing but taters and salt, and cold's Greenland, and Christmas to boot," said Jack. "Mother, I—I"——

And the tears came in his eyes till he couldn't talk, he was so earnest. That's my brother Jack all over. But mother laughed easy.

"Well," said she, "I don't believe there's enough for all, but if you three boys will eat bread and milk"—

Now! Just give a guess how we felt. Bread and milk! And right before our faces and eyes was a table loaded all up with cakes, and nuts, and apples, and roast turkey, and pies, and four kinds of preserves, and sliced tongue, and cold chicken! I never'd thought it of my mother, true as true! And we were AWFUL hungry

I and Bony looked at Jack, and we all three looked at each other for more'n a minute, and then Jack cleared out his throat and straigh-

tened up.
"I will!" said he.
"I will!" said Bony.
"I will!" said I,

And we did; we took bread and milk in the kitchen. That's the part there was'nt much fun about.

When we were most done, Katey poked her

head in the door.
"Do you want us to put your share of the dessert in?" said she.
"Yes-es, ma'um!" said we.

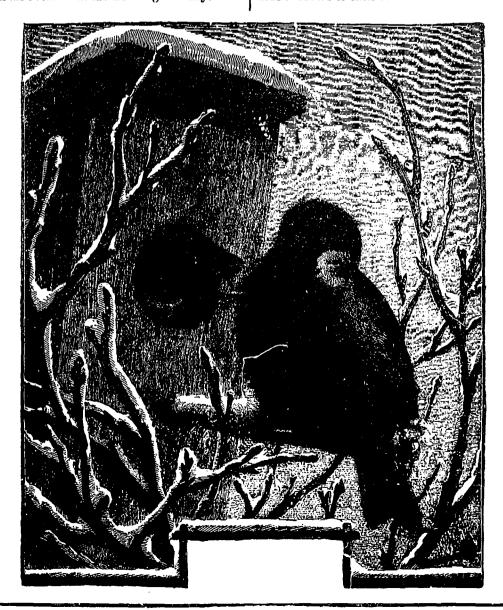
But it was worth while, when Jack set that basket inside that canvas door. I and Bony we stood at the crack and pecked in, if 'twas mean.

My! but you'd ought to've seen the little chap jump and clap his hands! Didn't he go into the cake and pie and stuff—and didn't they all three, and jabber, jabber, jabber all the time! I tell you one thing; there was enough Christmas dinner in that basket for ten boys.

We didn't have our Christmas dinner till New Year's, and then we did. Mother was just try-She says it's easy enough to give away ing us. other folks' things.

Two or three days after Christmas that Indian man walked up to our back door and knocked; and when Katey went to the door, he gave her

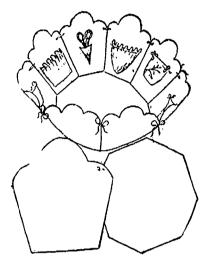
a bundle.
"For boys," he said, and then he walked off. There were three splendid bows, and half-adozen arrows to each bow!





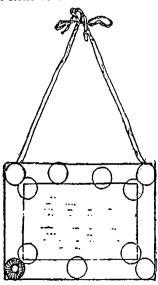
Christmas Hints and Helps.

It is sometimes desirable to pack a work basket for a journey. Our illustration shows the most convenient form for this purpose. The bottom is an octagon of cardboard measuring three inches on each side. Eight pieces cut



with scalloped tops are required for the sides. Cover all of these on both surfaces with any material; silk, velvet, satin, cretonne, or cashmere, basting the goods neatly over the pasteboard and overhanding together. Put a layer of wadding over the bottom, sprinkling it with sachet powder before putting on the outside. Sew little pockets to the side pieces for holding the various implements of the needlewoman, and attach the sides to the bottom, overhanding along the straight line. Work eyelets in the sides at the top and tie together with cord or narrow ribbon, so that when necessary the basket can be laid flat. This little article sells well at church fairs and bazars.

A PRETTY little wall decoration for a bedroom can be made as follows: Take of thin board, or thick card-board, a rectangle, five by four and one-half inches. Cover it with velvet, or plush, or silk. To the center, glue a smaller rectangle of Bristol board, leaving a space of velvet one inch wide, all around. Two pieces of ribbon fastened to the back and tied together at the other ends, serve to hang it up by. Paste a piece of cambric or silk over the back, to cover the edges. On the Bristol-board, print one or two little verses:

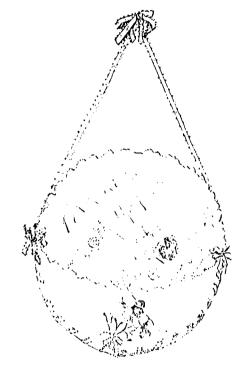


Make a little fence of trust all about to-day;
Fill the space with loving work, and therein stay.
Look not thro' the sheltering bars upon the morrow:
God will help thee bear what comes of joy or sorrow.

Outside of this little card, and on the velvet, set little brass rings which have been covered with double crochet of gold-colored silk, arranged in any order desired.

A case for unanswered letters may be made thus:

A circle of rough drawing-paper—Whatman's is best—10 inches in diameter, must have the upper edges "jagged" with dull scissors; a cresent moon of the paper, also with its upper edge notched, is laced to the bottom of the circle with pale-green baby ribbon with a picot edge. To do this, cut slits with a sharp penknife at regular intervals in both circle and crescent; draw the ribbon through and fasten at the sides with bows and ends. Touch the



ragged edges with bronze green paint and in irregular characters paint with a fine brush. "Pansies—that's for thoughts" Paint pansies on the pocket and hang it up by baby-ribbon. Cost, five cents. If you cannot paint, do the lettering and panies in India ink,

For a courtplaster case, take a piece of ragged edged vellum 10 by 2 inches, folded like a book and tied with baby-ribbon. Inside, place leaves of vellum, and into slits cut in these leaves insert strips of pink, white and black courtplaster. On the outside draw scissors, knives and sickles—all murderous-looking instruments—and the motto, "This was the unkindest cut of all."

THE cover of this pretty needle-book, illustrated in Fig. 1, has the usual two pieces of cardboard for foundation, each piece being covered smoothly on one side with nice silk.

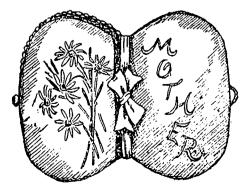
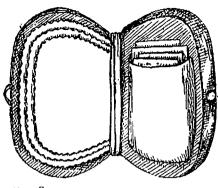


FIG. 1. OUTSIDE OF NEEDLE-BOOK.

For the front cover, the two pieces are simply overhanded together, while—that the broad edge may serve as a pin cushion—a half-inch layer of curled hair is placed between the two pieces for the back cover, and the edge is

covered, all around, with a half-inch strip of silk or flannel, which is overhanded to both edges.

The front cover has the word "Mother" embroidered upon the outside, and three pinked flannel needle-leaves are fitted to the inside.



PIG. 2. INSIDE OF NEEDLE-BOOK.

The other cover is of figured silk, and on the inside is arranged a little flat pocket, as shown in Fig. 2, for papers of needles,

Narrow ribbon is tied closely over the joining

Narrow ribbon is tied closely over the joining of the covers, while the fastening is accomplished by means of a heavy silk loop and a round-headed gilt pin.

Figured yellow silk was chosen for the covers, but the figure appears only at the back, the rest being cut out of the plain ground between the figures. The lettering was in shades of darker yellow and brown, to match the colors in the figure. A figure on each cover and one on the little pocket would be pretty and easily arranged.

Another serviceable present is this cunning

little pocket pincushion, modeled after a chestnut. To carry out the idea, select the colors as true to nature as possible. Cut two pieces of wiggin the size desired; cover on one side with brown satin ribbon, and overhand a little piece of mouse-gray velvet neatly on top, to re-



present the light color on the nut; work a number of long stitches on the sides in silk of the same shade; overhand the sides together, and fill with good pins.

CHRISTMAS is coming on flying cet, and unless pocket-books are plethoric, busy fingers must be active or the stockings hung by the chimney with care will be filled with emptiness.

In the Artists' Exhibition of 1893 at the New York Academy of Design, there was exhibited an oil-painting by J. L. G. Ferris, entitled "Sweet Charity." Its richness of coloring commanded instant attention, while the lesson it taught was so impressive that one naturally returned to it for a second view. Its subject is a young lady of colonial times who is on an errand to one of the poorer families of the town. She has a sensible, charming face, which expresses with remarkable fidelity the sentiment of her errand. There is not a home that this charming picture will not ornament. It must be seen to be appreciated. "Sweet Charity" was purchased by the Publishers of The Youth's Companion and has been reproduced in colors in large size, 14½ x21. It will be sent to all new subscribers to The Companion who send \$1.75 for a year's subscription, and the paper will also be sent free from the time the subscription is associated to Tanagary 1891 and for a full year is received, to January, 1891, and for a full year from that date, to January, 1895. This offer includes the Double Souvenir Numbers published at Thanksgiving, Christmas and New Year's, Address the Massey Press, Toronto, Can.



WILLING TO WORK.

Lady of the House.—If I give you your breakfast, will you work for it? WANDERER.—Yes; if you've got anything in my trade, LADY OF THE HOUSE,—What is your trade?

The Star.

WANDERER.-Landscape gardener.

CHRISTMAS Eve— and the mellow light Of the Star in the East was aglow O'er the Magi, hastening through the night. In the desert, long ago.

Christmas Eve, and the gentic light Of the Star in the East was aglow O'er the lambs, asleep with their shepherds by night. On the hillside, long ago.

Christmas Eve—and the golden light Of the Star in the East was aglow O'er a Baby's brow, in the holy night, In a manger, long ago.

Christmas Eve—and the blessed light
Of the Star in the East is aglow.
As it shone of old, through the sweet, still night.
O'er Bethlehem, long ago.

—Willis Road M.

-Willis Boud Allen.

Pick Our His Bear.—How many there are of us who would prefer to pick out our own punishment like the little boy thus described in Harper's Young People:

The boy was covered with must to the top of his kilf skirt; there were mud patches on his face and hair, and he had lost his hat, but in his hand he grasped a chicken—a limp, wet, and muddy chicken. It was the cause of his trouble, for he had thrown stones in the yard that afternoon, and had accidently killed the chicken. It is sister had declared that she could not love such a cruel boy. Then he had disappeared, and had been found stuck in a swamp.

swamp.

When he saw his mother his feelings overcame him, and

When he saw his mother his feelings overcame him, and he burst into a loud wail.

"My sister doesn't love me! my sister doesn't love me! I want to get losted in the woods, and let the bears cat me!"

"But" said the mother, "you cried when you pinched your fingers with the clothespin, and it would hurt you far more if the bears should cat you."

The boy was interested, and dried his tears, "I mean a kind, tame bear." he said, choking a sob.

"But a tame bear has sharp teeth."

The boy rubbed his eyes with his muddy hand, and was lost in thought for a while. Then he raised his head. His countenance was cheerful, there was not a trace of sorrow in his tone, and he cried, "I mean-I mean a nice little curly dog wifout any teef."

Artist—"Miss Brownie-Brown-Brown, who is to marry a prince, won't let us have her photograph for publication." Editor—She won't, ch? Tell the foreman to use one of those cuts labelled 'Before Taking."

Bertie—"You say he called you a donkey! What did you do?" Fred—"Nothing." Bertie—"Well, if a man called me a donkey I'd kick him with both feet." Fred— "Flust so. Any donkey would do that!"

She.—"Is Charley proving to be much of an artist?" He.—"He is hustling like a book agent and spends most of his time trying to get up some kind of a scheme to produce more pictures with less labor. Just now he is working on a plan to produce paintings by electricity."

Mamma.—"Were you a good little boy while I was away?" Little Johnny.—"Yes'm. I went into the store-room to see what was there, and it was empty, and the wind blew the door shut, and I couldn't get out till Jane came just a little while ago."

Mendicant—"Can't you give a poor blind man a few cents?" Banker— "No! The outlook is so bad that you are to be congratulated."

"Is the boss at home?" Housemaid—"No, Tuesday is bargain day, and she never gets home until real late in the afternoon."

Physicians are made, not born—no boy ever yet took naturally to medicine.

She—"Do you smoke eigarettes?" He—"Oh, no. I come from Chicago. I smoke hams."

"Is Brown still discussing the financial situa-tion?" "No; he's done gone to work to get a living!"

By the way, why doesn't the conductor punch the train-robber? He might at least give him a check.

Ont in Dakota the doctors decided that a man's constitu-tion will not stand eigarette smoking. The Legislature passed an anti-eigarette law, and now the courts hold that the Constitution of the state will not stand that. If there be anything constitutional about the eigarette it is time to ascertain what it is.

ascertain what it is.

"Forest fires," remarks a certain contemporary, "seem to follow a certain fatality, always originating in the dryest season of the year." This discovery of fact, if it is a fact, is of incalculable importance, second only to the discovery of the New England schoolboy who paralyzed his teacher one dry as he was poring over his "loggerfy" by calling attention to the remarkable coincidence to be found in the fact that the head-waters of navigation of rivers are invariably at some large town. If forest fires would not follow a certain fatality, but do their originating at x season when the ground needs drying, or when the parched carth is overlaid with "the beautiful" they would be far more welcome. There is a possibility of forest fires coming when they are not wanted.

The goode in this com-

Everything in nature yields to the irresistible charm of silence on a beau-

Down in Lumbkin Co., Ga., hogs are dying from sunstroke. Here many of them ride in open street cars and thrive as though they had the making of the elimete. climate.

a train.

a train.
Out of Place.—" You have of course somebody to clean the boots and knives, and somebody to do the kitchen and—" "Oh, of course, and I send the beds out to be made. I wanted somebody only to be looked at—but you won'tdo. Good morning."

"I wonder what is meant by cardinal principles?"— "I am sure I don't know. In the early times of cardi-nals they didn't seem to have any principles."

ANARCHY.— Destruction, and pipes and beer among the ruins.

"I'se done gib up my place, waitin' in de hotel," he said. "Whuffoh?" "Dev done 'sisted ou my eatin' mushrooms befoh de gues'es ter show dey wa'nt toadstools."

Husband (anxiously)—
"You should not carry
your pocketbook in your
hand." Wife creassuringly)
—"Oh, it isn't at all
heavy."

Strange to say, many brokers are best pleased with the stock market when it is simply unbearable.

Clerk in eating house creading newspaper).—" Here's a new recipe for making chicken pie." Proprietor.—" Let's hear it." Clerk.—" One chicken——" Proprietor.—" That II do. It's clear the fellow who wrote that doesn't know anything about cooking."

The people in this country who are working for glory are getting nothing else and a very small allowance of that.

tiful summer night, the mosquito excepted.

There is never a day passes that the faithful baker does not knead bread.

It is only the women who can lawfully hold up

"What makes the men love Mary so?" The jealous maidens cry; "Oh, Mary doesn't sing, you know, And more—she doesn't try."

Spectator—"Why, the center-fielder is singing while running." Stockholder—"Yes, that's a trick of his." Spectator—"What's he singing?" Stockholder—"After the ball."

Mamma—"When that boy threw stones at you why didn't you come and tell me, instead of throwing them back?" Little Son—"Tell you! Why you couldn't hit a barn door."

Willie Keep—"I was once very strongly tempted to blow out my bwains." Ethel Knox—"Did you do it?" No matter how economical he may be, or how large his wages, the coal-miner often finds himself in a hole.

"Well, Anna, have you found the rose for my hair yet?"
"Yes, madam; but now I cannot find the hair."

Pessimist—Don't you wish you'd never been born?"
Book agent—"No; I let other people do that for me."
Miss Quidnune—"Do you think that genius is hereditary!" Praxteles Beau—"I can't tell; I have as yet no children."

Mr. Crimsonbeak—"Isn't it hard work minding the baby?" Nurse girl—"Not half so hard as trying to make the baby mind me."

Watts—"How did you come out in your little wrestle with the Chicago wheat market?" Potts—"I went after wool and got worsted."

Barber—"Do you want a haircut?" Victim—"Not only one, but all of them."

Connidrum—"What's the difference between a cat and a legal document?" Answer—"The one has clawses at the end of its pawses; the other has pauses at the end of its clauses."

Photographer—"Now, madam, if it is not asking—er—too much of you, will you—er—kindly make an effort to—ah—to look pleasant? It will only be for a moment."

After the fair is over—
After the bills for hash;
Many may be in clover,
But few at the best in cash!

The latest method of cloping is by bicycle. In such in stances it is love which makes the wheels go round.

"What makes you think your son ought to go into the sugar business?" "He has a sandy complexion."

"Did you see Bill Jones in Chicago?" "No; saw a bigger Bill than him." "And who was it?" "Hotel bill." Principal—"You had a deficit in the cash account yesterday. Has the error been discovered?" Clerk—"The error, yes; but not the cash!"

"Madame, I ama man with a history," began the visitor, "Sorry," responded the lady of the house, "but we don't allow any book agents around here."

" This life is full of ups and downs. As through the world we go; But th' only kind of 'up' these days Is' hard up '—ain't it so?''



A WRONG DIAGNOSIS.

Timep Harry.-Lady, could yer belp a poor feller a little; I've got a hackin' cough an'a headache?

Mrs. Kindlings,—Well, I've got a little wood outside you could hack, and it might

The Diana.—Much obleged, Mun; but yer see my headache aint of ther splittin'

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:

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

THE CHATHAM FANNING MILL.



	유플 등 등 등
1000 sold 1 881)	5 m 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
1330 sold 1885	1 5
2000 sold 1886	こうざゃき
2200 sold 1887	E_EE_
2500 sold 1888)
3600 sold 1889	2 % 2 %
1000 sold 1890	2 _ 1 2 5
4500 sold 1891	E S S S S
$5000~{ m sold}~1892J$	≅ ⊆ ⊊8

Parkersville P.O., Nov. 21, '92, DEAR SIR.—The mill I bought from your agent has given entire satisfaction, and I have much pleasure in recommending it as a first-class mill. Yours truly,

WM. CHALMERS.

34,000 Chatham Mills now in use.
Over 10,600 Bagging Attachments now in use.

Bagging Attachment is run with a chain helt 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.

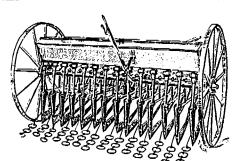
For Sale by all Agents of Massey-Harris Co., Ltd., in Manitoba and North-West Territories.

Some Additional Clubbing Rates.

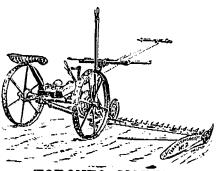
		Tire with
•		'_ Massey s
		Illustrated.
Weekly Mail, Toronto (including Farm and Fireside) weekl	y \$1 00	\$1/10
Family Herald, Montreal (see advertisement re premium) week	y 1 00	1. 10
Farmer's Advocate, London (renewal)semi-monthl	y 1 00	1/25
Farmer's Advocate, London (new subs)semi-monthl	y 1 00	1 10
Daily Witness, Montreal dail	y 3 00 -	3 ()()
Christian Herald, N.Y. (Talmage's) weekl	y 1 50	1 60
The Book-Keeper, Detroit monthl	y 50	80
National Stenographer, Chicago monthl	y 1 00	1 10
Phonographic Magazine, Cincinnatimonthl	y 100	1 10
Business, N.Ymonthl	y 1 00	1 30
Housekeeper, Minneapolis, Minnsemi-monthl	y 1 00	1 10
McClure's Magazine, N.Y. (illustrated)monthl	y 1.50	1 60
Munsey's Magazine, N.Y. (illustrated)monthl	y 1 00	1 20
The Idler, London, Eng. (illustrated) monthl	ÿ 3 00	3 00
Pall Mall Magazine, London, Eng. (illustrated) monthl		8 00
Lippincott's Magazine, Phila monthl	v 3 00	8 00
Worthington's Magazine, Elartford, Conn. (illustrated)monthl	y 250	2.50

If any other paper on this list, in addition to the ONE chosen with Massey's ILLUSTRATED, is wanted, we will quote price on application.





Massey-Harris Shoe Drill.



TORONTO MOWER.



MASSEY HARVESTER

THE MASSEY-HARRIS Wide-Open Binder

THE ONLY OPEN-BACK BINDER THAT HAS PASSED BEYOND ITS EXPERIMENTAL STAGES.

SECOND SEASON
IN AUSTRALASIA.

THIRD SEASON
IN EUROPE.

FOURTH SEASON
IN CANADA.



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.

ITS LATEST VICTORIES IN FIELD TRIALS

Were obtained in FRANCE in the Harvest just closed,

Winning 7 Firsts in 7 Successive Trials

And was Awarded EQUAL POINTS with the Hornsby (English) Open-Back Binder at the

ROYAL TRIAL, HELD AT CHESTER, ENGLAND.

ALSO AT THE

GREAT FIELD TRIALS, SOUTH AUSTRALIA. held September 29, 1893, at Willowie,

MASSEY-HARRIS FIRST PRIZE, defeating Hornsby Open-Back, Deering, and McCormick.

ALSO AT OROROO, SOUTH AUSTRALIA, 18th OCTOBER,

MASSEY-HARRIS FIRST, defeating Hornsby, Deering, McCormick, Woods & Johnston

ALSO AT BALAKLAVA, SOUTH AUSTRALIA, SEPTEMBER 29,

MASSEY-HARRIS FIRST, Hornsby 2nd, Buckeye 3rd,

Massey-Hairis Co. Ltd. TORONTO, CANADA.



ibd Ibnipilu

Sewed Cotton Duck Belting

For Endless Thresher Belt, Main Drivers, and for all places where belts are subjected to moisture or atmospheric changes, the GANDY stands paramount.

For further information, prices, etc., write-

The Gandy Belting Co. BALTIMORE, MD.

Canadian Agent, J. H. MORROW, Brighton, Ont.

INSURANCE

ACCIDENT. Employers' Liability, PLATE GLASS

Capital (BRITISH and) over \$3,500,000

EASTMURE & LIGHTBOURN. TORONTO.

GOOD AGENTS WANTED.

A GREAT OFFER!

GREAT PAPERS . . AND GREAT PREMIUMS.

We are in a position to offer Massey's Illustrated and the Family Herald and Weekly Star, of Montreal, for one year for \$1.10. This offer entitles the subscriber to a choice of the two great premiums given by the publishers of the Family Herald. These premiums are the "Star" Almanae for 1891, a smerb book of 450 pages, or if preferred a copy of the great Family Herald Souvenir Picture, which retails at twenty dollars. The premiums—Almanae and Picture—will be ready about the end of November, and will be forwarded in the order in which the subscriptions are received. Subscriptions to the paper may begin at once. Remember the offer of a choice of premiums holds good only to people who subscribe during the autumn. Afterwards the choice will positively be withdrawn.

TO PUBLISHERS AND PRINTERS.

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.

HAVING

A farm, a garden, a village lot, a home in the city or village or country, or expecting to have one, it will PAY YOU WELL to scenre invaluable Help, the Best Information, the thousands of Plain, Practical, Useful Hints and Suggestions given in the

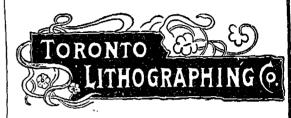
American Agriculturist

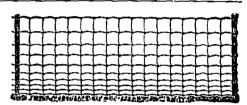
All prepared by thoroughly experienced, intelligent men, who know well what they talk and write about.

Nine hundred engravings in each volume, bring clearly to the understanding a great variety of labor-saving, labor-helping plans and contrivances, illustrations of animals, plants, buildings, household helps and conveniences, pleasing pictures for old and young, etc., etc. Only \$1.50 per year, postpaid. Sample copy free on application.

THE AMERICAN AGRICULTURIST,

52 and 54 Lafayette Place, New York, N.Y.





OUR SPECIALTIES.

Every rod of our fence is made from wire drawn especially for our use, as common soft wire would not hold the coil. There is a SPRING in every foot of fence, instead of one in forty rods. The ties are only one foot apart, instead of several feet, as in others.

Send for Free Monthly Paper and Price Lists.

PAGE WIRE FENCE CO. OF ONTARIG. LTD.

WALKERVILLE, ONT.



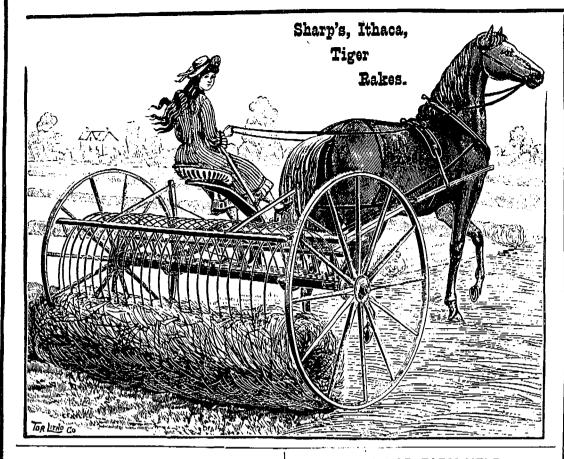
Largest circulation of any scientific paper in the world. Splendidly illustrated. No intelligent man should be without it. Weekly, \$3.00 a year; \$1.50 six months. Address MUNN & CO., PUBLISHERS, \$61 Broadway, New York City.



ROGERS' PEERLESS MACHINE OIL

EVERY STABLE SHOUTD HAVE EERLESS HOOF OUNTMENT

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





BOYS FOR FARM HELP.

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 Farley avenue. Toronco.

MASSEY'S ILLUSTRATED

An Independent Journal of News and Literature for Rural Homes.

PRINTED AND PUBLISHED BY THE MASSEY PRESS.

- Editor. 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.

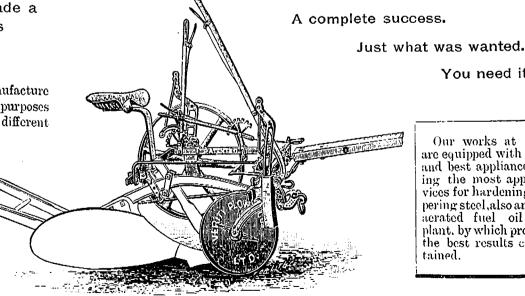
LTD.

PLOW RIDING ATTACHMENT.

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

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

American Soft-Centre Steel **MOULDBOARDS** on all our Plows.



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 acrated fuel oil burning plant, by which process alone the best results can be ob-

tained.

You need it. Try it.

YERITY PLOW Co.

BRANTFORD, ONT., CANADA.

THERE is no excuse for any home, be if ever so humble, not being provided with good liternturessow triays. Good reading matter is essential to good living. Nothing indicates more markedly the progress of this age than the guest quantities of magazines and periodleads which are delivered through the Post Offices of every city, town, village and hamles at such low subscription rates. What would your grandfather have thought of Masser's

nt such low subscription rates: What would your grandfather have thought of Masser's Liuses ares at fifty cents per annum? Popular—outertaining—instructive, it gives the most for the least money of any nagazing populated. Sample capy of Masser's Lieuwra view sent free. Special features in the Christmas Number. Drop s a post sum. Our diabscription Agency offers

Any the saiding as 30 CENTS or a year's inhecription to lasses in little tracked his y by sanding the subscription through as being also at the said subscription through as realist redicated by a protect appoints back. See examples below. Our ub price as a short induced by the said. See examples below. Our ub price as a short induced by their cost to us. Note them. It ou want the difference Wealth Mail, or any other paper not on our list.

N.B.—When MORE THAN ONE periodical in the list is wanted the aussign of the prices for many periodicals manifemed are below cest to us) to the prices of those marked thus. To ceuts many be added, and those marked thus 1,15 cents must be added. All others may be had at prices quoted. Postage is prepaid in every instance. Sind in subscriptions party and avoid delays incident to the great rush of buildness at the first of the year.

PRESET PRESIDENCES. Publisher Cong.	WERKLY PERIODICALE. Publishers Cub	MONTREY PREIGUIGALES Publisher Club
THE PARTY NAME APPEAR.	GRUERAL LIPERATURE	Leterature for the Home &c.
ecking Claim Roomto 1.	The Home Journal N.Y. \$2 00 kg 66	Ladies Home Journal Phila (thus.)
Vockly Empire (Foronto (With promium) 100 40 Veskly Dewe Turinto (With premium) 100 50	Literary Digest, N. V. (new subs.) 3 00 2 60 Public Optoion Washington, D.C. (ren.) 8 00 2 70	Joanest-Miller Illus, M.y., Washington D.C., 1 00 70. Arthur's Home Magazine (Illus, Flille, 1 50 1.10.
cekly Witness Montreal andly Perild and Star, Montreal (premium) 1 00 60	" (new subs.) \$ 00 2 60 For Juveruss.	Good Housekeeping, Springfield, Mass. 400 170 Cottage Bearth, Boston, (Illus) 150 100
ockly describe Montreal 100. 80	FOR JUVERURS.	Cottage Marth, Boston, (Illus.) 1 50- 1 00 Godoy's Magazine, N. Y. (Illus.) 8 00 2 50
Detroit Pitts Pitts Detroit 1 1 00 60 10 100 100 100 100 100 100 10	Youth's Companion; Boston (renewals) 1, 75 1, 60 (now subs.) 1, 75 1, 50 Harper's Young People, N.Y. 2, 00 1, 50 Golden Daya, Phila. (6 mos. half rate) 3, 00 2, 50	Farm, Fireld, Stock, &c.
eckly Express, Burgato 100 00	Harper's Young People, N.Y. Golden Dava, Phila (6 most half rate) 3 00 2 50	Can Live Stock and Farm Journal (also House)
nter Geran, Cineago	L. MCTENTERIC	hold Companion) (bul. of year free) 100 60 Canadian Poultry Review, Toronto 100 60
cekly Malland Express N. V. 100 80	American Machinist, N.Y 3 00 2 00 Electrical Roview N.Y 8 00 2 50	Canadian Poultry Review, Toronto 100 50 Poultry Bulletin, N.Y. 100 60 American Poultry Journal Chicago 100 60
turday Nigut, Toronto (city) 2 50 9 00	Electrical World, N.Y. (new subs.) 8 60 2 50 Scientific American, N.Y. 3 00 2 60	The Poultry Monthly, Albany, N. V. 1 25 60
aturday Ledger, Porcesto 200 1 50	I. PHINDIANON N.Y - DIE 4 PM I	American Veterinary Review, N.Y 3 00 2 50 American Swineherd, Chicago - 50 30.
Colly Spectitor, Hamilton, Only 100 00 00 00 00 00 00 00 00 00 00 00 00	ani S. A. Supplement 7 00 6 50 Miscrellandus.	American Agriculturist, N.Y. 159 1 10
cekly Spectitor, Hamilton, Ont. 100 60 catern Advertier, London, Ont. semi-wely, 100 60 cekly Free Press, London (also Farm and Home) 100 60 cekly Hamilton Conspit. Ont. 100 60	PPhe Volca, M.Y. (Probibition), (renewals) 1 00 85	Nor'-West Farmer and Miller, Winnipeg 1 00 80.
ekly Herald, Gueight, Ont	(new subs.) 1 00 80 †Union Signal, Chicago, (W.C.T.U. organ), 1 00 80	Dairy World, Chicago 100 60. Creamery and Dairy, Waterloo, In 100 76.
	Journal of Education, Boston - 9 50 2 25	Canadilan Agriculturist, Peterboro, Ont. 2 00 1 50 American Miller, Chicago (semi-monthly) 2 00 1 60 Can. Bee Journal, Brantford Ont. (semi-m'ly) 1 00 76
itish Whig. Kingston, Out 100 60	NONTHLY PERIODICALS.	Can. Bee Journal, Brantford Ont. (semi-mly) 1 00 75
RAME, TIME, SPECK, 30.	MAGAZINE AND GENERAL LITERATURE.	Est. Gioux.
altiv r. & County Rentleman, Albany, N. Y. 250 200	Harpers N.Y. 400 8 60	Missionary Review N.T. 2 30 1 60 Review of Churches and Christian Literature.
rest and Farm Turonic (with premium) 100 60	Hentury N.Y. 400 3.60	N.Y. (new subs.)
ural New Yorker N. Y	Scriptor's Magazine, N.Y. 3 00 2 60 Harper's Magazine, N.Y. 4 00 3 56, Century N.Y. 4 00 3 50 Phe Review of Roviews, N.Y. (ren.) 2 50 2 25 Chres of Liferature, N.Y. (new) 2 50 2 50 Chres of Liferature, N.Y. 5 00 3 50 Atlantic Mouthly, Boston 4 00 6 64	N.Y. (new subs.) - 3 00 2 40 Endeavor Horald, Toronto (C.E.S.) - 25 20 The Treasury, N.Y. 2 50 2 00
he Bredder's Gazette Chicago half rate, 6 m.) 400 3 50	Atlantic Mouthly Boston 400 260 Atlantic Mouthly Boston 400 260 Andoyer Review Boston (bi moniny) 300 260 Quiver, N.Y. and London 250 125 Outing, N.Y. 300 260 The Chautauquan, Meadville, Pa. 300 185 North American Review, N.Y. 500 460 The Cosmopolitan Magazine, N.Y. 150 130 Nineteenth Century (original English sheets) 450 400	FOR JUVENILES.
The American Garden, N. Y	Andover Roylew, Boston (bl. monuny) - 3 00 2 50 Oniver N.Y. and London 2 50 1 25	Boy's Own Paper, Lon , Eng., and Toronto 1 75 1 155
merican Bee Journal, Chicago (new subs.) 1 90 - 76	Outing N.Y. S 00 2 50 The Chautanguan Mendville: Pa 9 00 1 85	Girl's Own Paner, 17% 1 35 St. Nicholas, N.Y. 300 2 60 †Babyland, Boston 50 25
merican Bee Journal Chicago (new subs.) 1 90 - 75 merican Dairyman, N.Y. 1 50 1 10 Coarc.	North American Review, N.Y 5 00 4 50	t Batyland, Boston 50 25 t Our Little Mein and Women, Boston 1.00 70 t The Pansy, Boston 100 70
Hollye, N.X. (half rate, 6 m.; diarty rate, 3 m.) 5 00 4.50	The Cosmopolitan Magazine, N.Y. 150 150 Nineteenth Century (original English sheets) 450 400	
rek, N. V REFAUTOUR 1, 6 00 4 50	Contemporary Review , , , , , , , , , , , , , , , , , , ,	MISCELLANEOUS.
rthera Messenger, Montreal 50 10	Westminister Review , , 4 50 4 00	Teducational Journal, Toronto (somi-m'ly) 1 50 1 10, American Tencher, Boston 1 00. 70, Musical Record (Ditson's), Boston 1 00. 63
inday School Times, Phila. 1 50 1 00	Westminister Roylew 4 50 4 00 Blackwood's Magazine 7 7 3 00 2 60 Lake Magazine, Toronto 2 50 2 00 Canadian Magazine, Toronto 2 50 2 00	Musical Record (Ditson's), Buston 100 65
angulical Churchman Toronto 1 to 1.25	Canadian Magazine, Toronto - 2 50 2 00	t The Erage (Hubic), Philit (New Sheat) - 1 to 1:10
rtherri Messenger, Montreal 90 10 unday School Times, Phila. 1.50 1.00 substerian Review Toronto 1.50 1.25 anguites Churchanan, Toronto 1.00 75 anguites Churchanan, Toronto 9.00 2.50 attle Folk's Paper, Albany, N.Y. (Sanday School, paper, Colored Illustrations) 3.50 80 stille Folk's Paper, Colored Illustrations 3.50 80	La verrape Littenature. Televire Hour, Lendon (Log.) and Toronto 1 75 1 86	(new subs.) 1 00 70
School paper, colored linestrations) 3 50 90	Sunday at Home 1 75 1 35	Young Mea's Era, Chic. (Y. M.C.A. semi-m'y) 1 50 10 Popular Science Monthly, N.Y. 5 00 4 00
	ALL TRACE OF THE STATE OF THE S	Phonetic Journal (Pitman's) (in weekly or
n's Hora, Chicago (1 yr.) 150 1 00 (6 mios) 1 00 76 dependent N.Y. 3 00 2 00	English Illus, Magazino, N. Y. and London, 175 140 Demirred Family Magazine N. Y. 200 160	Phonetic Journal (Pitmen's) 6 mos 80 70
ANTI TIMES AND A COMMANDE	Frank Leslie's Popular Monthly, N.Y. 5 00 8 50	The Delineator, N.Y. and Toronto (fash, Sr.) 100. 85
us. London-haves with actes Minimumer and Arms Nos. 100 8 57 ud. Landon Navis without artes Nos. 6 36 8 53 ustrand American N. 2 500 2 50 arpers Wesley M. 2 50 2 50 ark Legitas Illus, Pares, N. 7 (pair rate)	English Lius: Magazine, N. Y. and London. 1 75 1 40 Demorat & Family Magazine, N. Y. and London. 1 75 1 40 Demorat & Family Magazine, N. Y. 2 00 1 60 Frank Ladie's Popular Monthly; N. Y. 5 00 8 50 Frank Ladie's Popular Monthly; N. Y. 5 00 8 50 Hudget of Wit, N. Y. 2 25 1 75 Pleasant Bours, N. X. 1 75 1 30 Install & Magazine at Arr. N. Y. and London 3 50 8 00 Cassalt & Magazine at Arr. N. Y. and London 3 50 8 00 Tamel's Faints Magazine in Arr. N. Y. and London 3 50 8 00	monthly parts 150 1 40 Phonette Lournal (Pitman 816 mos 50 70 70 70 70 70 70 70
ADU AMAS NOS. WHO AND AND WAS A STATE OF THE	Methodist Magazine, Toronto 2 00 1 50 Cassoll's Magazine of Art. N. V. and London, 2 50 8 00	Canadian Photographic Journal Pormits on 1.57 sa
nstrated American A.T.	Councilla Faintis Magazina 150 1 25	American Angler, N.Y. (new subs.) 2 00 1 60 Iron Age, N.Y. 1 16 20
Torry Base N.	Devel's Family Morrollis Art Lubrechings, S. I. (half rate, 5 m. quarter 200 S in [Unioped plates with each No.) 4 00 S 60 Art Amstern, R. J. (half rate, 5 m. quarter rate 2 m. [emisses pattern with each No.) — 4 00 S 60	QUARTERLY PERIODICALE
tinos y	Art Amsterri A. J. (half galacting quarter rate 3 m. (half galacting with each No.) — 4 00 / 3 60	Ediublirgh Review (original English sheets) 1 0) 8 to
w Yor Letter, NY, (mitomorphis) - 2 to . 150	2 25 2 00	Guinterly Review

For explanations of the igness of the light and the property of the second party of the property of the second party of the se

Milierustus Harper's Monthly, Weekly Empire and Cottage Hairth.
by subscribing through us they would cost

Minter's Ladraness 10 to 10 to

At Publishers the class can be would have out the world the control of the contro

Rubber Belting

IF YOU WANT THE

FINEST T

MADE. ASK YOUR DEALER TO GET FOR YOU THE

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

MANUFACTURED SOLELY BY

THE GUTTA PERCHA & RUBBER MANUFACTURING CO.

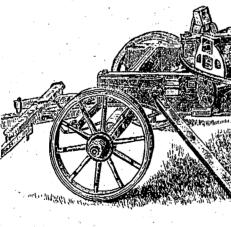
61 & 63 Front Street West, TORONTO.



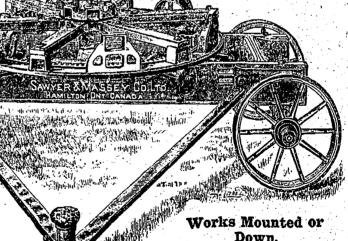
well

MADE.

Prices



FOR 10 OR 12 HORSES.

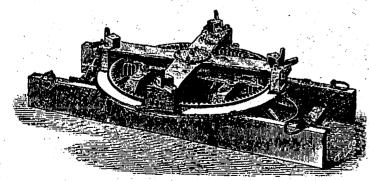


GRAND

vorkers

Write

Particulars



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

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