# - 3thasseve's sillustrated • <br> (PUBLISHED MONTHLY.) 

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[Toronto, March, 1890.


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## A Journal of News and Literatore for Rural Homes

New Series.]
TORONTO, CANADA, MARCH, 1890.
[Vol. 2., No. 3.

## ROUND THE WORLD,

 and the ORIENT.(Extracts from a series of letters written to the employes of the Massey Manufacturing Co., by W. E. H. Masser, Esq.)

## PALESTINE.

Eleventh Letter, dated Atlantic, R.M.S. Iberia, bound for London, May rith, $188 s$.

A small Russian steamship, manned by Russians throughout, took us from Alexandria to Jaffa. We were two days and two nights on board, calling at Port Said cn route. On board in the steerage were a lot of Russian peasants, who had comefrcm a remote part of Russia and were making the pilgrimage to Palestine via Alexandira. I had often read and seen pictures of the poor Russian peasantry, but the reality was worse than I could have imagined ; poor, ignorant, superstitious, miserably clad, and filthy in the extreme. The men wear their hair long and trimmed off square at the ends; their clothing was dirty, the outer coat a sort of long frock coat heavily padded, or of greasy skin, the wool still on. Their foot gear was exceedingly heavy, the boots being either of felt or thick leather. The women were hard-looking and dressed very
much like the men. The stuff they ate was something awful-musty dark sago bread or sloppy concoctions of horrible appearance. They were dirty and filthy to a repulsive degree. They were, however, very devout and thoroughly in earnest, too. They might frequently be seen crossing themselves and praying. According to my way of thinking, though, a few less prayers and a little soap and water instead, would have shown more piety.
We anchored off Jaffa in the early morning, and fortunately it was calm, for landing in rough weather is not possible, and is quite bad enough in mooth water.
Though Jaffa (ancient Joppa) has through all ages been the port of Jerusslem, it possesses no harbor, and one has to be rowed ashore through the dangerous rocks in a small boat. Sometimes there is something approaching an adventure in landing or embarking. When we came away it was rough, and we only ventured out after considerable deliberation, and fortunately we escaped both accident and a wetting, though the boat-load ahead of us barely escaped the former and got a good deal of the latter. We had scarcely set foot on land when an insolent Turkish official stepped up and demanded a passport in a haughty manner. Passport we had none, being told it was unnecessary, though we had its equivalent and more than should have been re-
quired, as we were afterwards informed. But no, he must have a Turkis/h passport. I tried to explain matters through my dragoman (interpreter and guide, whom I had brought from Egypt) and get him to allow us to go to the hotel and get breakfast till he could see the British Consul-a claim I had a perfect right to make, since he could not leave his post to go to the consulat once. However he would scarcely listen to me and threatened to send me back to the boat. To be so insolently treated by a petty Turk put my control over my temper to its fullest test. Finally he consented to allow our dragoman to go to the British Consul while we were kept in the guard-house for over an hour, an armed Turkish soldier sitting by our side! The first time we have ever been incarcerated! In due time our dragoman returned with the British Consul, who came to the rescue with his whole retinue of servants. The manner in which the consul opened up his batteries of Arabic upon the Turkish official was very pleasing to my ears, and we were released very shortly. The Turks are becoming more and more insulting to tourists-my experience being nothing unusual-and it is high time something was done, A British passport alone is not suflicient, butit must have T'urkish passport attached, and must be presented at every port or town of any considerable size one enters.


JAFFA, AS APPROAOHED FROM THE 8RA.

They are putting the screw on resident foreigners tighter and tighter. They have forbidden the further building of schools and churches, and have done all in their power to stop mission work now in progress, resorting to every means they dare. Once or twice recently they have had the insolence to send in a notice to Miss Arnott to close her cele-
just ripening, in others the wheat was only halfgrown and beautifully green, while yet other fertile fields were being ploughed.
Here, too, we saw primitive farming operatious going on-and things were quite as primitive as the methods in Egypt. I went into one field and tried my hand with a Syrian plow, which had an ox


IEAVING YORT SAID FOR JAFFA,
brated school in Jaffa within a given time! I heard, too, of other similar instances. If Mahomedans think thus to stop the progress of Christianity they have a rather hopeless task before them. Though they profess so much piety and boast in a belief in the One true God, they would do well to heed the counsel of the wise Gamaliel to the Jewish Council of old, leat haply they, too, "be found to fight against God" and bring upon themselves a like condemnation (Acts, v. 34).
Jaffa, as seen from the sea, is pretty and picturesque and, like most Syrian villages, "distance lends enchantment." The houses appear as though built one above another in terraces, the whole forming one great pile of oriental dwellings and buildings at the very water's edge-the site being a commanding hill.
As one wends his way up through the very narrow streets from the landing he sees sights and bazaars not unlike those of Egyptian towns, though the buildings are more substantial, being mostly of stone, and further he sees native Syrians who differ in appearance (being somewhat fairer) and in dress from the Egyptian Arabs.
The Jaffa market place is always busy and is the rendezvous of the townspeople for business, gossiping, and social concerus, and hence is, of course, a curious and interesting place. We passed camel after camel laden with boxes of oranges to be shipped away, the district around Jaffa producing ex. cellent fruit and very abundantly.

But a short distance from the landing-place is the reputed house of Simon the Tanner, where Peter lodged and saw the vision (Acts, $x$ ). This famous old port has seen many a hard fight and undergone many destructions and rebuildings. We drove on at once to Jerusalem, leaving a more thorough look through Jaffa till our return.

For a long distance after leaving the port the road runs through a series of orange groves and is bordered with. cactus hedges. The perfume of the oranges filled the air and the heavily-laden trees were beautiful to look upon. Oranges bring from thirty to eighty cents per 100 in Jaffa according to the season. Leaving the groves we sped on over the lovely and fertile Plaid of Sharon. It was a charming drive, the air so fresh and bracing after the heat of Egypt, and on either side were beautiful, well-cultivated fields. In some fields the grain was
and a donkey yoked to $i t$. The plow was easy to manage certainly, but the beasts I could not with. out the use of the "goad," which was too cruel a means of inciting activity to suit me. Ere long some of the crude tools-the old reaping.hooksused on the Plain of Sharon, are to be laid aside, and in their stead Massey Harvesters will harvest its golden products, while Arabs look on in gross astonishment at the unwonted intruders; for while at Jerusalem I had the pleasure of appointing an agency and selling the first Massey Harvester in Palestine, which was to be used onone of the beautiful farms on the Plain of Sharon. This will probably be the first modern reaping machine used in the vicinity of Jerusalem.
As one passes over this great highway between the Holy City and its seaport-a way which was so oft trodden by Bible characters-the kings, the prophets, and the saints of old ; over which Roman armies, crusaders, and pilgrims by thousands have marched-his thoughts can but carry him back to historic scenes. Here and there were places and villages mentioned in Scripture-the sites where events recorded in the Holy Bible were enacted.

While their definite locality may not be known now, it can be approximately. If one looks carefully about him, he will see scores of sights that will bring passuges of Scripture to mind, and further that will help to elucidate illustrations otherwise difficult to understand. One writer draws attention to several such points. The simple plow, for in. stance, which merely scratches the ground, is guided by one handle, and so "No man having put his hand to the plough and looking back, is fit for the king. dom of heaven" (Luke, ix. 62). The ploughman in his. other hand carries the goad spoken of-a long spear with a sharpened point for touching up the cattle. "It is no use for refractory oxen to raise their heels when the goad touches them-the driver is safely behind the plow an'l out of reach. One thinks of the voice saying to Saul of Tarsus, 'It is hard for thee to kick against the pricks,' that is, the goads (Acts, ix. 5) ; and of 'Shamgar, the son of Anath, which slew of the Philistines six hundred men with an ox.goad; and he also delivered Israel' (Judges, iii. 31)." I had noticed at intervals a few stones-three or four-carelessly piled one above another, and upon enquiry found they marked the boundary of the fields, for there are no fences or hedges of any kind. It would be a amall matter to scatter them all, but "it is written," "Cursed be he that removeth his neighbor's landmark" (Deut. xxvii. 17). "Ruth went gleaning in the field after the reapers, she had no ditches to scramble over, she only passed the boundary stones of a large field, similar to those in the Plain of Sharon, 'and her hap was to light on a part of the field belonging to Boaz' (Ruth, ii. 3)." The author quoted has also well said that " time would fail to tell of a tithe of such scriptural associations as a day's journey in Palestine would call to mind."
The Arabs one meets on the road are almost invariably armed with either gun, pistol, sword, or dagger, and generally a combination of these, and if no other weapon, a heavy club with a round bulb at one end, which has been used through all time, probably from the days of Cain. Naturally one does not experience much pleasure at first in meeting Arabs thus armed, but these wespons are carried for defensive purposes; the miserable government providing no police protection, the heavily. taxed farmers have to guard themselves against the roving and mischievous Bedaweens.

We lunched at Ramleh, a pleasant village of


THE MASSEY IARVESTER AT WORK ON THE PLAANS OY SHARON, PASESTINE.
about 4,000 inhabitants. 1ts chief object of interest is an ancient tower, twenty-five feet square at its base, diminishing by graceful offsets until it attains the height of about 100 feet. It was evidently originally the campanile of a Chriatian church.
As we catered the mountaius of Judea we frequently saw shepherds watching and leading their sheep. How different this scene to those we had witnessed on the great "sheep runs" of New Zea. land and Australia! There the enormous flocks were driven from place to place by their caretakers and with the aid of trained sheep dogs, but in Palestine the shepherd tends his small llock of sheep and goats with tender care, as in ages past. He lcads them into the "green pastures" and they follow him, and know him as he calls them on, the foremost of them scarcely a foot from his heels.
"My sheep hear My voice, and I know them, and they follow Me." (John. x, 27.)
Crossing the valley of Ajalon we climbed over the "hills of Judea" and, darkness coming ou, spent the night in their midst, at one of the small khans by the roadside. It was a glorious, clear, moonlight night, and a weird experience. The sights we looked upon-the old and barren mountains, so beaucifully outlined against the sky, casting their black shadows into the deep valleys, were dreamy subjects. To think, too, of the scenes they had looked upon!
On our way we had passed by several tiny and picturesque villages, some of which were of historic interest, but I must not stop to mention these things. The stony aud barren mountains of Judea have no interest in themselves-it is only their historic association, for they are desolate indeed, aud even near Jerusalem, where once they were so beautiful, desolation reigns supreme, as it was prophesied.
In the immediate vicinity of Jerusalem, however, of late years there has been a great change-the hillsides are again being cultivated and areapproaching their former glory. Their peculiar formation -a layer of rock, then one of arable soil and another of rock-in steps, as it were, makes them extremely pretty when in a high state of cultivation, and the natural terraces covered with olive trees or grape vines. The fruit of the country is most excellent. I have already alluded to the splendid oranges and lemons. The grapes are something extraordinary, the bunches grow to an enormous size and attain the highest perfection. Fig trees abound. If this system of cultivating continues and becomes more extensive, as it is steadily doing, Palestine will ere long again become a" land flowing with milk and honey." Great credit is due to the well-conducted German Colonies for their efforts in this line.
If one obtains his frst view of Jerusalem from the Jaffa road he is destined to great disappointment. As he nears the city he passes through a long series of new and modern buildings-residences, hotels, cafes, church properties, etc. On the right is the large Russian Quadrangle, containing none too elegant but substantial buildings-a large church and an extensive "hospice," where pilgrims are given free lodging during their stay in Jerusalem. Each of the sects has one or more such "hospices" in or near Jerusalem, for the shelter of its pilgrims. Being anxious to get a peep at the old walled city we seemed a long time riding past these numerous new structures and at last, when we came to the Jaffa Gate, the view of the city was so cut off it hardly seemed possible we had arrived atJerusalem. But, after getting located and seeing the view from the roof of the hotel just inside the gate, we began to realize it.

These long lines of new buildings through which we came, nearly all of which have been erected within the last six or seven years, seem to be fulfilling prophecy in a wonderful way, the city being extended and laid out exactly in the manner nientioned in Jer. xxxi, 38.40.
The walks in and about the sacred city are more than full of interest to the diligent observer, and the three weeks that I spent in its neighborhood are amongst the pleasantest and inost profitable 1 have ever been privileged to enjoy. Having already written a lengthy letter from Jerusalem to the Massey Memorial Hall Sabbath School, I will only make brief mention now of some of the more important excursions we made in its vicinity.*
To the Bible student there is infinite pleasure in rambling about the hills and valleys near the Holy City, where nearly every foot of ground has its historic association and where there are no end of beautiful walks, all so deeply interesting. A stroll around the outside of the city, following the walls, only takes about an hour and gives one an excellent idea of the commanding situation of the city, and in the higher parts affording some excellent views of the surrounding hills and valleys. Of this, however, I must nut stop to write now.
On one of our rambles we visited Subterranean Jerusalem, or the subterranean quarries, which extend under a greater part of the city. Close to the Damascus Gate, in the face of the natural rock, which at that point forms the greater part of the city wall, there being but a few layers of stone above it, there is a small doorway or entrance low down, where visitors crawl into the wonderful quarries-a great labyrinth of cavernous aisles, one following upon another, formed by the cutting away of the rock for building purposes in ancient times.
*Mr. W. E. II. Massey's letter on Jerusalem will be begun in the Day No. of the Iluwstratro.

Great natural columns or piers have been left to support the solid rock above, and, candle in hand, with an experienced guide to avoid danger-for it is dangerous-one may wander about for hours in this vast succession of caves, so dark and silent, though only a little way beueath the busy streets of the city above. The full extent of these great quarries is as yet unknown, for portions of them are tilled with rubbigh from the fallen cities above. They were only discovered in 1852, having been closed to the outer world for ages. Their origin is unkuown, though in all probability, the stones used in the construction of the Temple and the great buildings of ancient Jerusalem were taken from these very quarries.
As one wanders about over the uneven surface, and glances into the deep stone pits, he will see chisel marks, niches for the lamps, blocks of stone partly cut out or left unfuished--just as they were left by the workmen centuries ago. There, too, may be seen the little spring which still flows where the ancient quarrymen were accustomed to slake their thirst. It was one of the most interesting places I have ever visited.
(To be contivued.)

## Birds Transporting Birds.

"Do large birds transport smaller ones through the air?" is a question often asked. Facts prove that large birds transport amaller ones in their yearly migrations. In the East the opinion is common that cranes transport on their backs small birds across the Mediterranean and over mountains. Several ornithologists have confirmed this popular opiniou by their own observations. One of them says that in the autumn flocks of cranes are seen coming from the North; as they circle over the cultivated plains of Palestine, little birds fly up to them, and the twittering of those already settled upon their backs may be distinctly heard.

the tower of ramileh.

# (Ona firist flizc Story 

## What Came of an Unexpected Meeting.

BY MAGGIE SMITH, WHITBY, ONT

$t$ was the day after Commencement in a popular Ladies' College, ashort distance from Ontario's Metropolis. Two girls sat near one of the windows of their Alma Mater watching the departure of their schoolmates. They were to be amongst the last to leave, one, Lina, taking the 4 p.m. train for a northern town, and the other, Nettie, an orphan, the night train for an eastern city where she was to spend her vacation with an uncle, at whose house she had made her home since earliest infancy.
" You'll be sure to spend next summer with me, won't you, Nettie?"
"I thought you were going to Sturgeon Lake."
"So I am and I want you to come too. Why its just lovely out at Uncle Ben's, where we boarded last summer. I'm sure you'll like it. Of course he is not my uncle, but every one calls him Uncle Ben."
"I fully intend to come, Lina, and I dare say I shall like the country well enough ; but I don't suppose I shall go into ecstasies over it as you do. One would think to hear you talk that by next summer you would be ready to don a pink sunbonnet and a blue check apron and become a permanent resident in some delectable little spot adjacent to Uncle Ben's. I imagine I see you. What a precious little farmer's wife you would nake! Just fancy it!"
"If either of us acts that role it will be you. Have you forgotten" she added, pointing to a diamond ring "that ' thereby hangs a tale'."
"Well, I can safely say there is no danger in this direction. I have not the least intention of wasting my sweetness on the desert air."
Just then the dinner bell rang and the girls proceeded to the dining hall.

A year has passed by; Commencement day has come and gone once more, and again Nettie is sit. ting by a window beneath which blossoms a bed of mignonette, and its fragrance, mingled with that of the hay which Uncle Ben is making up in a field close by, is wafted in through the open casement. The cool breeze rustling the leaves of the scarlet runners that shaded the window fanned the cheek of Nettie as she sat and viewed the beautiful landscape. "It is nice here," she soliloquized, leaning back in her chintz-covered easy chair "far better than I expected; the air is so bracing and everything is so clean and tidy; not a bit like the farm Uncle Reuben took me to once, when he went to buy a horse. I'll never forget that place nor how afraid I was of those horrid little black and white pigs that were playing hide-and-seek among the hencoops in the door-yard. What an abode of despair the whole establishment seemed to be? But I am actually beginning to like it here. I do wonder why Line stays so long. Oh, here she comes!"
"We are going, Nettie. Uncle Ben says we can have old Toby and I can drive."
"You stayed so long that I thought perhaps you were helping Uncle Ben make the hay. You might have done the raking with the assistance of old Toby: I tell you what it is, Lina, I almost think you made the mistake of your life when you became
engaged to that parson en aspect. You ought to marry a farmer, I'm sure."
"Youmay allay your fears on that score, Nettie, the parson, en aspect, as you call him, meets my views exactly, and I will leave the farmers to your tender mercies. You might do worse than marry one of them."
"Yes," replied Nettie, "for instance I might marry a parson."
"Well come, Nettie; let us get everything in order for our jaunt to-morrow. We will have to start early. It is nearly twelve miles distant and we won't be able to drive very fast."
"Don't think we can drive at all ; I'd be afraid for us to go alone."
"Nonsense, I can drive well enough. I never did, but then I've seen women do it and I know how. Toby is quict and won't run away. I asked Uncle Ben about it and he said, 'Quiet, Miss, why bless you, he won't go a step farther than you want him to.' You need not fear, we'll get along all right. I do hope it will be fine," and she glanced at a streak of gray cloud behind which the sun was just setting. "We must go to the rapids and the cave and I want to take a sketch or two, besides gathering a few Bntany specimens."
Thus talking and laying plans for the morrow the two girls spent their evening.
Early next morning found our young tourists tucking the afghan around them in Uncle Ben's covered carriage, which contained beside the two young ladies a well-filled lunch basket, a tin box for botany specimens, a basket destined to be filled with petrified moss, a waterproof each, for it looked a little like rain, and lastly Uncle Ben had placed under the seat a two-bushel grain bag containing a half gallon of oats for old Toby.
"I dare say, Miss, you'll get along all right," Uncle Ben was saying in answer to Nettie's anxious inquiries as to the probability of Toby's running away. "He's not given to them sort o' tricks. I reckon you're all ready now, Miss Lina," he added, giving a tug at the breast-strap.
Hereupon, Lina gave the lines a shake and old Toby with head erect trotted down the lane. Everything went well for the first half of the journey. The weather was threatening but as yet no rain had fallen. They were going down a slightincline on the side of a hill which had been cut away, leaving a high bank rising abruptly on one side and a deep declivity on the other. They were too busy talking to notice the road and all at once to their surprise, Toby came to a stand-still. He had reached the foot of the incline where was a washout in the road over which he refused to go.
"Go on," said Lina, giving the lines a little jerk. Toby stood still.
" I'll try to pass on the right side ; some one else has; I see the wheel marks.?

Lina pulled the reims, whereupon Toby began to back.
"Get up! get up!" and she tugged at the lines still harder.
Toby answering to the pull still continued to back. "Dear me ! Lina, I'm afraid he is going to upset 48."
" Whoa, whoa, Toby !" screamed Lina, loosening the reins a little as she reached forward for the whip.
l'oby obeyed instantly and turning his head took a look at the frightened girls.
"Couldn't you get out and take hold of his head, Nettie? You could lead him while 1 drove."
"Oh I couldn't! I couldn't! I couldn't go near him ; see how wild he looks. Look at him now," she added as Toby began to paw the ground and shake his head impatiently.
"I believe we had both. better get out and I'll try to lead him around the end of the bridge."
"Whoa, Toby! Whor!"
"I do declare, Linu, it is dropping rain. Whatever shall we do?"
Just then thoy heard a step and in an instant a hand seized the bridle.
The stranger was a young farmer from a neighbor-
ing field, who, hearing the excited voices of the girls, hastened to their aid.
"Can. I assist you, ladies?" The tone and man. ner were those of a gentleman.
"We want to go across the bridge," explained Lina.
"I will lead him over," said Mr. Hargrave
"Thank you very much,", said Lina. "I feared we would have an accident."
" Pardon me ladies, have you far to go?"
Again Lina answered, "We are on our way to Lonely Hollow.
'Then I think you had better seek shelter, as there is every appearance of a heavy shower. I live across there," he said, pointing to where some chimneys showed themselves among the trees. " My mother will be delighted to have you cull," and thus urged they drove on while the young man crossed the fields toward home, to apprize his mother of their intended call and to be ready to receive them.
They were kindly welcomed by a sweet-faced elderly lady, whom the young man introduced as his mother, and who ushered them into a capacious and well.furnished drawing room.
While the rain spattered and splashed outside the three ladies chatted pleasantly.
"You must play for me, please, Miss Bronson," said Mrs. Hargrave, addressing Nettie and rising led the way to where the piano stood.
As she made preparations for opening it, the girls busied themselves looking at some pictures on a table near by, amongst which were a number of daguerreotypes, relicts of those days when picturetaking was in its infancy.

When Mrs. Hargrave turned towards them, Nettie was standing gazing at one of those pictures, a look of blank astonishment on her face.
"See ! see, Lina!" she gasped. "It's my mother." "Where and how did you get it, and who is the other lady ?" and Nettie turned excitedly to Mrs. Hargrave.

Mrs. Hargrave was no less surprised than Nettie. Explanation followed inquiry and Mrs. Hargrave found in Nettie the daughter of her dearest friend and schoolmate, of whom she had heard nothing since a few years after they parted. There was not time to say much then for the rain had ceased and the girls hastened on their journey, promising Mrs. Hargrave to make her an all-day visit early the next week. How Nettie looked forward to that visit! At last she had found some one who had known her mother.
Nettie had no recollection of either mother or father. Before she had reached her second year both parents succumbed to the ravages of a terrible disease and she, the only surviving child, had been taken to the home of a bachelor uncle and maiden aunt, her father's brother and sister.
One of the great longings of her life had been to know something about her mother and no nne seemed able to tell her much, only that before her father married her, she maintained herself as a governess.
She had not been very kindly received by the members of her husband's family and but little intercourse existed between them.
Once when Nettie was about five years old, while playing with an old work-box of her mother's, she had found a daguerreotype of two ladies (the exact counter-part of the one at Mrs. Hargrave's) one of whom her aunt said was Ler mother and the other was most likely some schoolmate.
The remainder of the day was all that could be desired and was enjoyed to its fullest extent by our young pleasure-seekers.

Tuesday found Nettie and Lina paying their promised visit to Mrs. Hargrave's and many such visits were made during their six weekg stay at Uncle Ben's.
"Farm life is not what I then thought it was. The use of the many labor-saving implements which are found both in-doors and out. on every wellregulated farm, greatly lessens the work."

It was Mrs. Hargrave, the Nettie of five years ago, who apoke, in answer to a question of Lina's, who, with her husband, lately stationed as pastor of the village church near by, is visiting her friend, now mistress of Elmwood Villa.
"Do you know, Lina," continued Nettie, "it is five years to-day since we drove Uncle Ben's old Toby to Lonely Hollow and I so unexpectedly met my mother's friend."
"And also your fate," said Lina.

## GOLD MINING IN AUSTRALIA.

onf of thr deerret mines in tile world - thr "aolden citt" and "quartzorolis"- imatr a milp undproroindithe gold yirid of to-dat.
[Written for Magsey's Illustrated by our Ausitrulasiun Correspondent.]
is commencing a series of articles on matters Australian, $I$, a native born Australian, do not think 1 could do better than place before the readers of Massis's Illustratrd some facte and figures regarding the great gold mining induatry in Australis, ond more especially Victoria.
It is to gold that the leading colony of the Australias owes its great wealth and world-wide fame, and the colonists of the great Dominion of Canada, will not, I trust, think that gold mining as crrried on throughout this continent is in any. way uninteresting. A visitor to these lands has certainly missed sonething when he or she has neglected to take advantage of any opportunity for inspecting some of the most important mines.

My fellow colonials will by a stretch of the imagination leare what has been described here only a tew days ago as "icy Canada" for the more genial climate that is to be enjoyed in Australia. Here in December Nature is at her best, the trees and the foliage put on the most remarkable and varied dress, the crops are ahout to be harvested, and in many parts of the colony the heat stands at about 117 degrees in the shade. In a short article, suoh as this must necessarily be, your readers will understand that the vast subject can only be very slightly aketched.
The first mining city we will tisit is Sandhurst. For miles and miles the earth is nothing but quartz reefs, and in all mining centres the term "quartzopolis" is used to denote one of the leading mining districts in the colony. Timo can only be spared to go down one mine here, and therefore we select the decpest mine in Australia-Lansell's 180. This mine is ownid by an old gentlemen named Mr. George Lansell, who is recognised as one of the pluokiest of fortune's favorites. His residence situated in the midst of his mines is a perfect paradise, and visitors are accorded every information and a thorough Australian welcome - frank, hearty and sincere. After an exchange of courtesies we are taken to the mine. First of all we inspect the beautiful machinery and the admirable arrangements.
Everything is as clean and bright as any workshop, and as yard after yand of the broad steel rope is payed out until the electric bell announces to the engineer that a "trusk " of dirt la near the surface, no one watching the proceedings from this point would dream for a moment that everything outside was dirt. The machinery is to the visitorlise other machinery. That is to say that it is only an enginecer who would be very much interested in the question as to how the engines worked. Well, to get on with the story. We are invited up two or three flights of stairs or steps leading up to nearly the poppet heads and the mouth of the shaft. The poppet heads is that portion of the structure over the mine on which are placed the large grooved wheels over which the ropes going down the mine are worked.
The stairs are alwaye referred to by miners as the "brace," -why, I do not know. Well, there is a large platform around the mouth of the shaft from which radinte dezens of small tramway lines. For a time we watched the operations in silent wonder. A ring of the bell and we see coming from the
shaft a large iron frame called a "oage" in which there is a truck on wheels holding perhaps a couple of hundredweight of stone. It is all stone here, and we are told that there is less trouble because everything almost can go to be crushed at the battery. With alluvial mining however, it appears that a big lot of the earth brought up is valueless and has to be truoked away into heaps until there is formed quite a miniature range of mountaing.
Tn get back to the truoks. The cage is stopped at the platiorm on which we stand and the truck is run on to one of the many tramways, thence for perhaps fifty yards along a staging until it is tipped up into the heap waiting to go under the great heavy stampers, where it is crushed into sand and runs down over blankets. The gold naturally goes to the bottom, and gets either on to the blankets or the copper plates that are inserted to reccive it. The material left on the plates, etc., is then taken and washed until there is nothing left but the pure shining gold.
The din of the stampers as they crush the quart\% is a little too much to listen to for any length of time, and we go back to the mouth of the shaft. I omitted to say that before resohing such an clevated position we had been given some overalls and waterproot clothing.
We are invited to take our places in one of the trucks which has been run on to the cage. There is a nervous sort of feeling when you go down a mine for the first time; and when the signal is given and the cage begins to be lowered, at what appears to be lightning speed, deep down, down into the bowels of the earth it is more than probable that the curious visitor will be sorry in his heart that he came. For sometime we can see each other's faces, but the light gets less and less until we are rushing through space in perfect darkness. One of the miners with us makes some remark, but it is probably imagination that makes us think that it sounds hollow and weird-like
The shaft is damp, and we can fancy that we hear the drip, drip of the water at the bottom long before we can do so in reality. It seems an interminable time while we are going almost we know not whither, and there is a sigh of relief when one feels the speed slackening until at last the oage stops and we are, wonders of wonders, deep down in one of the greatest of Australian gold mines, over half a mile in the bowels of the earth, and completely shut off from all inbabitants of the earth of which we formed a part. It seems lighter below than it was 1,500 feet nearer the heavens, and we are surprised to find that the air instead of being cold is actually warm-almost hot. The mine is being worked at different parts, but all on the same principle. Tramways run from the shaft far away back into the earth. The lamps show us what a busy life it all is.
The trucks with the golden quartz run along the "drives," and seated in one of these we are rushed along through pitchy darkness until we come upon a number of the miners who are working at the "face"-that is the very end of the drive. The miners are fine men, both physically and mentally, and they have many very interesting things to tell us.
We are shewn the gtone. It looks common enough, but whon one of the miners breaks it with his pick-head, we take it up again and see a perfeot vein of gold running through it. Then the reel is shown to us. It is clearly defined and forms a solid mass of stone. The way the men work $i t$, the reef is before you all the time. The miners are stripped to their flannels, and are now working their eight hours shift-sometimes a good deal less.
No man in Victoria-or at least, no tradesman-works more

fig. 1.-madame herry co's. mine, creswick.
than eight hours in the day, and the work of the miners is so heavy on the conetitution that many of them are only worked geven hours gt a wage of eight shillings per day. The miners suffer many complaints in their search for the precious metal -one of which is the miner's consumption. A Royal Commision has now this disease to enquire into. We only go into onedrive, but the manager tells us that the earth all around is honeycombed, and men are working all over the mine, some at 1,000 feet, some at 1,500 feet, others at 2,000 leet and so on throughout the shaft. "Wherever there has been work done is known as a "level." The finding of rich gold at so great a depth has put an end to a great deal of controversy, as it wa one time popularly supposed that no good gold would be

obtained at a greater depth than 2,000 feet from the surface Now, however, Mr, Lansell has proved the contrary with a mine over hall a mile deep, and others all over the colony are following suit.
We are thankful to reach the surface again. For the first time a trip down a mine is certainly a bit uncanny but it is something to tell one's friends that jou have aeen where the gold comes irom, and to what is beneath the earth's suriace are dispelled.
Mining managers are generally proud of their mines, and I leading mines before he leaves the colonies.
Pertaps the best mine in the colony to give figures about is the Ladame Berry Mine at Creswiok, which is in the Ballara District. Ballarat is the greatest mining centre of the worldknown everywhere as the "golden city," and justly entitled to its name. It ever there were streets paved with gold it must have been in this fair Ballarat, which in the midst of all its gold mines is also a city of trees.
Creswick is a great mining district, and the Madame Berr is one of the greatest mines. The difference between it and Lansell's 180 , is that the latter is quartz while the Creswick and of course. Everything is the same with this exception and, of course, the diffcrent measures that have to be used to Figure 1 is a pho
Victorian gold mines. Figure 2 will and represents most "gutter" containing the wash-dirt runs how the " lead " or goutter" containing the wash-dirt runs through the earth. Your readers will see how well defined it is and how different whole of the "face" out the valuable and valueles take th are sent up separately. One lot goes to be "puddied" to the gold while the other is thrown awny.
The lines down the figure are direrent "shoots" or shafte put in to cut the gutter while the lines aoross are the drives that run from the different shoots. Of course they are of different depths as a lead 100 feet deepin one place may "dip" very quickly and be half as deep again a bundred yarde urther on. At some depth or other, however, quartz reef and alluvial leads have been known to run for twenty o thirty miles-that is the same vein of stone or dirt has been
worked at dificent places for this distance.
The cost of timber every year in the Madame Berry Mine arerages $\$ 15,000$, and the mines throughout the colony hav have now been made for forest conservation
The Madame berry group has been working for about inin ycars. The yield of gold obtained up till June last. wis 271,921 ounces, worth $\$ 5.439,480$. The dividends paid to share holders come to $\$ 2,840,000$, and the royalty on the gold paid to the Crown $\$ 393.445$. The dividends for three months jus passed came to $\$ 168,375$. The total yield of the whole of the Madame Berry group since its first commencement is ten tons two cowt. Surely that is something to think of.
Thearea in square miles being worked throughout the colony by mines in June was 86,760, and the yield of gold for the quarter 116,846 ounces, valued at $: 3,111,910$. The total value of bachinery employed is $59,317,385$. The grand total of gold aro up till the end of last year discovery thirty-sercn year reduced to other weirhts the stupendous and onagifice smount of 1,981 tons of solid rold. This at an aggregate value of $£ 4$ per oz. is in Canadian coin worth an aggregate value of ex per oz. is in Canadian coin worth S1,112,719,180. The The dividends paid throughout the colony for the last thre months amounted to $\$ 040,35 \mathrm{~h}$.
During the last few years the gold yield in the colony has shown a decrease, but there is not the shadow of a doubt that hundreds of miles of country almost unexplored will yet be found to contain the precions metal. Your readers have now some facts and figures of the Australian gold fiolds and gold yields. I trust that it will not be altogether uninteresting. At some future time I may tell you tales of joy and misery that havo been the result of the gold fever, of fortunes made and lost, and many stirriag incidents in the sometimes in bis well-tnown lines:

Gold! Gold! Gcld! Gold!
Bright and yellow, hard and cold
Molten, graven, hammered and rolled
Heavy to get, and light to hold,
Hoarded, bartered, bought and sold.
tolen, borrowed, squandered, doled
Spurned by the young, but hugred by the old
To the very verge of the churchyard mould,
pold Gold ! old! Gold!
good or bad a thousandiold.
Melbourne, Deo. 1889.
H. C. Jonze.


Societies being inadequate at the present time to meet the requirements, the Government should make an additional grant of $\$ 0,000$ to them for their exclusive use. It was argued, amongst other thinga, that by having a good prize list the public could be easily

The Old Methods of Farming.
How awfully hard wore the old ways of farming, As sad recolleotion presents themin to light. The old iron plow that was drawn ly tho oxen, The planting of corn, the broadcast hand-sowing The cutting out weeds with a hoe from the corn. The back-aching work of hilling up "taterd," That made us long so for the sound of the horn.
And then came the haying with waarisome labor Of cutting with scythe, the grass to make hay. Of raking with hand-rake, of pitching and loading
And swcating to death as we mowed it away, Then harvesting grain with long. fingered cradles,
The hinding with straw-'twas hrrd and so slow, The threshing with flails or trampling with oxen, And cleaning from chaf when a strong wind would blow.

How different now are the methods of farming. We turn over ground with a steel riding plow. We hoe with a sulky, cut grass while we're riding, Rake and load with the horses and put in the now How sweet is the sound of the Toronto Light Binder To those who remember the cradle's lright gleam, as the nurn out the grin so


Mr. Fred V. Massey, whose illness we have referred to in previous issues of the Illostrated, continues very ill, requiring constant care and attention. He suffers greatly from nervousness and periods of coughing. His greatest relief is fonnd in hypodermic injections of morphine, which he has to undergo every two or three hours while awabe.

The members of the family are very grateful for the many expressions of sympathy they receive from all quarters, and the constant enquiries regarding Mr. Fred, that are made on all sides, indicate the high esteem in which he is held by those who know him.

Farmers in the North.West will be pleased to hear that the Dominion Government will spend $\$ 20,000$ in procuring a supply of the best seed wheat for gratuitous distribution throughout the Territories. Mr. McKay, superintendent of the Brandon Experimental Farm, will be entrusted with the work of distribution, and preference will be given to those whose crops failed last year.

AND now it is Pennsylvania's turn. A Pittsburg paper published, the other day, an interview with Mr. John McDowell, one of the most prominent farmers in the country, about the decline in farming, in which he says: "I have devoted some little investigation to the matter, locally, and I find that the value of agricultural property in Washington county has decreased just about 30 per cent in the last three years. In 1886 farms here could be bought only at an average of $\$ 70$ per acre, but I have followed up the Sheriff's sales since then, and from the recorded figures the depreciation will average 30 per cent. Farming does not pay in Pennsylvania. The mortgaging of agricultural land results from two causes, viz: unfair taxation first; and the want of a remunerative market for both stock and serial crops, second."

Hon. Chas. Drury, Minister of Agriculture, was waited upon last month by a large and influential deputation representing the Agriculture and Arts Association of Ontario who urged that in consideration of the grants to Electoral District Agricultural
induced to attend the country fairs thereby counteracting the attructions of outside exhibitions. $1!$ r. Drury did not give the deputation much hope of anything being done by the Government in the direction asked. There is apparently considerable diversity of opinion in regard to Township fairs. It cannot be deuied that a large number of people interested in these fairs are strongly opposed to carrying them on in the face of a yearly deficit caused, no doubt, by people preferring to attend the Exhibitions in large cities. Many look upon side shows as an evil, but all the same the fact remains that people will persist in crowding to Fairs where ontside attractions are to be seen. The desire to hrve l?airs devoted solely to agricultural purposes is worthy of the highest commendation but when such Fairs as the Provincial, with its attractive prize list, are run at a heavy loss there is nothing for it but to succumb to the inevitable, The time may come when people will get tired of side show attractions and then the purely agricult. ural fair will have a good chance of financial success.

The settlers' trains for Manitoba have started again this spring, and will continue to run throughout March and April. We learn that they are likely to be well patronized this year by Ontario farmers, who are going to settle in the West. Many of these farmers went to Manitoba last summer, looked over the country, and bought land which they will cultivate this year. In most parts of the country farms can be rented for a small cash outlay, and a new settler cannot do better than rent a place and at his leisure look over the country. Notwithstanding the fact that the crops in the North-West were light last season, the settlers have shown their faith in the country by preparing a larger acreage for crop this year than on any previous year. It is estimated that over one million acres will be sown this season in Manitoba alone. A great many cattle and sheep are now in the country and mixed farming is becoming general. In addressing meetings in various parts of Ontario this year, Mr. McMillan, the Manitoba Government Agent in Eastern Canada, expressed the opinion that, within ten years, Manitoba would be as widely and as favorably kuown for cattle and dairy products as it is to day for grain, and there is no reason to doubt that this will be so. Our Canadian North. West is going ahead, and the signs of progress are both rapid and substantial. There is not a boom in the ordinary sense of the word, nor is it desirable there should be, but railroads are being built in all directions, sulstautial buildings both iu town and country are taking the place of temporary ones, and more actual settlers are moving into the country now than ever before in its history.

We regret that limited space at our disposal will only permit us to refer briefly to several important meetings held in Toronto last month. The Central Farmerg' Institute had a three days' session at which many subjects of interest to the agricultural community were submitted and ably discussed. An address by Prof. Robertson of the Experimental Farm, Ottawa, on "What can Winter Dairying do for Ontario "was full of practical and useful information. In his opinion winter dairying was a branch of agriculture which the farmers of Ontario could no longer afford to neglect. If it could be developed with good judgment and persevering energy it would repair the shattered financial health of those districts which a long practice of grain selling had brought upon them. The deliverance of our farmers from ever-recurring periods of depression and hard times was in their own hands. Winter dairying would help them to do for themselves what no outside help or governmental aid or hindrance could effect. It would provide large supplies of products always in demand at remunerative prices. It would increase the fertility of their fields and give them a satisfying income the year
round. He believed that the creameries of this province might become one of the greatest factors in furthering its material prosperity through winter dairying. The other meetings were the Dominion Short Horv Breeders' Association, the Dominion Ayrshire Breeders' Association, the Draught Horse Association, nad the Canadian Clydesdale Horse Association. Satisfactory reports were read at all these meetings and at the first-named several interesting papers were read and discussed. At the lastnamed it was stated that the stallion show to be held in Toronto on March 13th. would surpass any of those previously held.

Ir is evident that the Public School Inspectors of Ontario are fully alive to the importance of teaching agriculture on the lines advocated in the Illostrated. At their annual convention held in Toronto last month they passed the following resoIution: "Ihat in the opinion of the Public School Inspectors in convention assembled, it is desirable that provision be made in our Public Schools' Act for the establishment of a system of advanced Public Schools more especially devoted to the interests of agricultural education; that the honorable the Minister of Education be recuested to have the Public Schools Act amended in this direction, utilizing as far as possible the present Public Schools of the Province for this purpose, and that a special grant from the Legislature and the County and the Township municipalities be made to aid the Trustees in establishing these schools." The question now is what is the Minister of Education going to do, about it? Has he the higher education of farmers' sons sufficiently at heart to give the matter at least a trial? The cost would not be great. A select number of school teachers could receive a special training at the Guclph Agricultural College to enable them to take charge of these advanced schools. It is not expected that they could become qualified to instruct farmers' sons in the actual practices of husbandry but they could be equipped for teaching the principles on which success in agriculture de. pends. We believe that an immense amount of useful elementary knowledge could be disseminated by school teachers, if they would confine themselves to principles, leaving the practice entirely to those who have spent their lives in it. The instruction a youth receives in our rural achools deals with altogether different subjects useful in their way, no doubt, and necessary, but barren of interest to youth as compared with the book of nature when properly opened and explained. Imagine a country lad inspired with a desire to know and learn about his surroundings. There is no one to help him. His early efforts, at least, must be cramped and disappointed, if, indeed, he is not altogether disheartened und dissuaded from following his natural inclination. Boys in the country must be so taught that they will take a wider and deeper interest in the things of the country if the growing tendency to crowd into the cities is to be checked. The movement to establish advanced schools in the interests of agricultural education is a step in the right direction and it is to be hoped that those appealed to for aid to carry it out will respond generously.

AN apothecary in Holland has brought out an invention which may have the effect of making doctors and druggists unnecessary. It consists of a figure of a man made of metal, divided internally into compartments, representing the heart, lungs, liver, stomach, throat, etc. In each of these is a drawer opening outward, in which there is an approved remedy for the diseases of the organ. The drawer can be opened by pushing a coin into a slot situated where the keyhole ordinarily is. The packages of pills or powders will contain full directions in regard to their use. It is proposed to set up one of these combined doctors and druggists in every public square, at the principal street crossings and at all railway stations. In country places one of these automatic medicine dispensers will stand near each post-office, church, and other public buildings. A resident or traveller, being suddenly afflicted with the toothache, pushes a sixpence or dime into a slot, opens the drawer leading into the mouth, takes out a powder, swallows it and is at once relieved of

Sain. Corn plasters are taken out of the foct and porous plasters from the back. In a drawer in the forehead are remedies for various kinds of head. aches. It is not necessary for a person to know how to read in order to enable him to prescribe for himself. If he knows "where he feels sick" he will know where to find a remedy for his complaint. In Gcities where many languages are spoken this representation of a man will be very convenient, as it will render the services of an interpreter unvecess. ary. It will be as easy to obtain medicine from this automatic machine as it is water from the town pamp. A competent person will take charge of them, refill the drawers and collect the money deposited every day. Philanthropic motives led to this invention. The Dutchman who suggested it states what most persons believe to be true, that the profit on selling drugs is so great as to be oppressive to the poor. He thinks there should be prome arrangement whereby they can obtain simple remedies at a low price. He also states that most drug stores are closed at night, when people are often in need of medicines. As to doctors, he says they are generally away from their offices and homes when the sick require their services. Fivery one, however, will know where to find a combined doc. tor and druggist when it is made of cast iron and is securely planted at a street corner.

An important Bulletin was recently issued by Prof. Saunders, Director of the Dominion Experimental Farms, on "Barley," in which he strongly urges Canadian farmers to grow twe-rowed barley for the market of Great Britain-rs it is preferred to any other by the British brewers. It must ever be borne in mind he says, that on no account should the two-rowed and six-rowed varieties of barley be mixed, for when that is the case the sample is of little value fo: malting purposes as the six-rowed will pass through the different stages of malting from one to two days sooner than the two-rowed. To leavo the six-rowed that length of time on the floor after it is ready for drying would result in decay and the growth of mould which would seriously injure the quality of the malt. For this rea. son no maltster will have anything to do with mixed barleys. On the question as to whether two-rowed barley can be grown in Canada he gives the results of tests made on the Experimental Farms, and those obtained by farmers in different parts of the Dominion from the samples of two rowed malting barley which were distributed for test, and says "The results now submitted of the tests of these five leading varieties of two-rowed malting barley (Carter's Prize Prolific, Danish Chevalier, Danish Printice Chevalier, English Malting, and Beardless) over a very large area in Canada are sufficient to show that even in an unfavorable season forbarleygrowing there is a wide territory over which two. rowed barley for the English market can he grown with advantage, and the yield obtained from the samples sent out as well as in the field culture at the Experimental Farms would indicate that heavier crops of two-rowed barley of the varieties named could be raised thau of the ordinary six-rowed barley. It is not practicable to entirely change any important crop in a single season, especially when it covers so large an area; it is better for many reasons that such a change should come more slowly, but it does seem feasible to bring this about to a very large extent within a comparatively short ime." Good, pure seed is the first necessity, as so much dependa on giving the plants a good start at the outset. Valuable hints are given on barley. culture such as : a moist soil is necessary to start the plants properly ; a wet soil is detrimental and the land should be well-drained; a light, rich, friable oam is generally regarded as the most suitable soil for barley although it does well on a clay loam it thoroughly worked until it is reduced to a fine nellow condition; a well-pulverized and clean see, ! bed is all-important; early sowing is much favoren?, owing as soon as the ground is dry enough to l.e vell-pulverized; when drilled, two bushels of seed to the acre is commonly used. Barley for malting hould be allowed to ripen thoroughly before harresting, for thus only can a really mellow grain be ecured. When out too early the grain becomes teely, and hence of far less value to the maltster. In conclusion Prof. Saunders says: "The importance f this subject can only be fairly seen when the
magnitude of the interests involved are considered, The total barley crop of the Dominion is prohably about $30,000,000$ bushels, with an average yield of from 20 to 25 bushels per acre. While this is much larger than is produced in some countries, it falls below the average in Great Brituin. Recent returns give the yield of barley in England, Scotland and Wales, for the year 1889 as 31.58 bushels per acre; in $188 s$ it was 33.14 , showing a falling off last jear of 150 bushels. The results of the tests given in this Bulletin show that there are great differences in the fertility of different varieties, and it is well known that favorable conditions of soil are essential to a vigorous growth. With fertile strains of vigorous seed and skilful and judicious management in the preparation of the soil there seems to be no good reason why the farmers of Canada should not be able to work their crops nearly, if not quite, up to the Eaglish standard. Such a result is worth striving for; overy bushel added to the acre would amrunt to $\$ 880,000$ annually to the profits of the farmers, and taking the crop at $30,000,000$ bushels, the yield at 25 bushels to the acre and the price 40 cents per bushel, the iucrease of one pound in weight to the hushel would result in an annual gain of $\$ 250,000$. With depending issues so great as this, no effort should be spured to place within reach of Canadian farmers the very best strain of seed which the world affords, and to disseminate among them all the information which can be gathered, bearing on the conditions essential to success." The Dominion Government were prompt to acknowledge the importance of the matter as on the suggestion of importance of the matter as on the suggestion of
the Minister of Agriculture they placed $\$ 25,000$ in the Supplementary Estimates and an order was cabled to England to purchase two rowed seed barley of the best varieiy to that amount. It is expected that the seed will reach Canada ahout the middle of this month and will be inmediately dis. middle of this month and will be inmediately dis-
tributed in two-bushel bags, sufficient to seed one acre, so that at the end of the season farmers using the seed will have a good supply for next year.


Subscriber, Two Risers, man.-A hammer used for driving fence posts was illustrated and described in our last year's April number. It would be difficult for you to make a pile driver that would give you satisfaction ; besides, you would be liable to infringe upon some patent or other.

A Youna farmer, Nbly Oxlet, alta. - It has been demonstrated that the lest preservative for posts is to first of all soak them with petroleum, and then apply hot gas tar to the portion below the surface. The posts should be thoroughly dry, and it may be mentioned that all experiments indicate decidedly that posts set reversed last longest. We should think it would be better not to peel cottonwood posts, at loast, not the part under the surface. The question of cheapness as between oil and tar need not trouble you, as both are required.
T. W., Whirewood, N.W.T.-A grod and cheap punch for ringing a bull is made by taking a picce of hiokory about one foot long, one-half to threequarters inch through; whittle round smooth and to a sharp point. This is preferred by many to any iron that cuts in any shape, or knife. It never makes the nose sore or inflamed.

## 4 CASH PRIZE COMPETITIONS

Of Interest to every Farm Household.

Massey's Illdstrated has been steadily winning fast friends during the past twelve months, and no wonder, for neither time nor money have heen spared by its publishers to fill its pages with interesting and instructive matter and with the handsomest illustrations obtainable.

None of our past zeal shall be wanting in the future to make the Illostrated a journal of atill greater merit.

As this journal is published in the interest of rural homes, and with a view to greatly increasing
its usefulness, we have decided to offer the follow. ing prizes for four competitions:-

## FOUR GASH PRIZE GOMPETITIONS.

No. 1.-For the Best Essay on "Can our present Methods of Farming be improved upon, and if so, How?"-Open to Farmers only.
First Prize, $\$ 5.00$ in cash.
Second Prize, goods to the value of $\$ 9.00$ seleoted from our Premium List.
No. 2.-For the Best Essay on "Good House-Leeping."-Open to Farmers' wives and daughters.
First Prize, 85.00 in cash.
Second Prize, goods to the valne of 83.00 selected from
our Premium List.
No. 3.-For the Best Plan for a General Pur. pose Farm Barn.-Open to any reader of the Illustrated.

## First Prize, 85.00 in cash.

Second Prize, goods to the value of $\$ 3.00$ selected from our Premium List.
No. 4,-For the Best Plan for a General Purpose Poultry House. - Open to any reader of the Illostrated.
First Prize, 85.00 in cash.
Second Prize, goods to the value of $\$ 3.00$ selected trom
our Premium Ligt. our Premium List.

## GENERAL CONDITIONS.

The work on each competition must be wholly original and executed by the author's or designer's own hand, and evidence
furnibhed to this effeot if asked for. furnighed to this effeot if asked for.
The manuscript or plans entered for competition shall all become the property of MassR8's ILLusTratsd, but will be re-
turned it they do not care to publigh them turned if they do not caro to publigh them.
First and Second Prize Essays, and Plans. and otbers if found desirable will be fully illustrated. Authors, and Designer's names will be published unless we are specially requested not to do so.
Work on cach competition must bo in promptly at time specified below, and must be accompanied by author's or de. signers full nanine and P.O. addrese.
All communications must be addressed to-Mlassey Prese, Massey Street, Toronto. Any enquiries requiring an answer must be accompanied by a 3 c. stamp.
Special Conditions.-Competitions Nos. $1 \& 2$.
There will be three Judges, one of whom will be Mr. Chas. Morrison, one of the editors of the Illogtratid (ex.Editor Toronto Daily Mail), and two others, who bave no connection with Masser's Illostaatsd, and who will be duly appointed and announced. Their decision will be Inal.
Esaaya will be Judged on the following basis:-
General Appearance, handwriting, etc., maximum, 10 pointa. Grammatical Construction and Spelling,
Knowledge ol Subject,
Originality of Theme and Argument,
Treatment, 20
20

No manuscript must contain less than 800 , or more than 2000 words.

Special Conditions.-Competitions Nos. 3 \& 4.
There will be three Judges, one of whom will be Mr. W. E. H. Massey, who has from youth had much to do with building and the drawing of plans. Another will be a professional architect or draughtaman, and the thind a competent and practical judge of the requirements and utility of tarm barna and poultry houses.
Plans will be judged on the following basis:-
Neatness and Accuracy of Drawings, maximum, 20 pointe. Exterior Design Interior Arrangementa, . Interior Arrangementa, Adaptability to General Purposes Cost of Construction, compared with
merits of Design
All Plans ahould be carefully done up before being posted, to prevent their being lost in transmission.
When Manuscripts and Plans must be sent in.
The sooner work on each competition is banded in the better. hut the following ars the latest dates upon which manuscripts
and plans will be received-

Competition No. 1- up to 6 p.m. on March 14th next. $\begin{array}{ccccc}\text { " } & \text { No. 2- } & \text { " } & \text { " } & \text { March 14th next. } \\ " 1 & \text { No. 3- } & " 1 & " 1 & \text { March 14th naxt. }\end{array}$


Wagon Coupling Bolt.
Mr. C. R. Notman, Wiarton, Ont , writes us:I have a wagon coupling bolt which has given me great satisfaction for the past two years and has saved me the price of a good many of some other design. Before I had this one made I lost three of the other kind most generally used by wagon makers and farmers. I have never seen a bolt like it before and it may be worth illustrating in your farm notes. It is made thus:-


Pruner for Thorny Bushes.
Every spring and fall the guestion arises how to cut outand remove with least labor the tough, prickly canes of the blackberry and other thoray bushep. The pruner depicted in the cut is suggested. This is an old file transformed by a blacksmith into a hook, An iron rod is welded to it and a handle fixed on the other end as shown in the

sketch. Of course the edge of the hook is kept aharp. With such a firm and comfortable hold on the tool one can work for days without the least fatigue and, if the hand is gloved, with perfect comfort. The old wood after being cut out of the hills may be left to decay or taken ont and burned, which is the plan when spring pruning is practised. There will be little of it left next season.

## Reeling Barbed Wire.

Tue fcllowing sketches of a contrivance for reeling up barbed wire when a fence is to be takeu


Pig. 1.
down were supplied to the Rural New Yorker by a correspondent. It was made of pine lumber in a
very short time. He used horse-rake wheels; the chain and sprocket-wheels were borrowed from an old binder. It is a very handy rig and can be run


$$
\text { Fia. } 2 .
$$

by one man. Figure 1 represents a side view while Figure 2 shows a view from above: a, spool; $b$, chain-belt; $c c$, sprocket-wheels ; $d$, crank.

Ir is well always to bear in mind that the early killed is the easily killed weed, and the weed that robs the crop least.

Porchase only the very best seed. It is a fact that every extra cent spent for improved seed, will often bring a dollar in the harvest.
A commonication now and then from some of our readers giving the results of their experience on any subject of interest to their brother farmers would be greatly appreciated.

The greatest care should be taken to select those varieties of corn intended for silage, that will fully mature before frost, in the localities where it is proposed to grow them; a less number of tons of mature corn being in all cases more valuable than a much larger number of tons of immature corn.

Ir is surprising to see what a great change a little paint will make in the appearance of farm buildings. Many of the ready mixed paints are valuable and cheap, and the painting can be done by one of the boys or hired men at odd times. A good coat of paint will preserve the buildings, add to the beauty and attractiveness of the premises and transform old run-down farm houses into neat and tasty homes.

Those who wish to increase the value of their farms at little cost, with no increase of taxation, should make the public road which passes their farms, smooth and handsome. Throw no stones or rubbish into them; leave no broken and decayed implements to occupy them; clear out the unsightly weeds which otherwise would spread to the adjacent Gelds; make them a continuous landscape garden -the cheapest ornamental planting you can have, for the ground thus brushed, planted and improved costs jou nothing.

On how many farms do the sons take an active part in buying and selling and planning the work, so long as the father is able to do so? Because his son was once small and helpless the stupid, blind parent seems to hold him always so and often only awakens to the truth when it is too late, and with a strong sense of wrong done him rankling in his heart the joung man leaves the old farm forever, so far as interast is concerned. There is many a
farmer's son that has the natural ability at eighteen to take the home place and run it better than his father, who has never yet been allowed to sell a wagon load of produce, a fat steer, or a horse, no matter how many are raised, and who is forced to ask "pa" for a dollar if he is "permitted" to go to the fair. A boy with any intellect must have a heart as big as an ox's not to run away from a farm when treated in that way.-Breeder's Gazett.

Ir is not always that the planter can have his choice of soil, and he can meet with fair success by adapting it as far as possible to the different kinds of trees he has to plant. Peach trees do best on sandy soil. He can lighten heavy land for them by free use of coal ashes. Cherry trees do best on the dryest, gravelly land. An excess of water makes the trees non-productive. On dry land they will need good manuring with plenty of ashes containing potash. The pear thrives best and is freest from disease on clay soils, perhaps because these preserve a more equable temperature.

A vegetable garden should contain a full supply of all that can be grown in the vegetable line. Nor is it sufficient that it only have such as may be supposed to be necessary from one planting. The very thought of a vegetable garden should carry with it the idea of a constant and liberal supply of every line that may be produced successfully. Vege. tables of some kinds arrive at their best condition and then commence to decline rapidly in their de. sirable qualities. In such cases the planting should be made at such intervals of time as will be likely to secure a succession of the product. However desirable earliness may be, nothing is gained by planting before the soil gets sufficiently warm to cause a speedy germination and a rapid development of the plant. A slow unnatural growth is very likely to produce undesirable vegetables. Success in a garden requires labor and attention, but it must be remembered that it is labor that pays for itself many times over.

## Witio Stock.

## To Restrain a Cow from Kicking.

- Oor illustration shows a method of restraining a kicking cow. It is so simple and easy, and so quietly applied, that the cows do not seem to resent it as they do if tied head and foot, as some seem to think necessary. A small rope or large cord is passed around the body of the cow just in front of

the udder and over the top of the hips. It need not be drawn tight, just gaug will do, and no cor to which it is applied will even kick. Sometimes a cow thus tethered will lift a foot as if to kick, but somehow she seems to change her mind and puts it down again,-American Agricullurist.

Never keep more than a dozen pigs in one pen, and better not that many. Let them have pure water, wholesome food in variety, dry, clean, wellventilated pens and styes and plenty of them. Let them have exercise in the open air and plenty of grass in season, and at farrowing time give each sow a pen to herself. These are the necessary con. ditions to health, and consequently to financial success in handling the improved hog.

So long as a sow brings a good litter of vigorous igs she should be kept for breeding. It is not a good plan to keep changing and using young sows or breeding. Under what may be considered the Bame condition, a sow that is two years old, will bring a better litter of pigs than a young sow and aven with the best of breeds there must be some risks and to avoid having the risks the botter plan will be found to keep sows for breeding that have proved themselves to be good mothers.

Mares in foal should have exercise and moderate work, and under no circumstances should they be subjected to harsh treatment, nor should they ever be allowed to go where they would be in danger of being frightened. Animals of vicious habits should never be used for breeding purposes, as vices are transmitted. Of two colts similar in disposition and sense, one may develop into a steady and valuable family horse, while the other may be everything that is vicious, treacherous and unsafe-all because of a difference in the men handling them.

Calves should be made tame from the start; hey should show no more signs of fear of you than your pet dog does. It pays to loaf around among the calves, and it pays well, too, as you will find when the calf becomes a cow and you attempt to milk her. Your cows and calves, in fact all your stock, should look upon you as their best friend. Get them to feel that way towards you, and you have made a very important step towards success. The man who looks on his cows as mere machines to turn feed into milk, and has no further thought about them, does not, you may depend upon it, get all out of their ownership that he ought to.

Speaising of the "general purpose cow" a leadng dairy authority says: Milk-giving and meatmaking are equally natural functions of every cow In natural condition. Milk and flesh alike come from the food eaten, digested and assimilated. The quantity and quality of either product will be affected by individual peculiarities, acquired or inherited, by the quantity and quality of food, and hy good or bad care. Full work cannot be done in both directions at the same time. The maximum product in both is not to be expected from the same animal, even at different times. There are thousands of cows, however, representing a half-dozen breeds, or various crosses, which are conclusive proofs of the possibility of combining in one animal a, merit above the average-both for the dairy and for beef-making-a combination making animals more valuable for a multitude of our farmers than would be those in which there was a special development in either direction with corresponding weakness in the other. It is well worth an effort to supply the lest possible of these double-purpose cows.

Thr high bred horse is the animal nearest to man in intelligence. Horse-breeding has become a science and in France especially it has reached a wonderful degree of perfection. The French people are ardent lovers of horses and this sentiment has been keptalive amid all the turmoils of France. The government has lent its interest to secure a valuable animal for army use and has its own steeds selectod with the greatest care. This fostering has resulted in wonderful progress. Over 12,000 horses have been recorded under the direction of the government. The most valuable horse in France is the Tranch Coach. There are hundreds of mares in the Dominion which can be crossed with Frenci Coach stallions and breed colts of double the value of the dams. In this way additional value may be added to our horses and a way opened to help the farmer lift burdens from the farm. There is a profitable demand for colts of such breeding in the States.

Says the Horseman :-The best drivers are those who are always on their guard. Many accidents occur from the capers of gentle family horses that have never been known to become frightened or to do anything coltish and for this reason have been
carelessly driven. People are always on guard when about horses known to be vicious, and the most dangerous kicks are from usually quiet horses which were approached without caution, and in a playful moment or when surprised, let fly without vicious intent. The lesson that all good horsemen have learned from this is to be always on guard when among horses and to never, under any circumstances, drive any horse carelesaly, or neglect proper precautions for safety. I'he steadiest horses are sometimes coltish, and an accident or runaway may result from momentary neglect.

Starved cows are generally owned by men who have starved heads. They may be well posted on politics, but they certainly are not well posted dairymen. It will be generally found that with all their experience they have not learned how to breed a profitable dairy cow or how to feed a cow up to the point of profit. The dairy cow calls for high discrimination and intelligent aupervision, and no animal on the farm responds so generously to little attentions as she. The function of milk-giving is maternal and is influenced by every surrounding as well as the condition of the animal herself. While the steer that is gorged with corn and is piling on fat under his sleek hide may stand considerable cold in winter without loss and with apparent satisfaction, a cow that is giving milk is susceptible to every change of weather and keenly feels the cold. Not with her as with the steer ; instead of piling the surplus fat about her bones she is pouring it forth at the milk pail, and each day we take from her as milk what was her food the day previous. This constant depletion accounts easily enough for the sensitiveness of the dairy cow, and no one should be so thoughtless of the cow's comfort and careless of his own profits as to have this animal feel a single want. The management of cows calls for much patient, intelligent labor; such as is given in all dairy countries, notably Holland, Denmark and the Island of Jersey.

## The fooultra gard.

## Hatching Box and Brood Coop.

The hatching box and brood coop here depicted, was designed by an Iowa poultry keeper, and illustrated in I'he American Poultry Jourual as something of value to every poultryman.


The box is eighteen inches square and twenty. four inches high. There is a sliding door in the front the width of the box, less the width of the groove pieces in which it alides. There is a hole in each side, near the top, for the purpose of ventilation and light. In the box is placed about four inches of moist black dirt; upon this is placed cut straw. All is now in readiness for the eggs and the setting hen. She is given the eggs and the door is closed. The run is made of lath-the width and length of the box and one lath long. A combina.tion trough, containing corn, water and gravel, is placed in front of the end of the run. Once a day the door is raised and the hen is allowed to come off, which she does, and after eating, drinking and talsing a dust bath, returns to the nest. The eggs are examined by opening a small slide door in the back of the box. The hen on the nest, the doors are closed, and old biddy rests content, believing that no one on earth knows where she is. She is safe from rats and other large vermin. She is not
molested by other hens. In fact, she is as a sitting hen should be. Since using this coop I have hatched a far larger per cent. of eggs than ever before. There is nothing to prevent the hen from hatching every fertile egg. When the chicks are hatched they and. the hen are removed. The box and run are thoroughly cleaned. Then it is placed in the yard and the hen and chicks put into it. It makes a splendid brood coop. In it the little chickens can be fed, and larger birds cannot enter in to share their meal or purloin it all. It gives the hen the ground in which to scratch and dust, and can be moved so as to give the hen fresh earth whenever desired.

In managing the poultry the hens should be looked upon as a machine for producing eggs and be fed and managed accordingly.

Chicken houses should be comfortable but need not be expensive. To the poultry the rough boards are fully as acceptable as the finest cabinet work.

Eacs intended for hatching should not be over two weeks old. If much older it takes longer to hatch them, and the chicks are not so thrifty as a general thing.

CARE should always be exercised to make nests for sitters, as will best promote comfort, convenience, cleanliness, health and a successful hatching of the chicks.

If you have plenty of small apples that you would othervise throw away, cut them up fine and throw them into the chicken coop. They will disappear rapidly.

As experienced poultryman thinks the easential cause of frilure in so many of the attempts to keep fowls in large numbers is due to lack of care. The farmer, he says, will rise at four o'clock in the morning to feed and milk the cows, will carefully clean out the stalls and prepare beds for the cows, and his work does not end until late, but he will not do so much work for the hens; jet the hens will pay, when properly cared for, five times as much profit, in proportion to labor and capital in. vested, as the cows.

Laying hens are very fond of broken bones. They help to digest other food when they cannot get at sharp gravel, and with the strong digestive apparatus which fowls have, every part is made use of. The lime goes to make the shells, but if the bones have been only cooked and not burned, they are full of material from which the egg itself is made. The only advantage from burning bones is to make them break up more easily. The fowls certainly do not like them as well, nor are they so good for them as when broken up without burning.

If all keepers of poultry realized the advantages of having a dry bottom for the fowl houses, they would spare no elfort to secure it. Proper drainage is the first necessity ; the houses are better first located on a slope to the east or southeast where there is natural drainage, and where, by banking up the back, the water will be turDed away immediately. The houses shouid not be floored over, but filled to a depth of six or eight inches with dry sand from the river beach or a bank where no clay or loam will be mixed with it, for with either it will soon pack down solid, and not be loose and soft, as it ought to be. Coal ashes work well if kept perfectly dry, but as soon as they are wet or moist they tread hard. With sand in the houses they can be raked over frequently to take up the litter and feathers which accumulate, and after the roostboards are cleaned, it is well to sprinkle them over with the sand, to absorb bad odors. This dry floor furnishes the fowls a chance for the dust bath which they cannot get outside in the winter time. For furnishing the hens the exercise that they need, the afternoon meal of hard grain may be pressed into the sand with the foot while feeding; then they work for what they get, and are not so liable to lay on fat, as large fowls will if they simply eat and then stand about till the next meal time.


Amusing and Instructive.
how farmer boys may become entomologists.

Soxe difficulties beset the way of the young entomologist which are apt, at the very beginning, to lead to discouragement, if not to despair. First, there is the seeming necessity of an elaborate cabinet for his collection. Secondly, a very great deal of time and labor must be taken in the preparation of specimens, and results are very often unsatisfactory. Thirdly, museum pests make "eternal vigilance the price" of a collection. And fourthly, it is impossible to identify material as one finds it ; and there is no satisfaction in the possession of any insect without a name that can be relied upon. In view of these difficulties, which are very serious, what shall the young entomologist do?
First, an elahorate cabinet is at the beginoing, if not always, an unimportant , atter ; at any rate, no one should purchase or make an elaborate cabinet until after he has scen a number of different kinds of boxes, and has decided upon some specialty in his collecting. Pasteboard or plain wood boxes, with plain overlapping and closely fitting covers, with pith, turf, or cork lining neatly covered with white paper, are cheap, and are as good as the best for any collection. Cigar boxes neatly papered will answer every purpose for a long time. The collection, and not what it coutains, is the all-important thing.

Secondly, it is true the labor of preparing specimens for the collection cannot be avoided; but in entomology, perhaps more than elsewhere, he aaves more than half his time who does all his work well. It is always waste to do anything with poor specimens, except as they are unique. It is a waste, except for special purposes, to rear or prepare a mass of common material. In collecting, no imperfect specimens, save as the species is new to the collection, should be preserved. Much temptation to a waste of time and labor will thus be avoided. After the specimen is prepared, the same rule should be followed. No imperfect specimen, save it is unique to the collection, should be preserved. One will thus be forced to exercise patience and extreme care, which are, after all, the great requisities. The same care should be taken in the arrangement of the specimens. A collection of perfect specimens, well set, uniform in pins, beight upon the pins, and in labels, is always a satisfaction. The all-important rule is, do all work well and for permanency. Thirdly, museum pests are very easily controlled with a little care. Have your collection by preference in a room without carpet or rugs. Have the covers of the boxes as closely fitting as possible. Keep them in a cabinet or wardrobe with closely fitting doors. But wherever the boxes may be, if pests are found in the collection they must be destroyed at all hazards; baking the specimens is the best way, though care must be taken not to expose to a temperature much above the boiling point. Two or three good applications, two or three weeks apart, of chloroform or bisulphide of carbon will kill all living things in the boxes. Once clear of pests it is easy to keep clear. Naphthaline in cones or pinned in a paper in one corner of the box, will prevent any danger. Personally, I have found the
oil of sassafras to be as good as any, and much plensanter in some respects than other preventives. Have a piece of sponge on a pin in a corner of the box and drop a little of the oil on it. All preventives ought to be renewed several times each year. But as long as the odor exists the insects are safe.
Fourthly, the difficulty connected with the identifying of species is no small one; but there is no satisfaction in a mass of material unarranged and unmanageable. Let the beginner determine that whatever difficulties present themselves, he is going to have his collection systematically arranged, and is going to understand why it is so arranged. Every insect must have if possible, one label, with date and place of capture; another with its scientific name, and it must be in its proper place in the cabinet.

The young entomologist should determine that be will know why insects are arranged as they are by entomologists. If he is to be anything, he must be more of a student than a collector. At the beginning collectors and students are pretty sure to be too ambitious. The insect world is much larger than most people realize. Any one who collects butterflies is supposed to know not only about all of these, but as well about beetles, and every other insect, not only in his own country, but the world over. Insects, in species, probably far surpass all the rest of the animal kingdom, and perhaps equal in number all other created things on earth. Even a genius would have to be spread very thin if he tried to cover a knowledge of all the rest of the animal as well as the vegetable and mineral, king. doms. The young entomologist must, if he is to be anything, limit his studying and collecting to a specialty-to one sub-order at least; and if he means to do well, to one family or group, or perhaps one genus. The aim must be to have in that specialty all the knowledge possible, and a collection representing as perfectly as possible every species. One must have his "hobby" and eacrifice freely in other groups for the sake of perfection in the requirements of his specialty.
For study, get all the literature bearing upon the subject. Read, as far as possible, the current journals of your own country; note all matters of interest and by publishing or otherwise, let others have the benefit of what you learn. Make the acquaintance, by correspondence and personally, of veterans as you may have opportunity and as you have something real to aek or tell. Form a society, if none exist near you, and join any within your reach.

In getting the names of insects, one must make use of the time and brains of others. This cannot be avoided in the present atate of the science. So, while you are about it, have your material determined by the best authorities, that is to say, by specialists ; thus you can be able, as far as possible, to rely on what you have, though of course specialists are not infallible. You can find who the specialists in any family are from the State entomol. ogist or from any entomological journal. Write and find their terms for the use of their time and knowledge. It is however, always understood that a specialist has a right to retain any of the material sent him if he desires it. Never forget to pay expressage or postage both ways if you wish insects returned.

In the speciality, at least, seek to have the in. sects in all stages of their history-from the egg to the imago.

To sum up, let the ground you a.ttempt to cover be rather too little than too large. Demand perfection of yourself. Have no end of patience and carefulness. Do all your work well. And seek in study and collecting to have everything thorough, reliable and complete.


A Summary of News for the Past Month.
lst.-Hon. F. R. Mnsson, Mr. C.A. Dansereau, and Mr. Phil. Landry, called to the Dominion Senate to represent districts in Quebeo.
2nd.-Destructive fire in Boston, Mass., loss \$200,000; $81 \times$ people burned to death.
3rd. -The London Times actiles the libel suitbrougbt agains It by Mr. Parnell who receives $£ 5000$ as a solatium Residence of Secretary Tracey, at Washington, destroyed by fire ; bis wife. daughter and a servant girl hurned to death. C. P. R., sheds at Oitawa and five passenger coaches d atroved hy fire
the C.P.R. appointed oity engineer of Toronto.
4th.—Death of Senator John Macdonald, Toronto.
5 th.-Three young ladies and four gentlemen while holding a religious meeting in Hull, Ont., attacked by a mob and badl beaten and bruised.

0th.-About two hundred lives lost by an explosion in a colliery at Abesychan, Monmouthahire. England. Andrew Carnegie offers to spend one million dollars for a cen. tral free library and branches for Jititsburg, Pa,
Immense deetruction of property by floods in Oregon. Immense destruction of property by floods in Oregon.
7 th.-Paris excited over the arrest of the Duc d'Orieans, eldest son of the Count de Paris, for violation of the law ban ishing members of previously reigning families from France
8th. - Death of Cardinal Penci, the Pope's hrother.
John Morton and his wife, Miami Station, Man. shot dead by Morton's father, because of a trifling quarre) between them.

1uth.-The Orange Incorporation Bill parses its second read. ing in the Dominion House of Commnns hy a vote of 35 to 0 in Brooklyn, N.Y. laid.
11th.- Manitoba Legiglature pass a resolution abolishing the Official use of the French language. ${ }^{\text {I }}$. opening of the Hull, Ont.; Protestant evangelists terribly beaten.

12th. - Duo drorlesnssentenced to two yearsimprisonment. - Thomas Kane, hanged in Torooto for the murder of | his paramour. |
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| S12 |
| 1000 |

\$12,000.
136h.-Parnell Commission report laid before the Imperial Parliament.
14th -Australian Colonial Conference unanimonsly adopts motion in favor of colonial federation.

Toronto Uni versity buildings and contents aluost wholif destroyed by fire, loss about $\$ 400,000$.
15th.-Mr. Peter McLaren, the wealthy perth lumherman, called to the Dominion Senate. .. Horrible treatmen of Russian political prisoners reported in Siberia; one lady flogged to death, and three others commit suiolde in consequence.
ion at Ottawa.
18th.-Death of Count Andrassy, the well-known Hungarian Etate8nian. United Stantes Senate ratifics the Britisb arrested for murdering his wife.
19th.-Death of Joseph G. Biggar, M.P. the well-known Home Ruler.
20th- - Four children of John Liston, Kingaton, Ont., burned to death. Dr. Montague, elected M.P. for Haldimand beating Mr. Colter by 239 votes.
cotia Legiblature
21st-Atter a long and able debate in the House of Commons Sir John Thompson's amendment to Mr. McGarthy's Bill for
the abolition of the official use of the French Lanquage in th the abolition of the official use of the French Lanquage in the the North Weat Assembly, carried by a vote of 149 to 60 .
22nd. -Over sixty lives lost and great destrucion of pro 22nd. - Over sixty lives logt and great deatrucion of pro
perty at Prescolt, Arizona, hy a larze storace dam perty at Prescott, Arizona, hy \& large storaye dam giving
way. Death of John Jacob Astor, of New York; way
wealth estimated at $\$ 150,000,000$.
23rd.-Rodolph Dubois, St. Alban, Que., arrested for mu dering his wife, mother-in-law, and two young children.
dering his wife, mother-in-law, and two young children.
24th. - Unted States House of Representatives select
24th.-Unlted States House of Representatives eeleot Chi cago for the World's Fair of 1892. .i. Motion to place seeds and grain used for the produotion of ensilage on th frec list defeated in the Dominion house of Commons.
25th.- Resolution in faynr of ahortening the hours of labor defeated in the Imperial House of Commons.
28th. -Toronto Board of Trade resolves to urge upon the Government the establishment of a two-cent postage to and from any place within the empire.
27th. -Robert A. Smith, merchaot, Newmarket, Ont., murdered in his store by some unknown pereon. . . . Sir John Mncodonald presented by his irienda and admirera with a por trait of binsell. . Mr. Adam Brown's bill to prevent the shooting of pigeons from traps, read a sccond time in the Dominion House of Commons.
28th.-Mr. Labouchere, M.P., suspended by the Imperial House of Commons for asserting that Lord Saliebury told untruths. $\qquad$ Mr. W. R. Brock, Tornnto, called to the Dominion Senate.

Sir Morell Mackenzie awarded f1500 damages against the St. James' Gizette, London, for pult of the lo


Not Well Acquainted.


If Camel.-Here! keep your tail out of my fodder! IR Eliprinastr.-Well, you needn't get your back up!

He Carried His Locks Home.

armer.-How would you like to have your hair cut, sir? UsTongr.-With scissors, sir! Did ye s'pose I wanted it e with a table-knile?
o remove paint-sit on it.
ELER ask a woman what she is doing when she is trying to
r is to be hoped that after having had apring all winter we not have winter all spring.
Hovid earthquakes, be referred to as "real estate moveots," or " matters in connection with ground rents?"
Istress-Mary, go shoo those chickens out of our yard. tress (later)-jary, have you shod those chickens yet?
shopmaker hung out a new sign, and then wondered at passers-by found so amusing. Aign, and then wondered
His sign ran as follows:
Ho elsewhere to be ohested. on't go elsewhere to be oheated. Walk in here."

## MASSEY-TORONTO LIGHT BINDERS.



GOLD MEDAL AT MELBOURNE CENTENNIAL EXHIBITION, being the higheat honor awarded, although other Exhibitors have erroneously claimed additional distinction by way of special mention.

GOLD MEDAL AT TUNGAMAH VICTORIAN FIELD TRIAL, December 14th, 1889, for best field work, strength, durability, and ease of manayement.

GOLD MEDAL AT CLUNES VICTORIAN EXHIBITION, 1889, for general exhibit.

## Reports of the Australasian Field Trials, 1889.

Kerang, held Oct. 18th. -Toronto lst Prize, defeating the Buckeye and Woods. Nathalia, held Oct. 29th.-Toronto defeats the McCormick. Nomorkati, held Oct. 31st.-Toronto defeats the McCormick.
Nhill, held Nov. 7th.-Toronto defeats the McCormick.
Charlton, held Nov. 7th.-Toronto defeats the McCormick and Woods.
[Osborne. Ballarat, held Dec. 5th.-Toronto defeats the Deering, Hornsby, Buckeye, Howard, Woods, and Romsey, held Dec. 31st.-Toronto defeats the Howard, Woods, and Hornsby.

## The Massey M'f'g Co., Toronto, Ont.



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HARROW.
This is the most complete and perlect working Harrow made. Ithas no equal in reliability and effectiveness.
The digk gangs are connected with the main frame by a ball and socket joint, in such a manner that each gang is free to conform to the uneven surface of the ground, and can be taken apart for trans. portation or storage, without the use of any tool, in one minute.
is in all respecte the very best Harrow manufaotured, and will give perfect eatisfaction in $y$ case. For further information and circulars, address
M. WILsON \& CO., Hamilton, Ont.


## WHAT IS IT?

The best, the most useful, the strongest and cheapest EMERY STONE for grinding Mower Knives, and the only one that can bo used for scythe sharpening also.

## SOMETHING NEW

We control all rights for this Grinder in Canada, and are having them made to our order. Agents wanted Everywhere. Write for prioes wholesale or retail.
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Toronto, Ont.

condouted by aunt tuto.
(Communications intended for this Department should be addressed to Aunt Tutu, care Mabsri Prkse, Massey Street Toronto.

## Cat-Tail Card-Receiver and Camp-Kettle.

Tie together three niccly formed cat-tail stalks with a bow of broad ribhon. Brouze a large,coarse woven straw hat ; the woven hat requires nolining, and is consequently much lighter than a braided one. liasten the brim of the hat at three points, that is, to each cat-tail stalk; and a pretty card basket is the result, as seed in Fig. l.


FIG. 1.

fig. 2.

A gypsy camp-kettle may be represented by tying three strong cat-tail stalks together quite near the heads, thus forming a tripod. From the center, by means of a light brass chain, suspend a tiny Japanese tea pot or a light kettle, us shown in Fig. 2. The effect will be quite pleasing in an otherwise vacant corner of the parlor. This can also be made to serve as a pretty table decoration for a five o'clock tea. But in this case the cat-tails must be quite small, nor should the stalks be more than two feet long. The kettle must be of crackled ware which will resist great heat. A small alcohol lamp, completely hidden by small pieces of wood, is placed under the kettle to keep the water boiling.

## Crocheted Book Bag.

Pretty book bags, always acceptable to achool girls, may be manufactured so easily by one having the least bit of ingenuity that it seems unnecessary for any child to go without one, or be obliged to carry the plain homely canvas ones so often scen. Two balls of macrame cord and a rembant of fine French sateen are all that is required for the bag as illustrated; but, if desired, a much nicer one may be produced by asing satin for the lining and placing a large, soft bow of broad satin ribbon carelessly on one side. First, an oblong piece of crochet work, twelve inches wide and twenty two inches long when completed and bordered, is made in any easy stitch. As shown here the work begins in the middle of the piece-at the bottom of the bag-with a chain about eleven inches in length, on which are worked several rows of plain double crochet, then a'row of shells, then plain again, and so on till one side is completed. The other is worked on the other side of the chain in the same way. A border of scallops like the shells is worked all around the edge, and straps fifteen inches long, that are also of plain crochet bordered by small scallops, are joined to it at each end for handles. It is stiffened
with thick starch, spread out smoothly and dried, and afterwards varnished with white or bronze shellac according to taste. The bag is then smoothIy lined as far as the border with blue, yellow or red sateen, bent in shape, and finished with a fanplaiting of the sateen at each end, the top of which

is tnrned down to form a ruftle, below which is a casing for an elastic band. If preferred the lining may be omitted and a wedge-shaped piece of cro-chet-work, folded lengthwise through the iniddle, inserted at each end, but the bag will not be as capacious, or as readily adjust itself to the demands made upon it as it would with the fan-plaiting and elastic. Of course much smaller ones may be made for little children, who, if they have only one little book to carry, are much comforted if they have something pretty to carry it in.

## Table Scarf.

This table scarf is made of a width of India silk of the needed length for the table that it is to adorn. The endsare decorated with alternate strips of velvet and silk, of equal width but of different lengths, the silk strips extending not quite as far below the edge, nor as far up on the scarf, as the velvet strips. All the strips are finished in points

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