

• Massey's Illustrated •

UNITED WITH THE "TRIP HAMMER."
(PUBLISHED MONTHLY.)

Mid-Winter Number

New Series, Vol. 1, No. 3.]

[Toronto, February, 1889.



THE WOODS IN MID WINTER. From a Charcoal Sketch by M. RAPIN, reproduced by photo-engraving. (ART AMATEUR.)

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These Premiums are given by the Publishers for obtaining new subscribers, not to new subscribers.

No Person sending his own name as a subscriber can receive a Premium for it.

Any person subscribing for MASSEY'S ILLUSTRATED and paying the full subscription price, can then receive Premiums for all the new subscribers he may obtain and send us.

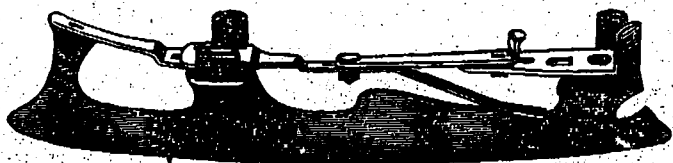
Our Premium List is really a catalogue of all sorts of goods, useful, needful, entertaining, and amusing, including a nice variety of books; and as we offer all the goods illustrated and described FOR SALE at prices quoted, it affords people living in remote districts a fine opportunity of selecting and purchasing the newest and best goods, it being possible to send many of the articles by mail, and all of which may go by express, the rates for which are very low at the present time.

A FEW SPECIMEN PREMIUMS.

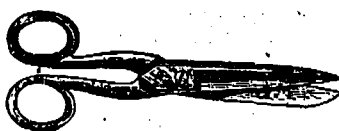
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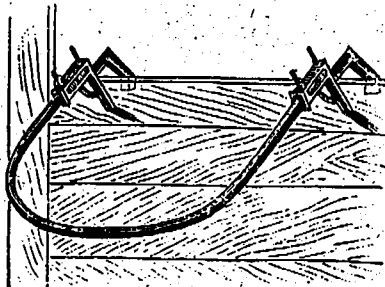
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A handsomely bound book, which also contains a sketch of the life of the Pontiff and his portrait.

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In view of the uncertainty as to the fate of Stanley, the intrepid explorer, this book, written by himself, should prove of much interest. It is abridged from the original edition, is bound in cloth, and contains 312 pages copiously illustrated.

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No farmer should be without one of these Counter Scales. It has a capacity of 1/2 oz. to 36 lbs., and is a first-class scale for farm use. They are made by Gurney & Wares Scale Co., Hamilton.

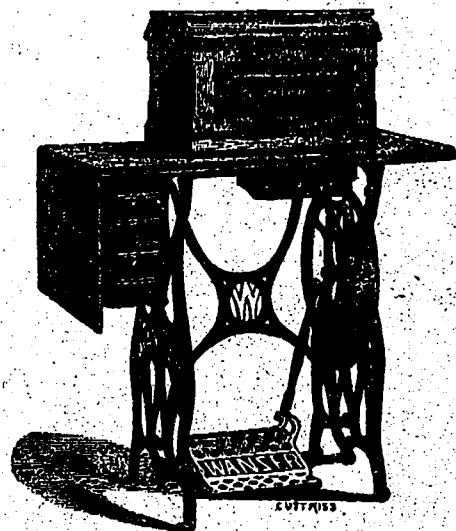
Price, with tin scoop and including stamping, \$8.50, or given for 20 new subscriptions. Must be sent by express or freight and charges paid by receiver.

Special Premium No. 123.—The Youth's Companion.

We offer this most excellent illustrated Weekly Paper, published by Perry Mason & Co., Boston, which has the largest circulation of any American journal, is the best known, has the most noted contributors (W. E. Gladstone amongst others) and is beyond any question the best paper published for Young People to be had.

Regular subscription price, \$1.75, or given for one year for only 3 new subscriptions to "Massey's Illustrated"; or if a renewal, given for 8 new subscriptions to MASSEY'S ILLUSTRATED.

Premium No 62.—Sewing Machine.



The Sewing Machine we offer is the "Wanzer C" No. 6, manufactured by R. M. Wanzer & Co., of Hamilton, Ont. It is a thoroughly reliable machine, and first class in every respect. It has walnut stand, with extension table, set of drawers and new gothic cover. Each machine has the following attachments:—1 ruffler, 1 extra throatplate (for C or F), 1 foot hemmer, 1 binder, 6 needles, 1 bottle of oil, 1 tuck marker, 1 set of 4 hemmers, 1 oil can, 1 cloth gauge and screw, 1 instruction book, 1 quilter, 1 braiding wire, 1 braiding foot, 1 screw driver, 4 bobbins, 1 spool of thread.

Price, \$45, or given for 76 new subscriptions or for 40 new subscriptions and \$10 additional. Must be sent by express or freight and charges paid by receiver.

MASSEY'S ILLUSTRATED

A JOURNAL OF NEWS & LITERATURE FOR THE RURAL HOMES

UNITED WITH THE "TRIP HAMMER."

New Series.
Published Monthly.

TORONTO, CANADA, FEBRUARY, 1889

[Vol. I., No. 3.]

COCOA-NUT PALMS.



ROUND THE WORLD,

A Run through the OCCIDENT, the ANTIPODES, and the ORIENT.

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

THE HAWAIIAN ISLANDS.

Third Letter, dated S.S. "Zealandia," Dec. 7, 1887.

* * * * *

The last letter to you went ashore at Samoa, to be picked up by the return mail steamship.

A sloop came out about 12 miles from the shore of Tutuila and despatched a small boat manned by some fifteen light-clear-coffee-colored South Sea Islanders to receive the Samoan mail. They presented a great contrast to the dark chocolate-colored race of Hawaii, and judging from appearance their tailor's bills must be very light: a mere band about the loins constituting a full dress suit. They were men of fine physique, with rather savage-looking countenances and peculiar, fine, bronze-colored hair. It was most amusing to see them propelling their boat up to our ship's side with clumsy short paddles instead of oars. No sooner had they reached the ship's side than they began



HARBOUR OF HONOLULU.



AN AVENUE OF ROYAL PALMS.

wild endeavors to sell native fans and other articles they had brought with them—each vying with his neighbor. They were not allowed to come on board, and as they stood reaching up and bartering in a frantic manner with our passengers, it was a ludicrous spectacle. It looked very sorry for the mail for some time, that receiving the least consideration. Occasionally a passenger would throw a shilling or a sixpence into the water and before it could get very far down these marvellous swimmers would dive in after it, the successful one never failing to bring it up between his teeth. I trust, however, my letter reached you safely, though it looked very doubtful for it for a while.

As I promised I will now endeavor to tell you something about the Sandwich Islands. In attempting a description of the Hawaiian Islands (their proper name), brief as mine must necessarily be, one scarcely knows where to begin—there is so much of interest that might be said about these beautiful-isles and the strange little mid-ocean kingdom of Hawaii. To the average Canadian or citizen of the United States, the name Hawaiian

Islands suggests merely some islands away off in the middle of the Pacific *somewhere*, to the best of his knowledge peopled with savages, whom missionaries are striving to civilize; for the grossest ignorance is extant regarding this little island kingdom. The reason for this is no doubt due to the fact that beyond an occasional meagre newspaper item, information published has been of such a nature as not to reach the general public. Hence, to start with, it may be best to give you a few facts and figures. There are twelve islands in the Hawaiian group, only seven of them being inhabited, the other five are more properly speaking rocky prominences. They lie near the intersection of the 20th parallel of N. lat. and the 160° of W. long., and are the most isolated portion of the inhabited globe. The nearest continental harbor is San Francisco, 2,100 miles away, and it is but little less to the nearest group of islands of any considerable size. These islands are of volcanic formation, having been built up by degrees in ages past from the very sea bottom; the line of progress being from the northwest islands, which are the oldest, towards Hawaii in the southeast, which is the largest island of the group, and where is to be seen the great volcano of Kilauea, the largest active volcano in the world—the greatest attraction in the kingdom. The most important island of the group, commercially and otherwise, is Oahu, upon which is situated the beautiful city of Honolulu, the seat of the government, with a population of 20,000. The total population of the islands is now estimated at 84,574, only a little over half of these being pure-born natives, one quarter Chinese, one-eighth Portuguese, about 4,000 English and American, the balance being made up of other foreigners.

The lava of which the islands are wholly made up, upon decomposition forms a rich and very fertile soil, and being favored with a most equable warm climate (the thermometer at Honolulu, for instance, ranging from about 75° to 85° on the average the year through), a most luxuriant vegeta-



ISLAND OF OAHU, HAWAIIAN ISLANDS.

tion results. All sorts of tropical fruits and the most beautiful of palms and shade trees, shrubs and flowers abound.

There are many large sugar plantations which give enormous yields—sugar, in fact, forming the most important export, 8,577 tons having been exported in 1885, with considerable increase each season since. Rice is also a very important crop, about 4,000 tons being shipped every year. Nearly \$60,000 worth of bananas are annually disposed of, while hides, wool, goat skins, molasses, coffee, etc., are largely exported. I was greatly surprised upon entering the lovely harbor of Honolulu to find such large shipping interests. It presented a busy scene with its numerous ships loading and unloading their cargoes; and except the odd-looking native fishing canoes here and there in the harbor, the natives on the wharf, and the tropical vegetation beyond, one sees little else to remind him he is in a port so foreign. The harbor is finely protected by a coral reef barrier, forming a natural breakwater.

Honolulu is a modern city in every sense of the word. Its public buildings, business blocks, and fine residences will compare favorably with those of the average American city of the same size. But its lovely avenues lined with the beautiful cigaroba trees with fern-like leaves, the monkey pod and acacia, the most charming of shade trees, and most magnificent of all, the stately royal palms, with trunks like perfectly carved granite columns, carrying above graceful pinnated leaves of enormous proportions; and many other tropical trees and palms far surpassing anything I had ever seen. The parks and private grounds are adorned with trees bearing luscious fruits, while date palms, banana palms, and coconut palms are as common as apple and pear trees with us; and elegant shrubs, plants, and ferns, which we have to cultivate with the utmost care in conservatories, are here to be seen growing out of doors in their fullest perfection and in bloom almost the year round.

The mountains of the islands are green to their very tops and are most beautiful to look upon. One who has taken the delightful drive from Honolulu



KING KALAKAUA I.

up to the Pali, through the beautiful Nuuanu Valley, will ever hold in vivid memory those lovely hillsides covered with verdure of the softest green shades; and the magnificent, sudden, burst of view from the summit of the plains and ocean beyond, from over the frightful precipice, to the edge of which the road leads. Here it was that Kamehameha I. won his crowning victory by driving his last opponents over its ledge to the rocks beneath. A steep and dangerous bridle path now winds down the side of the mountain and is the road by which

connection is had, on foot or horseback, with the other side of Oahu.

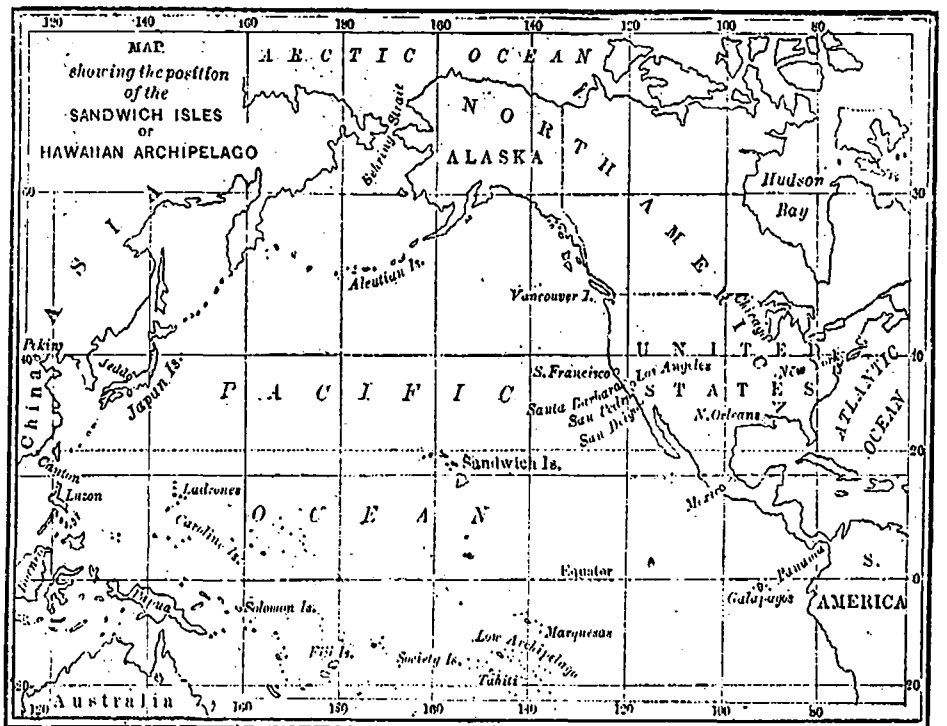
Previous to the time of Kamehameha I. the natives of the various islands of the group were divided into bands or tribes under the rule of separate chiefs, but one after the other he conquered and brought under subjection the several tribes of the various islands, until the final battle at the Pali gave him the acknowledged sovereignty of them all.

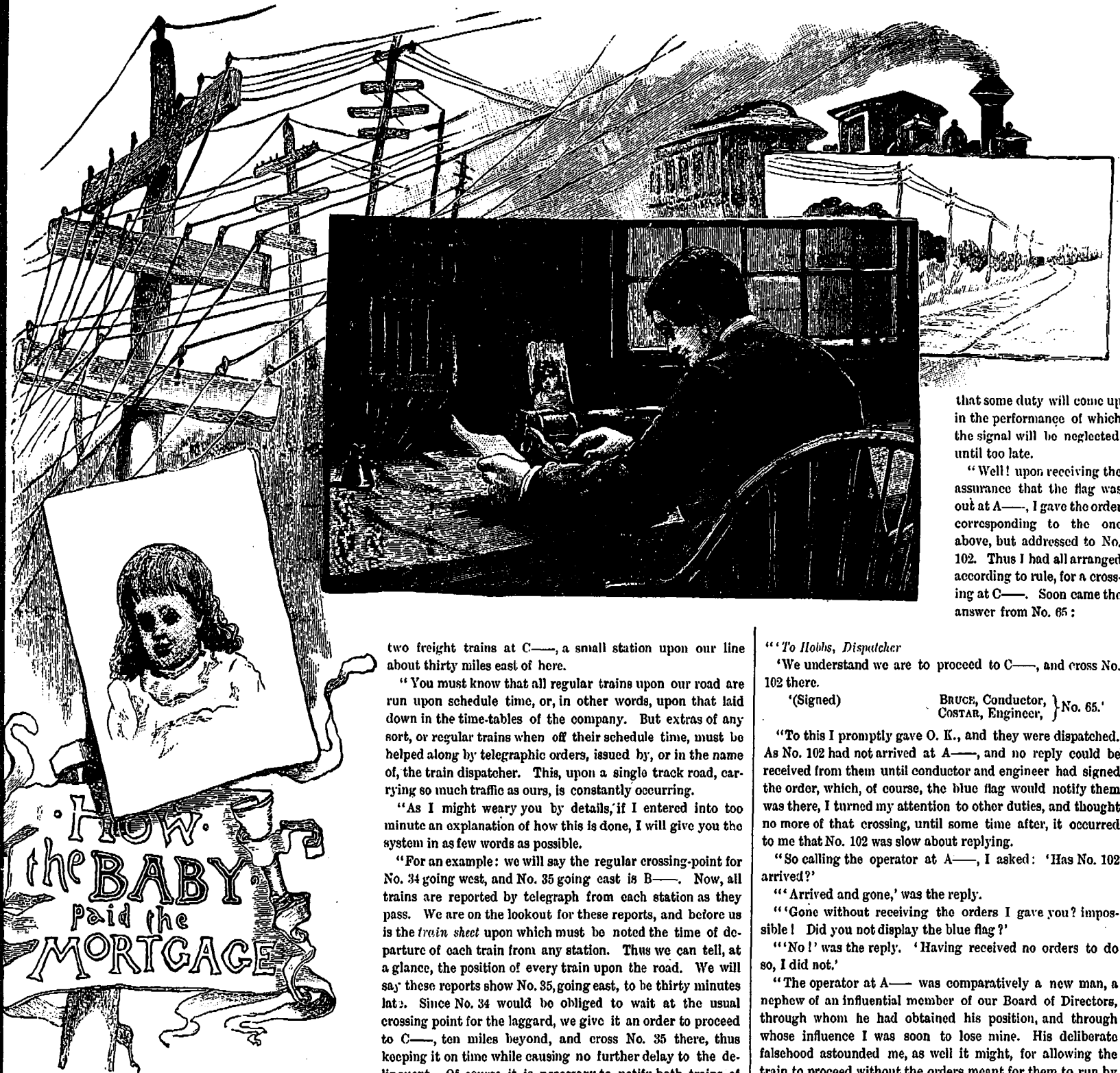
Some Englishmen claim the Hawaiian Islands to have been discovered by the great circumnavigator, Capt. Cook, who landed there on Jan. 18th, 1778, and who, it is supposed, was murdered there the following year; but, beyond a doubt, they were discovered by the Spaniards very much earlier. However this may be the islands remained independent, though Kamehameha I. was but a child at the time of Cook's visit. All power centered in the King up to 1840, when the power of the crown was restricted (reign of Kamehameha III.) and has successively been further restricted until now, since the revolution of last summer, it is a limited monarchy similar to that of Great Britain. A large and handsome statue of the first ruler, Kamehameha I., who is often styled the "Napoleon of the Pacific," has been erected in front of the fine government building.

The present King, Kalakaua I., with whom I had the pleasure of meeting and conversing, is a man of fine presence, and is very genial in his manner. He is very well educated, speaks English fluently, and is regarded as quite an orator in his own language. He has made the tour of the world and has considerable administrative ability. Had his advisers been faithful and disinterested men the revolution of last summer need not have taken place. It was indeed a wonderful revolution, for without the shedding of blood or so much as the firing of a gun, though there were very warlike preparations on both sides, the constitution of the kingdom was completely changed. Matters are quiet now and though there are, of course, many discontents, it is sincerely hoped and believed that peace is ensured.

King Kalakaua, like most of his countrymen, is fond, probably too fond, of amusement and inclined to take an easy life. Like the Prince of Wales he is the patron of boating, yachting, jockey clubs, and agricultural societies. Queen Kapiolani is spoken of by all as a lady of great amiability, and she has done much to comfort her afflicted subjects in the leprosy hospital. Iolani Palace, the royal residence, is a large handsome structure in the heart of the city and bears a striking contrast to the grass hut of their great predecessor, Kamehameha I. The palace is guarded by a very miniature army neatly uniformed and equipped.

[N. B. This Hawaiian letter will be completed in the next issue, when a description of the natives and native customs will be given, and several other beautiful illustrations published—two made directly from photographs taken by W. E. H. Massey, Esq.—Ed.]





that some duty will come up in the performance of which the signal will be neglected until too late.

"Well! upon receiving the assurance that the flag was out at A—, I gave the order corresponding to the one above, but addressed to No. 102. Thus I had all arranged according to rule, for a crossing at C—. Soon came the answer from No. 65:

two freight trains at C—, a small station upon our line about thirty miles east of here.

"You must know that all regular trains upon our road are run upon schedule time, or, in other words, upon that laid down in the time-tables of the company. But extras of any sort, or regular trains when off their schedule time, must be helped along by telegraphic orders, issued by, or in the name of, the train dispatcher. This, upon a single track road, carrying so much traffic as ours, is constantly occurring.

"As I might weary you by details, if I entered into too minute an explanation of how this is done, I will give you the system in as few words as possible.

"For an example: we will say the regular crossing-point for No. 34 going west, and No. 35 going east is B—. Now, all trains are reported by telegraph from each station as they pass. We are on the lookout for these reports, and before us is the *train sheet* upon which must be noted the time of departure of each train from any station. Thus we can tell, at a glance, the position of every train upon the road. We will say these reports show No. 35, going east, to be thirty minutes late. Since No. 34 would be obliged to wait at the usual crossing point for the laggard, we give it an order to proceed to C—, ten miles beyond, and cross No. 35 there, thus keeping it on time while causing no further delay to the delinquent. Of course it is necessary to notify both trains of the change in crossing points, and right here is where my trouble occurred.

"One day, sitting at my instruments, busily employed as you saw me a few moments ago, I discovered that freight No. 102 was losing time. Soon it was thirty minutes behind, and wishing to help along freight No. 65, which usually crossed at B—, I concluded to push it along to C— for a crossing. Accordingly I called up D—, the next station beyond the usual crossing point, and upon receiving the response went ahead with this order:

"To Conductor and Engineer No. 65:

'You will proceed to C— and cross No. 102 there.

(Signed) HOBBS, Dispatcher.

"The next move was to protect them in thus passing their usual crossing point, by giving the same order to No. 102 at A—.

"Calling up A—, I said in the cipher used on such occasions: '14 for No. 102,' which means, 'Put out blue signal to hold No. 102.' This blue signal, a flag by day and a lantern by night, conspicuously displayed in front of a station, means telegraphic orders, and by this signal no train is allowed to pass. Instantly came back the reply from the operator at A—: '15 for 102.'

"Now, every operator's duty is to put out the signal before replying with 15, which means: 'blue signal is displayed and will hold the train.' You see the use of the cipher figures is a great saving of time and space. The most imperative orders are issued, and the utmost care taken in moving trains by telegraph; and to answer with 15 before the signal is displayed, is contrary to all rule, as in doing so there is a chance

"To Hobbs, Dispatcher

'We understand we are to proceed to C—, and cross No. 102 there.

(Signed)

BRUCE, Conductor, } No. 65.
COSTAR, Engineer, }

"To this I promptly gave O. K., and they were dispatched. As No. 102 had not arrived at A—, and no reply could be received from them until conductor and engineer had signed the order, which, of course, the blue flag would notify them was there, I turned my attention to other duties, and thought no more of that crossing, until some time after, it occurred to me that No. 102 was slow about replying.

"So calling the operator at A—, I asked: 'Has No. 102 arrived?'

"Arrived and gone,' was the reply.

"Gone without receiving the orders I gave you? impossible! Did you not display the blue flag?'

"No!' was the reply. 'Having received no orders to do so, I did not.'

"The operator at A— was comparatively a new man, a nephew of an influential member of our Board of Directors, through whom he had obtained his position, and through whose influence I was soon to lose mine. His deliberate falsehood astounded me, as well it might, for allowing the train to proceed without the orders meant for them to run by C— and endeavor to reach their usual stopping place at B—, as soon as possible, to save delay to 65, which was rushing along expecting to reach them at C—. The result must be a collision.

"The thought drove me nearly frantic. Further questioning only resulted in further denial from the operator of having received any orders to hold the train, which he accused me of having failed to send.

"With fast-beating heart, and a terrible faintness upon me, I dropped my head upon the instruments and prayed for the poor fellows upon the trains. How many of them would survive the wreck, which now it was impossible to prevent, for between the two trains rushing toward each other so swiftly, no operator was on duty with busily clicking instruments to warn them of their fate.

"Noticing my actions the dispatcher eagerly inquired the trouble. I could not reply in words, but noticing my instrument calling, I grasped a pen, and with my trembling fingers copied this message, which relieved my mind of the heaviest load I have ever known. It was addressed to the superintendent from the conductor of No. 65 and ran thus:

"Freights Nos. 65 and 102 met in head collision one mile east of C—, speed of fifteen miles per hour. Crews of both trains escaped uninjured. Fifteen cars derailed, five of them wrecked completely, badly blocking the main line. Will report in person by first train.'

"My greatest fear had been that loss of life would result. Now that was past. I was ready to explain.

"As is usual in such cases, all the participants in the affair were called before the superintendent. Each man told his story. The operator at A— firmly adhered to his falsehood

YES, SIR! the boy there, though but five years old and not knowing a dash from a dot, stands upon the company's pay-roll as Telegraph Operator, at fifty dollars per month. 'How did it come about?' you ask. Just wait a few moments until my relief comes, and as we walk to the house for supper, I will give you the story."

The speaker was an old school friend of mine, whom I had hunted up after a long absence from my native city, and found busily employed in the Train Dispatcher's office of the — Railroad, as chief operator. Upon his telegraph instruments rested the cabinet photograph of a little boy, and my remarking upon the smart appearance of the little fellow elicited the above reply.

"Not much time for conversation here," continued my friend, as if in apology for not commencing at once, "what with ordinary messages, train reports, and the all-important orders, we are kept pretty busy; the hours are short though, and, by the way, here comes my relief now."

Here followed an introduction to the relief, a pleasant-looking young man of twenty-one or two, whose duty it was to remain all night at the post my friend was just vacating, to whom was given some general information as to how the trains were running upon his division, and what orders had been issued; and then, with a pleasant good-night, we were off.

"Now, for the story!" continued my friend as we emerged upon the street, and turned our steps towards his home.

"One year ago I was discharged from the very position I now hold, for having, as was charged, caused the wreck of

and I as firmly to the truth, but to no purpose. The influence of his director uncle saved for him his position, the blame was attached to me, and I was discharged, forced to give up my position and move. Some time before this, trusting in the security of my position, I had put all our little savings together and purchased a small house and lot in the pleasantest part of our city. I had borrowed from our savings bank the sum of two thousand dollars, and placed a mortgage for that amount upon the place, believing that with prudence and economy we should be able to repay and lift the mortgage in due course of time.

"A pleasant little place it was, and much pleasure we took in fixing it up with flowers and vines, until it presented a most attractive appearance, and to ourselves, at least, was the very perfection of taste and home comfort. Now it must all be given up. This made the blow doubly hard, for where could I obtain a position at my business, with the knowledge that I had caused a wreck?"

"No! I must give it all up, and commence at the foot of the ladder again.

"The company, having decided to put in the wires and open a station at C—, as a measure for guarding against further trouble, very kindly offered the situation to me. I could but accept. Soon we were moved into our new quarters—I cannot call it a home—in a modest house near my station.

"Day after day came and passed now, so uneventually as

light knew no bounds as he stood upon the platform when the heavy freights went rolling by, or the fast express, with a rush and scream of the whistle, passed like a flash; and he would watch them out of sight with great round eyes, laughing and clapping his hands with delight.

"We used to watch him in silence, my wife and I, for she often came to sit with us, and cheer me by her presence; and thoughts of the opportunities he would miss, and the privilege of schooling he would be debarred from by my misfortune, were not calculated to make us cheerful.

"One beautiful summer day, when I had been some three months at my station, sitting as usual watching and listening at my instruments, for want of something better to do, I heard the dispatcher's office calling A—, heard him answer, followed by an order from the office to '14 for special freight passing east,' heard the reply exactly as the operator had given it to me on the day of the wreck—'15 for special freight'—then this order:

"To Conductor and Engineer Special Freight:

"You will not leave A— until special passenger train, Fairfield, conductor, has arrived."

"The special passenger train referred to was, as I knew, for I had heard it reported by wire, composed of an engine, superintendent's private car, and directors' car, filled with the

useless thoughts, until I was disturbed by the entrance of the little boy, who had been busy at play outside. He came in in high glee, exclaiming: 'Papa! papa! train coming!'

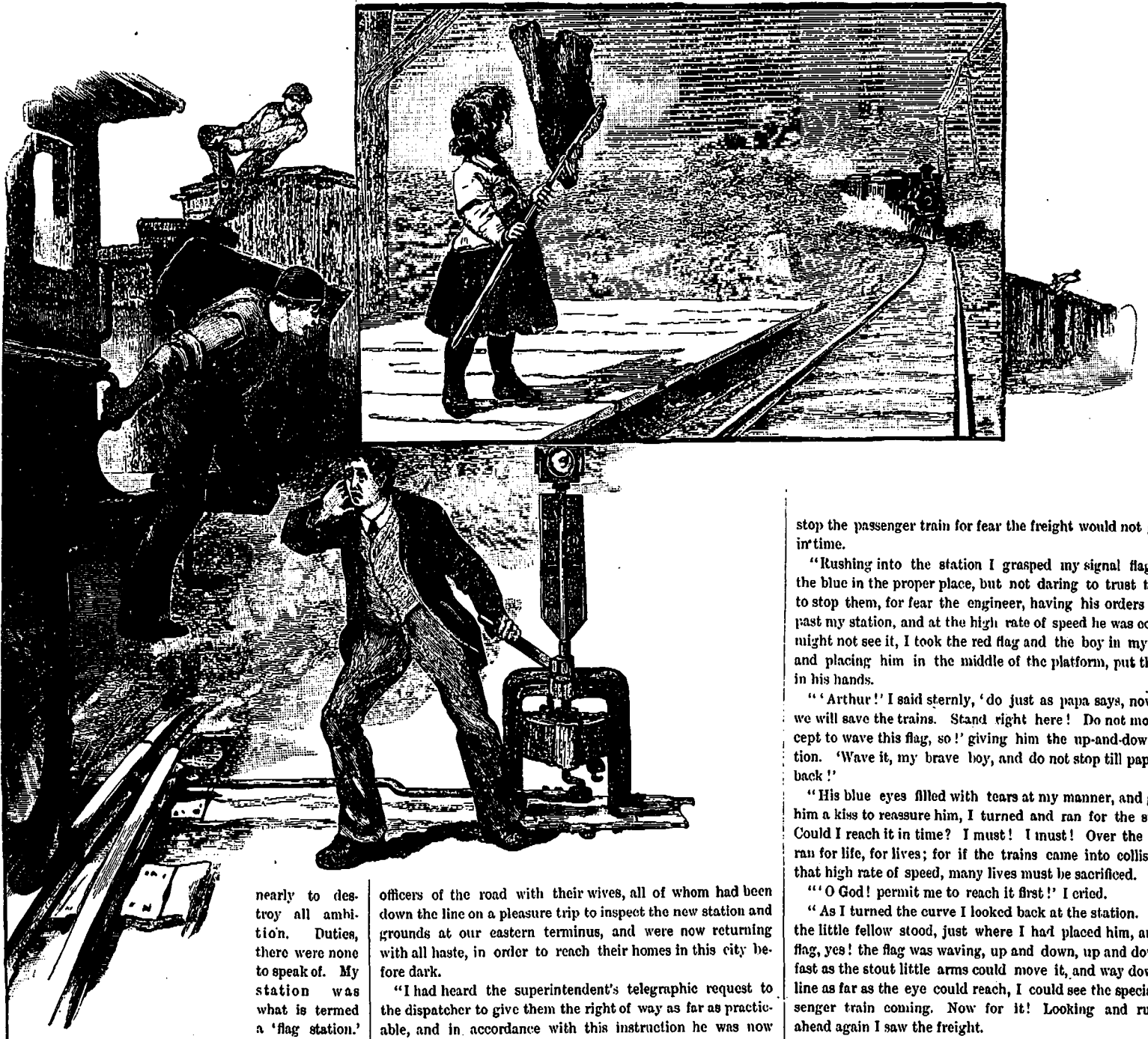
"No, dear, not just yet. Wait five minutes and then we will see them go flying by,' I answered him with a smile, knowing how pleased he would be to see the rushing train.

"No! now, papa, now! I can see the smoke—come out, quick!" To please him I complied, and looked up the line in the direction of the approaching special, which had passed the last station east of me, and must now be within five miles of our station.

"That, that way, papa! Look through the trees—see?"

"I turned, and saw rising above the trees the black smoke which denoted the approach of a train. In an instant I understood the situation. The freight was approaching—the freight which was ordered to remain at A— to cross the passenger train. For a moment I was dazed, but only for a moment, for I knew something must be done, and that quickly, to avert an awful catastrophe.

"Below my station, some hundred yards or so, round a curve which hid it from sight, was a switch which opened upon a side track running by the station for another hundred yards, and which would hold the freight, could I but reach and open it before the freight arrived there. But I must also



nearly to destroy all ambition. Duties, there were none to speak of. My station was what is termed a 'flag station.' Trains made no

regular stop there, and when an occasional passenger wished to take the train, a very unusual occurrence by the way, my red flag by day, or red light at night, 'hauled up' the desired train. I grew despondent. Every day I sat in my little den of an office, listening to the business passing upon the wire, business in which I took no active part, for few, indeed, were the opportunities I had to open the wire.

"The little boy was my almost constant companion. He took great delight in the rural life which we were obliged to lead, grew stout and brown as any little rustic, and his de-

officers of the road with their wives, all of whom had been down the line on a pleasure trip to inspect the new station and grounds at our eastern terminus, and were now returning with all haste, in order to reach their homes in this city before dark.

"I had heard the superintendent's telegraphic request to the dispatcher to give them the right of way as far as practicable, and in accordance with this instruction he was now holding back the freight.

"I sat idly watching the approach of the special, and marking the quick time they were making, as the telegraphic reports, one by one, succeeded each other, as the train passed station after station—and still bemoaning my hard fate.

"No mistakes this time, I thought, only for me was the ill luck reserved: for surely the operator at A— would not, could not, commit the same fault twice. This time there would be no poor assistant to attach the blame to but the chief dispatcher.

"I sat there some time, filled with these ungrateful and

stop the passenger train for fear the freight would not get on in time.

"Rushing into the station I grasped my signal flags, put the blue in the proper place, but not daring to trust to that to stop them, for fear the engineer, having his orders to run past my station, and at the high rate of speed he was coming, might not see it, I took the red flag and the boy in my arms, and placing him in the middle of the platform, put the flag in his hands.

"'Arthur!' I said sternly, 'do just as papa says, now, and we will save the trains. Stand right here! Do not move except to wave this flag, so!' giving him the up-and-down motion. 'Wave it, my brave boy, and do not stop till papa gets back!'

"His blue eyes filled with tears at my manner, and giving him a kiss to reassure him, I turned and ran for the switch. Could I reach it in time? I must! I must! Over the ties I ran for life, for lives; for if the trains came into collision at that high rate of speed, many lives must be sacrificed.

"O God! permit me to reach it first!" I cried.

"As I turned the curve I looked back at the station. There the little fellow stood, just where I had placed him, and the flag, yes! the flag was waving, up and down, up and down, as fast as the stout little arms could move it, and way down the line as far as the eye could reach, I could see the special passenger train coming. Now for it! Looking and running ahead again I saw the freight.

"Thank God! I shall reach the switch first,' I cried, and ran on. My switch key was out of my pocket as I ran, and in my hand. A moment more and the switch was reached, and the train one thousand feet behind in the race for life. To insert the key, unlock and throw the rails upon the siding, was the work of an instant.

"Yes! I was discovered by the engineer of the train—hear! the shrill whistle for the brakes, the danger signal, saw the engine reversed, the brakemen scrambling over the tops of the cars setting the brakes, and knew all was done that could possibly be done to slacken the speed of the heavy train—

standing at the switch, ready to throw the rails back as soon as they had passed upon the siding.

"In a moment they were within hailing distance, the fireman was upon my side, down upon the steps of his engine making ready to jump.

"Stick to your engine," I cried. "Run upon the siding, and do your best to stop her. Tell the engineer to stick and stop her for his life."

"It is wonderful that he heard me, much more comprehended my meaning through the rush and roar of the train,

allowed me to free from debt; and, yes, that is the boy running to meet us now—a proud little fellow upon pay-day, as he goes with me to the office, and stands among the men taking their turn to receive their pay—the pet of all. My wife fears they will spoil him with their attention, and the presents of the ladies on that train.

"The operator? Oh! Without stopping to learn the result of his second blunder he deserted his post, and for aught I know, may be running yet; for, certainly, I have no knowledge of his future career. His error lay in replying that the

The man at first repulsed him, and refused entertainment, saying, "I attended a protracted meeting last winter, and became religious. The Lord forgave my sins and I joined the Methodist church. I don't intend to keep company any longer with the class of men that come here to fish."

But the doctor's pleasant manners won him over, and he finally consented to take the stranger in and to show the way next morning to the trout-stream. When they returned late in the afternoon, the man said, frankly,—

"Doc, I like you," and slapped him familiarly on the shoulder.



and hiss of escaping steam, as the engine rolled by at greatly reduced speed; but I saw him climb back and commence setting the break of the tender. With a terrible roar and grinding of the brakes upon the wheels, the train passed.

"I closed and locked the switch upon the main line, and started back for the station. I knew the special must have stopped there, else, ere this, it would have been upon us. Yes! sure enough,—coming in sight of the station,—there she stood, safe and sound, and upon the siding beside it stood the freight, now come to a full stop.

"The platform in front of the little depot was filled with people, passengers of the special and train men. I saw the boy, still holding the red flag, in the arms of the superintendent. Crowded about him were the President, Board of Directors and other notables, invited guests of the road, with their ladies, numbering fully twenty-five people, who certainly, some of them, if not all, owed their life to the little fellow. Upon reaching the station I was at once the center of the excited throng, all eager for an explanation. In as few words as possible I gave, in answer to the superintendent's inquiry, my story,—how the baby had discovered the approaching freight, how I had instantly placed him with the flag, which, it seems, had been the means of stopping them, how I had hastened to the switch, arriving just in time to put the freight upon the siding, and that was all.

"All—no! This was followed by an impromptu directors' meeting in my little seven-by-nine station—a directors' meeting in which ladies took a prominent part. I was called in with my wife, who had run to the station, alarmed by the unusual excitement—and the boy. Speeches were made which brought the blush to my cheeks and tears to my wife's eyes, tears of joy and pride in the boy.

"Yes, sir! They voted me two thousand dollars 'for prompt action and heroic conduct in time of danger,' and at the suggestion of the ladies—who but a woman would have thought of anything so romantic?—also voted to place the boy upon the pay roll as telegraph operator.

"A happy household we were that evening, and with many a kiss the boy was put to bed at night. The next day I was called to the general offices, and the dispatcher having told his story, how the orders had been promptly given to hold the freight, there were no doubts now as to the person who had been remiss in duty upon both occasions. I was reinstated in my old position, and we immediately moved back into the little house you see yonder, which the company's gift

blue was displayed before putting it out, and then neglecting it. When he saw the train pass, he deliberately tore up the orders, trusting in his ability to shift the blame upon me, in the first instance, but the second was too much."

—W. D. HOLMAN in *The Youths' Companion*.

The City of the Dead.

They do neither plight nor wed
In the city of the dead,
In the city where they sleep away the hours;
But they lie, while o'er them range
Winter blight and summer charge,
And a hundred happy whisperings of flowers,
No, they neither wed nor plight,
And the day is like the night,
For their vision is of other kind than ours.

They do neither sing nor sigh
In the burgh of by and by,
Where the streets have grasses growing, cool and long;
But they rest within their bed,
Leaving all their thoughts unsaid,
Deeming silence better far than sob or song.
No, they neither sigh nor sing,
Though the robin be a-wing,
Though the leaves of autumn march a million strong.

There is only rest and peace
In the city of surcease
From the failings and the wailings 'neath the sun;
And the wings of the swift years
Beat but gently o'er the biers,
Making music to the sleepers, every one.
There is only peace and rest;
But to them it seemeth best,
For they lie at ease, and know that life is done.
—Richard E. Burton.

Found Out.

The late Dr. Bethune, of Philadelphia, was "a brother of the angle." With old Izaak Walton he thought, "God never did make a more calm, quiet, innocent recreation than angling." No more cheerful companion could be found than he with whom to "whip" a trout-stream. His humor bubbled over, his wit flashed, and the longest sojourn in the woods failed to exhaust his stock of good stories.

On one occasion, however, he found himself an unwelcome guest, and was coldly received by the man who was accustomed to entertain visitors. He had gone to a noted trout-stream in the interior of Pennsylvania, and sought lodgings with a man who had long served as a guide to strangers.

"What do you like me for?" asked the doctor.

"Well, doc, I'll tell you. We've been out a'most all day; we haven't caught much, you fell in and got wet; and I haven't heard you swear once."

The doctor smiled inwardly at this dubious compliment, but said nothing to betray his profession.

After supper, as he was sitting outside the cottage, the man came to him and said, with a little hesitation, "Doc, since I joined the church, I've had prayers every night. We are going to have them now, and maybe you wouldn't object to come in."

Dr. Bethune heartily accepted the invitation. He listened attentively to the stammering reading of a chapter in the Bible, and joined lustily in an old-fashioned Methodist hymn. The host watched him closely, and then said, in a doubtful tone, "Maybe you wouldn't mind leading us in prayer?"

The doctor prayed in the simple and earnest manner which those familiar with him will never forget, and then went out again to the porch and solitude.

The host soon joined him, and looking him steadily in the face, said,—

"Doc, I suspicion you."

"What do you suspect me of? Nothing bad, I hope."

"Oh no, nothing bad. Maybe I'm wrong, but I kind 'o suspect you are a minister."

"What makes you think I'm a minister?"

"Well, I'll tell you. I haven't heard you swear once since you came. Then you joined us in the hymn as though you liked it. Then the way you prayed made me most sure you're a minister."

Dr. Bethune laughed heartily at the man's simple earnestness, and confessed that he had been found out and was a minister. They had good times together, and both of them enjoyed telling the story in later years.

When Day is Done.

When day is done,
The silent shadows, one by one,
On dusky pinions settle down
O'er quiet field and busy town.
With folded petals dreams the rose,
The lily nods in sweet repose,
Hid in the forest dark and still,
Sing hermit thrush and whip-poor-will.
The stars look down with loving eyes,
And sleepily the sixth wind sighs—
When day is done.

—Dorothy Grey.



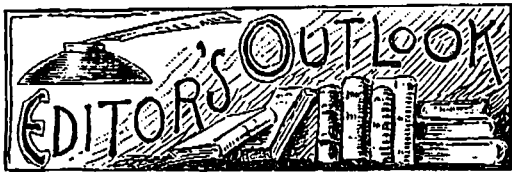
The Farmer Feedeth All.

My lord rides through his palace gate,
My lady sweeps along in state,
The sage thinks long on many a thing,
And the maiden muses on marrying;
The minstrel harpeth merrily,
The sailor ploughs the foaming sea,
The huntsman kills the good red deer
And the soldier wars without a fear.
But fall to each what'er befall,
The farmer he must feed them all.

Smith hammereth cheerily the sword,
Priest preacheth pure and holy word,
Dame Alice worketh broidery well,
Clerk Richard tales of love can tell,
The tap-wife sells her foaming beer,
Dan Fisher fisheth in the mere,
And courtiers ruffle, strut and shine,
While pages bring the Gascon wine,
But fall to each what'er befall,
The farmer he must feed them all.

Man builds his castles fair and high,
Whatever river runneth by,
Great cities rise in every land,
Great churches show the builder's hand,
Great arches, monuments and towers,
Fair palaces and pleasing bowers,
Great work is done, be't here and there,
And well man worketh everywhere,
But work or rest, what'er befall,
The farmer he must feed them all.

Charles G. Ireland.



We have much pleasure in drawing attention to a most interesting letter on page 10 from an esteemed lady correspondent in Melbourne, Australia, who is a native-born Canadian.

THE oldest inhabitant has considerable difficulty in being able to figure out how many Canadian winters in his recollection have been so mild as the present one. Any stranger visiting Canada this winter for the first time would be mystified to account for the stories he probably had been accustomed to hear of the arctic nature of Canada's climate. It is the general impression up to the present that except in rather flat lands, which were flooded and the water had become frozen, fall wheat has suffered very slight damage.

PREMIER MOWAT has always evinced rare discrimination in his choice of men to fill positions in his cabinet. The appointment of Mr. Drury as Minister of Agriculture was an exceedingly popular one, and the appointment this month of Lieut.-Col. Gibson, of Hamilton, as Provincial Secretary, is just as popular. Col. Gibson is every inch a gentleman and will prove a valuable acquisition to the ministry. The vacancy was caused by the resignation of Mr. Pardee, Commissioner of Crown Lands, owing to continued ill-health, and the transference of that portfolio to Mr. Hardy.

THE Provincial Exhibition apparently must go on this year and London will have the honor of placing upon its annals the fact that the last one was held within its borders. It is understood that members of the Agriculture and Arts Association are fully alive to the fact that it is folly to continue holding the fair. There is, however, disappointment in store for the local fairs who expected to

obtain a share of the \$10,000 annual grant which the government has made to the Provincial. We are not much wide of the mark in saying that when the Provincial fair becomes a thing of the past so will the \$10,000 grant.

We took occasion last month to refer to the scheme of annual examinations inaugurated by the Council of the Agriculture and Arts Association, of Ontario, on subjects having a direct bearing upon practical agriculture. It again affords us much pleasure to state that the Council have decided to give prizes and medals for different purposes for the season of 1889. Amongst these may be mentioned the following: Essay on "The cultivation of green crops for soiling and ensilage and their value in farm operations," first prize \$30, second prize \$20; essay on "The advantages of rotation of crops as compared with the evil of over-cropping," first prize \$30, second prize \$20, the manuscript in both cases not to exceed twenty-five pages, and to be sent to the Secretary of the Association, Toronto, not later than August 1st, next.

AT this season of the year farmers have to keep their wits about them so as not to get swindled by the seed wheat confidence men. Their game has been practiced so often that it is surprising any one can be simple enough to allow himself to be caught in the trap. It is generally to get a farmer to buy sufficient seed wheat of a certain grade at fifteen dollars per bushel for the land which the farmer intends devoting to wheat and agreeing to return in the fall and purchase an equal quantity at the same price from the crop secured and take the remainder at \$2.50 per bushel. If the farmer hesitates to accept this proposition they then offer him the option of selling the crop to his neighbors at \$15 per bushel and keep the profit himself. Unfortunately they are often successful and the farmer who pays them for the seed wheat learns to his disgust when the fall time comes that he has been duped.

"Why do boys leave the farm" formed an important subject for discussion at some of the recent meetings of the Farmers' Institutes. Well, we suppose a good many reasons can be advanced. One of them, no doubt, is the glamour of city life. How many sons of farmers have entered the learned professions and are barely earning enough to keep body and soul together? Of course there are exceptions and many farmers' sons in the professions have won for themselves not only distinction but an ample competence. The constant cry is that the professions are over-stocked and unquestionably they are. Why, therefore, should farmers' sons prefer to enter professions that are admittedly overcrowded to following the honorable calling of a farmer? It seems to us that those who can best answer the question "Why do boys leave the farm?" are the boys themselves, and if they would write us giving their reasons we will be glad to publish them. Their letters might provide food for reflection.

WITH the object of encouraging scientific farming in the province of Quebec, Hon. Mr. Rhodes has introduced a bill to the Legislature of that province inaugurating an Order to be called "L'Ordre de Merite Agricole de la Province de Quebec." The most important feature is to provide medals and diplomas as prizes to be offered for competition, and for this purpose the province is to be divided into seven agricultural and four colonization districts. The Order will comprise three classes: Active members, "tres grand merite;" aspirant, "grand merite," and aspirant "merite," and the qualification is to be 85, 75, and 65 points respectively. Medals and diplomas are to be given under the great seal of the province. Three subjects are to be taken up, agriculture, kitchen gardening, and fruit raising. Anything tending to advance the cause of agriculture or to instil a spirit of emulation into the minds of farmers should be gladly welcomed and the Quebec Ministry are therefore to be congratulated on establishing the Order of Agricultural Merit. Now Mr. Drury, you have the floor!

JANUARY is the month for meetings of the Farmers' Institutes throughout Ontario. True to his promise, the Minister of Agriculture has attended a large number of these meetings. He states that a very much increased attendance is reported from almost all parts of the province and a greater readiness on the part of farmers generally to prepare papers and take part in the discussions. It is safe to say that the work done by the Institutes this year has been much better than during any year since their organization. The objects of these meetings are largely educational and by attending them all who have eyes to see and ears to hear can learn something to their advantage. Any farmer who imagines it will not pay him to take some trouble and a little expense to attend the Institute meetings must be possessed of a considerable supply of vanity. It would do him a world of good to go to one of the meetings as he would very quickly get the conceit knocked out of him, and would be forced to come to the conclusion that "there are more things than we dream of in our philosophy." All honor to the men who by reading papers on practical and scientific subjects do all in their power to uplift the cause of agriculture.

COMPARISONS are being constantly made between Dakota and Manitoba and the Northwest as to their farming capabilities. It is well known that farmers in Dakota have during the past year suffered very greatly from different causes, and a large proportion are in consequence in abject poverty. It has been estimated by the United States Department of Agriculture that the early frosts last fall in Dakota reduced the average yield of wheat to nine and one fifth bushels per acre. In Manitoba and the Northwest a good deal of loss was also occasioned by the early frosts, but although the loss is not fully known yet, it will not, according to competent authority, be nearly as great as in Dakota. The Canadian Northwest has undoubtedly the advantage in climate over Dakota as it is not so variable. It therefore should not be a difficult matter to convince intending settlers that Dakota is inferior to Manitoba and the Northwest as an agricultural country. Canada has a glorious heritage in her Northwest and it should be the duty, as well as the privilege, of every one of her loyal sons by voice and pen to defend that heritage from the malicious attacks made against it as a farming country by speculators and others who have interests at stake in Dakota and other rival States.

SOME valuable information can be got by a perusal of the homestead and immigration statistics for the year 1888 prepared by Mr. Brydges, commissioner of the Hudson's Bay Company. During the year about 330,000 acres of land were taken up in homesteads, pre-exemption, and sales in Manitoba from the government, and the land companies sold about 180,000 acres making a total of 510,000 acres, almost the whole of which has been taken up by actual settlers. Land companies who had become possessed of considerable quantities of land through the foreclosure of mortgages also disposed of a large quantity of what they thus acquired. Between the loan companies and private individuals who have been selling land not far short of 100,000 acres have been disposed of making a total acreage actually settled upon in Manitoba during 1888 of fully 600,000 acres, which is largely in excess of any year since the boom of 1882. Most of these lands have been taken up in quarter sections and it is estimated that about 4,000 farmers in addition to the 1,000 who were previously in the country have settled upon the land during the past year in Manitoba. Taking an average of three to a family this would mean a total increase in population from this source alone of about 12,000 people. The prospects for the current year are even more encouraging.

FRIDAY evening, January 4th, will long be remembered by the Toronto Board of Trade in particular, and by the people of Canada in general. It was the occasion of the second annual banquet of the Board of Trade and it was memorable from the words of loyalty that fell from the lips of every speaker. What called forth these genuine expres-

sions of loyalty to Canada and our Sovereign Lady the Queen from Grit and Tory alike without any preconceived plan? Why, simply the talk of a few disgruntled people about annexing Canada to the United States. The principal speakers were His Excellency the Governor-General, Sir John Macdonald, Hon. Oliver Mowat, Hon. G. E. Foster, Senator Macdonald, President Van Horne, Canadian Pacific Railway; General Sir Fred Middleton, Hon. George Drummond, President Board of Trade, Montreal; President Fairgrieve, Board of Trade, Hamilton; and Mayor Clarke, Toronto. Hon. Mr. Foster made the speech of the evening and he struck a responsive chord in the hearts of all present at the conclusion of his brilliant peroration when he said: "Gentlemen, with a future before us which can only be bounded or restricted by our own efforts, I cannot have sympathy with the intimation that we are prepared to sacrifice the traditions of the past—the historic links which bind us to those that have gone before, full of glory and grandeur, as they are. We are not prepared to sacrifice our future and hand ourselves over to any but the Sovereign and the sovereignty that has so long ruled, and the sovereign which, we hope, will long sway the destinies of this the Gem of the British Crown."

THE *Scottish Leader*, published in Edinburgh, in an article reviewing the agriculture of Aberdeenshire and the North of Scotland for the past year, says:—"Another feature of Aberdeenshire agriculture that merits attention is the system that has been adopted by a number of prominent agriculturists of bringing cattle by specially chartered steamer direct from Canada to supply the demand for store stock. The want of the class of beast referred to at one time threatened to prove a very serious difficulty to Aberdeenshire and northern farmers, but it may be said to have been satisfactorily surmounted by the importation of the native-bred Canadian bullocks. A number of cargoes of these brutes have been imported from time to time during the twelve months (about 3,000 head in all), the animals fetching in the sale-ring at Aberdeen an average of about £13 per head. While no profit has been made on the importation considered from the point of view of a trade, it may be at once admitted that no profit was at the outset looked for. Judged of as a means of keeping up the diminishing supply of store stock, the experiment must be regarded as a success, and feeders, it may also be borne in mind, are willing to admit that, as beef carriers, the Canadian bullocks are, all things considered, satisfactory." This is cheering news, as the farmers of the north of Scotland supply the London markets to a considerable extent with beef, and a large and increasing trade will no doubt be opened for Canadian cattle. Alberta stockmen are also to send a carload of horses from Calgary to England as an experiment, there being a great demand in the old country for horses for army and other purposes. If the experiment should prove successful another important market will be opened for stockmen in the northwest who have embarked in the business of breeding horses.

THE third session of the Sixth Parliament of the Legislature of Ontario was opened on January 24th, with the usual ceremonies. In the speech from the Throne the following appears: "I am glad to know that the agricultural industries of the country have been fairly prosperous during the past year; that though the early part of the season was unfavorable, and in some localities crops and pastures were badly affected by drouth, yet that, over the greater portion of the province, cereals, roots, and fruits have been abundant and of superior quality. The extensive areas of land brought under cultivation during the last decade in India, South America, the United States, and our own Northwest, make economy in production more essential to the farmers of Ontario than ever before; and emphasize the importance of giving increased attention to the best means of promoting the agricultural interests of the country. Increased efficiency has been given by the legislation of last session to the Department of Agriculture throughout all its varied services; and experience is already justifying the policy of assigning to the department a Minister free to devote to it his whole energies." There we have the plain unvarnished

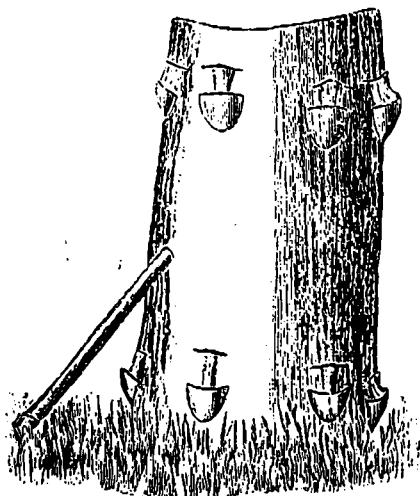
truth. Now what about the exodus of farmers from Ontario to the United States which we so often read about in a certain section of the daily press. Is it a fact that it has attained such proportions as to call for a special commission to enquire into its causes? We are not in a position to answer that question. But why Ontario farmers should prefer the United States to Canada is what we are puzzling our brains to find out. It can't be the want of productiveness of the soil. Last year the yield of fall wheat in Ontario was 16.7 bushels per acre, and the average yield in the United States, according to the report of the Department of Agriculture was only 11.6 bushels per acre; while of spring wheat the yield in Ontario was 17.5 bushels per acre, and in the United States the average was 10.3 bushels. Then in oats the yield in Ontario was 35.4 bushels per acre, while in the United States the average yield was 26.2 bushels. To emphasize these facts more distinctly, a writer recently in the Chicago papers in an article on "Decline of the Farms," shows that in the past twenty years the yield of wheat has decreased in New York State from 13 bushels per acre to 10.3 bushels and the corn yield from 29.3 to 23 bushels per acre. Taking the Southern States for a period of ten years past the decline was in North Carolina, wheat from 8 bushels to 5.9 bushels per acre, corn from 16.41 to 11.5, oats from 12.9 to 8.7. In Georgia the wheat yield decreased from 7.3 to 5.1 bushels per acre, corn from 11.1 to 8.7, oats from 10.2 to 9. In Mississippi, wheat from 9.2 to 5, corn from 13.8 to 13.5, oats from 14.5 to 11.5. In Texas wheat decreased from 15.5 to 8.5 bushels per acre, corn from 19 to 18.5, oats from 27.2 to 22.8. Kentucky, between 1864 and 1884, registers a decrease in wheat yield from 10.2 to 7.7 bushels per acre, corn from 28.5 to 24, oats from 24.2 to 16.3 per acre. In Indiana the decrease in the wheat yield was from 14.3 bushels per acre to 10.4 bushels per acre, corn from 29 to 27. In Illinois wheat went down from 14.3 to 10, and corn from 33 to 25 bushels per acre. The reasons given for this marked decrease are loss on the cost of production, deterioration of the soil, introduction of the landlord and tenant system, and ravages of insects. He believed that "soil deterioration is not so much a prime cause of agricultural decline as are our methods of farming, and we may yet discover that in our land system we have imitated too much England's methods and too little those of France." These are facts for farmers in Ontario to digest.

Simple Studies on Interesting Subjects.

No. II.—India Rubber.

WE have selected for the second article on "Simple Studies on Interesting Subjects," the subject of India Rubber.

Although it might be said its use is almost universal, very few know anything of its source, the means of gathering it, methods of preparation for market, processes of manufacture, etc. We will in this article endeavor to explain all these points in as plain a manner as possible. In India, Africa,

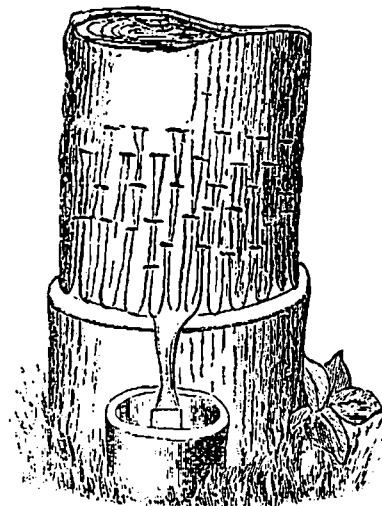


and South America there are numerous plants that yield a milky juice which becomes an elastic fibre by coagulation resulting from exposure to the air.

The most prevalent method of gathering it is here illustrated. The tapping is done at the beginning of the dry season. The collector places at the base of each tree a number of small cups of burnt clay with one side flattened; with an axe he makes an upward cut as high as he can reach across the trunk, penetrating through the bark and into the wood an inch or more. The breadth of the cut is also about an inch. One of the cups is immediately placed beneath the bruise and fastened there with a bit of moistened clay, when the sap begins to exude, continuing about three hours. After the same manner another incision is made at the same height and separated from the first by four or five inches, and so on till a girdle of cups is formed around the tree.

On the following morning the same operation is performed, only on a level about six inches lower. After several days' work the last tier reaches the ground. In due time the collector makes his rounds and empties the contents of the small cups, fifteen of which hold a pint, into a larger vessel called a calabash.

A very different mode of procedure, however, is pursued in some parts of South America. To a height of three feet the loose outside bark is stripped off. Near the ground a trough enclosing one-half the circumference of the tree is made by pasting clay to the trunk and shaping it as shown in the illustration. A series of cuts are then made



which allow the juice to run into the improvised gutter, whence it is drawn off into a vessel below. The milky juice thus collected is moulded in a wooden instrument resembling the paddle of a canoe, over which soft clay is rubbed to prevent adhesion. It is then well warmed in the smoke of the fire and new layers are added as the process proceeds. It soon becomes solid, and when dried is ready for the market.

As the rubber comes to the manufacturer it is full of foreign ingredients, and must be washed, which is done by boiling in water for several hours, and then passing through a wringing machine, very much resembling the one used in the laundry, from which it emerges in long sheets with rough surfaces. It is then dried by steam heat in 90° Fahr., care being taken to keep it out of the direct rays of the sun. It is next passed between fluted rollers in what is called a masticating machine. Finally it is moulded and compressed into compact blocks and put into ice houses to cool, where it remains until required for use.

It is used for various purposes. Some of them are:—As an eraser of pencil marks; cut into thin strips it serves as a brace to the bands of cotton, woollen, and silk gloves; mixed with sulphur it becomes vulcanized rubber, when it serves as ink erasers, elastic bands, door springs, gas tubes, balls, etc.; mixed with pitch it is made into combs, watch-chains, and pen-holders; in solution and mixed with shellac it is used as a cement by ship-builders, and is also used to insulate wires. Such are some of the uses of this important article which will be found to be soft to the touch, flexible, tough, elastic, impervious to water, inflammable, emitting a strong odor, and giving off dense smoke; whose elasticity is augmented by moderate warmth and diminished by cold; which will melt in very hot water or when subjected to 250° Fahr., and whose freshly cut edges are easily joined by pressure with the assistance of a little heat.



Reward.

If farmers, who have discovered ingenious methods in connection with their work which would be of use to their fellow farmers, will write us and describe the same, furnishing a sketch when practicable, we will reward them by publishing them over their names, with an illustration when possible; and further, when we consider the plans or ideas advanced have special merit we will remit them amounts varying from 75c to \$5.00, in proportion to our estimate of their value to our readers.

It is difficult sometimes to loosen a rusty screw. If you cannot withdraw such a one, heat an iron rod to a white heat and hold it for two or three minutes against the screwhead, after which the screw will come out with facility.

Now is the time for the farmer to cudgel his brains to find out what he can raise that will yield the greatest profit, how he can best inform himself concerning what he expects to grow, and what seeds, plants, tools, etc., he needs. From the experience of the past two months it would not be surprising if we had an early spring, and therefore it is as well to be ready for it.

The *Rural New Yorker* says:—"We have tried about everything in the way of covering for the feet. For work in frozen snow or for riding on a cold day, we have never found anything equal to the thick felt boots and heavy rubbers worn by lumbermen in the pine woods. In wet and sloppy weather this foot-gear will not answer, but for clear, sharp cold there is nothing to equal it for comfort."

In the winter season it is often desirable to keep pieces of fresh meat, especially pork, spare rib, etc., as long as possible. Without a refrigerator or ice house it may be accomplished very satisfactorily by allowing the meat to freeze hard and then packing tightly in a barrel with snow, when it can be obtained, and placing the barrel in a cold place. In this way meat can often be kept for months, and so lengthen out the period of homemade fresh meat. Care must be exercised and close watch kept when the snow begins to thaw that the meat does not get uncovered, as it will in a little time become tainted. —*German town Telegraph.*

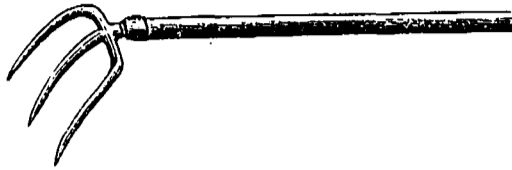
We should like to know any just reason why farmers' wives consent to take store pay for their butter. If those who know that their butter is good and marketable would refuse to sell it except for cash, it would simplify the matter very much as those who did not demand cash would by that act "confess judgment" against the article they are trying to sell, and it would soon go out of the market altogether. If storekeepers would quietly think over the matter, they would come to the conclusion that cash payment for all butter purchased by them would relieve them of the most serious difficulty they have to struggle with in the conduct of their business. Farmers' wives are as much entitled to cash for their butter as their husbands are for wheat, oats, cattle, or pork.

Is it not a fact that a large number of farmers have allowed themselves and their families to get into the habit of dining on very ordinary fare? This should not be. The farmer can be the best liver in the land, as he has his choice of the world's produce; the crops and fruits of the earth are his to begin with, and he should fare sumptuously every day. Why not devote more attention to the garden, enlarge its boundaries if need be, and enlarge your ideas of gardening at the same time. Take the catalogue of the best seedsman you know and let the whole list of vegetables from artichokes to turnips be represented by some of the best sorts. Plant various "small fruits"; don't devote all your space to onions, cabbage, and potatoes. Give

the garden some extra attention; you will never miss the time and you will live better than you ever have before.

A Handy Hook.

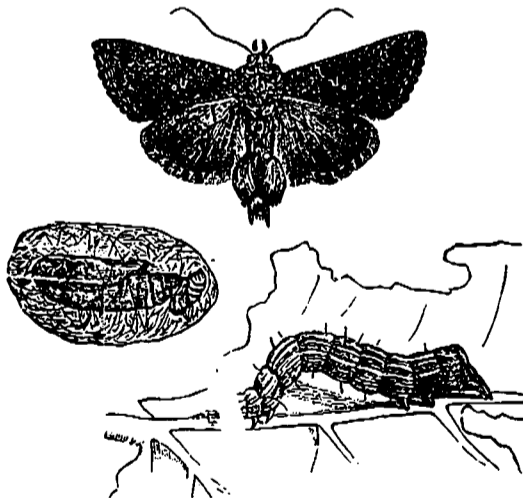
WHEN the end of a prong of a three-tined pitchfork breaks off, the rest of the fork can be turned to good account by cutting off all the prongs to five or six inches in length and bending the shank to get the general shape of the potato hook, as here



shown. Flatten and sharpen the points of the prongs, and bend them to the general shape of those of the potato hook with the outside ones about four inches apart. Completed with a hoe-handle, it makes a fine implement for loosening up ground around plants. —*Rural New Yorker.*

A Caution to Celery Growers.

My attention has lately been called by an Ohio correspondent to the liability of injury to celery in winter quarters by the "green lettuce worm" or cabbage plusia (*Plusia brassicae*), illustrated herewith. This insect is distributed over a large portion of the United States and frequently does serious injury to cabbages, cauliflowers, lettuce, and similar plants. My correspondent, a gardener of long experience, writes:—"They work most when the nights are warm and moist, and in warm, cloudy weather are very active and destructive. When cool nights arrive they can be found in the centre of the plant or beneath it among the leaves and rubbish at the bottom. When disturbed while feeding it either falls off the leaf or, throwing its body with the exception of the hind parts out straight from the leaf, it will remain in that position quite a while. In color it so nearly resembles the plants on which it feeds that it takes a sharp eye to detect them. The quickest method to find it is to look for a mutilated leaf, or by noticing the pellets of excrement, which are about the size of a No. 10 shot, and generally lodge below the pest when feeding in bunches, leaving a brownish or dark stain. They will stand a right sharp frost and conceal themselves in the heart on cold nights,

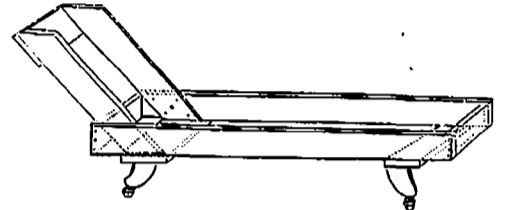


so that they are frequently put away with celery in winter quarters, and destroy every vestige of leaf when so confined." In the light of this experience it behooves gardeners where this insect is present to take care that it is not put away with their celery, to destroy the crop even after it is harvested. —*CLARENCE M. WEED in The American Garden.*

A Lounge for a Dollar.

To make a lounge, the material for which may be had for one dollar, take two strips of wood, eighteen feet long, four inches wide, and one inch thick. From one of these cut two pieces, each six feet long, for the sides, and two pieces two and a half feet long for the ends. Put them together strongly, using screws, and making a gimlet hole to start each screw, in order not to split the wood.

Two more pieces two and a half feet long, from the second strip, for the head, cut as shown in the diagram. These are screwed on the inside of the frame, at one end, giving them a comfortable slant. Another piece, two feet four inches long, is fastened to the ends of the "head-pieces." On the under side of the body frame fasten two more strips, two and a half feet by four inches, each about six inches from the end of the frame, and in these drill a hole about two inches from each end, into which put casters. On the inside of the sides, on the lower edge, fasten strips of wood about an inch square, and on these lay thin boards, over which tack a piece of bagging, treating the head in the same way. Stuff this frame with hay, piling it up about a foot above the sides, and over this stretch some muslin, drawing it as tight as possible, and tacking it firmly on the under side of the lounge. Over this tack the final covering of pretty



cretonne which costs twelve cents a yard, using about three yards. If you choose to make the lounge more expensive and, of course, more comfortable, stuff it with hay on the bottom and excellent material, though it is not necessary. This lounge, which is more of a "divan" than a lounge, may look too low or too hard, but it will be one of the most comfortable articles of furniture in the house. If half a dozen springs are used, they will improve it greatly. —*American Agriculturist.*

Libe Stock.

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

If corn fodder is cut and steamed, or moistened with boiling water, it will be found an excellent and agreeable change of diet for the cows. Cows that are given a variety of food occasionally will always keep in better condition than those that are fed on a sameness of diet continually. —*Dairy World.*

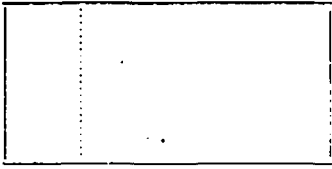
In growing calves for near the top of the market be sure and keep the top line straight. The calf that is pot-bellied is sway-backed, and is like bad butter—spoiled once spoiled forever. It is first good breeding, and second, good feeding, especially during the first year, that makes the straight broad back, without which no cattle bring the top price. —*Live Stock and Western Farm Journal.*

PROF. SANBORN'S ration for a 1000-pound horse: Two quarts of oats in the morning, one and one-half quarts of bran at noon, and a strong quart of corn at night is not a troublesome way of feeding. This ration is large enough for a horse at any light work, and probably larger than needed. For city purposes or for a pleasure horse in a city a different ration would be given. During the work season the grain ration may be doubled and a little ground feed added to the bran.

PROF. W. A. HENRY'S dairy experiments go to show that the ripening of cream before churning increases the yield of butter from 15 to 20 per cent. over the yield from sweet cream, provided that both are churned in the same way. The ripening of cream appears to have no marked influence upon the time of churning. The mixing of sweet with sour cream just before churning does not result in any advantage to the sweet cream, the same loss being incurred as when each cream is churned separately. The same increase in the yield of butter produced by ripening the cream may be obtained by adding acid to sweet cream just before churning. —*Rural New Yorker.*

The *Breeder's Gazette* says that any one who knows anything about a steer knows that he prefers whole corn to corn meal and ear corn to either. It costs an eighth of the corn to grind it and another eighth to take it to and from the mill. Why not feed ear corn at once to the cattle, even if a fourth of it does nothing but find its way into the manure heap? But no such loss need be incurred. With hogs to follow, ear corn can be fed with actual economy besides the saving in labor, and experiments carefully conducted show this. Probably meal will finish up a steer better than ear corn, but for the bulk of the feeding there are no trials to which we can point that show in favor of meal over whole corn. A step still further in the right direction is to feed unhusked corn-fodder and all to the cattle.

NEXT to warming water for stock is to keep the stock water warm, and below we give the outline of a tank which shows how this may be largely accomplished:—



The dotted line represents a partition in the tank reaching to within a few inches of the bottom, and at a distance of say three feet from one end. A cover should be laid on the main part of the tank, and then pack that end of it on all sides with chaff or other non-conducting material. It will be seen that when cattle begin to drink at the open end—which should have a hinged cover—the water flows in from the bottom of the reserve supply. We believe that this cold-shut-off is of great value and we call especial attention to it.—*Farm Stock and Home.*

Reserve Power in Milk-Giving.

THE following interesting article in the *American Agriculturist* is written by Mr. John Gould, Ohio:—

The plan of feeding grain to milch cows at all seasons, if intelligently carried out, is one of the most profitable methods in the dairy. The usual argument is that it maintains the flow of milk, increases its value for commercial purposes, and enriches the farm by giving back in manure two-thirds or more of the original market price of the feed. These are good reasons, but I apprehend that there is more than this to warrant feeding the cow a fair ration of nitrogenous food each day that she contributes toward the products of the dairy. It pays to feed a cow a generously-heaped dish of bran every day for at least a month before she calves. The production of milk is now generally conceded to be almost wholly a draught upon the blood, the larger number of elements in milk having corresponding components in the blood. Hence, foods for the purpose of milk production are the best possible supports for forming blood and building up bone, muscle, and nerve. Any food that has direct influence upon these must, in the nature of things, be adapted to present, or not remote, milk supply. By this we contribute toward a reserve power to prolong profitable milk-giving, and get a return for food consumed, which at the time did not appear. It is now shown that the cow which is fed bran and shorts, or even oatmeal, through the early summer months, will give more milk and hold out better than one that subsisted during that period on grass alone, and had her grain ration added as the maturing grass and August heats began to tell upon the milk flow.

There seems to be a draught upon the system of the cow in these early months that she is only just able to respond to, so that she has no chance to fortify her system for the long effort that the dairy cow is now expected to make. The latent power she should store up is not secured, and later on when nature calls for maternal duties, a greater exertion is necessary to digest the food. At last, when the grain does come, too much of it is taken to repair the previous demand upon the system. She lacks the reserve power stored away in well stocked nerve and muscle, by means of which fully charged blood tells in the milk pail and the churn. Cows are not now required to be hardy. They

are asked to have constitutional vigor and power of consuming and assimilating food and turning it in right channels. The grain-fed cow has had every want of the system fully supplied, while the other has had to do a work of subdividing; and when the flush feed does come, she may put it all into the milk pail; but is more likely to build up her system and make good the credit account where she has from her own flesh and blood contributed to make up a balanced milk ration out of grass. The other cow has nothing to make up, but that reserve power later on comes into play, and the farmer sees that the early fed grain pays in the end. It is not the strength of the few quarts of oats eaten at sunrise which carries the race horse under the wire a winner; but it was the reserve or latent power stored up in the past, not expended in trying to find here and there a scanty subsistence just sufficient to fairly support life, but the result of unused but appropriated food, which, when wanted, could be called upon to win the race. The cow is asked to give milk; and her nervous system must be the power. If she uses all the strength of her food to fight cold, warm barnyards, melt snow from her back, and warm falling clouds of water, besides hunting her own food, we can expect little latent power to be stored up to help us win the amount of milk that is secured the last months of her dairy season that now alone make the cow a profitable animal. She must now give milk 310 days of the 365, and to do this, she must first by breeding and feeding be the type of a dairy cow, and by habit, care, and protection, aided by generosity of rations, reach the goal now set for all good cows, 7,750 pounds of good milk per year.

The Poultry Yard.

If you want to make all the money you possibly can out of poultry you should grow your own feed.

Don't keep too many "dead-head roosters." If you want the eggs for hatching, one to every dozen hens is enough, and if you want eggs for market, you need no rooster at all. You can materially lessen your expenses by attending to this hint.—*Poultry Monthly.*

The *Poultry Bulletin* says:—"Feeding for eggs is the principal thing for winter laying, no matter what breed you keep. Mashed-potatoes in the soft feed are very desirable and greatly relished two or three times a week. Vegetables are necessary as well as grain, and animal food for the full development of the laying capacity of any breed of poultry."

An ingenious chicken raiser near Pomona, Cal., has devised a way of preventing chickens from scratching up his garden. He crosses the long-legged brahmas with the short-legged bantams, and the result is a new breed of fowls with one long leg and one short leg. When they raise either leg to scratch they lose their balance and come to grief. After a few demoralizing attempts they desist.—*Ex.*

THE following breeds are recognized by most writers and fanciers to be the best flesh producers: for weight, Cochins, Brahmas, Langshans, LeFlech, and Creves; for delicacy and flavor of meat, Game, Houdans, Dorkings, Malays, Langshans, LeFlech, and Creves; the Spanish breeds are wildish but hardy, so are Leghorns and Brahmas; Dumpies, or American Creepers, Dorkings, and Dilkies are the best mothers. The latter lay early, quite as pullets, and after about a dozen eggs they sit.

Don't rely upon Providence to run the poultry yard; if you do you will surely get left. Roll up your sleeves and go to work, if you would succeed. After you have done this it is all right to leave the result with Providence. But don't go around depending solely upon Providence for assistance. You will soon come to the conclusion that the whole system is a failure, and that you must take the other tack if you want to succeed. They only succeed who earn success.—*Poultry Monthly.*

WHEN an agricultural editor finds nothing else to write about, he recommends farmers to raise ducks or geese. What possesses him to write such drivel, unless it be the lack of something else to fill up, we

never could understand. Ducks might be tolerated if peace could be kept in the family no other way, but a divorce suit would be almost preferable to a demand from the better half for room on the farm for a flock of geese. The only goose we ever heard of that could be endured on a farm was the mythical one that laid the golden eggs. From gosling to aged gander the goose is an unmitigated nuisance. It defiles everything it touches. Three geese will tread down and defile almost as much pasture as a cow. Its eggs are coarse eating and its flesh not much better. Even the feather beds, which are the good wife's excuse for demanding geese on the farm, are unhealthy and an abomination to any one not in the most vigorous health. We advise farmers to draw the line at the duck, and if they have to yield to make a determined stand between the duck and the goose.—*Live Stock and Western Farm Journal.*

THERE have been many suggestions given as to the best mode of breaking up "the sitting hens," in order to compel them to desist from incubation and begin laying again. If a hen begins to sit it is usually when she is in good condition, and as a rule she is fat. If she is prevented from carrying out her intention of sitting, by being broken up, she will lay only a few eggs and begin sitting again. Now, we will give an excellent plan which will save time and give more eggs after the hen is broken up. In the first place let her stay on the nest a week, giving her no food the first three days, and only one meal the next two days, and one the next two, which completes the week, but let her have all the water she desires. She will then fall off in flesh, and should be taken from the nest and placed in a lath box, with open sides and open bottom, with no nest or anywhere for her to sit, giving only one meal a day, which should be stale bread soaked in milk and a little chopped clover. Keep her in the box two or three days, and then let her be placed with the other fowls. She will then be in good laying condition, not too fat, and will lay on, and not attempt to hatch another brood for quite a length of time.—*Mirror and Farmer.*

Pithily Put Pickings.

COMMENCE the new year on the farm by paying for everything as you go. Enormous bills cause trouble and inconvenience.—*Agricultural Epitome.*

"How lucky some men are!" is the almost envious comment of the hap-hazard farmer and stockman as he contemplates the success of his wide-awake, thorough-going neighbor.—*Breeders' Gazette.*

NO MAN'S experience can teach him all that is worth knowing; therefore read, and get the experience of others. . . . The best profit is in the best products. An afternoon visit to market will find the best meat, butter, vegetables and fruits all sold.—*Vermont Watchman.*

THE most solemn joke in all the world is farming just for fun. . . . Russia is a sort of semi-barbarous land, but blinders are never put on horses there. . . . Politeness pays in the cow stable. A gentle man gets more milk than a harsh one.—*Farm Stock and Home.*

It is almost work thrown away to set trees, shrubs, and flowers, and then leave them to take care of themselves. . . . In the management of a farm, as well as with all other pursuits, attending to details has done more to assure success than anything else.—*Maryland Farmer.*

It is not what we produce but what we utilize that makes the profit. . . . On the farm as elsewhere, misfortune is the shadow of carelessness. . . . Many a boy has been driven from the farm by being compelled to do chores while the men were mooning under the trees.—*Selected.*

If you made any bad mistakes last year, tell your fellow farmers about them so that they may avoid a similar pitfall. . . . "The pen is mightier than the sword," but the lead pencil is mightier than the pen on the farm in winter when plans are being made for the next season's farming operations.—*Western Plowman.*

THE country home that was complete has scarcely yet been found. There is always some addition that may be made to add to its beauty and attractiveness. . . . The farmer whose home is comfortable and whose stock are well provided for is happy whether the wind blows and the storm beats or it is bright and sunny.—*Rocky Mountain Husbandman.*

CONSIDER the fact that in every working season there are 50 or 60 working days so rainy or disagreeable that a man cannot do full work out of doors. The farmer who plans for profitable work indoors on these days is an economist in the true sense of the word. . . . Teach your daughter that good butter is better than poor music. . . . The "scrub" farmer will always have scrub cattle, no matter in what herd book they are recorded.—*Rural New Yorker.*

A CALF born in fall or winter is worth two born in the spring for profit. . . . To attempt to improve scrub stock by selecting and breeding is poor economy. You can purchase improved stock and secure the benefit of the work of others cheaper than you can do the same work yourself. . . . The greater the number of persons contributing milk or cream to the factory, the less uniform will be the product unless the operator or owner carefully inspects the herds' stables and dairy houses of the patrons.—*Dairy World.*

CORRESPONDENCE

THE ANTIPODES.

A LADY'S IMPRESSIONS OF THE CLIMATE AND PEOPLE.—A COUNTRY OVERFLOWING WITH WHISKY AND WATER.

The following interesting letter is from a lady in Melbourne, Australia, who is a native-born Canadian :

To the Editor of MASSEY'S ILLUSTRATED.

SIR,—In looking over the MASSEY'S ILLUSTRATED I noticed that its pages promised to its future patrons some letters or notes on foreign topics. Therefore, thinking that it may interest some to hear a little about Australia from one who so lately called Canada her home, I take the liberty of sending a few lines—but not in the hope of attracting, or holding the attention, of any gentleman reader for one moment. It is to the wives and daughters of our good friends the farmers that I address these lines—as I believe it is the intention of the MASSEY PRESS to make the paper equally interesting to male and female. Any letter coming from here, I anticipate, will be mostly devoted to agricultural, and other subjects interesting to gentlemen only.

I know, by experience, the opinion held by most Canadians, of Australia—viz., that it is a land overflowing with milk and honey, and also that its climate is the finest in the world. Well, all this probably may, and probably may not, be true. It all depends upon the sense in which you take the former. If you take it in the literal sense of the word, then I think you labor under a mistake, as it is not any better in that respect than Canada. I do not think the gods provide any more goods here than in any other country, without first putting the shoulder to the wheel. Of course, vast fortunes have been accumulated by a great number of fortunate men, many of whom have had to work for it, while others have, perhaps, made their pile in a day, through speculation, and others in much less time, through the turf.

If, instead of calling Australia the finest (or in other words, the flower of the flock) country in the world, people would describe it as the place overflowing with whisky and water, I think they would come nearer the truth; as there is certainly more liquor consumed here than in any other country—that is taking the population into consideration.

THE AUSTRALIAN CLIMATE.

The topic which generally holds good in every emergency, or lack of conversational powers, viz.—the weather, must here receive another criticism, though in this instance not a harsh one. To say the least of it, the Australian climate is truly a delightful one. During the winter we never see snow—excepting on the mountains—and very rarely have any frost, but we have any amount of rain during this season. Therefore, instead of having every thing frozen up and covered with snow, we see lovely green grass and flowers everywhere. But when the first approach of summer comes, and with it the hot winds and scorching sun, the beauty of nature soon fades and leaves in its place nothing but skeletons of its former loveliness. Winter launches into summer so suddenly, that you can scarcely tell when winter ends and summer commences, though you are pretty sure of the advent of the latter when a hot wind springs up and almost blinds and smothers you, if you happen to be caught out in it. These north winds are something to be imagined rather than felt—the air seems to be on fire. But one consolation they—the winds—never last for more than three days at a time, and then for weeks we will have the most delightful weather, pretty warm to be sure, but there is always a nice cool breeze blowing.

MANNERS OF THE PEOPLE.

The colonials are very similar to the Americans in their manners, free, hospitable and wide awake, although I am told some of them are abominably lazy. The blacks or natives make good domestics, but are so treacherous that they are not to be trusted. Like the Italians they will have their vendetta (or revenge) if you anger them in any way, and that in the most horrible manner imaginable. They have the patience of a cat, but the ferocity of a tiger.

This being Xmas season, every thing is beginning to assume a very pretty, gay and festive appearance. Most of the vegetables and fruits are just coming in now—which means we are having everything the reverse to what you are having. Instead of having natural ice, we have only that which is frozen by means of chemicals and machinery. It tastes about the same, but is perhaps purer and—dearer.

I must now draw my letter to a close, but I may perhaps at some future date tell you more about what a life in Australia is like.

In conclusion allow me to offer you the "season's greetings." I remain yours, etc.,
C. E. M.

MELBOURNE, December 23rd, 1888.

FROZEN WHEAT AS SEED.

Prof. W. Saunders, Director Experimental Farms, Ottawa, has sent us the following under date January 30th:

To the Editor of MASSEY'S ILLUSTRATED:

SIR,—I desire to submit to your readers a summary of the results of the first 50 tests of frozen grain sent to the Central Experimental Farm by the farmers of Manitoba and the North-West Territories for the purpose of ascertaining the suitability of the samples for seed. These consisted of wheat 41, barley 5, and oats 4. The wheat varied in germinating power from 21 to 90 per cent.; 13 of those of lower grade were found to produce so feeble a growth in the soil as to be unfit for seed, no matter how large the quantity sown. Five samples which showed over 90 per cent. of vitality have been returned as good for seed, when sown in the usual quantity, and the remaining 23, which range in vitality from 66 to 89 per cent., have received a qualified recommendation. On an average three-fourths of the plants produced from these latter samples made fair growth, the other fourth weak growth. The use of such seed is not without risk, but should the season be favorable, it is likely that in the fertile soil of the western prairies many of the weakly plants would eventually become strong. It would, however, be wise in using such seed to sow a larger quantity per acre than is customary to compensate for the lack of vitality.

Of the five samples of barley tested, two germinated in the proportion of 15 per cent. only, the others 47, 65, and 97. The last named was a good sample for seed and the only one of the five which it would be safe to use. The two of lowest grade were worthless for this purpose, that which germinated in the proportion of 47 per cent. had about one-fifth of the plants very feeble, while that which showed 65 per cent. produced only 25 plants which made fair growth and 40 weakly ones.

The four samples of oats ranged in germinating power as follows: 9, 53, 67, and 70 per cent. The two of lower grade were found to be quite unfit for seed, the other two showed a fair growth with but few feeble plants, and would be likely to produce good results with a favorable season if thickly sown.

It is probable that these samples fairly represent the quality of the seed held for next year's sowing by the farmers in those districts in Manitoba and the North-West Territories which have suffered from early autumn frosts. If this be so then nearly one-third of the farmers settled in those localities are unprovided with seed fit for sowing. Many additional samples are now undergoing test and every mail adds to their number. It is hoped that all those who propose sending samples to be tested will forward them soon, so that returns may be sent before the time for sowing begins.

Owing to a press of matter we are unable in this issue to give the answers to several questions sent us, but they will be published in the March number.—[Ed.]



CONDUCTED BY J. B. HARRIS.

EVERYBODY knows that self-culture involves work and self-denial. Every young fellow will acknowledge that he cannot make a business of devoting his evenings to frivolity or dissipation and expect to make himself fit to take an honorable position among men. And yet these same young fellows will continue to spend their evenings in pursuits that are either frivolous or worse. Why is it? Why is it that young men who know perfectly well that if they would rise to prominence in their respective trades or occupations they must devote time and toil to mastering those underlying principles, and finer details without a knowledge of which they are handicapped in the contest with other men. No one can tell why it is. Perhaps as good answer as any is that human nature is perverse and often not only refuses or neglects to walk in the way it knows to be right, but finds a strange pleasure in paths which it well knows to be wrong. Else why is it that a young fellow who sees a companion outstripping him in the race of life and who knows that his companion's success is due not so much to superior talents as to studious habits, by the exercise of which he obtains a clearer insight into the reasons of things, the principles and laws which govern the materials he handles and the machines and tools with which he works why is it that the same young fellow will go on spending his time frivolously—standing on street corners—playing billiards—at the theatre—at the bar—or perhaps in places even worse than these? He knows that he is doing wrong and that the end must be evil, and yet he goes on. At forty years he sees his old companion superintendent of the shop, while he himself still works at the vise or the lathe. This of course is an extreme case. We cannot all attain to position and eminence. There must be heads to plan—but there must also be hands to execute. But we can all

take advantage of the opportunities we possess to obtain knowledge and by its means to take a step upward.

We this month publish the essay written by Mr. J. J. Holmes, employed in the Machine Shop of the Massey Manufacturing Co., for which he received a prize of five dollars. Although we did not receive as large a number of papers as anticipated, we are glad to know that at least some interest was manifested in the matter. We should not like our readers to think, nor should we like the writer of this prize essay to think, that his article is as good as we expect to receive later on from himself and from, we trust, many others of our subscribers.

Following are marks attained by Prize Essayist, the standard of 100 representing, say, the attainments of an average public school pupil:

Divisions.	Standard of Each Division.	Average Marks Obtained.
Writing.. .. .	10	7½
General appearance.. .. .	10	7½
Grammatical construction.. .. .	20	17½
Spelling.. .. .	20	17
Knowledge of subject.. .. .	20	15
Treatment.. .. .	20	15
	100	79½

THE PRIZE ESSAY.

SELF-CULTURE.

In this age, the abundance of schools and teachers places the means of education easily within the reach of all, making it but natural for us to assume that the essayist is to speak of self-culture only after school-days are past, and the scholar is left to follow his own inclinations; at the same time it should be understood that self-culture has gone on (to a certain extent) during school-days. In order to get at the pith of the subject I will ask and strive to answer a few questions:

1st. What is self-culture?

In my opinion, self-culture (in a liberal sense of the phrase) is an individual attempt to acquire a knowledge of any subject in which we are deficient, and to improve our knowledge on all subjects as far as possible.

2d. What avenues are open for those desirous of improving by self-culture?

The public libraries, night-schools and classes, the hearing of lectures, the subscribing to technical and other journals devoted to the particular branch wished to be studied, etc.

3d. What is the rule for success in self-culture?

The diligent application of the individual to the subject on which he wishes to be better informed, by reading and study, observation, and in conversation with those whose word is reliable; not forgetting that most essential feature, perseverance.

I have been speaking of the self-culture which (in part) is absolutely necessary for the success of those engaged in business pursuits; but there is a further development of the study (not directly necessary to the attainment of an honest livelihood) which if properly cultivated, serves to enliven the passing hours, and make our social intercourse one with another more agreeable by its presence. Those who have made a study of this particular branch are not commonly called self-cultured, but are known to the world as accomplished.

Perhaps the easiest way to explain my meaning, would be to define an accomplished young man; the definition applying to all cultured people.

The accomplished young man is to be seen to the best advantage in society. He is noticed at once by his neat personal appearance and gentlemanly manners. He knows when to make a call, how long to make it, and what to do and say while making it. If appearing in company, he is free from all awkwardness and embarrassment, suiting himself to circumstances with perfect ease. He is kind and attentive to all, can converse intelligently on most subjects or listen attentively if required. If musical, can entertain; or witty, can amuse. Everything he does is done with a care not to bore, thus winning respect and a welcome from all.

In conclusion of the subject let me here remark, that the composing of this essay is an attempt at self-culture in earnest. If you don't think so, try it?
NONNIE.



CONDUCTED BY AUNT TUTU.

(Communications intended for this Department should be addressed to AUNT TUTU, care MASSEY PRESS, Massey Street, Toronto.)

A Bit of the Bright Side.

SISTER RURAL READERS.—Do you think that in this "workaday" world of ours, we count our blessings often enough? You know that old saying that when one feels particularly depressed in mind or spirits he or she should count over twenty-five blessings, especially his or hers, to act as an antidote for such ills. Now, suppose, when we first wake in the early morning, instead of beginning to think of the baking to be done, and wondering whether or no the sponge we set last thing the night before, has risen, or worrying over the hard, busy day before us, we turn to the little face on the pillow near us. It may be the baby of a few months, rosy and dimpled, sleeping with tightly clenched fist thrown up over its head, showing by that act (they tell us) perfect health and sound sense. Or it may be a little maid of eight or ten summers is enjoying the heavy sleep of early childhood by your side. Kiss the quiet face, thanking God for the health of your little one, and let it count as first of your list of blessings. Surely it is one every mother's heart will appreciate. Cover up the little one and step softly around. Plenty of sleep is such a good thing for babies, young or old,

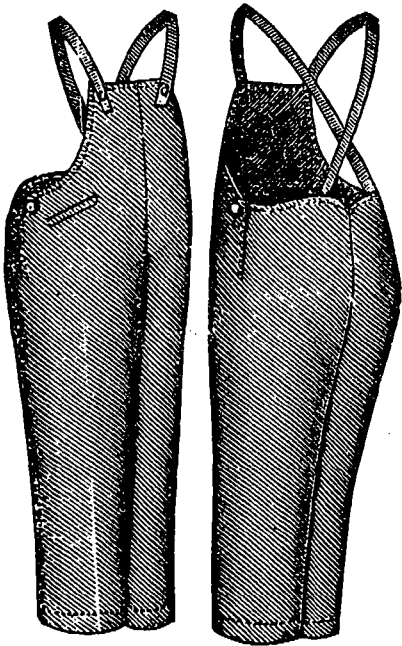


FIG. 1.

and we know the little heads are safe from harm when on the pillow. Let me quote a remark made by the good mother of a large family to my own mother. "Mrs. Howell," she said, "when the children are all put safely in bed, and none of them have been sick, or got hurt during the day, don't you think it a good day's work done?"

We do, and we also think letting them sleep reasonably late in the morning a good day's work well begun.

Let us hurry down to the kitchen now, where the head of the house has already started a fire and put the freshly-filled tea-kettle over. Count that, my sisters; it's a blessing not to be overlooked, and come out of the door for a breath of fresh morning air. Look away over the hills and far beyond to the mountains sharply defined by the early sunlight, thank God for the great creation spread before you, and thank Him also that you

are a part of it, doing His work under His guiding hand.

Bring your gaze back again to the boundaries of the farm, whose every foot is owned (clear of mortgage) by the good man you call husband. Note that blessing, please, my sisters.

And now count up. Have we enough of blessings, think you, to begin the day with? If so, we will add the rest at our leisure. You smile. What! Is the measure full already?

A FARMER'S SISTER.

OUR cuts of patterns this month represent two useful garments. No. 1 representing a pair of overalls with apron front. For a man measuring 34 inches about the waist it needs 4 yards of material 27 inches wide or $3\frac{1}{2}$ yards 36 inches wide.



FIG. 2.

No. 2 illustrates a boy's working suit. It consists of a camisole and overalls and is adapted for a boy from three to fifteen years of age. To make the suit for a boy of nine years $4\frac{1}{2}$ yards of goods 27 inches wide will be needed; the camisole calling for 2 yards and the overalls for $2\frac{1}{2}$ yards. If material 36 inches wide be used, $3\frac{1}{2}$ yards will suffice; the overalls needing $2\frac{1}{2}$ yards, and the camisole $1\frac{1}{2}$ yards.

This cut illustrates a receptacle for photographs that is intended to hang upon the wall. It may be of plush, etc., and is crossed horizontally with graduated rows of tinsel galloon, which are secured with a few stitches at irregular intervals, to allow pictures to be slipped in any of the cases.

A diagonal stripe of galloon gives variety to the whole, and serves as a border to a triangular piece of embroidery or antique brocade. The galloon or a cord may finish the edges, and the back is covered with satteen. The interlining is of stiff cardboard, and the size depends entirely upon the taste.—*Domestic Monthly*.



Bits of Soap.—Gather together all the pieces of white soap that you may have, castile, ivory, and any others that are known to be good. Cut them into small pieces and dissolve in boiling water in the proportion of a tea cup of water to half a cup of scraps. As soon as the scraps have melted, and while the water is still hot, stir in ground oatmeal

to make a stiff batter Grease some old cups and pour enough of this mixture in each for a small cake, and set it aside to harden and dry. You have now a very nice soap that is excellent for daily use in the nursery; or the mixture may be made just a little thinner and kept in a tin cup to be brought out as soft, white soap at the children's baths. For the boys' and girls' tri-daily hand-scrubbing stir the batter very stiff with oatmeal bran or wheat middlings, and mould into flat cakes. These have a roughness that is necessary to remove ink stains, pitch and the many defiling substances with which every healthy boy and girl seems to come in contact.

For fancy hand soap, melt all together the pieces of any colored toilet soaps, provided, of course, that they are good, and do not contain injurious materials; stir in a few drops of perfumery and a very little Indian meal. Pour this into shallow dishes (fancy-shaped if you like), and when partly cold stamp on a pattern and mould the corners of the cakes round, or cut into shapes with a cake-cutter.

The scraps of yellow soap may be put into the soap-shaker—a wire receptacle for holding soap that is to be shaken in the dish-water; but for those who have no such implement, this is a way of disposing of them: Dissolve the pieces as before, using less hot water, and when the mixture has partly cooled stir in a quantity (as much as it will take nicely) of scouring sand or bath brick scraped fine; pour into a wooden box and stir often until cold. This is excellent for scouring tins and cleaning unpainted shelves and floors, but will, of course, remove the paint from wood-work. Yellow soap may, like the white, be simply dissolved and left to stiffen a little to be used as soft soap.—*Ladies' Home Journal*.

Helpful Household Hints.

By warming the knife hot bread will cut as nicely as cold.

MUCH sickness in farmers' families in winter is due to keeping large quantities of potatoes and other vegetables stowed under sleeping rooms.

A VERY sure and quick way has been suggested to remove grease spots from silk. "Rub the spot quickly with brown paper." The friction will soon draw out the grease.

BRIGHTEN up the half-worn house dresses with belt, collar, cuffs, etc., of the new cashmere or tinsel-edged ribbons. You will be surprised to see the change it will effect in the appearance.

TO CLEAN men's clothing, mix two parts alcohol and one part ammonia; rub vigorously with a sponge or woollen cloth (if a cloth is used it should be of the same color as the garment you are cleaning). This receipt is also excellent for other woollen goods and for carpet.

Nut Candy.—Take five cups of sugar, six tablespoonfuls of water, four tablespoonfuls of vinegar, one tablespoonful butter. Boil without stirring till it crisps in cold water. Line buttered tins with any kind of nut meats (walnut or butternut meats are best) and pour the candy over them. When nearly cold mark off into strips.



That Problem.

THE rather puzzling problem we published in the December ILLUSTRATED has called forth the interest of many boys and girls; and while all may not have solved it correctly, we are glad to print below as promised the names of those who have sent in the correct answer, which is:—

PENCILS.	PRICE.	MONEY.
3	4c. each	12c.
15	4c. "	75c.
2	4c. "	8c.
20 pencils.		20 cents.

And herewith are the names, ages, and addresses of the boys and girls who have solved the problem:—

- Sadie Berry, Berryton, Leeds Co., Ont., age 15 years.
- W. M. McIntyre, Nairn, Ont., age 16.
- Wm. Mundell, Melrose, Ont., age 13.
- John W. Brown, Chard, Ont., age 15.
- E. Kaulbeck, Milford, Hants Co., N.S., "A School Boy."
- Robert Kaulbeck, Mid Musquodoboit, N.S.
- Howard Brown, Cantley P. O., P. Q., age 21.
- P. Hollarn, Pinedale, Ont.
- Albert Gray, Newry P. O., Ont.

- Dave Nicholson, Sebright, Ont.
- Fred. McIntosh, Bookton, Ont., age 11.
- Sanford Buckinough, Bookton, Ont., age 13.
- Margaret A. Kidd, Airlie, Ont., age 13.
- Rowland Middleton, Viola Dale, Man., age 12.
- Alexander D. McLaren, Ralphton, Man., age 13.
- Annie Eliza Tate, Seeley's Bay, Ont., age 15.
- W. H. Morrison, Newry P. O., Ont., age 13.
- J. R. Morrison, Newry P. O., Ont., age 11.
- John Andrew McKenzie, Kinloss Township, Lucknow, Ont., age 12.
- Thos. Gilsinan, Nannimo, B. C., age 18.

Prize Essay.

And now we are going to offer our young readers a still greater inducement to try their knowledge and ability in another line. We are going to give two cash prizes—a first prize of two dollars and a second prize of one dollar—for the two best compositions sent to us before March 15th next, on the following conditions:—

1. The subject shall be, "WHY I LIKE LIFE IN THE COUNTRY."
2. The essays must be written by a boy or girl living in the country (not in a city or big town) under seventeen years of age.
3. Must be in essayist's own handwriting.
4. Must be at least 300 words and should not be over 500.
5. All essays must be in before 6 p.m. on March 15th next, and must be addressed—
MASSEY PRESS, MASSEY STREET, TORONTO, ONT.

6. Every boy or girl competing must send in a statement that they have composed the essay sent in without assistance, that they have written it themselves, and are under seventeen years of age.
7. Be careful to give your name and address correctly and plainly.
8. The First Prize shall be \$2, and the Second Prize \$1.
9. The writers of the Third and Fourth best essays will receive Honorable Mention in the ILLUSTRATED.

They will be judged on the following basis:—

Handwriting	.....	maximum, 10 points.
General Appearance	.....	" 10 "
Grammatical Construction	.....	" 20 "
Spelling	.....	" 20 "
Knowledge of Subject	.....	" 20 "
Treatment	.....	" 20 "

Judges—Mr. C. Morrison and Mr. J. B. Harris. Their decision will be final.

It seems that the Bean Bag Game, a description of which we gave to our readers in the January number, has been highly appreciated. Even the old folks communicate with us and confess to have gotten an unlimited stock of fun out of it.

"Papa, fot would you take for me?"

She was ready for bed and lay on my arm,
In her little frilled cap so fine,
With her golden hair falling out at the edge,
Like a circle of noon sunshine.
And I hummed the old tune of "Banbury Cross,"
And "Three men who put out to sea,"
When she speedily said, as she closed her blue eyes,
"Papa, fot would you take for me?"

And I answered, "A dollar, dear little heart,"
And she slept, baby weary with play,
But I held her warm in my love-strong arms,
And I rocked her and rocked away.
Oh, the dollar meant all the world to me,
The land and the sea and the sky,
The lowest depths of the lowest place,
The highest of all that's high.

The cities with streets and palaces,
Their pictures and stores of art,
I would not take for one low, soft throb,
Of my little one's loving heart,
Nor all the gold that ever was found
In the busy, wealth-finding past,
Would I take for one smile of my darling's face,
Did I know it must be the last.

So I rocked my baby and rocked away,
And I felt such a sweet content,
For the words of the song expressed to me more
Than they ever before had meant.
And the night crept on, and I slept and dreamed
Of things far too glad to be.
And I wakened with lips saying close to my ear,
"Papa, fot would you take for me?"

—Selected.

Sarah's Moral Application.

It takes a child—the age of four appears to be the limit—to make a straight moral application of gospel truth. Sarah, aged four, is a devout little Christian. She has a child's book of *Gospel Stories Illustrated*, which she studies faithfully.

Lucinda, her sister, aged ten, has been telling what she will do when "her ship comes in." She becomes indignant at some of Sarah's misdeeds, when the following occurs:—

LUCINDA—"Sarah, you shall not ride in my carriage when I am grown and married."

SARAH—(to whom the carriage and rich husband for her sister are very real) "Can't I, teester?"

LUCINDA—"No."

SARAH—(after a long pause and very thoughtfully) "Nevaw mind, teester; you keep your cawings and hosses. I see in the Gospel book where the wich man went stwait to the debil, and the poor man was cawied to Abwaham's bosom. You keep cawige; I don't want to wide in it."

Bobby's Article on Cats.

A CAT is a curius animil. It has fore feat and also fore legs. Its head is at one end of its body and its tale is at the other. When it walks its hed gos before and its tale follows along behind. Its front feat walks before, and its hine feat walks along behind. If a kan is tide to a cat's tale, it will not track when it walks. It is not good for a cat to ti a bunch of fire-crackers to its tale eather. It is apt to walk too fast and get heated. A cat's tale is a good handel to pike the cat up by, but it's hard on the cat. Cats can clime treas. Dogs kant. That is lucky for cats. When a dog gets after them, they kan clime a tre, when they kan sass back without gitin hert. You kant hit a cat. Wunot I thru a bute at one, and I hit a nold ruster. The ole ruster he dide, but the cat didn't.

RAGGED URCHIN (weeping): "Oh, oh—oh, dear!" BENEVOLENT GENT: "What is the matter, my boy?" "I've lost (sob) my penny. Oh!" (Howl.) "Never mind, here is another." Urchin sets up another howl as he pockets the coin. "What is the matter now?" "Oh, sir, if I hadn't lost the other one I'd have two now."





Matches are made in heaven, scratched everywhere and blown out in Chicago.

We presume you can judge the amount of a woman's affection by the sighs of her heart.

One great trouble with those who go to the bad is that they do not think to provide themselves with a return ticket.

The man who said, "It is an ill wind that blows no body good" must have lived near a soap boiling establishment.

Do not treat a man coldly because he happens to be down in the world. Always keep a kettle of hot water ready for tramps.

When the doctor says he's going to clean out the system the result sometimes justifies the victim in thinking he meant a cash system.

If there is anything which will make a young man query whether evolution is not a failure, it is to see a pretty girl kiss a pug dog.

The man who spends most of his days giving advice to his friends has no need at all to lie awake nights wondering why he isn't popular.

It is a sad fact that too many people keep upon one side of our churches—the outside. They seem to feel most "at home" there.

A good housewife never opens the condensed milk can with her husband's razor, nor will a loving husband curry the horse with the nutmeg grater.

A man that marries a widow is bound to give up smoking and chewing. If she gives up her weeds for him, he should give up the weed for her.

It is not always the man who looks the wisest who knows the most, but most people don't know this, so that it will pay you to look just as wise as you possibly can.

"Court the fresh air day and night," says a medical exchange. That's good advice for the girls, but if you are a young man you had better court the fresh heires.

Guest—What sort of a way do you call this to run a hotel, young fellow?

Clerk—European, sir.

Guest—Yes, I know I'm a payin'; you needn't tell me that. But I ain't kickin' on that. I only wanted to tell you that the big belt has slipped off the shaft down in the wash-room, and fellers is wipin' their hands on it, that's all. If you don't want it soiled you'd better tend to it.—*Toledo Blade.*

It is Well to Remember

- That slander, like mud, dries and falls off.
- That he who gathers roses must not fear thorns.
- That to wait and be patient soothes many a pang.
- That all are not princes that ride with the emperor.
- That correction is good when administered in season.
- That it takes a great deal of grace to be able to bear praise.
- That you will never have a friend if you must have one without failings.
- That to have what we want is riches, but to be able to do without is power.
- That there is no limit to the age at which a man may make a fool of himself.
- That the roses of pleasure seldom last long enough to adorn the brow of those who pluck them.
- That a man who cannot mind his own business is not to be trusted with the business of others.—*Good Housekeeping.*

Young man (to servant)—Is Miss Clara engaged?
 Servant—Hiven rist your sowl, sorr, I hope she is. She's in the parlor now wid a young man's arm twict around her waist.

Girls should learn to be useful as well as ornamental. There are times when, instead of going out among men "to make a mash," as the saying goes, they should stay at home and mash the potatoes.

Mother—Now, Johnny, mamma doesn't like to spank you; it is more painful to her than to you.

Johnny—Well, ma, if it makes you feel so bad I'm willing to go without it for your sake.

A youngster was asked to give his idea of the meaning of "responsibility," so he said: "Well, supposing I had only two buttons on my trousers and one came off—all the responsibility would rest on the other button."

The minister's wife sat on the front porch mending the clothes of one of her numerous progeny. A neighbor passing stopped in for a social chat. A large work basket, half full of buttons, sat on the floor of the porch. After various remarks of a gossip nature the visitor said:

"You seem to be well supplied with buttons, Mrs. Goodman."

"Yes; very well indeed."

"My gracious! If there ain't two of the same buttons my husband had on his last winter suit. I'd know 'em anywhere."

"Indeed!" said the minister's wife, calmly. "I am surprised to hear it, as all these buttons were found in the contribution box. So I thought I might as well put them to some use, so I—what! must you go? Well, be sure to call again."—*West Point Alliance.*

A Few Conundrums,

What is the difference between a fog and a falling star? One is mist on earth and the other is missed in heaven.

Why is a man called honorable who is upstairs beating his wife? He is above doing a mean act.

What are the great astronomers? The stars, because they have studded the heavens for ages.

What is thieving on the outskirts? Picking ladies' pockets.

In what place did the cock crow when all the world heard him? In Noah's ark.

When does the rain become too familiar to a lady? When it begins to pat her (patter) on the back.

Why may carpenters reasonably believe there is no such thing as stone? Because they never saw it.

Who are the best men to send to war? Lawyers, because their charges are so great no one can stand them.

Why is Satan always a gentleman? Because, being the imp of darkness, he can never be imp o' light.

If a church be on fire why has the organ the smallest chance of escape? Because the engine cannot play on it.

Why are the makers of the Armstrong guns the greatest thieves in Her Majesty's service? Because they rifle all the guns, forge the materials, and steel all the gun-breeches.

What color is a field glass when covered with snow? Invisible green.

What length should a lady's dress be? A little above two feet.

If you had to swallow a man, what kind would you prefer? A little London porter.

What is the most difficult St. Paul train to catch? The 12.50 because it is "ten to one" if you catch it.

What relation is a loaf of bread to a steam engine? Mother, because a loaf of bread is a necessity; a steam engine an invention, and necessity is the mother of invention.—*Yenowine's News.*

"Grandpa, do hens make their eggs?"

"Certainly."

"The same way a boy makes a ball when his papa don't buy one for him?"

"No, not exactly."

"Do the hens put in the yellow first, and then put the white around it?"

"I guess they do, but you shouldn't be asking such questions; when you are older you will know all about it?"

"I want to ask you just one more question; may I, grandpa?"

"Yes, go ahead."

"Who sews on the covers for them?"

Grandpa lies down and dies.—*St. Louis Humorist.*

THE CITY COUSIN IN THE COUNTRY—HE TRIES CHURNING.



I.—Looks easy! guess I'll try it!



II.—Talk about gentle exercis?—I'll do this evry day!



III.—Seems to go a little hard - wants oiling, I guess!



IV.—Don't see any butter there yet



V.—No confounded churn can get the best of me



VI.—I'll bring that butter or die!



A Summary of News for the Past Month.

- 1st.—Richardson Drug Co.'s buildings, St. Louis, destroyed by fire, loss \$500,000. . . . Senator Blair, of New Hampshire, wants Canada annexed, peaceably if she will and forcibly if she won't.
- 2d.—Emperor William, of Germany, replying to a deputation predicts peace for 1889.
- 3d.—Judgment rendered in the Laprairie election case disqualifying James Mesheane, ex-Minister of Public Works, in the Mercier Cabinet, for seven years. . . . Lincoln pulp mill of Merrittton, Ont., burned, loss \$30,000.
- 4th.—Reported that 200 persons lost in the snow and frozen to death in Russia during the past week.
- 5th.—Hon. Edward George Villiers Stanley, eldest son of the Governor General, married to the youngest daughter of the Duke of Manchester in London, England.
- 6th.—Letter from the Pope read in the Irish Catholic Churches sympathizing with the Irish people in their present suffering and praising their fortitude.
- 7th.—Governor Ames, of Massachusetts, recommends the extension of female suffrage in that State.
- 8th.—Advices from Mandalay state that a battle has been fought between the British forces and the Karens; loss, British, 5; Karens, 200. . . . Attempt made to blow up the royal palace at Madrid, Spain.
- 9th.—Cyclone swept over Reading, Pa., and blew down a silk mill in which 250 girls were employed, 28 of them being killed and 20 seriously injured. . . . Seven storey house in Pittsburgh, Pa., blown down by the storm, and 25 men killed and 30 severely injured. . . . Niagara Falls Suspension bridge completely wrecked by the storm. . . . Quebec Legislature formally opened.
- 11th.—Sir John Macdonald 74 years old to-day. . . . Principal Grant tendered a reception at Queen's University, Kingston.
- 12th.—Dominion Evangelical Alliance send a lengthy petition to the Governor General-in-Council praying against the Jesuit Estate Act.
- 14th.—Eight persons killed in a railway collision near Talmage, Ohio.
- 15th.—Several heavy business failures announced in Montreal.
- 16th.—Mr. Neveu, Liberal elected in Joliette, Que., for the House of Commons. . . . Letter dated August 17th received in Brussels from Stanley the explorer.
- 17th.—Sanford Fleming, C. M. G., re-elected Chancellor of Queen's University, Kingston. . . . Arabs destroy the German Missionary Station at Tuga and massacre eight missionaries.
- 18th.—Carload of cotton (144 bales) shipped from Kingston, Ont., for China, via the C. P. R. . . . Wilson, Gladstonian, elected in Govan, Scotland, for the Imperial Parliament.
- 20th.—Authentic accounts received in London, England, of General Gordon's murder in Khartoum.
- 22d.—Wm. Ross, Collector of Customs, Halifax, removed from his post for allowing the American ship Batson to tranship her cargo of fish. . . . Railway collision at Point St. Charles, Montreal; one woman killed and five persons injured.
- 23d.—Advices received of three hideous assassinations of negroes in Kingston, Jamaica, by "Jack the Ripper." . . . First annual dinner of the Board of Trade, Montreal. . . . Ontario Branch of the Dominion Alliance endorses parliamentary suffrage for women.
- 24th.—Farewell Banquet given by the Lord Mayor of London to United States Minister Phelps. . . . Formal opening of the Ontario Legislature. . . . Mr. Goyette, Nationalist, elected in Laprairie for the Quebec Legislature, and Mr. Lariviere in Provencher for the Manitoba Legislature.
- 25th.—An English missionary and sixteen of his followers murdered by the natives of Zanzibar.
- 26th.—Death of ex-Chief Justice Sir William Buell Richards, at Ottawa, aged 74. . . . Railway Committee of the Privy Council give permission to the Northern Pacific and Manitoba Railway to cross the C. P. R. at Morris. . . . Mme. Albani enthusiastically welcomed in Montreal.
- 27th.—Great excitement in Paris, France, over the election of General Boulanger for the Seine Division. . . . Terrible distress reported among settlers in Seward County, Kansas.
- 28th.—Grand Opera House and the Post office at Duluth, Minn., destroyed by fire, loss \$200,000. . . . Reported that Gen. Harrison's Cabinet will comprise Mr. Blaine, Secretary of State; Senator Allison, Secretary of the Treasury; Gen. Alger, Secretary of War; Mr. Wanamaker, Secretary of the Navy, and Mr. Estee, or Mr. Swift, of California, Secretary of the Interior. . . . Lord Wolseley creates a sensation in England by lecturing in favor of conscription for the army.
- 29th.—Serious rioting in New York between street car strikers and the police. . . . Death of the King of Annan.
- 30th.—Sudden death of Prince Rudolf, heir-apparent to the Throne of Austria, at Mierling, near Baden. . . . Mr. Colter, Reformer, elected in Haldimand for the House of Commons.
- 31st.—Formal opening of the Dominion Parliament. . . . U. S. Minister Phelps leaves London for the United States. . . . Advices received from Samoa that the Germans have declared war against Mataafa, and that probably all the Samoans will join against the Germans.



CONDUCTED BY R. HARMER.

BUENOS AYRES, SOUTH AMERICA. — Our correspondent writes us that most damaging hail, rain, and wind storms have been experienced in many parts of the Argentine Republic, and great loss was sustained to the crops, and cites an instance where one extensive grain grower lost 8,000 (eight thousand) acres of wheat. It is, however, reported that the Republic will have some ten million bushels of surplus wheat which will be mostly absorbed by Brazil.

MELBOURNE, AUSTRALIA, December 25, 1888. — Our harvest is now about completed and is the poorest in the history of the colonies. We scarcely have sufficient wheat for our own requirements. South Australia will not average more than four bushels per acre. The annual consumption of wheat in Australia is about twenty-four million bushels. We have had most excellent success with The Toronto Binders, in spite of such adverse circumstances. We have won in open field competition eight first prizes and two second prizes against the Hornsby, Walter A. Wood, McCormick, Deering, Osborne and Buckeye. What better can we have?

MR. FRED I. MASSEY, manager of the European Branch House of the Massey Manufacturing Co., who has been here on a short visit, returned to his field of operations by the S. S. "Etruria" on Saturday last, the 2d inst. He reports that the harvest season was most disastrous throughout most all Europe. A great deal of grain in North England did not ripen and was not cut. Rain was incessant all summer, and the average temperature for the month of July did not exceed 44 degrees.

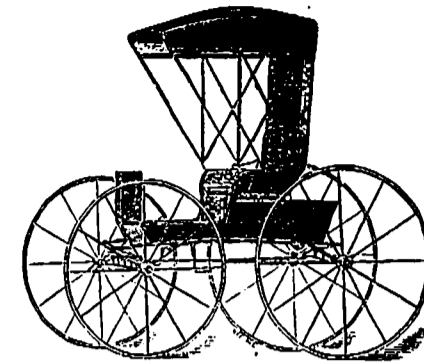
PARIS, FRANCE, Jan. 14, 1889. — The Grand International Exhibition opens here May 1st next. Most of the space is already taken up and it promises to be a successful affair. Although we understand the Canadian Government is taking no active part in the Exhibition, we expect to see some Canadian interests represented and notably amongst them will be the Toronto and Massey Machines. Now that we have a direct steamship service between Montreal and Havre, landing passengers within three hours of Paris, we hope to see many Canadians here during the Exhibition season.

EUROPEAN WHEAT STOCKS, JANUARY, 1889.
THE stock of wheat in Europe was large for the first of the year, as will be seen below:—

	Bushels.
United Kingdom	22,000,000
France, in and out of bond, about	18,000,000
Belgium and Holland, about	4,000,000
German Ports, about	3,000,000
Buda-Pesth, about	11,500,000
Russian northern and southern ports, about	25,000,000
Danubian ports, about	3,500,000
Total stocks, about	87,000,000
Total on passage to Europe, exclusive of Mediterranean	22,770,000
Grand Total	109,770,000

The new wheat crop on this continent is only six to eight months away. If it happens that Europe gets short of wheat in July and August, 1889, the Atlantic ports with a good crop and an early harvest can, as they have before, furnish Europe with tens of millions of bushels from the crop of 1889. This alone would make good any probable deficiency in supply there may or might be.

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The Massey Manufacturing Co. have just issued a splendid **POCKET COMPANION** for 1889. It comprises a heavy paper wallet, 3½ x 6½ inches, with Pocket, and Page for Erasable Memoranda; the handsome folding cover being lithographed in colors. There are 25 blank ruled pages for notes, cash accounts, etc.; several pages of valuable legal information, by consulting which the farmer may guard himself against sharp games, swindlers, etc.; also a few pages describing the machines manufactured by the Massey Manufacturing Co., beautified by fine wood engravings.

To farmers who send us their names and addresses on a post card, stating they expect to buy a Binder, Reaper, Mower, or Rake for next season (no matter of whose make), we will send a copy **FREE**. To all others, 10 cents each by mail.

Address,
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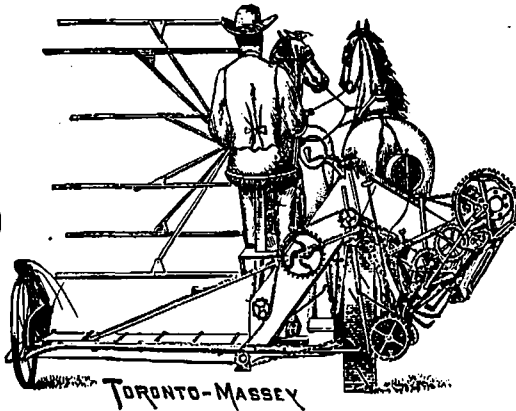
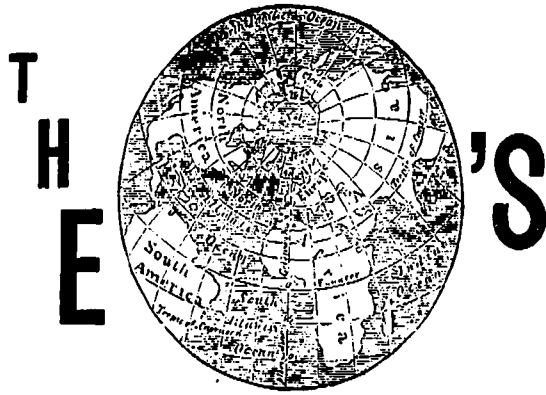
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THE MASSEY M'F'G CO., TORONTO, ONT., CANADA.

Returns from the Australasian Harvest Fields.

JUST RECEIVED.



THE WORLD'S MONARCH OF THE HARVEST FIELD.

THE TORONTO LIGHT BINDER

HAS BEEN AWARDED

The Victorian Grand National **GOLD MEDAL** for Reapers and Binders

THE TORONTO WINS EIGHT FIRST PRIZES and Two Seconds,

defeating every Machine of any note on the face of the Globe.

REPORTS OF THE TRIALS.

- ST. ARNAUD, held Nov. 30th, 1888 } TORONTO, 1st Prize; McCormick, 2nd; Buckeye, 3rd; Hornsby, 4th; Deering, 5th.
- NIHILL TRIAL, held Nov. 15th, 1888 TORONTO, 1st Prize; Hornsby, 2nd; McCormick, 3rd; Deering, 4th.
- STAWELL TRIAL, held Nov. 22nd, 1888 TORONTO, 1st Prize; Hornsby, 2nd; Buckeye, 3rd.
- MURCHISON TRIAL, held Nov. 21st, 1888 TORONTO, 1st Prize; McCormick, 2nd; Hornsby, 3rd.
- LITTLE RIVER TRIAL, held Oct. 12th, 1888. TORONTO, 1st Prize; Buckeye, 2nd. (See detailed report of this Trial top of next column).
- ARARAT TRIAL, held Nov., 1888. TORONTO, 1st Prize; Buckeye, 2nd; Deering, 3rd; Osborne, 4th.
- ALBURY TRIAL, held Dec. 12th, 1888. TORONTO, 1st Prize; Hornsby, 2nd; old style Toronto, 3rd.
- WHITTLESEA TRIAL, held Dec. 13th, 1888. TORONTO was awarded all three Prizes, 1st, 2nd and 3rd.
- CHARLTON TRIAL, held Nov. 19th, 1888. Hornsby, 1st Prize; TORONTO, 2nd; McCormick, 3rd.
- BALLARAT TRIAL, held Dec. 10th, 1888. Hornsby took 1st Prize, the TORONTO, owing to prejudice, being placed after the Hornsby, but nevertheless defeating the Woods, Buckeye, Howard, and Deering.

N.B.—We may expect still further reports of other great victories in the Southern World, as the Australasian Harvest was not yet over at last accounts by mail.

A most remarkably Light Draft Machine.

According to the Judges' Report at the Bridgewater, Victoria, Australia, trial, the draft of the Toronto was 132½ lbs. lighter than the McCormick, 125 lbs. lighter than the Osborne, and 50 lbs. lighter than the Hornsby.

THE LITTLE RIVER TRIAL.

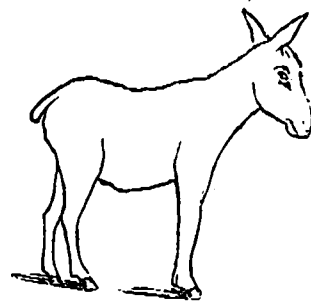
LITTLE RIVER, VICTORIA, AUSTRALIA, Oct. 12, 1888.

HOW THE BUCKEYE GOT LEFT.

Herewith is printed the report, which is copied *verbatim* from the *Australasian Ironmonger* of Nov. 1, 1888.

TRIAL OF REAPERS AND BINDERS.—A field trial of reaping and binding harvesters took place at Little River on the 12th ult. The Massey Harvester, made by the Massey Manufacturing Company, Toronto, Canada; and the Buckeye Harvester, made by Aultman, Miller & Co., Akron, Ohio, U. S. A. (Agents: J. Henderson & Co., Melbourne), were the only competing machines. The trial took place in a field of rye, the crop standing over four feet in height, and resulted in favor of the Massey, as will be seen by the following scale of points:

	Points Obtainable.	Massey, Toronto	Buckeye.
Lowness and evenness of cut.	20	18	16
Tightness and evenness of sheaf.	20	17	14
Durability and construction.	20	20	18
Time.	15	15	14
Facility of transport.	10	10	6
Total.	85	80	68



THIS IS
A
MULE.

—a South African Mule, too. South African Mules are but little larger than Canadian Newfoundland Dogs; yet Four of these tiny animals will draw a Toronto Light Binder easily.

Read the report of THE TORONTO LIGHT BINDER in South Africa, which is printed below *verbatim* from the *Wynberg Times and South African Agriculturist* of Dec. 1st last.

Trial of Massey's Steel Frame Reaper and Binder.

On Thursday, the 22d November, as already shortly reported in our last, an interesting trial was made at Kliphuevel on the farm of Mr. Gert Loubser of one of the Massey Company's Light Steel-framed Binders. The day was a fine one, a south-east wind kept the air cool, and the proceedings were watched by a good number of farmers interested in labor-saving machinery for harvesting. Among those present were Messrs. J. D. J. Visser, M. Dreyer, J. D. V. Uys, senior and junior, T. Alldermann, J. Theunissen, F. Duminy, etc. The crop was not a good one, the wheat being too dry and the ground full of clods; but the machine did its work thoroughly and well. The sheaves were delivered compact, well tied and could stand rough handling, and the stubble was left perfectly clean, not a loose ear remaining on the ground. The lightness of draught caused universal surprise,

Four Small Mules Drawing the Machine with Perfect Ease.

And it was a grand sight to see the Massey Binder travelling round the field doing its work in a perfect manner and almost noiseless. The details of the machine seem at first sight complicated, but when explained by Mr. Solomon, of the firm of R. M. Ross & Co., Cape Town, agents for the Massey Company, all present were surprised at the simplicity of the parts and the ingenuity with which they are put together.

During the trial the machine worked without a hitch—not a knot was slipped—and all present were unanimous in saying that the work done could not be surpassed and that the Massey Binder was what was wanted in this country. Mr. Loubser drove the machine, and though it was the first time he had tried a self-binder he found no difficulty, and during the morning several of the visitors drove the machine and all were highly pleased with the result. A MASSEY HARVESTER was also at work. This reaper had worked the season before and had given satisfaction, being simple in construction and light in draft and lower in price than any machines yet imported.

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Geo. A. & E. W. Cox, Toronto.

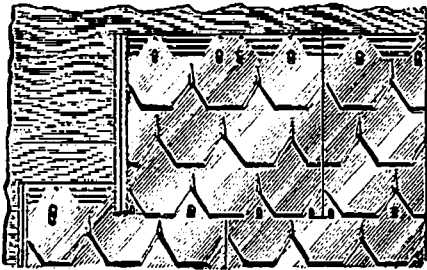
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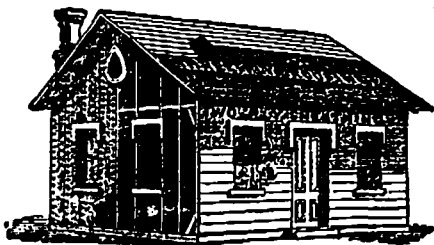
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AS OTHERS SEE US.

WE have received a large number of kindly and flattering notices from newspapers and periodicals not only in Canada but in the United States. We have not space in this issue for nearly all, but the following will suffice to show how the ILLUSTRATED is appreciated by its contemporaries:

AMONGST the number of new publications that we have received we find the MASSEY'S ILLUSTRATED, a journal of news and literature of interest to farmers, published at Toronto, at the low price of 50 cents per annum. —*Journal de Waterloo, P.Q.*

MASSEY'S ILLUSTRATED JOURNAL is before us; it is an independent journal of news and literature of a high order, and is a neat and interesting production edited by Prof. Scrub. It is published in Toronto by the Massey Co., at 50 cents per annum. We would recommend every farmer in the land to subscribe for it. New postage stamps taken. —*The Belmont Times.*

WE are in receipt of a specimen copy of MASSEY'S ILLUSTRATED JOURNAL, published in Toronto. Its make-up is of the finest, and it is printed on a superior quality of paper and with very fine ink. Taken it as a whole the Massey Manufacturing Co. deserve credit for producing such a handsome sheet, and every family should become a subscriber. Price per annum 50 cents. —*Ormslow Record, P.Q.*

THE first number of MASSEY'S ILLUSTRATED has been issued. Hitherto it has been published at irregular intervals, but in its present form it bids fair to occupy a foremost place among Canadian illustrated monthlies. It has recently been placed under able editorial and business management; the departments have been thoroughly reorganized, and to excellent reading matter is added the attraction of a tempting prize list for competition in matters pertinent to the scope of the paper, which deals chiefly with farmers' affairs and interests. —*The Toronto Daily Mail.*

WE are in receipt of a specimen copy of MASSEY'S ILLUSTRATED, being a journal of News and Literature for Rural Homes, and is united with the paper formerly known as the *Trip Hammer*. The paper is of good quality and the printing first-class, and we heartily welcome its monthly visit to our sanctum. It is brim full of news, and is a good farm monthly, and is yet suitable for others in any station of life. We wish them abundant success, as the proprietors deserve it for their pluck and energy in publishing such a monthly illustrated. Subscription price is only 50 cents per year. Send for a sample copy to the Massey Press, Massey Street, Toronto, Ont. —*The Advance, Stouffville.*

The Massey Manufacturing Co., Toronto, who have heretofore issued at spasmodic intervals a brochure which they called "Massey's Illustrated Journal," recently secured the services of Mr. Charles Morrison, late of the *Toronto Mail*, who has taken the venture in hand and made of it a really meritorious and delightful monthly, which is called MASSEY'S ILLUSTRATED, A JOURNAL FOR RURAL HOMES. It is not really an advertising sheet devoted exclusively to the interests of the Massey Manufacturing Co., but a legitimate venture on the sea of journalism, which, under the skilful management of Mr. Morrison, will evidently prove a gratifying success. The initial number has reached this office and is just what its name indicates. —*Canadian Manufacturer.*

AMONGST our exchanges this week we note the presence of MASSEY'S ILLUSTRATED, published by the well known Massey Manufacturing Co., of Toronto. This journal is not, as may be supposed, an advertising medium for the Massey Co.'s farm machinery, indeed, the Co. occupy but a small space in its columns, but is a 16 page magazine, beautifully illustrated and filled with interesting and instructive reading, under the following heads:—Contributions, Farm News, Household, Selected Literature, the Young People, Historical Diary, Editor's Outlook, Harvesting Machine News, and is notably a farmers' journal. The ILLUSTRATED is a monthly periodical, and will be sent to any address for the small sum of 50 cents per annum. Address, the Massey Press, Massey Street, Toronto. —*Southern Manitoba Times.*

We have received No. 2 of Vol. 7 of MASSEY'S ILLUSTRATED JOURNAL, devoted to the interests of the farmer, and published by the Massey Press, at the small sum of 50c per annum. It contains a large amount of interesting reading matter for the farmer, and would not prove an undesirable companion at any person's fireside. A sketch, "Round the World," by Mr. W. E. H. Massey, has been commenced in this number, and if subsequent papers are as interesting as this, it will in itself be worth more than the price of subscription. Send for a sample copy. —*South Simcoe News.*

A bright and spicily journal is MASSEY'S ILLUSTRATED monthly. It is devoted to News, Literature and Rural Homes. It is well edited. An account of a trip "Round the World," by W. E. H. Massey, is very interesting. This journal should become a general favorite with the farming community in whose interest it is specially devoted. —*Acton Free Press.*

A Journal of News and Literature for Rural Homes.—This magazine has been published at irregular intervals for the past seven years, and, for the most part, has hitherto been monopolized by the advertising matter of the Massey Co. It is in future to be a paper in the interest of the farmer and his family; a 16-page monthly, beautifully printed and handsomely illustrated; at the low price of 50c per annum. Prizes are offered for essays on subjects for farmers and their wives, also for their sons and daughters. Numerous premiums are offered for new subscriptions. Specimen copies can be obtained free, by addressing "Massey Press, Massey Street, Toronto." —*The Renfrew Mercury.*

MASSEY'S ILLUSTRATED, of Toronto, Can., reaches our table in a larger and greatly improved form, with a new dress and striking illustrations. This publication has been known to Canadian farmers for seven years, and its new features abundantly testify to its past success and hearty support among the people whose interests it has espoused. It contains a varied assortment of reading matter, notes on travel, readable sketches, condensed news, humor and wit, and many articles and paragraphs of interest to farmers in Canada. —*The Dairy World, Chicago.*

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An Independent Journal of News and Literature for Rural Homes.



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CHAS. MORRISON Associate Editor and Business Manager.

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There are 12 lines to the inch. There are 122 lines to the column. The columns are 2 1/2 inches wide, i.e., space for type matter. Electrotypes must not be over 2 1/2 inches wide, more than a column in width is taken.

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Arrangements with the publishers enable us to offer MASSEY'S ILLUSTRATED in connection with other publications at the rates named in the list below, which will give all an opportunity to procure their yearly publications at reduced rates.

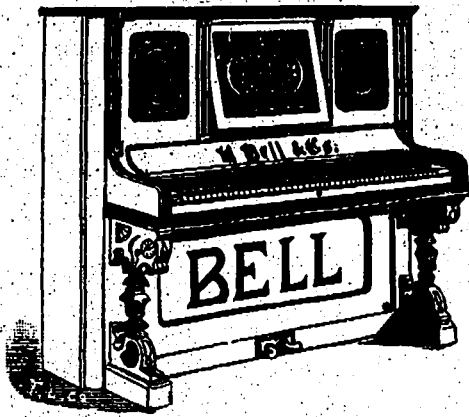
The following is the present list, though we hope to extend it, due notice of which will be given

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- Weekly Mail (\$1.00) with Farm and Fireside (75c.) and Massey's Illustrated (50c.), one year, given for only \$1.10
- Weekly Empire (\$1.00) with Massey's Illustrated (50c.), one year, and bust of Sir John Macdonald packed and delivered at Express Office, given for only \$1.10
- Canadian Live Stock and Farm Journal (\$1.00) and Massey's Illustrated (50c.), one year, given for only \$1.00
- Grip (\$2.00) and Massey's Illustrated (50c.), one year, given for only \$2.00
- The Presbyterian Review (\$1.50) and Massey's Illustrated (50c.), one year, given for only \$1.60
- The Canadian Advance (\$1.00) and Massey's Illustrated (50c.), one year, given for only \$1.00
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- YOUTH'S COMPANION (Boston, Mass.) (new subscriptions only, not renewals), \$1.75, and Massey's Illustrated, 50c., one year, together with any one-subscription Premium the subscriber may select from our Handsome Illustrated Premium List issued with the December number of "Massey's Illustrated," given for only \$1.00
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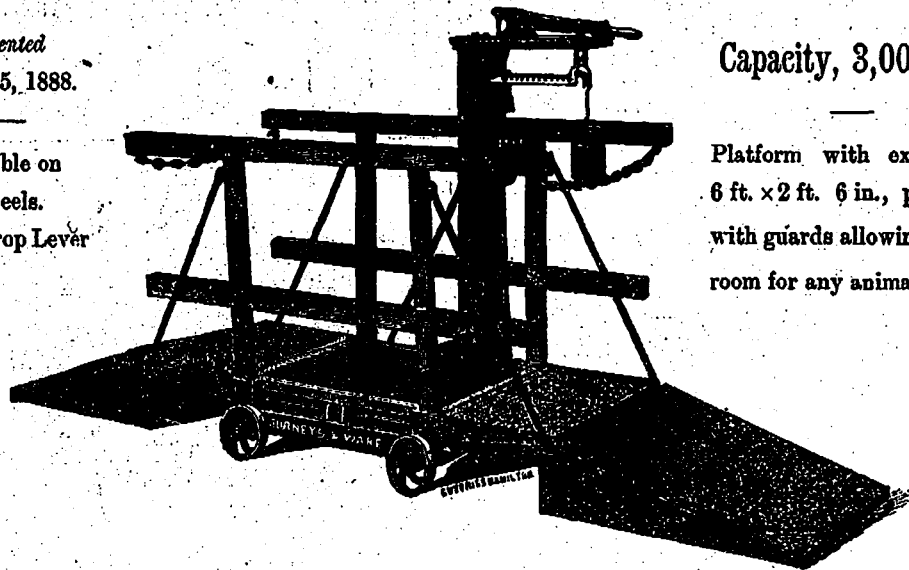
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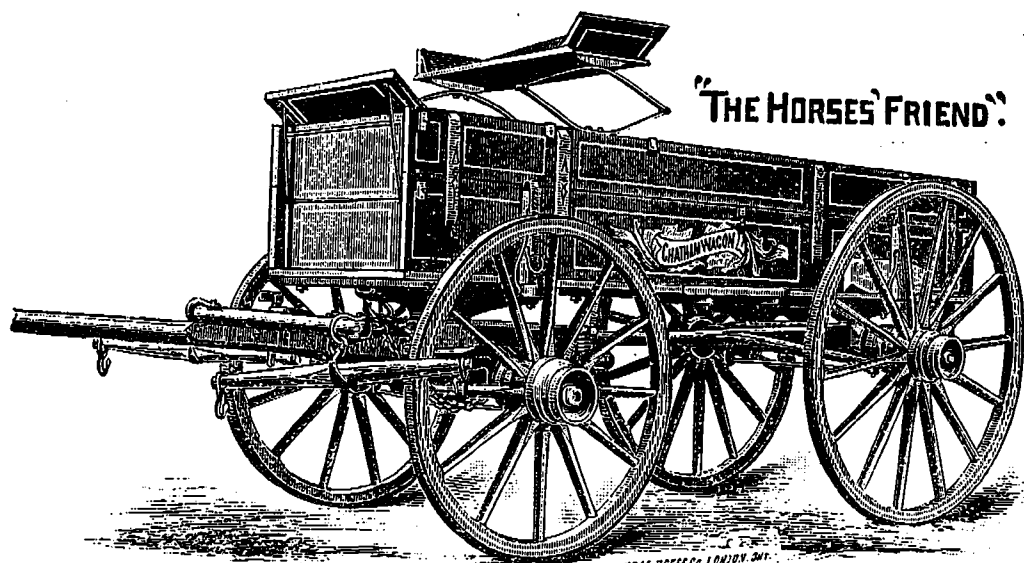
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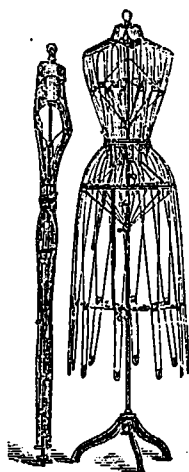
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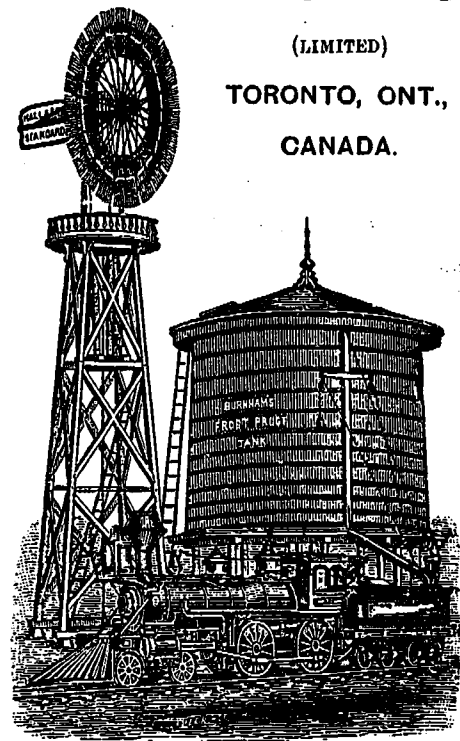
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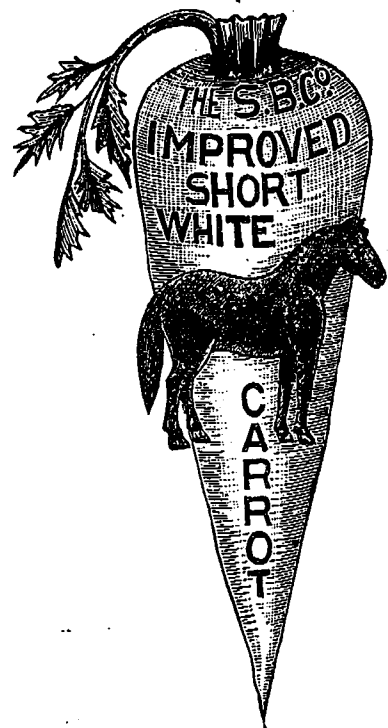
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