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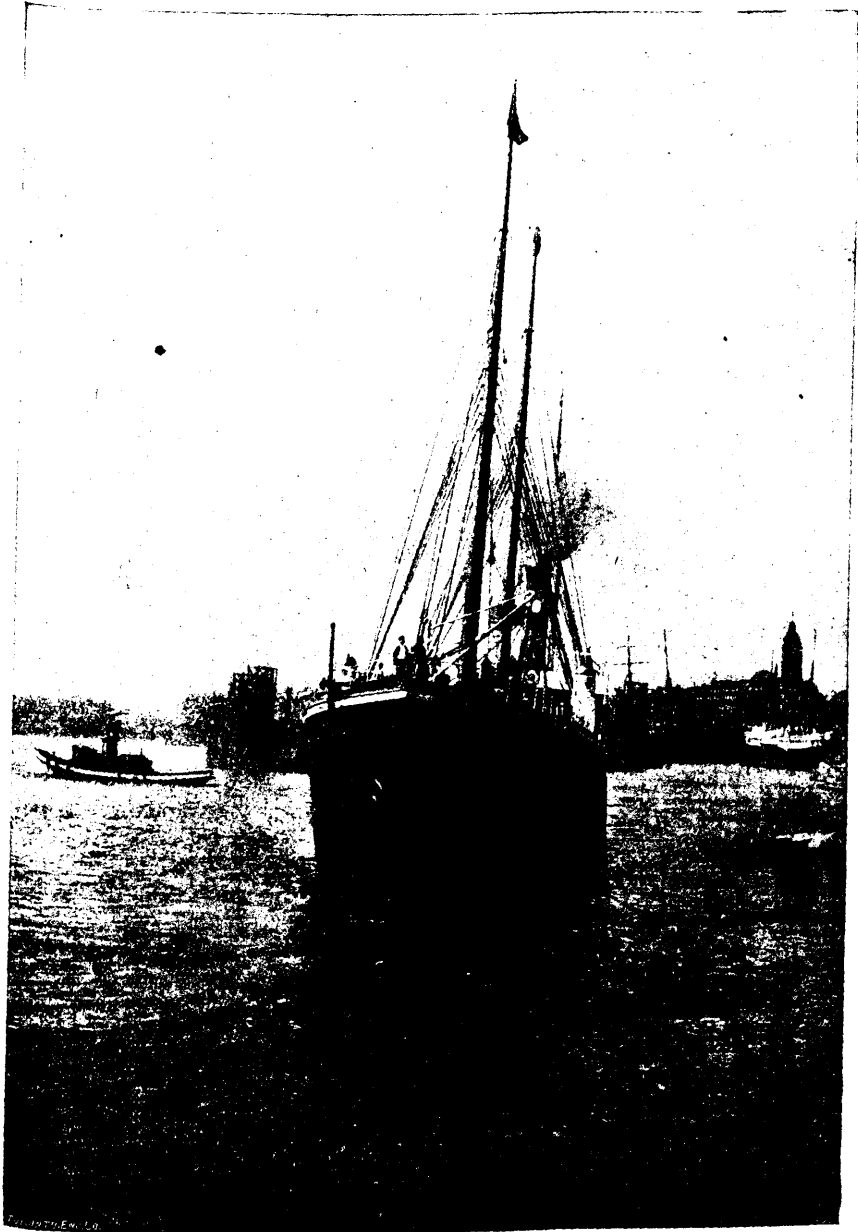
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New Series, Vol. II., No. 4.] JULY-AUGUST, 1898. [Whole Series, Vol. XVI., No. 4



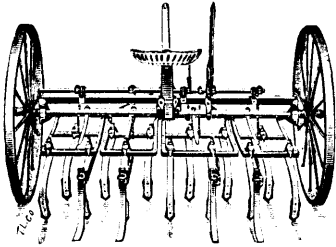
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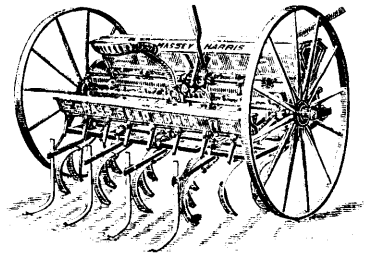
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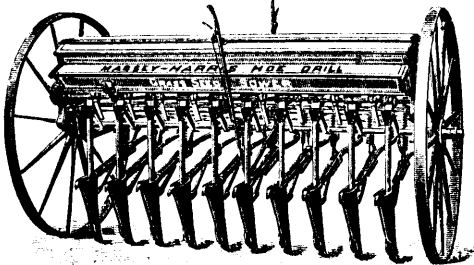
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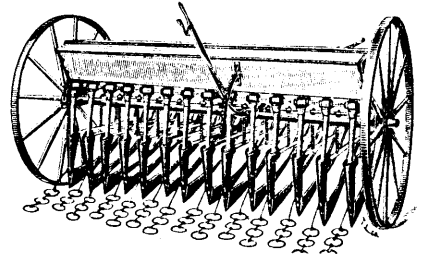
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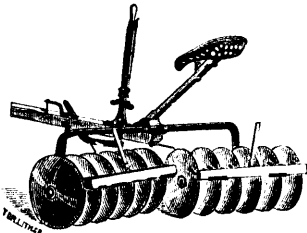
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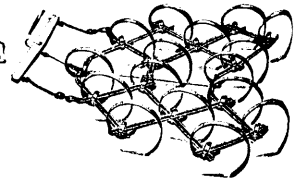
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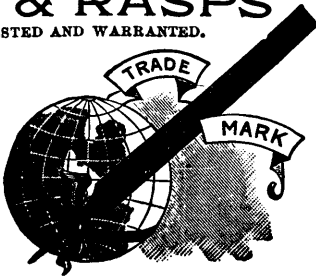
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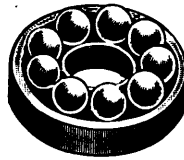
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WROXETER, Feb. 10th, 1897.

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 Gentlemen—The 14 ft. "Ideal" Steel Wind Mill and
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PETER McEWEN

THE CELEBRATED

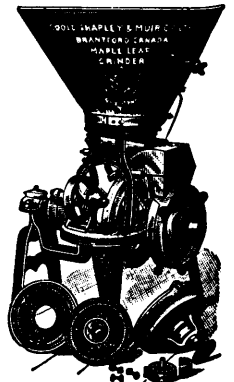
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IMPORTANT

To All Canadian Farmers.



OFFICE OF
C. C. MACDONALD,
DAIRY SUPERINTENDENT.

DEPARTMENT OF AGRICULTURE, MANITOBA,
WINNIPEG, July 4th, 1898.

EDITOR OF "FARMING,"
44-46 Richmond St. West, Toronto.

DEAR SIR:—

I have read with deep interest in your esteemed paper of June 28th, an article on *Grain Farming versus Dairying* by Mr. Joseph E. Gould, and I cannot help offering my hearty congratulations to Mr. Gould for his splendid article and also to "FARMING" for having such an able correspondent as Mr. Gould is. Every word in that article is gospel truth, and I would like to see it read by every farmer in Manitoba and the Great North West, generally.

From what I know of Ontario, having lived there the earlier part of my life, I know that every illustration that Mr. Gould brings out is a cold hard fact, and that the same state of affairs is fast coming about in Manitoba in regard to grain growing. Manitoba, as yet, in most parts of the province, has produced good crops of wheat, but there are some of the older settled parts that are not growing the same crop they used to grow, and some of the farmers of the Province ere long will see where they made the same fatal mistake as the Ontario farmers have done, of draining the land of its fertility by continued cropping without fertilizers. It would almost make an Ontario farmer's blood run cold to see the enormous quantities of straw that are burned in this province from the threshing machine, instead of having it worked up into manure by stock.

Dairying is making rapid strides in Manitoba, but there are still many farmers in the province who do not take kindly to it, but it is earnestly hoped that these will see dairy light before it is everlastingly too late to repair the damage done by continual draining of fertility.

I think that "FARMING" should be in the hands of every farmer in Manitoba, and I trust that the time is not far distant when we shall see it adorning every home in the province.

Wishing you every success,

I am, yours very truly,

C. C. MACDONALD.

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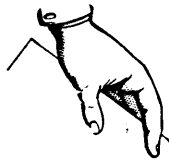
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DEAR SIR,—

I enclose my subscription for the FARMER'S ADVOCATE to April, 1899. I have much pleasure in saying that without doubt your paper is of inestimable value to farmers, and I only wish I had known of it when I was managing Lord Aberdeen's ranches in British Columbia. It would have helped me there in many difficulties as it helps me now in my dairy farm. I get quite a number of English and Scotch Agricultural papers, the "*North British Agriculturalist*" amongst the number, and in my opinion, for practical facts and methods, your paper excels them all, and this is also the opinion of some eminent agriculturists in the Old Country to whom I regularly forward the FARMER'S ADVOCATE after reading it right through myself. It seems to me that every issue contains just the solution of the difficulty you were in.

I remain yours faithfully,

EUSTACE SMITH,

"Park Farm," West York, Ont.
July 7th, 1898.

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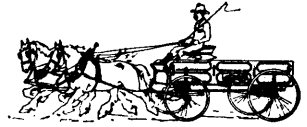
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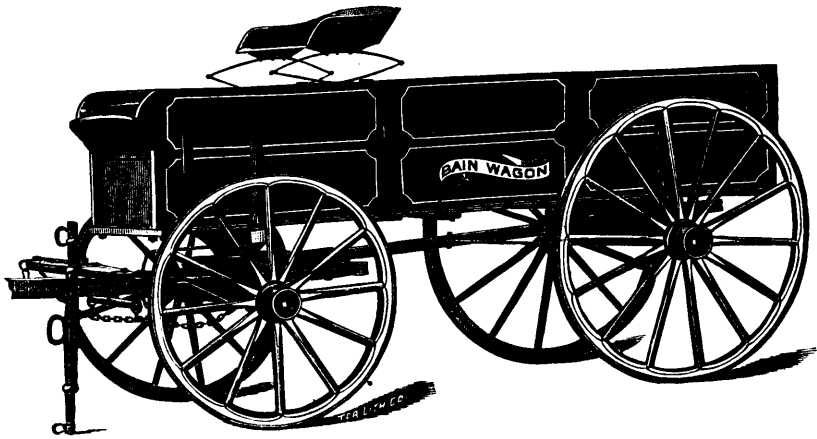
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The patrons of the Company who are coming to these Fairs are specially invited to see the fascinating and beautiful pictures, most of which are being specially made for the Company's use at these Exhibitions. They will be projected on the screen by electric light through the CINEMATOGRAPH. Each view requires from 2,500 to 3,800 separate pictures to produce the effect. As the wonderful film is passed rapidly through the machine, the pictures are thrown one upon another in such quick succession as to appear to the eye a truly living picture. For instance, the view of the great crowd of workmen as they leave the MASSEY-HARRIS works, consists of a narrow strip of transparent film 75 ft. long, on which are three thousand eight hundred separate and distinct pictures, taken in one minute and a half! Do not miss seeing this great scientific discovery at our stands. All our friends will be welcome.



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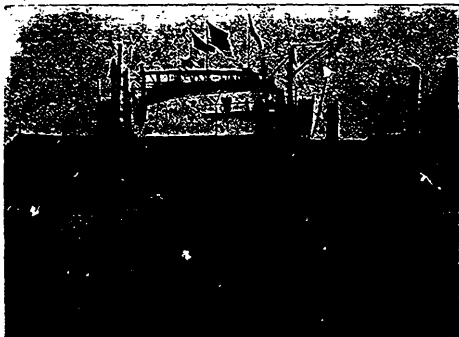
A Journal of News and Literature for Rural Homes.

New Series, Vol. II., No. 4.] JULY-AUGUST, 1898. [Whole Series, Vol. XVI., No. 4



DEATH and disaster have played prominent parts in the history of the world during the last month or two, apart from that which

practically at our own doors, in which the Atlantic Liner, *La Bourgogne*, was sent to the bottom, accompanied by over 500 human beings, will loom large in the



ILLUSTRATED LONDON NEWS.
LAUNCH OF H.M.S. "ALBION" BY H.R.H. THE DUCHESS OF YORK.

a modern war can always be relied upon to produce. The terrible catastrophe,

records of marine disaster; not merely on account of the appalling loss of life—

terrible though that was—but on account of the blood-curdling cruelty and damnable cowardice on the part of the crew of the ill-fated vessel. Free from such revolting episodes, and occasioning only one-tenth the loss of life that marked the Bourgogne futility, that which occurred at Blackwall, England, on the occasion of the launching of H.M.S. *Albion*, by H.R.H. the Duchess of York, was hardly less sad. The ceremonies connected with the launching being finished, the magnificent ship, which is the latest addition to the Royal Navy, and which forms our first illustration, left the ways and glided into the water in perfect style, the Prince and Princess, and other distinguished visitors, little thinking that before they left the build-

mostly women and children, belonging to the poor districts, were brought ashore and identified by relatives and friends.

Our illustration on the opposite page conveys some idea of the sad scenes which closed the launching of the *Albion*. Needless to say, as soon as the Duke and Duchess were made aware of the catastrophe they hastened to display their sympathy with those who had suffered loss of friends.

In our last issue we presented our readers with two illustrations of typical incidents in the life of Mr. Gladstone. Our two next illustrations also relate to the venerable statesman who was laid to rest last month in England's historic Abbey at Westminster, and in the presence of the most notable gathering of



THE GRAPHIC.

THE BED-ROOM AT HAWARDEN CASTLE IN WHICH MR. GLADSTONE DIED.

ing an occasion of rejoicing had become one of deep mourning, and that several hundred people were struggling for their lives on the other side of the vessel launched amidst so much enthusiasm. A gangway between two strips, upon which some hundreds of people were gathered to witness the proceedings, had been washed away by the wave caused by the displacement of water consequent upon the launch. It appears that notices of warning were posted near the fatal gangway. The occupants of the staging were precipitated into deep water, and upwards of thirty were drowned. Rescue parties immediately put out, and many gallant deeds were done, but it was impossible to save all. The scenes were heartrending as the bodies of victims,

England's greatest men that has been seen for years, except on the occasion of the celebration of Her Majesty's Diamond Jubilee. The first of the two illustrations gives us a glimpse of the room to which the eyes of Britons the world over were turned so often during those days of spring in which the Grand Old Man patiently awaited the coming of death.

The next illustration portrays an incident particularly touching. In the foreground to the right is the open grave into which the body of England's greatest statesman has just been lowered; seated on a chair, bowed down with grief as she realizes what that still unclosed sepulchre has taken from her, is the noble woman who for over sixty years was the dead statesman's true help mate; from



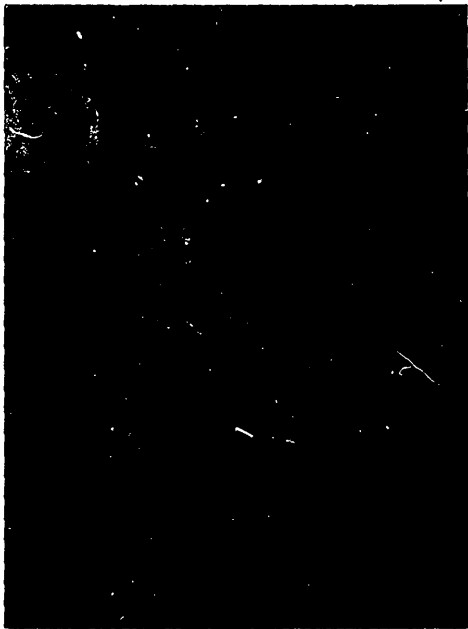
SCENE AFTER THE LAUNCH OF H. M. S. ALBION.

ILLUSTRATED LONDON NEWS.

its pedestal on the left the statue of Mr. Gladstone's great rival, Beaconsfield, looks down upon the scene; in the background are the sorrowful faces of many friends—statesmen and ministers, peers, and great men all—mourning him who

kissing her hand, speaks the few words of heartfelt sympathy which his manly emotion will allow.

The great centre of interest for the world is still "the war," and since our last issue the war has rapidly developed



H.R.H. THE PRINCE OF WALES TENDERING HIS SYMPATHY TO THE WIDOW OF MR. GLADSTONE. THE GRAPHIC.

has gone, and filled with deepest pity for the figure which gazes so yearningly at the grave at her feet, and over whom bends tenderly and with filial solicitude the Heir to the Throne, who, reverently

into something more than a newspaper war. The long-looked-for Spanish fleet under Admiral Cervera, after remaining for several weeks, safe but inactive, in the harbor of Santiago, was completely des-



GENERAL SHAFTER AND ADMIRAL SAMPSON LANDING ON CUBAN SOIL.

HARPER'S WEEKLY.

troyed while attempting to run the gauntlet of the American squadron on July 3rd. On the Spanish side the loss of life was considerable, over 800, while over 1,200 officers and marines were taken prisoners. Of the Americans, only one was killed. A remarkably one-sided ending to one of the greatest naval battles of the century, truly! On shore the soldiers of the United States have been no less successful than their compatriots on the sea. After several opportunities for displaying the dash and courage of the American soldiers, if not the genius of American generals, Santiago, the objective point of the first military expedition of the campaign, capitulated on July 17th, and the 20,000 Spanish soldiers in the city and district are to be transported to Spain at the expense of the United States; a second satisfactory result, so far as the Americans are concerned, but one full of bitterness for the brave Spanish officers and men, who are entitled to the respect and admiration of all for their courage and fortitude.

In our first illustration on this page is portrayed the landing, amid great enthusiasm, of U. S. General Shafter and Admiral Sampson on the beach at Aserradero on June 20th, to confer with General Garcia in command of the Cuban forces, whom the Americans have not found to be such useful allies as they expected.

In our next illustration we obtain a vivid picture of the landing from troopships at Baiquiri two days later of the troops of General Shafter's command.

One of the most stirring incidents of the war was the battle fought at La Guasima on June 24th, in which Roosevelt's rough riders, a regiment composed of cow-boys, college men and members of New York society, displayed remarkable heroism against heavy odds. The list of killed and wounded on the American side was very heavy.

On page 104 is portrayed an incident that occurred in the harbor of Havana;



ADMIRAL CERVERA Y TOPETE.

the fort of S. Clara firing on American cruisers that chased a blockade runner.



LANDING OF U. S. TROOPS AT BAIQUIRI.



HARPER'S WEEKLY.

THE BATTLE OF LA QUASIMA. GALLANT STAND BY THE ROUGH RIDERS.

We close our series of war pictures with a scene in Cavite Bay during the battle of Manila. The American fleet met and engaged the Spanish outside Cavite Bay at 4.30 in the morning. After a short engagement the Spanish ran into Cavite Bay, where the Americans overtook them. By 10 a.m. the whole Spanish fleet was destroyed. The American fleet consisted of the following: *Olympia*, *Baltimore*, *Raleigh*, *Concord*, *Boston*, *Petrel*, *Hugh McCulloch*, *Nanshan* and *Zafiro*, while the Spanish force consisted of two torpedo boats and four gunboats, and the cruisers *Castilla*, *Don Juan de Austria*, *Ulloa*, *Isla de Luzon*, *Isla de Cuba*, *Reina Cristina*, *Velasco*, and the mail boat *Mindanao*.

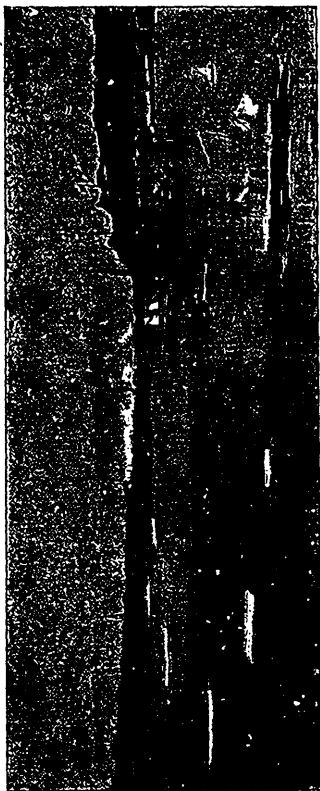
Those of our readers, who are lovers of realism, will be able to gratify their desire at the Toronto Industrial Exhibition, the manager of which is arranging for a spectacular display of the recent stirring events, with all the necessary accessories of actual warfare. The blowing up of the *Maine*, the battle of Manila, and the destruction of Admiral Cervera's fleet, afford plenty of scope for artistic daring and mechanical ingenuity.

Spanish Torpedo Boats

American Cruisers,
Vicksburg and *Merrill*.

Morro Castle

Floating Dock.

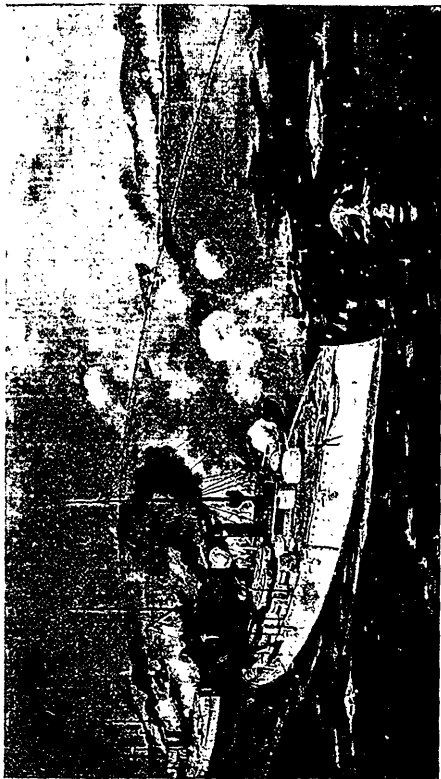


FORT SANTA CLARA FIRING ON THE AMERICAN CRUISERS THAT CHASED A BLOCKADE RUNNER
 THE GRAPHIC.
 British Cruiser, *Talbot*,
 The Spanish Schooner
 that ran the blockade.

Wreck of the U.S. battleship
Maine.

From the Cruiser *Fulton*

French Flagship
Dubourdieu.



THE GRAPHIC

THE BATTLE OF MANILA THE FIGHTING IN CAVITE BAY

PRACTICAL LESSONS FOR YOUNG PEOPLE.

BUTTER MAKING.—Continued.

Adapted from a Series of Papers by PROFESSOR C. PLUM, Purdue University.

BUTTER is really a part of milk, and like it will absorb strong odors of any kind. This you can easily learn, if you will. Go to a store where the butter is kept in refrigerators or boxes that are not clean and sweet, and taste of it. You will be surprised to find that butter tastes of so many different things. I am sure it will interest the teacher and children if you will report your discoveries in this butter box. You also can carry on a simple little experiment at home. Take one of the nice, sweet lumps of butter your mother has made and cut it into two parts. One part keep in a clean, sweet room or box. Place the rest in a box that has had some kerosene (coal oil) spilled on the inside of it, and keep it there over night. Now, every one will be interested to know if there is any difference in the flavor of the two halves of that lump of butter. You should be able to tell.

I am very sure that your various investigations will show that both milk and butter absorb strong odors, and so themselves become of bad quality, thus injuring their value. So does this not teach us that it is important to keep all milk and butter in a sweet air and in very clean vessels if we are to have agreeable tasting food of this kind, and wish to get the best prices for it?

After obtaining the cream from the milk, by skimming, it is necessary to churn it to secure the butter, and as has already been said, this is done by a dashing process. The vessel the cream is dashed about in is the churn, of which there are many different kinds. The best churns are usually of the simplest make.

Several things combine to make the operation of churning easy or difficult, and to produce good or poor butter. Among these may be mentioned—

- 1st. The kind of churn.
- 2nd. The kind of cream.
- 3rd. The temperature of the cream.
- 4th. The temperature of the room.
- 5th. The washing of the butter.
- 6th. The salting and working of the butter.

Let us briefly consider these points:

1ST.—THE KIND OF CHURN.

Generally speaking, a churn that contains a dasher or paddle will not make as good butter as will one that is free of such things. The dasher bruises or smears the butter, so as to injure what is called the "grain." These dashers are not really necessary, for cream dashed against the sides of the churn which contains no sticks or paddles will yield butter in a very few minutes. For this reason the best churns now made are barrels or boxes, without dashers, that either turn over and over or swing back and forth while churning.

2ND.—THE KIND OF CREAM.

If your mother skims the cream from the top of the milk, and takes with it some of the sour, curdled milk, little, hard, white lumps called "curds," will occur in the butter and so injure its looks. These lumps will also get rancid, and so spoil the flavor of the butter. The only way to prevent this is to strain the thick cream through a fine strainer, so that nothing but very smooth cream will pass into the churn.

Of course from what has already been said, the cream must be kept where there are no bad odors, otherwise it will be seriously injured.

Another thing that affects the butter is the condition of the cream when churned, whether it be sweet or slightly sour, or "acid," as it is called.

Here we have two nice opportunities for experimenting. In summer weather get your mother to allow several pans of milk to become sour and clabbered before skimming. Have her skim some of the thick top milk with the cream, as is so often done where milk is skimmed by hand. Now divide the cream into two parts. One lot churn just as it is, but the other pour through a wire strainer, so as to remove all lumps. What is the difference in the butter from these two lots of cream?

3RD.—THE TEMPERATURE OF CREAM.

Every person who has a dairy and churns should use a thermometer. Did you know that cream will churn much better at some temperatures than others? Nice thick cream will churn best at about 56 degrees. The only way you can find out when the cream is at the right

temperature is to use a thermometer. You can buy floating bulb or dairy thermometers for 25 cents that will be very valuable, and any druggist can get them for you. The use of the thermometer for one day may more than pay for the cost of it.

Here is an experiment for you that will be worth something to your parents, perhaps, as well as to other people.

Take some fairly thick cream, put it into a deep pan or pail, and place in a tub or large pail of very cold water and cool it until your thermometer says it has a temperature of 55 degrees. Stir the cream in the can to make it cool rapidly and evenly. Then take some cream that is much thinner and churn it at the same temperature. Which does it take you the longest to churn? Now, supposing you get some thin cream and churn it at 62 degrees. How long does it take the butter to come at this temperature? If you study this question carefully, you will find that in summer it will be well to churn the cream at 55 degrees, because it will gradually warm up some in the churn, while in the winter it will be well to have it somewhat warmer, or about 60 degrees. The colder you can churn your cream and get butter the better the butter will be, and you will not lose so much fat in the buttermilk.

4TH.—TEMPERATURE OF THE ROOM.

If you place some cream at 55 degrees in the churn, and then agitate it in a room at 70 degrees, what will happen? After you have churned fifteen minutes take the temperature of your cream. You will be sure to find that it is warmer than when you put it in the churn. What does that mean? Does it not mean that the air of the room is warming up the churn and its contents? That is just it. Now, if the butter comes in this warmed-up cream, will it be nice and hard to handle, or somewhat soft and sticky? Can't you report on this? Would you advise churning in a room warmer than the temperature of your cream, or in a little colder one, if possible?

5TH.—WASHING THE BUTTER.

After the butter comes in the churn to about the size of wheat grains we stop churning and draw off the buttermilk. That leaves the butter in the bottom of the churn, sometimes like a mass of golden wheat grains. Now, each of these pieces of butter has just been bathed in buttermilk, and so it needs a bath of water to make it clean. If you do not believe this, do what I tell you. Take some butter from the churn without washing it and make a nice solid lump of it, and place it in the ice chest. Then wash the rest of the butter in the churn

with clear cold water, twice, allowing the water to run off quite fully each time. Make a lump of butter from some of this and place alongside of the other unwashed butter, and keep it for a week or so, and note which keeps sweetest and of the best flavor.

6TH.—WORKING AND SALTING.

People take butter from the churn and put it in a bowl or on a butterworker. Then nice dairy salt is scattered over it, usually about three-quarters of an ounce of salt to a pound of butter, and then the butter and salt are worked together. This working is for the purpose of mixing the salt with the butter, and also to get the water or milk out of it, and make it into hard attractive lumps. Now, if the butter is rubbed or worked over too much, it looks greasy and does not have a nice "grain." Did you ever notice how some pieces of stone when broken have a ragged, glistening, broken surface? That surface shows the grain, and when butter is not worked too much, if a lump is broken in two, it will show a nice grain, much like the broken stone. So in working butter it should be firmly rolled or pressed with ladles or wooden sticks or rollers, but never rubbed with them. Rubbing destroys the grain, while the other process does not injure it unless carried to excess.

A Great Event.

Prominent among the educational mediums of the age is the wisely-planned exhibition of the agricultural, industrial and other arts; and foremost among exhibitions the world over is that which brings train-load after train-load of intelligent farmers and their families to Toronto during the early days of September.

The Toronto Exhibition opens this year on August 29th and closes September 10th.

The management of this great enterprise being in the same hands that have made its fame spread far beyond our own country in years gone by, we are sure our friends will have lost none of their old time eagerness to visit Toronto and spend as many days as possible at the Fair. The exhibits will surpass those of previous years, while in other respects it will be seen Mr. Hill has more than maintained his reputation.

During the Sepoy War, a young captain of artillery saw an ignited shell fall near his battery. Instantly he lifted it up, carried it to a distance, and flung it away. Just then it burst, shattering his left fore-arm.

On & Around the Farm.

General Notes.

The Value of Careful Selection.—In the breeding of animals and plants, climate and selection are important factors. The characteristic of either plants or animals may be changed in a marked degree by careful selection, and likewise they will deteriorate for lack of judicious care and

grass, etc., with thick leaves. Seed corn should be selected carefully. Nibs $1\frac{1}{2}$ in. long on an ear of corn result from bad selection. On such an ear the silks from the kernels on the tip of the ear are so slow in maturing that there is no pollen to fertilize them. Select ears that show, by being well filled at the tip, that the silks mature close together, not more than three or four days apart.



CHAMPION FRENCH COACH STALLION "INDRE."

selection. Plants abnormally large lack quality or flavor or both. By selection and care the dairy breeds have acquired the dairy habit and beef breeds the beef habit. These things should be understood by the farmer if he wishes to make farming pay.

There is much time and money lost by farmers because they do not grow those varieties of grains and grasses adapted to the climate. Plants with thick leaves are best suited to a dry climate, while those with thin leaves are more desirable for a damp au. For this reason those living in a dry climate should grow corn,

Avoid Raising Plugs.—Never in the history of horse raising was there a wider difference between plugs and good horses. Farmers must give as much thought to the selection of both dam and sire as they do in the breeding of cattle and other live stock. Of course it is not within the power of the many to raise a champion—such as the fine fellow occupying the centre of this page—but a coach horse that will bring \$300 is as easily raised as a plug that will bring but \$15. Such a horse is useful on the farm until the time when he is ready for the market, and can be used both to the plow and on the

wagon. In case he lacks the style or action necessary to bring a fancy price, he is still a general purpose horse and will bring a price that will be profitable to the raiser.

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Nitrogen from the Air is now got artificially in the form of sulphate of ammonia by a new chemical process at a cost of \$20 a ton, besides a by product that will revolutionize gas manufacture. These are remarkable claims, and if half of them are true, the cost of nitrogen for fertilizing will be universally reduced. But we await the practical demonstration of these claims before accepting them.

**

A Profitable Way of Converting some of the surplus fruit on the farm into a salable product lies along the line of jelly making. The great mass of city residents are forced to buy commercial jellies that in many cases are of inferior quality, if not positively injurious to health. Thousands that now go without rather than buy the questionable compounds shown in many stores, would be glad to patronize a brand of pure "farm-raised" jellies, put up in attractive shape and bearing the imprint of the maker, as a guarantee of excellence. Make the very best article possible; put it up in the most attractive style, and no inconsiderable income can be derived from fruit that is now often practically wasted. Such products are taken in many instances by women's exchanges.

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To Prevent the Breeding of Mosquitoes pour kerosene on the surface of the water from which they come. Introduce salt water into the smaller ponds. Small fish will also reduce the numbers. If the ponds can be drained mosquitoes will of course disappear.

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The Cabbage Root Maggot.—When cabbage, cauliflowers, kale, etc., are attacked by this pest, use kerosene emulsion freely about the roots of the affected plants. Avoid planting in ground where the insect has been destructive the year before.

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Farming in Sunny France—Half the arable land of France, a little more than half the pasture, as much as six-sevenths of the vineyards, and two-thirds of the garden land are cultivated by their owners. The average size of the farm in France is 16½ acres, against 63 acres in Great Britain. The average in the U. S. is 137 acres, and in Canada slightly less. More than 89 per cent. of the farms in France are under one hectare, equal to 2½ acres; only 2½ per cent. of the French

holdings amount to 100 acres each. It would evidently be superfluous for an agricultural journal in France to preach against the folly of holding too much land, instead of getting the most out of a moderate size farm. We are not in France, however!

In the Poultry Yard.

Enemies of Young Chickens.—The two great difficulties in the way of raising chickens on a farm, lice and hawks, are easily managed. For the first, dust the hen, while sitting, with insect powder, and after the chickens are a few days old, wet a piece of cloth or paper in kerosene and squeeze it dry, then rub it into the hen's feathers, especially under the wings. If this is attended to once a week there will be no trouble from lice.

The safest plan if hawks are troublesome is to make a covered run for the chickens. Construct a frame of boards about 15 inches high and any desired size and cover it with wire netting. Over one corner lay a wide board as a protection from rains, also to furnish shade on a hot day. If skunks trouble, lay boards on the ground around the frame.

This run should be moved every few days to give a fresh place, and if it is on grass, gravel must be thrown in or the turf broken so that the chickens can get it for themselves. I once put a fine lot of Plymouth rocks on a grass plot and moved the frame every day, to give them fresh grass. In spite of the best possible care they all died and it was some time before I found that the trouble was a lack of gravel. If the hen is with the chickens she will often dig through the grass and get gravel in that way.—*W. S. Miller, Agriculturist.*

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Nests for Egg Eaters.—To help the hens forget the egg-eating habit, place the nest boxes just high enough so the fowls cannot look into them, fixing partitions between, and cover with a slanting board so they cannot walk along on top and look in, leaving only room enough for a hen to fly up and walk into each nest. Says a correspondent to an exchange.

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Co-operative Poultry Industry in Ireland—A movement has been inaugurated for the formation of poultry rearing associations on the co-operative basis in the rural districts of Ireland. It is proposed to have the business of the society transacted from a convenient centre, placed in charge of a man or woman thoroughly experienced; the committee to hold its

meetings there once a week. This centre is to be fully equipped with suitable buildings and plant. The latter would consist of incubators, cramping machinery, grinding mill, bone crushers, etc. It would also carry a quantity of the necessary packing cases, packing materials and feeding stuffs. A pony and cart for collecting fowls and eggs would also be required. Around the central farm would be grouped auxiliaries, or small associations of poultry keepers, these to act as feeders of the central society by supplying lean fowls for fattening, and eggs, to be handled by the last named. The motive is to stimulate the industry and afford a better market for the product. It is proposed that eggs sold by the society shall be dated as in Denmark and marked in such a way as to facilitate the identity of any members not sending in stock fresh. Whether the foregoing plan would answer in Canada to the extent of "stimulating the industry," we are not prepared to say, but it has always been our contention that the farmers of this country lose tens of thousands of dollars annually owing to the indifference they show in regard to an industry which could easily be made a very profitable one.

* * *

The Importance of Care in Breeding.

CHARACTERISTICS OF THE DAIRY COW.

IF there is one thing above another that has influenced the upbuilding of some of the best herds of cattle of this



FIG. 1.

country, it is the proper mating for intelligent breeding of the cattle of the several breeds. There has been a lamentable hue and cry from irresponsible sources against the continued practice of in-and-inbreeding, but those who have had the daring and foresight to persevere in coupling the right kind of animals, have beheld a grand improvement in the dairy

breeds, not only in America, but all over the world. We have found it impossible to keep apace with any mode of progress without daily study and habitual observation along the lines of any particular industry.

The great trouble with dairymen has been the belief that a cow is a cow, and that numbers count up to make a dairy. Facts bear out the assertion when statistics tell us that the average cow makes less than 150 pounds of butter per annum,

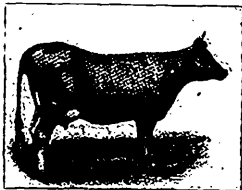


FIG. 2.

such cows do not pay for the feed and care given them, and should be fattened and slaughtered. Then a new régime should be ordered on in the way of producing a line of cows that will make at least 350 pounds of butter per year, or as near as practical, so that blood and feed combined will make the dairy a paying industry.

In our dairy, we are attempting to establish a herd of cows from a dam that is from butter-producing cows, and feel quite well repaid thus far in three generations. At every opportunity, we make a careful study of good producing animals at fairs, sales and elsewhere. Frequently we take a snapshot of them if they rate high in the near perfection of dairy type and form.

At Figs. 1 and 2 are shown two cows that represent two of the greatest dairy breeds of the globe—one the butter breed, the other for milk, both, though, of the double-wedge form and shape, which we find always contributes to the fullest measure in dairy perfection. While these two cows are of two distinct breeds, and noted distinctly for two purposes, they greatly resemble each other in dairy form. The Jersey shows up with her rival the Holstein in depth of flank and length of measure from hip to rump. The Jersey has a high pelvic arch, a fine tapering neck, shapely head, and an eye that betokens great nervous energy. The umbilical development in the Holstein is of a high order, and while her rival has a good barrel, well hooped, the Holstein

shows good depth, but lacks the length of the Jersey.

These cows are typical animals of their breeds, but what of their performance at the pail and the churn? The Jersey was a winner at the West Virginia State Fair last year for the butter prize against the Holstein and Ayrshire breeds, making the largest quantity of butter in twenty-four hours.

This Jersey is an inbred St. Lambert, likely the most intensely inbred class of cattle in America, and will make her two pounds of butter per day in full flow of milk. She is the product of the mating of sires and dams that have proved ability to transmit their butter qualities to their posterity.

The Holstein was just fresh when her photo was taken, and had given sixty-eight pounds of milk the twenty-four hours before. To the Holstein admirer she is a model cow in outline and form, and for the milk dairy, would make a splendid performer. Such object lessons as these are of great value to amateur breeders, and well worth study. They tend to break down some wild prejudices that are frequently the product of one's imagination.—GEO. E. SCOTT, in *Rural New York*.

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Trimming a Horse's Hoofs.

HAVE you a good rasp for the feet of the colts? The old saying "no foot, no horse," is not only a true one but should teach the farmer to take the best care of the feet of all colts. The too often gets too long, unbalances the foot and then splits, spavins and every other disease to which the feet and legs are heir. See that the foot is kept rasped off and level. Do not use a knife if it can be helped, as the first blacksmith that shoes the colt will cut enough away to last a lifetime. In no part of the horse's anatomy has he suffered so many wrongs or endured so much unnecessary suffering as in his feet. If there is the least excuse every blacksmith will use a knife.

Try to let the colts grow up with such good strong feet that there will be no excuse for cutting them. Use the rasp on the underside of the toe and under no circumstances put the rasp on the outside of the foot. The entire hoof, from the coronet to the sole, is covered by a fine coating of natural varnish, beginning at the upper margin or coronet and gradually becoming thinner as it descends. Under cover of this varnish the new horn is secreted and protected until it attains its maturity. The moisture necessary by the animal economy to the maturation of the horn is retained within it and the influences of wet and dry are cut off defiance. It is easy to see that this most important covering should not be

interfered with, and that the foot should be kept level and in good shape from the underside.—E. I. LIDDELL.

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Geraniums—Youth vs. Age.

Every little while I come across this advice. "Start geraniums in May or June for winter use. Old plants are worthless." Whenever I read that, or similar advices, I set down the giver of it as a "theoretical" writer, because anyone who has tried plants started in May or June alongside one, two or three year old geraniums, knows that an old plant, if healthy, is vastly preferable. It has a score of flowering points where the ordinary young plant has but two or three. A young plant must have, at least, a year's training, consisting mostly of pruning and pinching back, to make it a fine specimen. Let a geranium grow to suit itself and it will grow up lanky and awkward, with very few branches, but pinch it back and keep it pinched back for the first year, and you will have a plant that is bushy and compact, and such a plant will be worth a score of ordinary geraniums. A geranium does not outlive its usefulness for several years. By cutting it back severely and repotting it, the entire plant can be renewed from year to year, and as long as it remains healthy it will give fine crops of flowers. The young plant so frequently advised by those who know nothing about the value of old plants, gives one only a faint idea of what a really good geranium is. At two and three years of age, it is just in its prime.—E. E. REXFORD.

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Pears need a rich soil. Lack of fertility is often the principal cause of failure.

Popcorn will mature if planted late. It pops best if kept until the second year after it is harvested.

Tomatoes, it has been found by experiments, ripen sooner when exposed to electrical influences.

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A good herd of milch cows can be made a steady source of income whether the product is sent to market in the shape of milk, cream or good butter.

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A Record Indeed.

THAT the interests of the Industrial Farm at Welland are entrusted to good hands none will question when they learn of Mr. Hemming's latest achievement. A fortnight since, Mr. Hemming threshed a quantity of wheat, and was agreeably surprised to find a yield of forty-two bushels to the acre.

...AT THE...

Editor's Desk

WITH the thermometer registering a few degrees short of the century, and with perspiration and other discomforts very much in evidence, the last thing one would expect to receive is a letter from a correspondent in the same province complaining of frost. Yet even a climate so well conducted, as a rule, as that of Canada, is not free from the infirmities of the genus; and right in the middle of the dog days, Jack Frost swooped down in Northern Ontario, and, according to our correspondent, Mr. J. S. Robertson, of Holstein, left a very undesirable memento of his visit to that locality in the shape of damaged corn and potato crops. We certainly long, with an intense longing, for a modification of the furnace-like heat that prevails at present; but at the expense of the promising crops, the relief is too dearly bought, and we claim for the cold snap in mid-July, that it is merely the exception proving the rule that Canada's climate is a good friend to Canada's farmers.

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In a recent article from the pen of Professor Willis L. Moore, the head of the United States Weather Bureau, some very interesting information is given regarding the use of kites for testing the temperature at various altitudes.

Among other things, no less interesting, the learned Professor says:—

"The temperature readings already secured by our use of kites show that in the summer season we live in an extremely thin stratum of warm air; that on the hottest day an ascent of only five hundred feet would place a person in a comfortably cool atmosphere."

Later on Professor Moore remarks:

"It is a problem for the engineer of the twentieth century, how to utilize this information to give relief during the protracted hot spells of summer to the dense population of great cities, and so that one need not travel to the sea-shore in order to reach a temperature that is conducive to health and comfort."

Verily so! But why only the "dense population of great cities" taken into consideration? And those who can afford to travel to the sea-shore occasionally, at that!

Because the farmer bears the burden of our, at times, almost tropical weather, with less growling than the dwellers in cities, methinks he would be none the less appreciative of an occasional generous supply of that "comfortably cool" atmosphere, situated so tantalizingly near the "extremely thin stratum" in which, at the present time, he sweats and swelters from dawn to dusk.

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The brain of the all-conquering inventor is at work in every country, ever gaining fresh victories over the forces of nature. We long ago ceased to regard the carrying on of a conversation with a fellow creature a hundred miles away as anything very extraordinary. Hearing from the "lips of the orator" a speech made six months ago, a thousand miles away, by a man we never saw, is still interesting of course, if the speech be a good one and the orator famous; but the phonograph is no longer a novelty; and we take it as a matter of course that if anyone is suffering from some hidden trouble, the surgeon will peer into the recesses of the patient's interior by means of the Rontgen rays. Thanks to the researches of a Polish inventor rejoicing in the patronymic Szepanik, it is now possible, not only to recognize the voice of the individual who is speaking to us from the other end of the country, but, by the aid of the telegraphoscope, to gaze upon a perfect reproduction of the features of the one who has "rung up."

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With so much of what was regarded as impossible twenty years ago, already accomplished, surely we may hope that before the end of the Century of Progress, some inventive genius will render that "comfortably cool atmosphere," distant only a paltry five hundred feet, accessible to farmers, journalists, and all other hard working members of the community, who cannot find relief from the pain and perils of the "extremely thin stratum," by visits to the sea shore.

There is undying fame for the man who can confer this boon upon perspiring humanity. His name would become a household word throughout the land, unless it were a combination of consonants similar to that of the inventor of the telegraph. In which case it would again be demonstrated how closely is pain allied to pleasure.

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ANOTHER point for Canada in the game of tightening the bonds of the Empire, which is going steadily on! Six months ago we expressed our warm appreciation of the action of Mr. Mulock when he announced a three cent per ounce letter rate from Canada to all parts of the Empire. We recognized this as one of the greatest practical efforts that had been made by any colony to advance the cause of closer union between the different parts of the Empire. At the same time we expressed our regret that the Postmaster-General had not seen fit to make the rate two cents per half ounce, thus making postage from Canada to any point within the Empire cheaper than to any point without, which on the three cent basis it would not be. As it turned out, it was not within the power of the Government of Canada or of any single colony, to make a change such as that contemplated by the Canadian Postmaster-General, and Mr. Mulock's good intentions were frustrated; for the time being. The conference of Imperial and Colonial representatives, which was held in London last month, afforded the necessary opportunity of bringing the matter on the carpet and dealing with it in the proper manner. Mr. Mulock came out flat-footed for a penny postage throughout the Empire. The Imperial Government hesitated, and the Australians declared strongly against the proposed innovation on financial grounds. Mr. Mulock replied that in this matter the Canadian Government was determined not to be deterred from action by financial considerations. It was enough for them that a penny postage would materially strengthen the bonds of the Empire. The hesitancy of the Imperial Government disappeared, as well it might when a colony gave such practical proofs of its readiness to make

sacrifices to the cause of closer union. The Australian representatives could not, however, see their way clear to run the risk of a serious loss in their postal departments, and the rate to these colonies remains as of yore, the parties to the new compact, of a penny postage, being the Old Country, Canada, Newfoundland, South Africa and the Crown Colonies. That it is only a question of time, and a short time at that, before penny postage throughout the whole Empire will be an accomplished fact, cannot be doubted. In the meantime Canada will be the gainer to a considerable extent, as a result of the prominent part she has taken in what has already been accomplished. She has spoken in a tone which tickles the ear of the Briton at home, and the intending emigrant from the Old Country will be more firmly convinced that he might find a more congenial spot than Canada, in which to expend the energies for which there is not scope at home. And the Englishman being essentially practical, we can feel sure that when he and the friends whom he will leave behind, but with whom he intends to correspond are weighing up the advantages of the different new countries, neither he nor they will overlook the fact that from Canada he can "write home for a penny," and that a "letter from home" will reach him in Canada for the same modest sum. A difference of three cents in postage, a factor in our immigration returns! It sounds cheap, but we do not hesitate to express the opinion that the Department of the Minister of the Interior, and the country at large, will gain many times over whatever the post-office department may lose for a year or two, as a result of the action of the Postmaster-General in the matter of cheaper postage within the Empire.

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CANADA requires all the healthy booming she can obtain. We do not use the word "booming" in the sense it is generally accepted, and which conjures up visions of mushroom communities, with outrageously inflated values—and later a mighty crash. There is not the slightest reason, so far as the advantages offered are concerned, why Canada should

not receive the greater number of emigrants who leave the British Isles every year. As a matter of fact, during the last few years Canada's share of the United Kingdom's surplus brain and muscle, has been from 10 to 15 per cent. Out of the 102,000 emigrants who left the British Isles in 1896, we received 15,000; other colonies took 48,000; while the United States carried off the lion's share with 99,000. Knowing, as we in Canada know, the decided advantages our country offers to the industrious agriculturist, we may be inclined to wonder why a majority of loyal Britons, when they leave their native land, select a country outside the Empire. Considerable light is thrown on this subject by a writer to a recent issue of the "Economic Review." The majority of those who emigrate have little real knowledge of either Canada or the United States. The plea of ignorance then being equally applicable in regard to either country, what is there to account for the great "draw" the United States have possessed in the past? Simply a series of stirring events such as "the War of Independence, the Civil War, the Alabama Claims and so forth," which have given the United States a stronger individuality, and made the name of that country more familiar to the masses. In a word the United States have been "boomed," and, for no other reason, have reached a rich harvest of emigrants.

In proof of his contention that "emigration by ignorance" makes for the United States, but that "emigration guided by knowledge," turns the tide to Canada and other colonies, the writer, in the "Economic Review," advances some very interesting figures.

Some ten years ago, there was established at Hollesby Bay, in Suffolk, England, a colonial college for training intending emigrant farmers.

The Principal of the College has very strong American sympathies, and "hangs the Stars and Stripes side by side with the Union Jack in his dining hall. The students select their new homes from motives of purely personal advantage. But they have every information given them, and choose according to their

knowledge. There is no place in the British Isles, not even including the Colonial office, where more accurate, reliable and up-to-date information about the various colonies is possessed than at the Colonial College."

The following table shows how the students from the College, being in possession of definite knowledge, have settled.

Canada, - - - -	41
New Zealand, - - -	87
Other British Possessions,	85
United States, - - -	31
Other countries, chiefly South American Republics, -	21
	<hr/> 219

We do not think that anyone, in Canada at least, will take issue with the writer in the Review, when he argues that were the masses as well acquainted with the facts as are the students, "the main stream of emigration would be diverted from the States to the Colonies, and especially to Canada, in similar proportions."

Economists differ slightly as to the value of an able-bodied man to a new country. Some place it at \$1500. The writer in question is modest, and places the figure at \$500. Accepting his figure, it means that the United Kingdom exports annually about fifty million dollars worth of brain and muscle. We ought to secure a larger share of this wealth than we have done in the past, and, failing the immediate enlightenment of the masses of the old world, let us secure them by the booming process; into which should not enter civic strife or eagerness to quarrel with other countries, but a forward attitude on all questions which are engaging the attention of the Empire at large.

LORD Aberdeen's successor has been appointed, and in Lord Minto Canada will welcome another representative of the Sovereign, whose title to fame rests not on the mere accident of birth, but is founded on a well sustained record of personal achievement in the service of the State. Not only as a civilian, but as

a soldier, has he given proof of the possession of those qualities that make for greatness, and which it is eminently desirable should be characteristic of the one in whom is personified the sovereignty of such a big slice of the Empire as Canada.

* *

It is curious to note the determined efforts of European Governments to prevent "a cordial relationship" between England and the United States. The reason for these efforts is not hard to find, and they are in themselves a tribute to the potentiality of an "Anglo-Saxon understanding." That this might and would, if occasion arose, become an Anglo-Saxon alliance, is the nightmare of the continental powers of Europe at present, and all that the genius of jealousy can do is done to fill the minds of the Americans with the old time distrust of England.

One of the most ludicrous examples of the frenzy which prevails was afforded by the French press a few days ago. The British Government has decided to make a special addition to the strength of the navy to counteract a proposed increase in the Russian navy. The press of France sees a different reason for the increase, however—jealousy on the part of England of the growing naval power of the United States, and a desire to be in a position to thwart that country when opportunity offers. Ingenious, undoubtedly, but hardly likely to be swallowed by the most inveterate England-hater in the United States, with the friendly attitude of England when danger threatened still fresh in the memory!

* *

A SCIENTIST, no less than the world-famed Lord Kelvin, who visited Canada last year at the time the British Association met in Toronto, has estimated that in four hundred years all the oxygen in the universe will be exhausted; and then—*exit* the human race.

The reasoning by which the celebrated expert arrives at this startling conclusion is interesting. He is satisfied that when the earth emerged from its original red hot state there was not any or very little

oxygen among the gasses that surrounded it. "It follows that all, or nearly all the free oxygen in the atmosphere to-day has been produced by vegetation," and "the amount of free oxygen in the air is only increased by growing vegetation and diminished by combustion of vegetable matter."

It is in this combustion of vegetable matter—fuel—that danger threatens our descendants of four centuries hence. Basing his calculations on the present rate of increase in population, and development of fuel-consuming industries, Lord Kelvin finds the fuel of the world would last only 500 years; but one hundred years prior to that it will have used up all the oxygen.

A remedy is suggested however. "Cultivate enormous quantities of vegetation to increase our store of oxygen."

There is a special word of warning for the colonies. "Let the colonist see to it that he does not extirpate the forest. It will not do to plant only timber trees, for that would diminish the food supply. Fruit and forage plants would provide nourishment as well as oxygen."

* *

Thus reforestry, which has already engaged considerable attention, and has been the object of official investigation in our own province during the last two years, becomes a question of much greater importance than heretofore; at least to those governments whose solicitude and efforts are not only for the present but for those who shall come after, even to the eleventh and twelfth generation.

A TRIP THROUGH THE GREAT MASSEY-HARRIS WORKS.

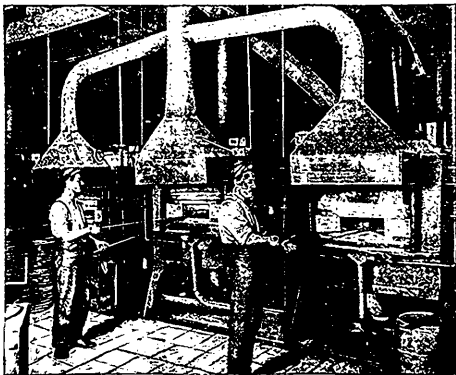


WE had just finished seeing the moulds being made in the Grey Iron Foundry in our

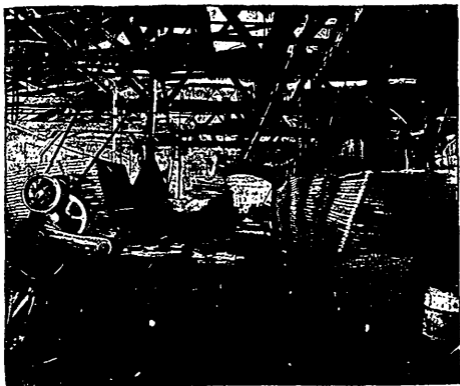
last article. Let us now turn into the immense Blacksmith Shop.

The size of this building and the enormous amount of material in it at the time of our photographic tour, prevent our giving a picture showing the full length of the place. The accompanying views of different sections, however, will suggest something of the work carried on, and also convey a slight knowledge of the mechanical construction of some of the apparatus used therein.

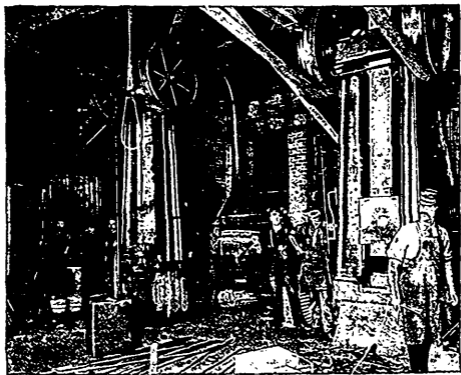
The Oil Furnaces are extremely interesting to the visitor. Within them are placed bars or strips of metal of various sizes, which it is necessary to shape into some part of an implement. The metal is heated by a continual stream of atomized burning oil. This process admits of an even degree of heat being sustained all day long, and greatly facilitates the handling of the large quantity of material put through the shop each day.



A GROUP OF OIL FURNACES.



THE STEEL FORGE DEPARTMENT.



SOME OF THE DROP HAMMERS.



TEMPERING TANK IN THE SMITHY.

The old-time forge used by our ancestors and now employed by the village blacksmith, is almost a thing unknown in the Massey-Harris Smithy.

The costly oil furnaces in the Toronto Factory alone consume about 200,000 gallons of fuel oil in a year. The reader can picture the blazo this would create if ignited altogether in one place. It is another instance of how the greatest means of usefulness given to man may, if improperly applied, be used to disastrous ends.

In the view of the Steel Forge Department you will observe the piles of Cultivator Frames. These enter the Smithy in one straight piece, and after being heated in the furnaces, are bent into shape as easily as if they were clay.

There is something terrible about the grim-looking drop hammers whether they are in operation or not. Motionless they look like some deadly weapons of destruction, and when at work the noise they create as they shapen and flatten the heated steel is sufficient to deafen one temporarily. It is almost useless trying to make your voice heard by a person immediately beside you, unless that person be partially deaf. It is a strange

fact, that the person with poor hearing has the advantage of the man with the keen sense in the drop hammer department, and can distinguish every word spoken.

The above cut shows the patented Tempering Tank devised and constructed by Massey-Harris Co., Limited, for their own secret tempering processes. This Tank is one of the most useful and valuable contrivances in the whole plant. The pieces of steel, such as teeth and points, are placed on the table and automatically carried through the oil tank, thus hardening them, whence they pass on to the tempering ovens.

It is this excellent hardening and tempering process which enables the Massey-Harris steel teeth and sections, to give such splendid service as they do in all kinds of territory and on the roughest land.

If the reader will consider, for a moment, the manner in which the quality of a tooth on a cultivator or the fork of a hay tedder is tested in the regular farm work in some parts of the country, you can easily realize the necessity there is for the utmost care and skill in their manufacture to insure the best results.



PART OF THE HARVESTER AND MOWER KNIFE ROOM.



AUTOMATIC KNIFE-SECTION HARDENING MACHINE.



EDITED AND SELECTED BY MRS. JOHN HOLMES.

Correspondence is invited on all matters pertaining to the Home, questions relating to any feature of domestic life, or of interest to women generally, will be readily answered, when possible, in this department.

You Can Scatter Sunshine.

THERE'S a heap of satisfaction
In the knowing, if you know,
That this world is just an Eden,
If you try to make it so;
For no one can monopolize
The King of light and day,
And you can scatter sunshine
If you feel that way.

There is joy behind each sorrow,
There's a lesson in defeat,
There's a lecture in experience
Philosophers can't beat;
And nothing like "I've been there,"
Can teach you day by day
To scatter wads of sunshine,
If you feel that way.

When you stand before your mirror
And you see reflected there
The image of your Maker,
With a face of blank despair,
Just reason for a moment,
Let nature have full sway,
For you can scatter sunshine,
If you feel that way.

Some Fancy Pin Cushions.

THE illustration, Fig. 1, shows a convenient pin cushion suitable for suspending from the wall or a corner of the dressing case.



FIG. 1.

To make: Cut four pieces of cardboard two and a half inches wide and seven inches long, pointed at each end. Cover each piece on both sides with soft silk; join the pieces as shown in sketch, after which finish all the joinings with a cord terminating at the ends with loops and tassels. Suspend by means of a cord

fastened at the ends. The model is covered with pale heliotrope satin; on which is embroidered, on the front edge, pale wood violets. The pieces of cardboard should be exactly of a size, and to insure this, it is better to cut one piece the required shape and size and then cut the other pieces, using this as a pattern.

The entire effect of such articles as here shown depend upon the neatness of the work for their beauty almost entirely.



FIG. 2.

For bazaars and sales the small inexpensive articles usually find readiest sale and yield greater profits than the larger and more expensive ones. The two designs, Figs. 2 and 3, show some pretty models for this purpose. Displayed in quantity, tastefully arranged in baskets, they are an attractive addition to the fancy-work booths. The illustrations show pin cushions made in the shape of apples and radishes of different sizes. They can be made of small scraps of silk



FIG. 3.

and a bit of cotton. To make: Roll a piece of cotton in the hand until it resembles the desired shape, then cover smoothly with soft china silk in the proper shade for the article represented, or in white silk tinted with diamond dyes to the required shade. Apply the dyes with a brush after the cushion is made. Other vegetables and fruits can be imitated in the same manner with equal success; for instance, tomatoes of the small round variety, strawberries of exaggerated size, pears and peaches, can all be reproduced in velvet and silk for a trifling outlay of time and money. The strawberry and tomato shapes should be fitted with embroidery for needles,

DRESSMAKING AT HOME.

YOUNG LADIES' COSTUMES AND HOW TO MAKE THEM.

Mess jackets are not at all difficult to make, for there are no revers or collar to bother us. The design illustrated (Fig. 1) represents one of the newest styles for wearing with white cotton shirts or blouses. There are altogether six pieces in the pattern of the jacket, which is half or one side of the garment, i.e., half the front, next to front, next to back, back, and the coat sleeve in two pieces.

down its centre. The two back pieces have to be cut from the serge or cloth opened out to its full width, and the crease fold must occupy the position indicated on the pattern of back piece by a perforated line. The single notch on the pattern of front and back indicates the position of the side seam each side, and the two notches indicate the centre of back seam, which must always be in an



FIG. 1

FIG. 2.

The skirt is the new shape for outdoor wear, and consists of three pieces, i.e., a front, and two wide back pieces. The pattern is half the circumference, i.e., half the front, and a full size pattern of one of the two back pieces. Only double-width material can be employed in the making-up of this skirt, and it must not be less than 41 inches wide, or else small gores will have to be added on at the widest part of the front, which measures from 39 inches to 40 inches at the hem.

In cutting out the front piece, place the straight edge of the pattern against the crease fold of the doubled-together material, so that when it is cut out you will have the complete front with the crease

exact line with the crease down the centre of front.

The above practical suggestions are very simple and easy to understand, but unless strictly adhered to no skirt can set properly. About six yards of double-width French beige coating or serge will be sufficient to make the complete costume for a No. 2 size figure, i.e., 23 inches waist, 31 inches bust, skirt length 83 inches back and front.

The lining and material of the mess jacket are cut the same size, therefore it is best to cut out the foundation first of all, and when that is properly fitted cut your serge or cloth from the various parts of the perfect fitting lining; finish the body

part completely without the sleeves, which are not machined into position until everything else is perfected.

There are many ways of decorating a jacket of this description; braid ornaments can be purchased all ready to sew on, or beaded passementerie could be used instead, according to individual fancy. Two and a half yards of soette or five yards of shot glace would be sufficient to line the coat, and an interlining of tailor canvas down each front piece as far as the dart will help to keep the jacket from getting out of shape, and, if worn by a lady with a very full figure, it will improve the shape if the back seams are bono-cased like an ordinary bodice. This is not at all a difficult thing to do, and a glance at the interior of any professionally made bodice will be a sufficient guide for anyone, however inexperienced in home dressmaking.

French Cashmeres are becoming more fashionable every day, and the design shown by Fig. 2 represents a very useful style for making up in cashmere or any sort of soft textured material that drapes easily. The top part and sleeves, together with the puffs at the shoulders, are made separate from the rest of the costume, which is, in reality, a sleeveless princess joined together at the waist, the join

being hidden by a band of silk or a fancy jewelled belt of any kind.

The body part of the princess is made on a tight-fitting lining, which hooks up the centre in the usual way. The cashmere is draped on to it in the manner shown in illustration, and hooks up the left side. The back is seamless, and the side piece of the material, each side, has to be cut the same size as the next to front lining.

The skirt is in five pieces, i.e., a front, side piece each side, and two backs. It is fitted tightly to the figure, as far as the hips, by taking up a dart or small pleat each side of the front, and one in the centre of each side piece, the remaining fullness of the two back pieces are then gathered on to the waist band with evenly arranged folds of more or less fullness according to the size of the figure.

Should the waist measurement exceed 26 inches it will be best to add another back piece, for the real beauty of cashmere is lost unless there is a sufficiency of material for the proper draping of it in the back folds of the skirt. In this case a yard and a quarter extra of the material will be necessary for a No. 2 size.

The body part and skirt can be sewn together at the waist, or left separate one from the other, according to fancy.

A TALK WITH MOTHERS.

You and Your Children.

Never praise or blame your children in the presence of strangers, the tender susceptibilities of childhood are injured by so doing. Insist on strict obedience, but make the duty less irksome to the child by only issuing the command when absolutely necessary. Be firm but mild in your authority, never punishing childish faults as though they were great offences. When, however, there is real cause for blame do not pass it over; and never relent when once you have forbidden anything.

Always avoid contrary commands, that is, never give a child an opportunity if you can help it, of saying, "But father told me to do so and so," or *vice versa*.

Let the suspicion once enter a child's mind that his parents are not as one on matters of discipline, and the child is at once going to take every advantage of that knowledge. However much or however little parents may differ in regard to the treatment a certain act of misbehaviour requires, all disagreement should be hidden from the eyes of the child, otherwise the child will lose some of its respect for both parents. Above all things never secure compliance with a specific command by bribery. As I have said before, be firm though mild.

Children frequently take advantage of the presence of relatives or friends to show a little defiance, in the belief that the visitor will plead for them and secure them some slight modification of the parental command. Of course no well-bred person would think of interfering, although an aged grandpapa or grandmama might be excused for putting in a gentle plea for forgiveness. Should, however, a friend or relative, no matter how close the tie may be, be so indiscreet as to interpose between yourself and your child, and attempt to secure the latter's compliance with your command by coaxing, or promise of reward, immediately have the child removed from the room. This in itself will at once convey your disapproval of the attempted interference, and a person possessed of the slightest delicacy of feeling would never commit the same indiscretion again. Should the visitor however, believing that "intimacy" justifies "familiarity"—which is at all times abhorrent, no matter how dear the friend or relative who indulges in it—disregard your implied wishes and the demands of good breeding, and, on a second occasion seek in your presence to intrude her "influence" upon your child who is displaying insubordinate tendencies; after the child has been sent from the room, politely but firmly tell your

visitor that while you appreciate the kindly motive which animated her, you and your husband never like anyone to interfere when your child is showing a rebellious spirit. Naturally this is a somewhat unpleasant course to have to adopt, the occasions on which it would be necessary are, however, fortunately rare, but when the occasion does arise, there should be no shrinking from what is so palpably a duty on account of its unpleasantness. Better a coolness between you and a friend, or a feeling of "hulliness" on the part of your sister, or mother, than a dawning belief in the mind of your child that the authority of yourself or husband is not final, but is subject to the acquiescence of others. Once let such an idea take root and you can never hope to make of your child that most lovable specimen of our kind, a courteous and well-bred youth or maiden. A child that has learned to think lightly of either paternal or mater-

nal authority can never be really respectful to others. He or she grows up with the parvenu's idea that respect is the badge of the menial, and, as a result, as man or woman, evinces far more boorish rudeness than is ever seen in the average third class menial. As husbands or wives, as fathers or mothers, as masters or mistresses,—unless there be innate good taste which bad training has fortunately failed to entirely destroy, and which blossoms forth in a healthful atmosphere,—such children become pitiful failures, unable to retain the respect of helpmeet, offspring or servant.

Children are not mere play things, therefore do not treat them as such. On the other hand, although our little folks claim all our attention, they must not therefore conclude that they are the masters whom everybody else has to obey. Their turn to rule will come in due time. And remember, "the child is father of the man."



Simple Recipes for Tasty Dishes.

Chicken and Ham Patties.—Required: The remains of cold roast chicken or fowl. To each quarter of a pound of chicken allow two ounces of ham, three tablespoonfuls of gravy, two of cream, half a teaspoonful of lemon peel, cayenne, salt and pepper to taste, a tablespoonful of lemon juice, an ounce of butter rolled in flour, puff paste.

Method.—Mince the fowl and ham, put them in a stewpan with the other ingredients, and stir over the fire for ten minutes. Line the patty pans, and proceed as directed for lobster patties.

Mock Crab Sandwiches.—Required: Some slices of thinly cut bread fried in squares, four ounces of shelled shrimps, the same quantity of mackerel or herring roes, an ounce of butter, an ounce of grated cheese, a tablespoonful of cream, cayenne, mustard, pepper, lemon juice, a few drops of vinegar, and a little thick white sauce.

Method.—Steam the roes, and when cold cut them up and pound them with the shrimps and the seasoning; add the liquid ingredients gradually, and enough sauce to bind the whole. Put some of the mixture on half the squares, cover with the other half; laying them on lightly, not pressing them down.

Seed Buns.—Required: Four eggs, four teacupfuls of sugar, two of butter, one of milk, a tablespoonful of carraway seeds, half a teaspoonful of carbonate of soda, flour.

Method.—Beat the ingredients well together, adding flour by degrees till a paste thick enough to roll out is formed. Make into small buns and bake in a quick oven.

Household Hints.

To Prevent Moths, before putting away shades or rugs, sprinkle with cayenne pepper.

To Take Ink Spots out of Mahogany.—Apply spirits of salt with a piece of rag until the ink disappears.

To prevent steel brooches or ornaments from getting rusty or dull when not wearing, keep in a box in which is a little powdered starch.

To blacken tan shoes, clean them and rub them over with a strong solution of washing soda. When dry give them a coat of ink, then polish with ordinary blacking.

To clean velvet, rub it down with olive oil or butter; this will make it like new. Instead of using a brush to a felt hat, a pad of velvet will remove the dust better.

A substitute for Cream may be made by beating the white of an egg with a teaspoonful of sugar and a very little water; put it into the cups before the coffee is poured into them.

To Keep Milk or Cream Sweet.—Milk or cream may be kept sweet by adding a teaspoonful of borax to a quart of milk or cream. It will be found a most effectual preservative.

Paint Marks on Clothing.—When fresh, these can easily be removed by rubbing with turpentine or paraffin applied with a bit of cloth. If they have dried on, rub with a mixture of equal parts of turpentine and pure alcohol, and clean with benzine.

A GREAT BARGAIN.

THE Dexters were noted as a family for their shrewdness, and Squire Dexter was proud of it. He called it foresight which enabled him to get much for little, and he was elated when he saw the same trait creep out now and then in Don and Aleck, his sons.

Not that the Dexters were dishonest as the world defines dishonesty; the squire would not have done anything that he thought dishonorable; but he had a knack of getting the best of a bargain.

For various reasons Squire Dexter did not keep a horse, which was a sore vexation to the boys. Doll was Mr. Dick's horse, a clean-limbed young chestnut which the squire liked to drive. As he frequently hired the animal, he thought himself quite a benefactor to poor Mr. Dick.

Mr. Dick had not made such a success financially as had the squire. He was a simple, straightforward old man, who had seen nearly all his property slip through his fingers in his dealings with those sharper than himself. The squire said this was due to a lack of business qualifications, and he privately opined that the old man should not keep a horse, since he could hardly provide himself and wife with necessaries.

But old Mr. Dick clung to his horse, and as no one except the Dexter boys had evinced much desire to own it, he had encountered no great temptation to part with it.

Now the temptation had come in the form of bodily needs. The old man shivered in his thin clothes that morning as he hurried Doll.

"After Doll again?" he asked, with an abortive attempt to cease shivering as the boys rushed into the stable.

"Yes, sir," answered Aleck.

"Your pa's getting pretty fond of Doll," said Mr. Dick, giving a last touch to her mane. "I don't see why he don't have a horse."

"Nor I," said Don, impulsively.

"He might buy Doll," said the old man, slowly.

Don and Aleck exchanged glances. Don slipped on the bridle before he put the question that was crowding for utterance: "Would you sell her?"

"I've seen the time I would'n't, but it's different now," said Mr. Dick, sadly. "I'm getting old, and—and—I need the money."

The boys knew what that meant. Last week there had been some talk that the

Dicks would be on the town this winter.

"How much will you take for Doll?" asked Aleck.

"It don't seem as if seventy-five dollars ought to be too much. Doll's got good blood in her—but I do need the money," the old man sighed.

"Will you give father the refusal until tomorrow?" It was Don who put this question. He could not await Aleck's more deliberate speech.

"I'd rather your family should have her. You know how to use a horse, and you like Doll," partly mused the old man.

The squire had told the boys to put Doll to the carriage before bringing her up the lane to the house door, but they could hardly wait to do this, so eager were they to tell the news.

"It's what I call a bargain," said Don, emphatically, as he jumped into the carriage.

"Yes," assented Aleck; "father supposed old man Dick would want a hundred for her."

"Well, Uncle Eben will think it cheap. He paid eight hundred for a spar; and I guess neither one was any better than Doll."

Soon they were at the gate where Squire Dexter and his brother were standing.

Don screamed out first. "We've struck such a bargain, father!"

Then the two, as they tumbled out of the vehicle, poured out an excited account of their call on the old man. Squire Dexter turned to his brother with a laugh.

"They're Dexters, Eben, through and through. Know a good thing when they see it."

"And will you take her, father?" said Don, as the squire and Eben got into the buggy.

"We'll see. Uncle Eben will test her."

It was noon before the women returned. Eben Dexter was a good judge of horse-flesh, and the animal had been closely scrutinized in every particular. As he stepped out of the carriage, the eager boys heard him say, "I'd clinch it at once. She'll sell in the market for three hundred at least, with that style and action. Sound as a dollar, too. I'll find a buyer at that price any day. I'll give you two hundred, myself."

"Whew, but did you hear that?" Don whistled ecstatically, and gave Aleck a punch in the ribs that sent him headlong into the vacated carriage as they got in to take the mare home.

"I should say I did," grumbled Aleck, rubbing his side. "But it won't do a

fellow any good with his ribs smashed to splinters."

"We mustn't look too delighted," cautioned Aleck. "Old man Dick may repent when we tell him father will come to see him about Doll."

"No, he won't! He isn't that kind. He's straight as a string, if he is poor. You know pa's said more than once that he wouldn't have been so poor if he hadn't been so straight. He's a good old man, and it's a pity he and old Mrs. Dick 've got to come down to the poorhouse." Don flicked a bit of hay out of Doll's tail. "And even seventy-five dollars won't go far to keep them out very long."

"That's so," replied Aleck; "but I'm glad we've got the chance to get the horse as long as he had to sell her, though I'm sorry for them."

Mr. Dick was looking for the return of the horse, and met them at the gate. The boys said nothing, according to Aleck's suggestion. But the old man betrayed his anxiety.

"Did you speak to your pa about Doll?"

"Oh, yes, Mr. Dick. Father'll be across to see you."

"I wouldn't be in any hurry, only it's all I can depend on for winter," said the old man. "I'd like to get in coal before the price rises, and there's Doctor Smith's bill, — he don't like to wait long, and Mrs. Dick's apt to have to have him any time with her rheumatism, — and some flannels for her, and then the living."

"Father'll let you know before the time's up," answered Aleck.

"Poor old man has got the price whittled down pretty close," observed Don, as he swung the hitching-strap against the gate-post in turning into the street. It was Don's habit to hit things when he was thinking hard.

"He'd cut it still more, I suppose," Aleck rather curtly replied, "but he needs an overcoat."

Nothing more was said. They hurried in to the dinner-table, where the family were already gathered. Eben Dexter was reviewing the horse's fine points and the squire was in a very jubilant mood. Mrs. Dexter, who had smiled indulgently when Don and Aleck had announced the news to her, now sat silently listening.

After dinner she followed the squire into the hall. "Are you going to buy the horse?" she asked, timidly, as she helped him into his ulster.

"I think so."

"But can you afford it?" she ventured, with still more diffidence, for Mrs. Dexter did not often inquire into any of her husband's business.

"Why, you heard Eben," Squire Dexter replied, with a look of surprise. "I can make a good sum. He'll guarantee me a buyer."

"But I thought perhaps you couldn't afford it," she repeated, with gentle in-

sistence, brushing off a bit of mud from the garment and avoiding his eyes.

"H—m," said the squire. He pulled on his gloves and joined his brother.

The boys standing in the door, looked puzzled. They followed their father and uncle down the road to Mr. Dick's, while Uncle Eben kept up a one-sided conversation, not seeming to notice that the others were unusually quiet. They found the old man in the stable.

"Stays about Doll all the time now," observed Aleck, as he and Don stopped at the door while their father went in. Eben Dexter walked up and down outside, smoking his cigar.

The squire chatted a few moments on various topics, noting involuntarily as he did so how rapidly the old man was aging. He felt impelled to say, kindly: "We're all getting on in years, Mr. Dick."

"Yes, sir; yes, sir," said the old man, with assumed cheerfulness and an attempt at a smile. "It's all I am getting on in, squire." Then, quickly, as if fearing his visitor was avoiding the important subject, "The boys told you I wanted to sell Doll?"

"Yes, they said so." The squire's tone was perfectly non-committal.

"I do hope you'll take her, squire." Mr. Dick stopped before the manger with a scant forkful of hay. "The boys want her, and I do need the mouney powerfully just now, squire."

The squire saw the withered hands tremble, and he felt that it was not from the weight they were holding.

"It'd go hard to go to the poorhouse this winter," sighed the old man. "Perhaps my wife and I won't be here to worry about another winter. Don't say you can't afford it!"

"H—m."

The squire wrinkled his brows, turned on his heel and walked to the door. The boys stepped back and watched him. He looked toward the old house beyond. Mrs. Dick, scantily clothed, was emptying a wash-tub of water. She looked up, saw him and bowed.

The squire raised his hat gravely. The gray-haired woman reminded him of his own mother, dead but a few years. His mother had had every comfort, he thought, gladly. It was a shame for old Mrs. Dick to be so poorly provided for as she was. How those two old people would fare and feel in the poorhouse! Then his mind ran to the horse. Could he afford the bargain before him? He understood well what his wife had meant.

"Pshaw!" He uttered the impatient exclamation aloud. "The bargain was Dick's own making," thought the squire. "I'm not bound to tell the old man he is letting his horse go far below its value. Or am I?" The squire grew angry with himself that he should allow such a query to confront him.

"Taint the money," just then Don observed, in an audible mutter to Aleck, giving the stable door a kick as he spoke.

The boys had let nothing escape them. Don had been reading his father's thoughts. The kick called Squire Dexter back to the present. He looked up at the boys. His sons were sharp like himself, he reflected. Could he afford it? He determined to shift the responsibility of the bargain upon the boys. They should decide. As he turned to speak, the old man quavered behind him. The hesitation had worried him.

"I thought it was a good bargain, squire. I'll have to sell her. I might take—"

The squire had whispered to his boys: "I could get the horse for sixty dollars. She is worth three hundred dollars. Shall I beat him down to sixty? I leave it to you."

"But, pa," interposed Don, with a frown; "would that be just right when we took the refusal at seventy-five?"

"And he's got lots of things to get," said Aleck.

"I say he ought to get what's right," said Don, stoutly, and Aleck nodded a vigorous assent.

"Mr. Dick!" The squire pulled his coat about him and wheeled upon the old man. "Don't say a thing. I can't afford the price." The peremptory tone made old Mr. Dick shrink.

"Eben!" The squire turned back to the door. "Step here!"

Eben Dexter had thought it best not to be seen in the transaction. He was used to bargaining and he thought the sight of a stranger might raise the price. He did not know what kind of a man Mr. Dick was. Then he had wanted to enjoy his cigar. But he, too, had been observing some of the very things the squire had observed, and the cigar had lost its flavor.

He threw it aside in disgust as he stepped inside at his brother's call, and saw the white-haired, bent, shabby old man trying to hush disappointment in unnecessary attentions to the animal in the stall.

"This is my brother, Mr. Dick." The squire's tone was cool and even. The old man raised his faded, misty eyes and bowed silently. "Holl make you an offer for your horse."

Eben Dexter looked in surprise at his brother. "Not going to buy it yourself?"

"We can't afford it." The squire made a comprehensive gesture that took in the wondering boys, Mr. Dick and himself. "Make him the offer you made me."

Eben Dexter raised his shaggy eyebrows, glanced at the boys, who were staring straight into their father's eyes, looked once more at his brother, took hold of his own coat-collar and shook himself up. "Mr. Dick, I'll buy your horse for two hundred dollars."

"What!" The old man gasped.

"I guess I can add a hundred on my own account," said Eben Dexter, coolly, nodding sturdily back at his brother, and then laughing encouragingly as he saw old Mr. Dick clinging trembling to the manger. "That'll make three. That is what your horse is worth."

"And I could not afford to give what she is worth," said the squire, recovering his most matter-of-fact manner.

The Dexters were prompt to act when a decision was reached. A check was drawn on the spot, while the squire tried to ward off the broken thanks that Mr. Dick attempted to utter.

"No poorhouse, no poorhouse," he murmured, again and again, causing both men to shuffle about uneasily, and sending Don and Aleck outside for a violent wrestling-match by way of concealing their emotion.

"You'll have a horse when I can afford it," the squire simply said to the boys, as the two men came out to find them thus joyously engaged, and to send them back for Doll. He knew that his sons understood.

"I'm glad a Dexter's got him," reiterated old man Dick, his bent form straightened up, his eyes beaming, as he stepped spryly about making preparations for Doll's departure. "It ain't so hard to let her go now. Oh, but it's what a man takes along when he makes a bargain that shows his religion. You should be proud of your father, boys."

"We are," Don promptly answered, cloveting his chin proudly. "It's better than even having Doll our own selves."

But Aleck could not refrain from a boast at the tea-table. "I tell you," said he, "it takes a Dexter to make a bargain, though, and this is the best one yet."

The squire looked across at his wife and she smiled with loving approval.

—F. G. GRANT, in *Youth's Companion*.

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1898		August						1898	
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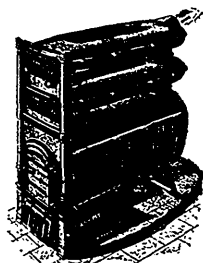
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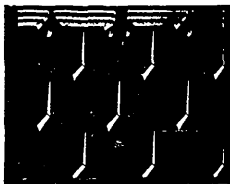
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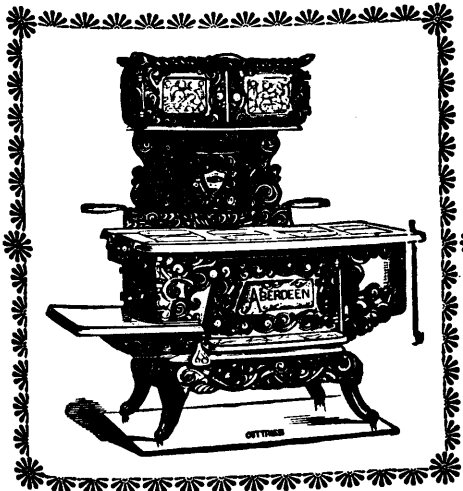
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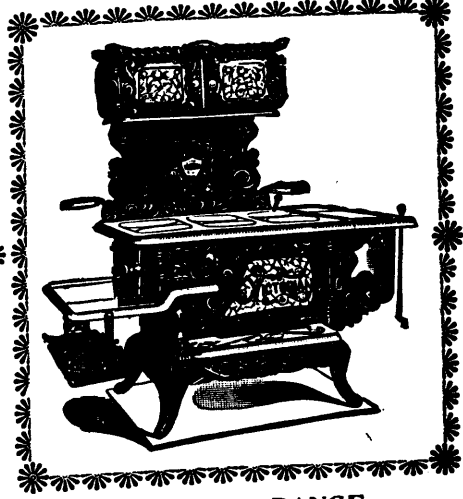
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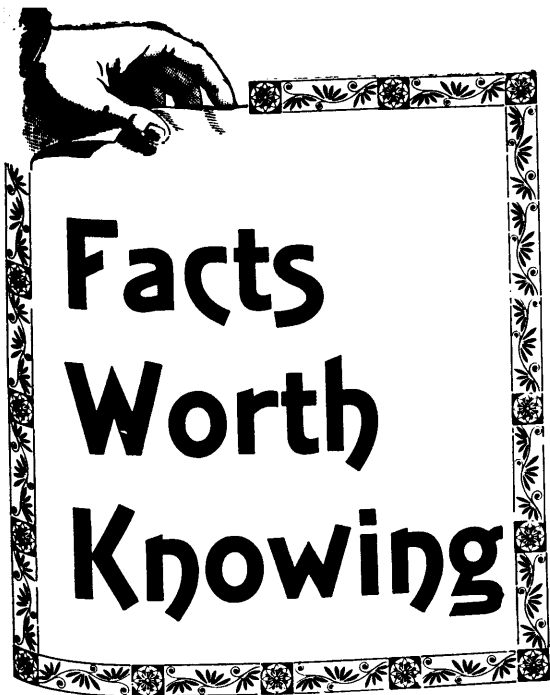
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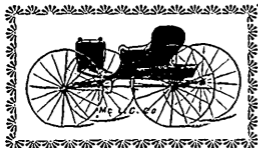
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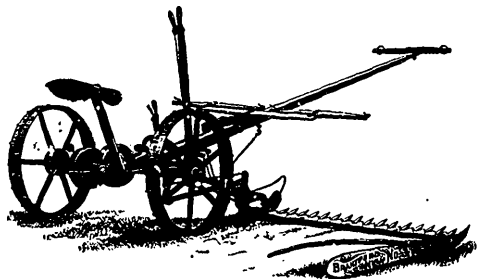
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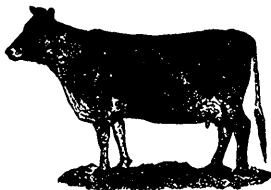
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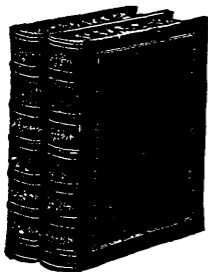
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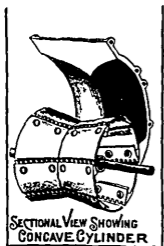
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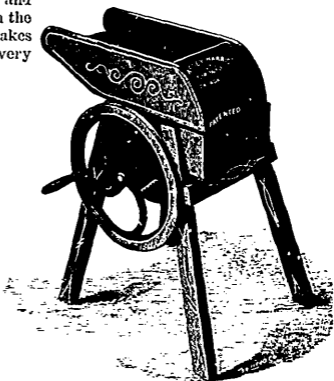
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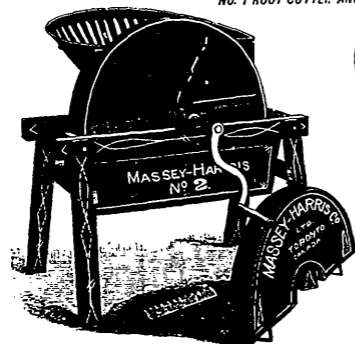
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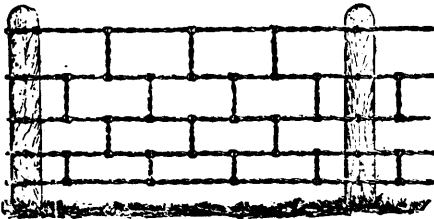
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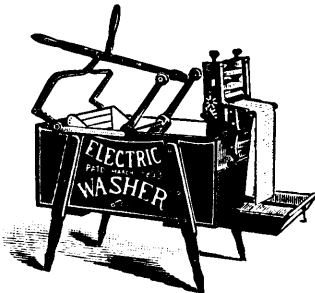


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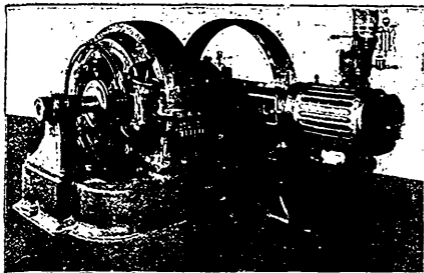
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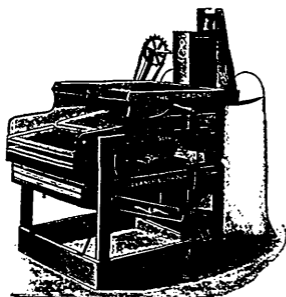


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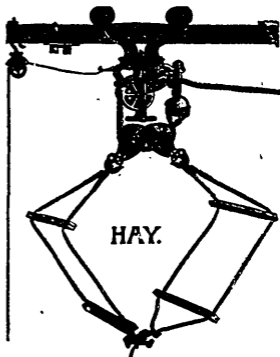
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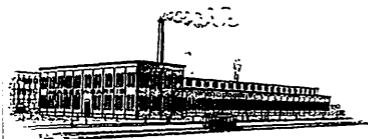


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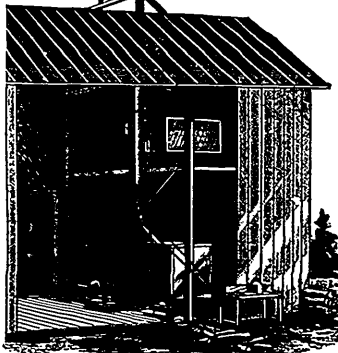
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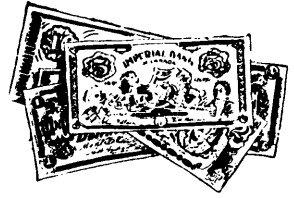
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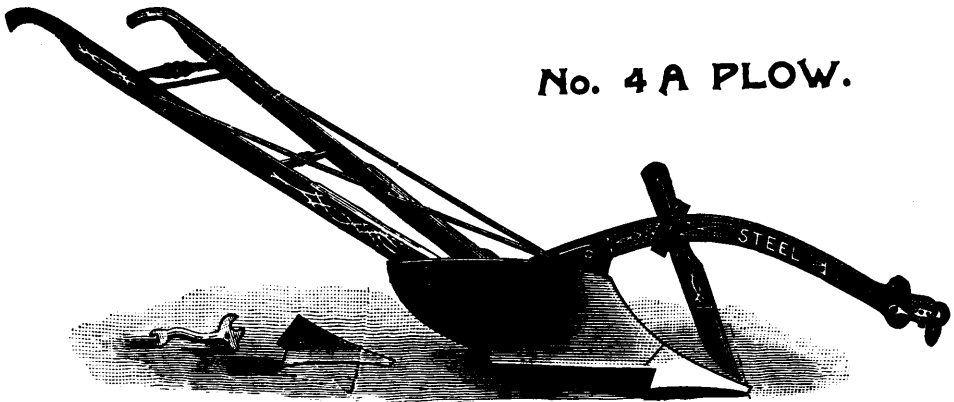
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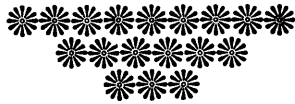
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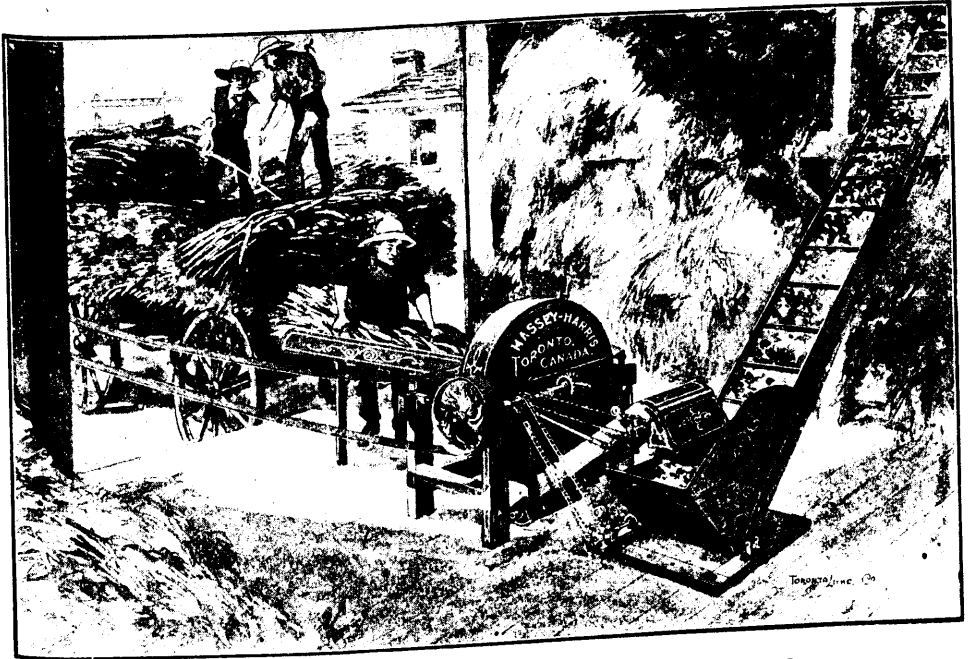
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